

Work-family guilt

A straightjacket keeping parents
in traditional gender roles



Lianne Arntzen

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Work-family guilt: A straightjacket keeping parents in traditional gender roles

**Werk-familie schuld:
Een dwangbuis die ouders in
traditionele genderrollen houdt**

(met een samenvatting in het Nederlands)

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Synthesis

“Guilt management can be just as important as time management for mothers. When I went back to my job after giving birth, other working mothers told me to prepare for the day that my son would cry for his nanny. Sure enough, when he was about eleven months old, he was crawling on the floor of his room and put his knee down on a toy. He looked up for help, crying, and reached for her instead of me. It pierced my heart, but Dave thought it was a good sign. He reasoned that we were the central figures in our son’s life, but forming an attachment to a caregiver was good for his development. I understood his logic, especially in retrospect, but at the time, it hurt like hell.” (p. 138)

– Sheryl Sandberg, *Lean In: Women, Work, and the Will to Lead* –

This quote taken from Sheryl Sandberg’s book on how women could just “lean in” to achieve a successful career, suggests that the guilt that mothers feel when they focus on their career is pervasive and detrimental for the well-being of working mothers. This so-called “mommy guilt” is proposed to be one of the underlying reason for why so many talented and highly educated women opt-out the career path and focus on their family instead (Belkin, 2003; Redrick, 2011). For example, nowadays, women still work fewer hours than men, there are few female leaders, and women are less likely to make sacrifices for their career than men (Catalyst, 2020; European Commission, 2018). When proposing that women just have to manage their guilt and “lean in”, the suggestion is made that women are to blame for the remaining gender inequality rather than societal norms that keep fathers and mothers in their traditional roles. In contrast, in this dissertation I show that the extent to which fathers and mothers experience work-family guilt is shaped by gender stereotypes in our society. Additionally, I show that this guilt, in turn, indeed predicts the work-family choices that parents make.

Over the last decades, the way men and women combine their work and family has changed. The traditional family consisting of a man as the sole breadwinner and a woman as the sole caregiver is no longer the standard (Pew Research Center, 2017). The number of women who entered the workforce at different professional levels has increased tremendously (Cipollone, Patacchini, & Vallanti, 2014; European Commission, 2018). Furthermore, fathers take on more childcare responsibilities than they once did and men’s share in household chores has increased (Bünning, 2015; Pew Research Center, 2019a; Van den Brakel & Merens, 2018). The standard gender division of fathers earning the family income and mothers doing the caring has been replaced by a great variety of family forms (e.g., stay-at-home mother with full-time working father, two full-time earners; Pew Research Center, 2017) in which personal choice is seen as leading in how parents combine their work and family commitments (Stephens & Levine, 2011).

At the same time, the work-family choices that men and women make remain heavily intertwined with their gender. For example, in comparison to men, women still less often have a paid job, take more career breaks and work fewer paid hours (European Commission, 2018). Furthermore, women still shoulder a disproportional amount of childcare and household chores relative to fathers (Craig & Mullan, 2010; Sayer, England, Bittman, &

Bianchi, 2009). In similar vein, in most families, fathers earn most of the family income (Pew Research Center, 2017). These gendered work-family distributions even magnify after men and women become parents (Endendijk, Derks, & Mesman, 2018; Grunow, Schulz, & Blossfeld, 2012).

In line with this gendered division of labor, societal norms for working parents remain traditional. Working mothers are still expected to be the main caregiver and prioritize their caregiving responsibilities whereas working fathers are still expected to be the main breadwinner and prioritize their work responsibilities (Haines & Stroessner, 2019; Morgenroth & Heilman, 2017; Park, Smith, & Correll, 2010). When US adults are asked about what would be the ideal situation for parents with young children, 76% reports that having a fulltime job is the ideal situation for a father while only 33% thinks that this is the ideal situation for a mother (Pew Research Center, 2019b). Also, in Europe norms remain traditional as 44% of Europeans agree with the statement that “the most important role for a woman is to take care of her home and family” (European Commission, 2018). In situations in which mothers (appear to) prioritize their work, they are seen as bad parents (e.g., Morgenroth & Heilman, 2017; Okimoto & Heilman, 2012). As a result of these gendered parenting norms working mothers may experience more guilt when they prioritize their work over their family compared to working fathers.

In this dissertation, I have examined how gender stereotypes shape parents’ work-family guilt and their work-family choices. The main tenet of this dissertation is that as a result of internalized gender stereotypes of “breadwinning fathers” and “caring mothers”, mothers experience more work-family guilt when prioritizing work than fathers. This ‘high guilt’ makes it difficult for mothers to focus on their career next to their family while ‘low guilt’ makes it easier for fathers to solely focus on their career. Specifically, I aimed to gain insight in three unexplored issues: (a) how work-family guilt may straightjacket parents into traditional gender roles, (b) the degree to which gender stereotypes predict mothers’ and fathers’ work-family guilt, (c) and whether fathers’ and mothers’ work-family guilt is shaped by the perceived family costs and career benefits when investing time and energy in work. By combing organizational psychological, social psychological and sociological theories, the general hypothesis of this dissertation was developed: “*Gender stereotypes elicit high work-family guilt in mothers but low work-family guilt in fathers, keeping working parents in traditional gender roles*”.

In the current dissertation, I focus specifically on heterosexual parents. I chose to do so because homosexual parents do not carry the same gender baggage as heterosexual parents. For example, when a family exists of two fathers, gender norms may not push one father more to pick up the sick child from school than the other father. Therefore, the influence of gender stereotypes on work-family guilt and work-family choices in homosexual couples may be different than in heterosexual couples and deserves an investigation of its own.

Theoretical approach

Below, I present an overview of the relevant literature. I will first outline the theories that are central to the gender stereotypes literature. Then, I explain how gender stereotypes may cause mothers to experience more work-family guilt than fathers and I discuss recent empirical findings on gender differences in guilt. In doing so, in addition to showing the knowledge that has been gained, I also discuss the shortcomings that have hindered the 'gendered work-family guilt' literature. Additionally, I elaborate on how the costs and benefits that parents perceive when they invest time and energy in their work may be an important driver of gender differences in work-family guilt. Finally, I present research on consequences of guilt, on the basis of which I explain how work-family guilt may impact parents' well-being and work-family decisions.

Gender stereotypes

For many working fathers and mothers, their roles as worker and parent are at the core of their identity. However, the degree to which the worker role or the parent role are emphasized, remains heavily intertwined with parents' gender (for a recent overview, see Haines, 2019). Although today it is considered acceptable that mothers earn at least some of the family income and fathers do at least some of the household and childcare, when parents prioritize the gender a-typical domain, backlash is likely to occur (e.g., a mother who goes into work even though her child has the flu will be judged as a bad parent while for a father the same behavior is judged acceptable; Okimoto & Heilman, 2012).

Social Role Theory posits that the reason for this is that biological differences between women and men (e.g., women's capacity for breastfeeding or men's greater physical strength) historically led to a task division in which women took care of the children and men pursued activities such as warfare and hunting (Eagly, Wood, & Diekmann, 2000). Over time this has resulted in a division of women as main caregiver and men as main earner (Eagly, Wood, & Diekmann, 2000; Eagly & Wood, 2016). As a result of these different roles that men and women occupy, we also have different expectations of what men and women are like. While men are expected to be agentic and strong, women are expected to be caring and warm. Importantly, these gender stereotypes are not only descriptive, but also prescriptive (i.e., they act as social rules about how men and women should behave) and proscriptive (i.e., they act as social rules dictating how men and women should *not* behave). For example, not only is a father expected to be the main earner of the family's income, when he is unable to do so he will be viewed as undeserving of respect (Brescoll & Uhlmann, 2005).

In an extension of Social Role Theory, in Role Congruity Theory, Eagly and Karau, (2002) argue that a high presence of female qualities such as warm and caring often is seen as implying the absence of male qualities such as agentic and independent and vice versa. Therefore, even when men and women show a positive but counter-stereotypical quality backlash is likely to occur (Kahalon, Schnabel, & Becker, 2018). For example, in

the workplace powerful women are judged to be insufficiently nice, and modest men are evaluated less favorable (Judge, Livingston, & Hurst, 2012; Moss-Racusin, Phelan, & Rudman, 2010)

The Role Prioritization Model builds upon these two related theories and adds that as long as parents are seen as properly *prioritizing* the responsibilities belonging to their gender, the behavior will be judged acceptable (Haines, 2019). For instance, an ambitious, full-time working woman can still be seen as a great mother as long as it is clear that her work does not undermine her ability to always put her children first. However, if parents prioritize atypical roles, they are judged negatively. For example, a father who takes on a lot of the childcare, but does not provide financially for his family will be judged as incompetent (e.g., Coleman & Franuik, 2011). It is important to note that, on average, both mothers and fathers think of their family as more important than their work (Pew Research Center, 2018; Van der Horst, 2014) and for both parents the norm applies that they should put family first. However, for men this means successfully fulfilling the breadwinner role and for women this means successfully fulfilling the caregiver role. Note that while for fathers work and family is compatible (by focusing on work, they are fulfilling the breadwinner role), for mothers work and family is incompatible (when they focus on work, they are not fulfilling their caregiver role).

Research confirms that men and women receive praise for engaging in gender-typical behavior and penalties for engaging in gender a-typical behavior (for an overview, see Haines, 2019). In comparison with mothers who appear to prioritize their caregiving role, mothers who appear to prioritize work are judged to be worse parents (Morgenroth & Heilman, 2017; Okimoto & Heilman, 2012), more selfish people (Brescoll & Uhlmann, 2005) and even face harassment (Berdahl & Moon, 2005). By the same token, men who appear to prioritize caregiving tasks receive criticism (Deutsch & Saxon, 1998), face harassment and frequently feel socially excluded (Berdahl & Moon, 2013). At the same time mothers and fathers are positively evaluated when they are perceived to balance work and family successfully according to the standards for their gender. For example, working mothers who take parental leave are judged even more favorably than stay-at-home mothers (Coleman & Franuik, 2011) and working fathers get a fatherhood bonus (i.e., earn more money; Glauber, 2008) compared to men without children.

How do these prescriptive gender norms in our society affect how fathers and mothers themselves feel about working (and especially situations in which they prioritize work)? Research shows that gender norms about what is (not) appropriate affect men and women's aspirations, decisions and behavior (Meeussen, Veldman, Van Laar, 2016; Wood & Eagly, 2009). Even when individuals do not internalize gender norms themselves, the praise and penalties when (not) adhering to gender norms will stimulate many individuals to act accordingly. Extending this research, I propose that mothers may experience situations in which they prioritize their work over their family as more negative than fathers, and as a result feel more guilty in these situations. Drawing upon general guilt literature, I propose that is important to get more insight into this gendered work-family guilt because guilt is

related to poorer well-being (Ghatavi, Nicolson, MacDonald, Osher, & Levitt, 2002) and triggers behaviors that are intended to compensate for the guilt-inducing action (Ketelaar & Au, 2003; Roseman, Wiest, & Swartz, 1994).

How gender stereotypes may predict work-family guilt

To elaborate on why I hypothesize that when gender stereotypes are internalized, they elicit high levels of work-family guilt in mothers but low work-family levels of guilt in fathers, it is important to know what guilt entails. Guilt is defined as a moral and self-conscious emotion that arises from *societal disapproval of specific behaviors* (Morris & Keltner, 2000; Tangney, Stuewig, & Mashek, 2007; Ilies, Savani, Peng, & Dimotakis, 2013). Therefore, when prioritization of the worker role over the parenting role (e.g., going into work even though your child is sick) is strongly disapproved in mothers but accepted in fathers, mothers may experience more guilt in situations in which they prioritize their work than fathers.

Some first evidence indeed suggests that mothers experience greater work-family guilt than fathers in Western cultures. (Borelli, Nelson-Coffey, River, Birken, & Moss-Racusin, 2017; Borelli, Nelson, River, Birken, & Moss-Racusin, 2016; Glavin, Schieman, & Reid, 2011). For example, when blind coders rated mothers' and fathers' answers on how their employment affects their family, mothers' answers contained a higher presence of work-family guilt than fathers' answers (Borelli, et. al., 2016). However, results are inconsistent as some studies fail to find evidence that gender is predictive of the level of work-family guilt that parents experience. For example, a study on daily experiences of work-family conflict did not find that such daily work-family conflict experiences were related to higher guilt in mothers than fathers (Livingston & Judge, 2006).

Importantly, these previous studies do not control (or only partially control) for the different work-family situations in which men and women find themselves and therefore are limited in their conclusions. For example, when a man works 40 hours a week and a woman works 20 hours a week and they report similar levels of work-family guilt in their daily lives, the conclusion that their levels of guilt are equal does not tell the whole story. What would happen when their situations were more similar (e.g., when they would both work 40 hours a week)? Would there then still be no gender differences in work-family guilt? I propose that men and women are active agents who (try to) organize their life in such a way that they feel satisfied with their work-family balance and that their work-family guilt is minimized. Therefore, when mothers are more likely than fathers to experience work-family guilt (or anticipate to feel more work-family guilt than fathers) they may already have reorganized their work-family life by working less paid hours and taking on more childcare and household tasks. As such, I propose that in addition to examining the work-family guilt that fathers and mothers experience in their daily life, it is crucial to also examine gender differences in work-family guilt and the role of gender stereotypes herein when fathers and mothers are in identical situations. In the current dissertation, I address this gap (Chapter 3 and 4).

A gendered cost-benefit analysis

The way in which gender stereotypes may predict work-family guilt is through mothers' and fathers' different appraisals of the work-interfering-with-family situation. According to Stress Appraisal theory, our emotions are guided by our appraisals (e.g., Lazarus & Folkman, 1984). Situations are not stressful in themselves, but can become more or less stressful due to the way in which they are appraised (Van Steenbergen, Ellemers, Haslam, & Urlings, 2007). Or in the words of Shakespeare: "There is nothing either good or bad but thinking makes it so" (Hamlet 2, ii). Applied to situations in which parents prioritize their work over their family, some parents may appraise this more positively than others. For example, some parents may appraise a business trip for work mainly as a fun outing that is beneficial for their work, whereas other parents may appraise it as highly costly for their family. I propose that these appraisals are partly gendered and that, in comparison with fathers, mothers appraise prioritizing work as bringing larger costs for their family and simultaneously bringing fewer benefits for their career. That is, as a result of gender stereotypes, fathers and mothers may make a different cost-benefit analyses of the time and energy they invest in their work instead of their family. This, in turn, may result in higher work-family guilt in mothers compared to fathers.

I expect appraisal of costs for family (i.e., family costs appraisal) to be gendered because parents may have internalized societal beliefs that mothers should be and are better at being the main caregiver. To clarify, when both the father and mother perceive that it is worse for the child if the mother is away on a business trip for a few days than the father (i.e., the appraisal of costs for the family is higher), the mother will likely experience more guilt while on the business trip compared to the father. Research indeed indicates that many parents have embraced the belief that the mother is the most capable caregiver and therefore that it is best for the children if she spends extensive time and energy raising them (Hays, 1996; Liss, Schiffrin, Mackintosh, Miles-McLean, & Erchull, 2013). Importantly, these intensive mothering beliefs are not only endorsed by stay-at-home mothers and fathers but also by working mothers, although their interpretation slightly differs from stay-at-home mothers. While many stay-at-home mothers believe that children fare best with the consistent presence of a mother, many employed mothers believe that *a lot of* high-quality interactions between mother and child are most important for the child's well-being (Hays, 1996; Johnston & Swanson, 2006). As a result of these intensive mothering beliefs, in comparison with fathers, mothers may appraise situations in which they prioritize their work over their family as bringing a higher cost to their family, resulting in turn in higher maternal guilt.

Gender differences in appraisal of benefits for career (i.e., career benefits appraisal) may be a second reason for why mothers experience more guilt than fathers. When parents choose to prioritize work (e.g., they go into work even though their child is sick), in addition to acting in line with gendered societal norms, one reason for this may be because they believe that it is beneficial for their career. The higher they appraise career benefits, the more they can justify their work prioritization and the less guilt they may experience. However, research

on gendered evaluations of performance, gender pay gaps, and gender inequality in hiring and promotion, demonstrates that women are less rewarded for the time and energy that they put in work compared to men (e.g., Barreto, Ryan, & Schmitt, 2009; Ellemers, 2014). For example, women are paid a lower salary for the same job (Catalyst, 2020), receive less representation opportunities (Johnson, Smith, & Wang, 2017), and female job applicants are often perceived as less competent and hireable than identical male applicants (Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012). Therefore, mothers may likely see prioritizing their work as bringing fewer rewards to their career than fathers, making it harder to justify their prioritization of work and as such resulting in higher maternal guilt when they do prioritize their work.

To summarize, mothers may appraise situations in which they prioritize their work over their family as bringing higher costs for their family and simultaneously bringing fewer benefits for their career compared to fathers. These appraisals, in turn, may instigate higher levels of guilt in mothers than fathers. Therefore, in this dissertation, I will explore parents' appraisals as antecedents of their work-family guilt (Chapter 5).

How work-family guilt may lead to gendered choices

Not only may guilt be a gendered phenomenon, it may also have severe consequences and may even explain why men and women keep making gendered work-family decisions. To get back to the quote of Sheryl Sandberg, who in her book explains how to become successful at work: "Guilt management is just as important as time management for working mothers", the suggestion is made that the underlying reason why fathers and mothers often make different work-family choices (e.g., why women work fewer paid hours than men, why there are so few female leaders; Catalyst, 2020) is that mothers experience more work-family guilt than fathers. Or if we look at it from the perspective of men, that a lack of work-family guilt in fathers is the reason why so many men feel comfortable about investing heavily in their career (e.g., work more paid hours than women, and are more likely than women to occupy leadership positions). The question therefore rises if work-family guilt indeed influences parents' decisions about how much time and energy they want to invest in their career versus their parenting.

Literature on general guilt indeed shows that guilt stimulates behaviors to repair the guilt-inducing act and to recover relationships that may have been harmed (Tangney, Stuewig, & Mashek, 2007). Specifically, experiences of guilt are related to confessions, apologizing and behaviors focused on undoing consequences of the guilt inducing act; for review see Tangney, Stuewig, & Mashek, 2007). For example, when individuals in a strategic game felt guilty about not cooperating or were induced to feel guilty, they displayed higher levels of cooperation in a next round compared to individuals who felt less guilty (Ketelaar & Au, 2003). Or when employees experienced guilt as a result of being made aware of previous negative work behaviors, they subsequently showed higher levels of organizational citizenship behaviors (i.e., voluntary behaviors that promote cooperation among employees and support the organization; Ilies, et. al., 2013). Based upon this literature, I propose that work-family guilt also is likely to trigger compensatory behaviors.

A first way in which parents may compensate for feeling guilty is by reducing the time and energy that they invest in their work, spending it on their family instead. Such a strategy may be reflected in the many qualified women (and the lack of men) who report to voluntary take time off work citing family obligations as the main reason to do so (Hewlett & Luce, 2005). A second way in which parents may compensate for feeling guilty is by engaging in reparative behaviors towards their children with both positive parenting (e.g., spending extra time with the children) and permissive parenting (e.g., spoiling the children). Finally, because general guilt is associated with depression and anxiety (Ghatavi et. al., 2002; Shapiro & Stewart, 2011), work-family guilt may also negatively influence the well-being of parents and in the long run, this unhappiness may lead parents to restructure their work-family life. Therefore, when parent experience work-family guilt, this may motivate them to prioritize their caregiving tasks over their work. As such, if mothers experience more work-family guilt than fathers, this may in part explain gendered work-family decisions. In the current dissertation, we examine these consequences of work-family guilt for parents' well-being and their work-family decisions (Chapter 2). Please note that although throughout this paragraph, I refer to men's and women's *decisions* and *choices*, it may not actually be their *free choices* and *decisions* because gender norms may push fathers and mothers towards certain roles.

General research question and contributions

In the current dissertation, I present four empirical chapters on the antecedents and consequences of work-family guilt in working parents. I argue that improving our understanding of work-family guilt is crucial as it may not only negatively impact parents' well-being, but also mothers and fathers' parenting, their work-family decisions, and their ambitions. The general research question is therefore: what are the predictors and consequences of work-family guilt in parents? Based upon the literature review presented above, I hypothesize that as a result of gender stereotypes, work-family guilt is higher in mothers than fathers, and that this work-family guilt negatively impacts parents' well-being and underlies gendered work-family decisions. I tested this hypothesis in four empirical chapters. In Chapter 2, I present evidence on how work-family guilt is related to lower well-being and reinforces traditional gender roles in fathers and mothers. In Chapter 3 and 4, I show the extent to which gender stereotypes and gendered contexts predict mothers' and fathers' work-family guilt. In Chapter 5, I show how the different costs and benefits that parents perceive of prioritizing their work over their family may be gendered and predict work-family guilt in parents.

With this dissertation, I make several contributions to the gender and work-family interface literature. First, so far there has been little empirical work on consequences of work-family guilt while based upon the general guilt literature it can be expected that work-family guilt has important consequences for parents' well-being, work decisions, and parenting. The empirical work that has been done shows that work-family guilt is related to general distress (Glavin, et al. 2011) and that in an imaginary situation in which work-family guilt is induced (compared to a control situation), parents have a higher intention to spoil their

child with a lollipop (Borelli, et. al., 2017). This scarce research on consequences of work-family guilt thus confirms that work-family guilt is related to well-being and parenting. In this dissertation, I aim to examine more broadly how work-family guilt affects parents' career choices, their parenting, and their well-being. In particular, I will illuminate the role of work-family guilt in reinforcing traditional gender roles in mothers and fathers.

Second, in line with the recommendations of Shields (2013), I move away from the essentialist view that gender differences in emotions (e.g., work-family guilt) are profound and inevitable. Instead, I look at *gender in context* when investigating gender differences in work-family guilt. That is, I examine contextual factors that are expected to increase or attenuate gender differences in work-family guilt instead of just examining whether men and women differ from each other. For example, in Chapter 3, the focus is on how internalized gender stereotypes predict fathers' and mothers' work-family guilt. In Chapter 4, I investigate how gendered organizational cultures predict gender differences in work-family guilt. Moreover, in Chapter 5, I examine parents' experienced family costs when they prioritize their work and manipulate parents' experienced career benefits of prioritizing work and examine to what extent this influences their levels of work-family guilt. This way, I aim to improve the understanding of what underlies gender differences in guilt.

Finally, by using a variety of research methods, I move beyond the mere use of cross-sectional research designs and the relatively small sample sizes that characterize previous research on gendered work-family guilt (e.g., Borelli, et al. 2017; Borelli, et al., 2016; Livingston & Judge, 2008; Martinez, et al., 2006). Cross-sectional designs make firm conclusions on the causality of relationships impossible and often fail to create a deeper understanding of phenomena. Studies with small sample sizes makes it hard to detect the small - but still meaningful effects - that mostly are characteristic of gender differences. For example, although the average Australian woman only earns \$1.87 per hour less than the average Australian men (small effect), this equates \$3394 annually and is thus very relevant (based on a 35 -hour week; Cassells, Duncan, Abello, D'Souza, & Nepal, 2009). To avoid these pitfalls, I use a variety of methods in my dissertation. I present *qualitative data* to get a deeper understanding of the construct of work-family guilt and its' consequences (Study 1 in Chapter 2). Furthermore, in addition to the use of cross-sectional surveys (Study 1 in Chapter 3, Chapter 4; Study 2 in Chapter 5), I perform *experiments* to establish the causal relationships between work prioritization, parents' appraisals, and guilt (Chapter 5, Studies 1 & 3). Additionally, I conduct a *daily diary study* to examine how work-family guilt predicts various consequences (Study 2 in Chapter 2). Finally, I draw upon a large cross-national survey (N = 2601) to examine how gender stereotypes may predict fathers' and mothers' work-family guilt (Chapter 4).

The context of the Netherlands

To test my research model, I mainly performed studies in the Netherlands. I did so in part because of access to data in this country, but also because the Netherlands is an interesting country when examining gendered work-family guilt. On the one hand, the

Netherlands ranks high on the gender equality index (place 38 from 153; World Economic Forum, 2020), meaning that participation of women in the labour force is relatively high, women are equally or higher educated than men, and women are granted the same access to health as men (World Economic Forum, 2020). On the other hand, the Netherlands is still a country where the culture and policies are focused on facilitating the traditional male-breadwinner/female-caregiver family (e.g. short paternity leave, part-time work is well-regulated etc.; Gornick & Meijer, 2003; Saraceno & Keck, 2011). Therefore, although formally Dutch fathers and mothers get equal opportunities in "choosing" how much time they allocate to work and family, at the same time they are still confronted with highly gendered family norms. As such, gender differences in work-family guilt may be higher among Dutch parents than among parents who live in countries that have less gendered family norms, such as Iceland (a country that actively supports dual-earner families with long paternity leave and high-quality, heavily subsidized childcare).

In Chapter 5, I zoom out and look at nine different European countries: Bulgaria, Finland, Germany, Hungary, The Netherlands, Portugal, Spain, Sweden, and the United Kingdom. Thanks to this cross-national perspective, I can explore to what degree national indicators of gendered parenting norms shape fathers' and mothers' work-family guilt.

Please note that all empirical chapters can be read independently, as they have been published or prepared for publication in separate journals. As a result, there is some overlap in the articles regarding the literature overview and when introducing ideas.

Empirical chapters

Work-family guilt reinforces traditional gender roles in men and women (Chapter 2)

In Chapter 2, I aimed to gain insight in consequences of work-family guilt. Specifically, I examined how work-family guilt may impact the daily life of working fathers and mothers with two studies. First in a qualitative study, I conducted semi-structured, face-to-face interviews with 14 heterosexual dual-earner couples (i.e., 28 parents) to get a deeper understanding of the pervasiveness of work-family guilt in the life of working fathers and mothers. This study was exploratory and had the aim to further inform my hypotheses on consequences that work-family guilt may have. Therefore, I examined how parents felt in different work-family conflict situations that they had experienced in their own lives. If parents reported to feel guilty, I asked them how they perceived that this work-family guilt may have impacted them in various domains (i.e., work, parenting, and well-being).

This study showed that parents often reported to feel guilty in work-family conflict situations and that this guilt, in turn, was perceived to have influenced their behavior in several domains. Specifically, parents reported to compensate for their guilt by adapting their parenting (e.g., spending extra quality time with their children), their work (e.g., taking

extra leave days), their personal time (e.g., spend less time on their own hobbies) and the way they organized their work-family life (e.g., outsource housework). Some parents also cognitively reappraised the situation as a way to reduce their guilt (e.g., immediately after reporting feeling guilty, emphasizing the financial importance of working). In sum, this interview study revealed that work-family guilt impacts the life of working parents and instigates behaviors that are in line with the societally prescribed maternal role (i.e., trying to increase time and energy for family, for example by sacrificing work time).

Building upon the interview study, I then performed a daily diary study among 122 working mothers, to examine whether work-family guilt indeed results in (a) reduced commitment to work, (b) increased compensatory parenting, (c) sacrifices of one's own time and d) reorganizing one's work-family life to gain more family time. Furthermore, I also hypothesized that work-family guilt would negatively impact mothers' well-being as general guilt is known to have negative consequences for well-being (Ghatavi, et al., 2002; Nelissen & Zeelenberg, 2009; Shapiro & Stewart, 2011). This diary study allowed us to examine both between-individual differences (e.g., the more guilt mothers felt the less happy they were, compared to mothers who feel less guilty) and within-individual differences (e.g., on days that mothers experienced more guilt they felt less happy). Results indeed showed that daily work-family guilt (both between-mothers and within-mothers) was associated with reductions in the time mothers wanted to spend on work, intensification of the time and energy mothers plan to spend with their children, increases in how much mothers think about dividing their time more efficiently, decreases in mothers' own leisure time (effect only exists within-mothers), and reductions in mothers' well-being.

Moreover, the diary study allowed us to perform lagged analyses investigating the prolonged causal influence of work-family guilt (e.g., Do higher levels of work-family guilt spill-over to lower happiness the next day?). The lagged analysis suggested that a number of consequences of work-family guilt spilled over to the next day and the next day off. Specifically, on days that parents felt guilty, the next day (off) they (1) thought more about reducing their working hours, (2) made more plans to increase the time they spend with the children, (3) experienced less happiness, and (4) were less satisfied with the work-family combination.

Together, these studies illuminated how work-family guilt may impact parents', and specifically mothers', work, parenting, time management, and well-being. Therefore, the high work-family guilt that mothers experience – possibly arising from normative standards for mothers to prioritize their family (e.g., Morgenroth & Heilman, 2017; Okimoto & Heilman, 2012) - may constrain mothers' work-family choices and straightjacket mothers into adhering to a traditional maternal role norms in which they prioritize caregiving tasks over work.

Internalized gender stereotypes predict high work-family guilt in mothers but low work-family guilt in fathers (Chapter 3)

In Chapter 3, I performed a cross-sectional study and a daily diary study to test the hypothesis that internalized gender stereotypes predict high work-family guilt in mothers but low work-family guilt in fathers. In both studies, participants' gender stereotypes were measured with an implicit association task in which participants had to associate male and female names with work word and family words (Greenwald, McGhee, & Schwartz, 1998).

Study 1 (135 mothers, 116 fathers) showed that in a fictitious work-interfering-with-family situation traditional implicit gender stereotypes that tie mothers to family and fathers to work, protected fathers from feeling guilty. Specifically, the stronger fathers' implicit gender stereotypes (i.e., the more fathers associated female names with childcare-related words and male names with work-related words) the less guilt fathers anticipated to feel in the imaginary situation. Although mothers on average anticipated to feel more guilty than fathers, I did not find evidence for implicit gender stereotypes as predictor of work-family guilt in mothers.

In Study 2, I zoomed in on mothers with a daily diary study, to see if in real life it would be possible to distinguish levels of work-family guilt between mothers with more traditional implicit gender stereotypes and mothers with more egalitarian implicit gender stereotypes. The results suggested that mothers interpreted an objectively similar work situation (working more than a fulltime day) differently depending on their implicit gender stereotypes. The stronger mothers' implicit gender stereotypes the more they interpreted such a situation as work-family conflict which in turn was related to higher guilt. To conclude, these studies show that the stronger parents have internalized gender stereotypes of "caregiving mothers" and "breadwinning fathers", the more guilty mothers feel and the less guilty fathers feel in a situation in which they prioritize their work over their family.

Individual gender beliefs and organizational gender norms predict work-family guilt in parents across Europe (Chapter 4)

In Chapter 4, I took a broader, sociological perspective and examined how the micro-, meso-, and macro context shapes parents' work-family guilt. I proposed that parents' work-family guilt does not occur in a social vacuum but is created by a mismatch in parents' own work situation (e.g., their working hours) and how much time and energy they think that they *should* invest in their work and their family. Furthermore, I proposed that this idea on how they *should* divide their time and energy between work and family is likely to be, at least in part, based upon parents' own gender role beliefs and the context in which parents are embedded. Therefore, I studied how, depending upon parents' own working hours, individual gender role beliefs, organizational gender cultures, and national gender cultures drive mothers' and fathers' work-family guilt. To test this research question, I drew upon the European Social Workforce survey with data from 2601 working parents nested

in 110 organizations in 9 European countries: Bulgaria, Finland, Germany, Hungary, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

On the micro-level, results showed that when parents worked more hours, they also experienced more work-family guilt. One group was, however, an exception to this rule. Namely, fathers who endorsed relatively traditional gender role beliefs. For them, an increase in working hours was *not* related to an increase in work-family guilt. This suggests that when fathers believe that mothers are superior in caregiving, they are protected against feeling guilty when working many hours.

On the meso-level, I focused on the extent to which organizations were characterized by a father-friendly culture (i.e., support fathers' work-family balance) because in such cultures the norm is communicated that both mothers *and* fathers are seen as responsible for childcare, in contrast to organizational cultures that just facilitate mothers' work-family balance. Results indeed demonstrated that in organizations characterized by a more traditional gender culture (less "father-friendly" culture) the relationship between working hours and work-family guilt was stronger for mothers than in an organization characterized by a more egalitarian gender culture (more "father-friendly" culture) while for fathers the organizational culture did not predict their work-family guilt. Specifically, when parents worked many hours, work-family guilt was highest among mothers who worked in an organization with a traditional gender culture while levels of guilt did not differ among fathers and mothers who worked in an organization with an egalitarian gender culture. As such, mothers seemed to be more influenced by the organizational context and fathers more by their own beliefs. An explanation for this discrepancy is that gender norms that prevail in an organization are communicated more to mothers than fathers. For example, a mother is more likely to get critical questions about who takes care of her children when she works fulltime. Therefore, the prevailing gender norms may be less salient for fathers and as a consequence their own gender role belief may become more important in shaping their levels of work-family guilt compared to mothers' own gender role beliefs.

Finally, because I had data of nine European countries, I also explored the macro-level. Specifically, I examined how the national gender culture may be related to fathers' and mothers' work-family guilt in mothers and fathers. In some countries gender norms are endorsed to a larger extent than in other countries (i.e., beliefs that mothers should be the primary caregiver while fathers should be the primary breadwinner; European Commission, 2018). In order to explore if such national gender cultures are associated with parents' work-family guilt, I divided countries into more traditional countries and more egalitarian countries based upon the percentage of residents who agree with the statement that the most important role of a woman is to take care of her home and family (percentages vary from 11% in Sweden to 81% in Bulgaria). However, no indications were found that this national gender culture mattered in predicting fathers' and mothers' work-family guilt.

In sum, these findings suggest that while fathers' work-family guilt mainly depends upon their own gender role beliefs, mothers' work-family guilt mainly depends upon the

organizational gender culture. This also indicates that mothers can be protected against feeling high work-family guilt by working in an organization with an egalitarian gender culture. To conclude, this study shows the importance of creating equal treatment of fathers and mothers in work environments because this can prevent gendered work-family experiences and as such can reduce gendered work-family choices.

A gendered cost-benefit analyses underlies higher maternal guilt (Chapter 5)

Chapters 3 and 4 established that work-family guilt is, at least in part, a gendered phenomenon. That is, the extent to which parents experience work-family guilt depends upon the strength of parents' own men/work + women/family associations (Chapter 3), their own endorsement of traditional gender role beliefs (Chapter 4) and the organizational gender culture (Chapter 4). A limitation of these chapters is that they do not yet explain whether, mothers indeed experience more work-family guilt than fathers in an *identical work-family situation*. In real life the work-family situations of parents are often different (e.g., on average fathers work more paid hours than mothers). This may conceal gender differences in guilt because mothers who felt guilty may have adapted the time and energy they invest in their work versus their parenting as a result. Therefore, the question how gender relates to work-family guilt when fathers and mothers are in identical work-over-family prioritization situations has yet to be answered.

Furthermore, it remained unclear what happens *in* parents themselves that causes some parents to experience more work-family guilt than others. Is it because they appraise a same work-over-family prioritization situation (e.g., going into work when one's child is ill) differently? Given strong societal gender beliefs that mothers are better at taking care of children than fathers or other caregivers (Hays, 1996; Liss, et. al., 2013) mothers may appraise their absence from home as bringing higher costs to their family than fathers, resulting in higher maternal guilt. Additionally, given that career benefits are often more easily attained by fathers than mothers (e.g., gender pay gap, gendered performance evaluations; Barreto, Ryan, & Schmitt, 2009; Ellemers, 2014), it may be harder for mothers than for fathers to justify their prioritization of work resulting in higher maternal guilt. Therefore, in this final chapter, I zoomed in on *whether* mothers experience more work-family guilt than fathers and *why* this might be the case. Specifically, I hypothesized that mothers experience more work-family guilt than fathers because, relative to fathers, they appraise a situation in which they prioritize their work over their family as bringing higher costs for their family and at the same time as resulting in lower benefits for their career.

Study 1 showed that when parents imagined a fictitious work-over family prioritization situation (i.e., going to work even though their child was sick) they anticipated to experience higher work-family guilt than when parents imagined a more neutral situation (i.e., staying at home when their child was sick). As expected, this guilt was even higher in mothers than in fathers. In Study 2, parents rated six fictional work-over-family prioritization situations (e.g., cancelling a fun outing with their child to go into work). Findings showed that overall mothers anticipated to experience more work-family guilt in such situations

than fathers. Furthermore, these gender differences in guilt could be partially explained by mothers appraising higher family costs than fathers in such situations. However, no evidence was found that this was due to mothers appraising lower career benefits than fathers. Although Study 2 did not find that higher appraisal of career benefits was related to lower guilt, it could be that especially participants who felt guilty, reported high career benefits of prioritizing work as a way to justify their prioritization of work. In Study 3, I therefore manipulated career benefits appraisals by asking participants to describe up to three reasons why either investing time and energy in work could benefit their career (*high career benefits condition*) or why investing time and energy in their career does sometimes not result in benefits for their career (*low career benefits condition*). Results indeed showed that when thinking about how their investment in work would result in career benefits, mothers felt less guilty about the family costs that their investment in work brings. However, for fathers I did not find that thinking about career benefits reduced their work-family guilt. This suggests that only mothers can be protected from feeling work-family guilt when they experience higher career benefits of their investment in work. Possibly, fathers perceive their investment in work less as a choice than mothers. Therefore, although they may appraise career benefits of their investment in work, this does not help fathers to justify the time and energy they invest in their work and as such this will not reduce their guilt (i.e., for fathers it is the default, so it is always justified).

Together, these studies suggest that if fathers and mothers would be in identical work-over-family prioritization situations, mothers would experience more work-family guilt than fathers. This is because mothers appraise situations in which they prioritize their work over their family, as bringing higher costs to their family than fathers. However, mothers can be partially protected from feeling guilty when they experience career benefits arising from their work prioritization, probably making the perceived family costs seem worthwhile. Organizations and governments may benefit from this knowledge by giving mothers visible career rewards for the time and energy they invest in their work, such as compliments, career developments possibilities, and promotion opportunities. This may decrease mothers' work-family guilt and as such increase their commitment to work.

General conclusion

Although there has been a remarkable change in the presence of women in the workforce, gender inequities in the work and family domain continue to exist (e.g., Catalyst, 2020; European Commission, 2018). Previous explanations of these gender inequities have mainly focused on the barriers that women face in the workforce (Barreto, Ryan, Schmitt, 2009; Ellemers 2014). However, now that women have entered the workforce in large numbers and some women also attained high positions, it is argued more often that the remaining gender inequality must be due to women's active choice and desire to focus on taking care of their family (and men's active choice to focus on their career; Fels, 2004; Hakim, 2006; Sandberg, 2013) In contrast, the four empirical chapters presented in this dissertation show how mothers' high feelings of work-family guilt result from internalized

gender stereotypes and this guilt, in turn, straightjackets mothers in traditional maternal roles.

Insights gained from this dissertation

The findings of this dissertation extend the previous literature on gender and the work-family interface (e.g., Ellemers, 2014; Williams, Berdahl, & Vandello, 2016). First, I show that parents' levels of work-family guilt are shaped by the environment in which they are embedded. For example, when mothers work in a "father-friendly" organization in which both fathers and mothers are seen as responsible for childcare, gender differences in guilt disappear (Chapter 4). Additionally, the less mothers have internalized gender stereotypes of "breadwinning fathers" and "caregiving mothers" the less they see working many hours as a work-family conflict and the less work-family guilt they experience (Chapter 3). Furthermore, mothers only experience more work-family guilt than fathers when they (temporarily) prioritize the worker-role over the caregiver-role. For example, mothers experience more work-family guilt than fathers in an imaginary work-family conflict situation but not in a work-family situation in which everything goes well (Chapter 5). Therefore, it can be concluded that rather than guilt being a feminine emotion, the social context in which fathers are seen as breadwinners and mothers as caregivers induces high work-family guilt in mothers (but not fathers). These findings imply that mothers do not necessarily have to experience high work-family guilt when they invest in their career. In contrast, it is possible to create contexts in which working mothers experience similar levels of guilt as working fathers.

Second, findings of this dissertation reveal that in today's society, mothers are more prone than fathers to see the costs for their family that the time and energy that they invest in their work brings (Chapter 5). This is in line with earlier research showing that mothers are still seen as a superior caregiver compared to fathers and other caregivers (Hays, 1996; Liss, et. al., 2013). Because of these higher appraised family costs, mothers experience more work-family guilt than fathers. Furthermore, fathers are still more likely to get career benefits than mothers (e.g., gender pay gap; Ellemers, 2014). However, this dissertation shows that by giving mothers (but not fathers) more visible career benefits, mothers' work-family guilt reduces (Chapter 5). As such, visible career benefits may increase mothers' willingness to invest in their career.

Third, I show that guilt is not an isolated emotion, but impacts the way fathers and mothers organize their work-family life. Specifically, the higher the work-family guilt that mothers experience (1) the more they think about reducing their working hours, (2) the more they sacrifice their own leisure time, (3) the more plans they make to increase the time with their children, and (4) the worse their well-being (Chapter 2). As such, work-family guilt acts as a straightjacket that keeps mothers in their traditional gender role. Therefore, when work-family guilt is more equally divided between fathers and mothers, work-family decisions will become less gendered.

Fourth, together these findings show that the choice narrative that is so often used when explaining fathers and mothers' work-family decisions is too limited (i.e., the belief that people's actions are a product of people's own preferences and goals, and are freely chosen, independent of social contexts Stephens & Levine, 2011). Even how guilty parents feel about the way they divide their time and energy between their work and family is already, in part, determined by the context in which parents find themselves. For example, when a mother quits her job for the benefit of her family, this is often seen as a voluntary choice, even though this decision may have been driven by work-family guilt imposed by societal norms. Therefore, the work-family choices that parents make are not simply a matter of their own preferences, but are influenced by the social and organizational context. That is, mothers (but not fathers) may be put in a 'guilt straightjacket' by 'family-prioritization' norms that apply only to mothers and not fathers. This is important to recognize because the more fathers' and mothers' work-family choices are seen as *individual choices* (free of contextual influences), the more people believe that men and women get equal opportunities and that gender discrimination does no longer exist (Stephens & Levine, 2011). This denial of gender discrimination may not only cease measurements to improve gender inequality (e.g., stop measurements to improve women's financial independence) but also put the blame for remaining gender inequality on women themselves (e.g., seeing it as women's own fault when they are financially dependent).

Strengths, limitations and suggestions for future research

With this dissertation, I provide new insights into why men and women keep making different work-family choices. A strength of this research is that I did not just assume gender differences in work-family guilt but tested whether these gender differences existed by including both men and women in most of our studies. Furthermore, following up the recommendations of Shields (2013) I illuminated contextual factors that drive gender differences in work-family guilt.

Another major strength of this dissertation is its' interdisciplinary nature. By using theories of different disciplines, I could gain a profound understanding of the gendered nature of work-family guilt. To illustrate, I draw upon the psychological theory of stress appraisal to increase my understanding of *how* gender predicts guilt, I used social-psychological theories (e.g., the prioritization model) to predict that the relationship between gender and guilt would depend upon parents' internalized gender stereotypes, and I was inspired by sociological theories (e.g., doing gender) to understand the influence of the context on individual behavior better.

With regard to research methods, I combined multiple methods to increase the validity of findings. To get a deeper understanding of the construct work-family guilt and its consequences, I used qualitative interviews (Chapter 2), which I followed up with a daily diary study on consequences of work-family guilt to get more objective and generalizable information (Chapter 2). To investigate how gender stereotypes shape parents' work-family guilt, I used the implicit association test and investigated with both a cross-sectional

design and diary study how the strength of parents' associations pairing men with work and women with family would predict their work-family guilt (Chapter 3). Closely related to this, I examined how parents' own gender role beliefs and their organizational contexts shape their work-family guilt by using a large cross-sectional dataset (i.e., European Sustainable Workforce Survey, Chapter 4) with information of multiple actors (i.e., work-family guilt according to the parent and organizational gender culture according to the HR-manager). Finally, by using vignettes (i.e., imaginary work-over-family prioritization situations), it was possible to compare fathers and mothers in identical situations (Chapter 5). By using these different methods, I could answer a variety of research questions that could not have been answered without it (or less optimally).

Despite these strengths, this dissertation also has a number of limitations that are in need for further investigation. First, in this dissertation I demonstrate short-term effects of work-family guilt. But how does work-family guilt influence parents' and especially mothers' ambition, job decision, and parenting in the long term? Now, findings of this dissertation suggest that work-family guilt is only related to parenting plans, but not to actual reported parenting behaviors (e.g., spending more quality time with the children). However, this could be due to the fact that parents need to find the time to change their parenting behaviors. Therefore, future research should longitudinally investigate work-family guilt and its consequences.

Second, I show that how guilty parents feel is predicted by their gendered appraisals of career benefits and family costs but I only looked at their *own appraisals* of their *own behavior*. In real life, however, in many work-interfering-with-family situations the level of guilt that mothers and fathers feel may depend upon a *couple's appraisal* of career benefits and family costs. For example, if a child is sick and both the father and the mother think that the child needs the mother more, family costs when the mother goes to work rather than when the father goes to work may not only be appraised higher by the mother herself but also by her male partner, which may elicit additional guilt in the mother. Relatedly, although I demonstrated that guilt depends upon parents' gender stereotypes, it is important in future research to also establish if gender stereotypes account for the gendered appraisals of career benefits and family costs.

Third, in this dissertation, I show that the organizational context predicts the extent to which parents experience work-family guilt. Although this is a first step in showing that contexts matter, I recommend future research to take into account how the broader environment shapes parents' work-family guilt because other contexts may be equally or even more important. For example, to what extent are parents' work-family guilt experiences and their work-family choices predicted by how they are raised themselves or by how their friends and neighbors combine their work and family. Showing how such contexts relate to work-family guilt could not only further establish that guilt is a result of social context (rather than a "fixed" trait) but can also demonstrate which contexts are most influential and how it is best to intervene.

Fourth, although throughout this dissertation, I often argued that mothers' and fathers' choices to focus on the work and/or family domain are shaped by gender stereotypes, I did not integrate the gendered aspect of this choice ideology. In today's society working full-time or at least four days a week is fairly self-evident for men, but women experience working to a higher degree as something that they *choose* to do (e.g., Van Steenbergen, Ellemers, & Mooijaart, 2007). Research shows that seeing actions as a product of independent choices stops women from seeing how gender stereotypes still are influential (Stephens & Levine, 2011). As such, this perception of free choice is a potential important mechanism that gives room for moral emotions, such as guilt. Therefore, I recommend future research to examine how this perception of free choice is related to work-family guilt, for example by manipulating this choice perception or by comparing levels of guilt from mothers who have to work to provide for their family and mothers who work out of personal fulfillment.

Fifth, the focus of this dissertation was exclusively on *the guilt* that parents feel when they *prioritize the worker role* over the caregiver role. But how do parents feel when they prioritize the caregiver role over the worker role? As this is non-normative behavior for men and normative behavior for women, you might expect that especially men would feel guilty. At the same time, research on the double bind for women suggests that also they have to adhere to ideal worker standards (e.g., Eagly & Karau, 2002) and therefore women might feel just as guilty. A better parallel is perhaps to look at how men who do not fulfill the breadwinner role feel. I propose that when investigating this it may be important to also take into account shame, as research suggests that guilt is mainly felt about controllable actions and shame is mainly felt about uncontrollable actions (Tracy & Robins, 2006) and not fulfilling the breadwinner role is often involuntary and thus uncontrollable for men (Drago, Black, & Wooden, 2005).

Finally, it is important to examine the extent to which these results can be translated to non-traditional families such as fathers and mothers in homosexual relationships or single parents. Gender stereotypes that fathers should prioritize the worker role and mothers the caregiver role, may be less relevant in non-traditional families because it is not possible to assign these caregiving tasks and/or breadwinning tasks based upon gender (e.g., also homosexual parents have to pick up their child from school when he/she is ill). Therefore, same-sex parents or single parents may not carry the same gender baggage as heterosexual parents do. Related to this, research shows that the division between paid and unpaid work is generally more equal among homosexual couples than heterosexual couples (e.g., Solomon, Rothblum, & Balsam, 2005; Brewster, 2015). Therefore, it is the question how work-family guilt develops in single parents and homosexual parents. For example, is work-family guilt more equally divided within homosexual parents than within heterosexual parents? I recommend future research to examine work-family guilt in parents within non-traditional families.

Practical implications

Based on the results presented in this dissertation, several practical recommendations can be made. This dissertation, clearly shows that social contexts shape parents' work-family experiences and their choices. Therefore, I argue that we should not put the responsibility for gender inequality on individuals themselves and relatedly that the aim should not be to develop strategies on how parents can just *alter their choices* to improve gender inequality. Rather, we should try to adapt the social and organizational context such that mothers and fathers are seen as equals in caring and working.

Although it may be hard and time-consuming to realize changes on a societal level, national policies that promote that fathers and mothers are seen and treated as equal partners in raising children may help to take away the gendered aspect of work-family guilt. Specifically, our results illustrate that mothers see higher family costs of prioritizing their work over their family than fathers (Chapter 5), and therefore such policies could help to make men and women's appraisal of family costs more even, and reduce the higher maternal work-family guilt. To illustrate, with a short paternity leave and a much longer maternity leave, governments communicate to parents that fathers are responsible for the breadwinning role and mothers for the caregiving role. When parents internalize such norms, mothers experience more guilt than fathers when prioritizing work over family (Chapter 3). By treating fathers and mothers as equally willing and capable of raising their children, for example, by giving them equal leaves, mothers and fathers may internalize this equal treatment and as such experience similar levels of guilt. This will reduce gendered work-family choices.

Also, at the organizational level, I recommend to implement policies focused on treating fathers and mothers as equal partners in the work and parenting domain. For example, employers and/or HR-managers could meet with every employee that became a parent and asking them which family arrangements will make it easier for them to combine their work with their family (when this is informally done, only women get explained these family arrangements; Wise & Bond, 2003). Furthermore, organizations should pay attention to giving women equally high career rewards than men, because mothers' who see career benefits of their investment in work experience less work-family guilt. For example, compared to men, women often get fewer bonuses (Kulich, Trojanowski, Ryan, Haslam, & Renneboog, 2011), representation opportunities (Johnson, Smith, & Wang, 2017), payment (Catalyst, 2020), and are more likely to be undervalued (Cahusac & Kanji, 2014). By reducing this gender gap in career rewards, mothers' experienced work-family guilt may decrease.

Finally, making parents aware of how contexts shape their experiences and choices may help to take away the pervasive assumption that their work-family division is purely a product of their own choice - independent and free from contextual influences (Stephens & Levine, 2011). By making parents aware of how their work-family experiences and choices are shaped by gender norms within their social and organizational context, they may be

encouraged to carefully think about how they themselves want to combine their work and family life instead of just doing what is expected of them.

Conclusion

The way heterosexual couples divide paid work, childcare and household duties is still highly gendered with men working most of the paid hours and women taking on the majority of household and caregiving tasks (European Commission, 2018; Catalyst, 2020; Pew Research Center, 2019b). In this dissertation, I show that these gendered work-family divisions do not arise from fixed preferences of fathers and mothers but rather are a response to social and organizational contexts that still prescribe fathers to prioritize the worker role and mothers to prioritize the caregiver role. Empirical findings show that the more parents have internalized traditional gender stereotypes, the more work-family guilt mothers experience and the less work-family guilt fathers experience. Relatedly, mothers experience the time and energy they invest in their work as more costly for their family than fathers resulting in higher maternal work-family guilt. This work-family guilt, in turn, acts as a straightjacket keeping mothers in the traditional caregiver role. Furthermore, empirical findings suggest that an important first step to ‘ungender’ guilt is by treating fathers and mothers as equal partners in raising children. For example, by creating a “father-friendly” culture within organizations where in addition to attention for mothers’ work-family balance, there is also attention for fathers’ work-family balance.

I started my dissertation with a quote from Facebook COO, Sheryl Sandberg, who in her book explains how women should change in order to reach influential positions: “Guilt management is just as important as time management for mothers” (p. 138). Although empirical findings of this dissertation indeed suggest that work-family guilt keeps mothers in traditional gender roles, they also reveal that work-family guilt is a response to social and organizational contexts that prescribe mothers, but not fathers, to prioritize childcare over work. Therefore, I recommend that rather than focusing on “fixing” mothers, we should focus on “fixing” the social and organizational context in which parents are embedded.



Work-family guilt as a straightjacket. An interview and diary study on consequences of mothers' work-family guilt

Note. This chapter was awarded with the best paper award at the WAOP conference and is based on **Aarntzen, L.**, Derks, B., Van Steenbergen, E., Ryan, M., & Van der Lippe, T. (2019). Work-family guilt as a straightjacket. An interview and diary study on consequences of mothers' work-family guilt. *Journal of Vocational Behavior*, 115, 103336.

Abstract

Working mothers often experience guilt when balancing work and family responsibilities. We examined consequences of work-family guilt with an interview study (N = 28) and daily diary study (N = 123). The interview study revealed that as a result of work-family guilt, parents tended to either reappraise the situation (e.g., emphasizing financial importance of work) or compensate for their guilt by adapting their parenting, adapting their work, and by sacrificing their leisure. Consistently, the diary study (where mothers completed online daily questionnaires over 8 consecutive days) revealed that higher work-family guilt was related to more traditional gender behaviors in mothers. Specifically, mothers (a) thought more about reducing their working hours, (b) reduced the time they planned for themselves, and (c) planned to reserve more time and energy for their children in the future although no changes in actual parenting behaviors were observed. Moreover, the diary study demonstrated that work-family guilt is associated with lower well-being for mothers. Together, these studies illuminate how work-family guilt may motivate mothers to comply with gender norms in which they prioritize caregiving tasks over their work.

More than ever before, mothers in the U.S. are working outside of the home; an increase from less than half of mothers in 1975 to almost three-quarters of mothers in 2017 (Pew Research Center, 2018). Indeed, an increasing number of mothers work in full-time paid employment (Pew Research Center, 2016). However, somewhat paradoxically, among mothers who are employed full-time, almost half would prefer to either work part-time or to stop working all together (Pew Research Center, 2013). Furthermore, despite the high percentage of mothers in paid employment, mothers still shoulder a disproportionate amount of the domestic work relative to fathers (Craig & Mullan, 2010).

Such statistics have led the popular media to suggest that mommy guilt is “getting the better of” working mothers (Redrick, 2011). Indeed, it has been proposed that the reason why so many highly educated, talented women ‘choose’ to opt-out the career path (Belkin, 2003), is because of the guilt they feel about work commitments interfering with their time with their children. However, to our knowledge, there is little empirical work on the consequences of work-family guilt. In this paper we address this gap in the literature. We examine how work-family guilt may influence parents’ (and especially mothers’) career choices, their parenting, and their well-being. In particular, we aim to illuminate the possible role of guilt in reinforcing gendered roles in mothers both at home and at work.

Work-family guilt in mothers

Almost all working parents will recognize situations in which their work responsibilities have interfered with their family responsibilities, for example, having to work even though your child is sick or coming home late and missing a family dinner. Although both fathers and mothers may experience guilt in such situations, feelings of guilt are likely to be especially prevalent in mothers because standards of good parenting are more intensive for mothers than fathers (e.g., Borelli, Nelson-Coffey, River, Birken, & Moss-Racusin, 2017; Martinez, Carrasco, Azo, Blanco & Espinar, 2011).

Notions of ‘intensive mothering’ assume that the time mothers spend parenting is especially important for the well-being of their children, and that this time is more important than that spent by fathers or by other caregivers (e.g., Liss, Schiffrin, Mackintosh, Miles-McLean, & Erchull, 2013). Relatedly, there still exists a normative pressure for mothers, but not fathers, to prioritize their family over their work (e.g., Morgenroth & Heilman, 2017; Okimoto & Heilman, 2012; Park, Smith, & Correll, 2010). For example, mothers who do not take parental leave are perceived as failing to adhere to ‘family prioritization norms’ and are judged to be worse parents compared to those mothers who do take parental leave (Morgenroth & Heilman, 2017). However, there is a Catch-22, because mothers who do take maternity leave are evaluated more negatively in a professional capacity (Morgenroth & Heilman, 2017).

Taken together, this research suggests that normative notions of what it means to be a good mother are in conflict with norms of what it means to be a successful professional (see also Cejka & Eagly, 1999; Schein, 1973). However, for fathers, the role of a good parent and successful professional align. Fathers are expected to be the breadwinner, so when they prioritize their work, they still fulfill their family obligations (e.g., Blair-Loy, 2003). Indeed, working fathers and non-working fathers are seen as equally competent as parents whereas working mothers are seen as less competent parents than those who do not work (Okimoto & Heilman, 2012).

As a result of these gendered norms and the gendered division of labor, there are two reasons why working mothers may be more likely to struggle to combine work and family than are working fathers. First, because mothers, compared to fathers, spend more of their time caring for children, mothers may be more likely to encounter situations in which they have to choose between prioritizing work or family (e.g., Duxbury & Higgins, 1991). Second, in situations where work interferes with their family (e.g., an unexpected meeting at work prevents parents from watching their child's football game), only mothers, and not fathers, may be viewed as prioritizing the wrong domain and may be judged more negatively (e.g., Okimoto & Heilman, 2012).

In line with the above, research shows that mothers experience more guilt about combining work and family than do fathers (e.g., Borelli et al., 2017; Borelli et al., 2016). Guilt is a moral emotion that people experience when they perceive that they have violated a societal or moral standard (e.g., Tangney, Stuewig, & Mashek, 2007). In situations where work and family conflict, mothers are thus more likely than fathers to violate societal standards. Research shows that women's descriptions about how employment affected their family were coded by blind raters as including more references to work-family guilt than did men's descriptions (Borelli, et al., 2016). It has also been demonstrated that when mothers and fathers were asked to imagine an identical work-family conflict situation, mothers anticipated more guilt than fathers (Aarntzen, Derks, Van Steenbergen, Van der Lippe, 2019). Moreover, gender differences in guilt were not found in a more neutral work-family situation, suggesting that it is not an innate tendency of mothers to experience more guilt, but rather that mothers experience more guilt in work-family conflict situations in which they violate the family prioritization norm.

Research demonstrates that experiences of guilt trigger behaviors that are intended to compensate for the guilt-inducing act and to make amends for relationships that were harmed (Ketelaar & Au, 2003; Roseman, Wiest, & Swartz, 1994). For example, Roseman and colleagues (1994) demonstrated that when participants were asked to remember a guilt situation in their own life they reported wanting to apologize for their action and to perform remedial action. Furthermore, individuals who participated in a social bargaining game and felt guilty about not cooperating in a first round of the game (compared to individuals who did not feel guilty) displayed higher levels of cooperation in a subsequent round (Ketelaar & Au, 2003).

Based on this research, we expect that work-family guilt is likely to trigger subsequent behaviors and decisions to redress the guilt-inducing act. In the following sections, we argue that work-family guilt is likely to have important consequences for mothers in three distinct ways: (1) consequences for work and career, (2) consequences for parenting, and (3) consequences for well-being.

Consequences for work and career

One way in which mothers may compensate for feeling guilty is by limiting the time and energy they invest in their work, spending this time and energy on their family instead. Such a strategy is reflected in the number of mothers who choose to step back the career-track because of family reasons. For example, Hewlett and Luce (2005) conducted a survey, completed by highly qualified women, which showed that nearly four in ten women reported that they voluntarily took off time from work, with the majority of women citing family reasons as the most important reason for leaving.

Drawing upon the broader work-family literature, it is known that work-family conflict influences a range of work-outcomes (for meta-analyses, see Allen, Herst, Bruck, & Sutton, 2000; Amstad, Meijer, Fasel, Elfering, & Semmer, 2011). For example, work-family conflict decreases job satisfaction, decreases organizational commitment and increases turnover intention. Therefore, guilt arising from work-family conflict, may have an important impact on workplace outcomes. Literature also shows that work-family conflict is positively associated with work hours (Voydanoff, 1988). Since reducing work hours may be a direct way to spend more time on family instead of on work, we expect that as a result of work-family guilt, parents may consider to reduce their working hours.

Consequences for parenting

Another way in which mothers may compensate for work-family guilt is by adapting their parenting, specifically, by engaging in reparative behaviors towards their children. Borelli and colleagues (2017) presented parents with a vignette in which they arrived late at the daycare to pick-up their child because of work-obligations. When they went shopping with their child before going home, their child demanded a lollipop. Parents who reported higher guilt in response to this vignette were more likely to say that they would buy their child a lollipop compared to those parents with lower guilt. On this basis, we suggest that work-family guilt may be associated with higher levels of permissiveness in parenting.

We suggest that work-family guilt may not only increase permissive parenting, which is associated with negative consequences for the child (e.g., lower self-esteem and life satisfaction; Milevsky, Schlechter, Netter & Keehn, 2007), but may also prompt parents to show more positive parenting behaviors such as spending extra time with their child. For example, using survey data from employed parents, Cho and Allen (2012) demonstrated

that parents who experienced higher work-family conflict undertook less recreational and educational activities with their children. Importantly, this relationship was weaker for parents who in general had a higher tendency to experience guilt (higher on trait guilt). This indicates that parents who experience more guilt when their work interferes with their family also compensate more in their parental behaviors. However, evidence about the influence of work-family guilt on parenting behaviors is inconclusive. In an experimental study, River, Borelli, and Nelson-Coffey (2019) randomly assigned parents to read either a vignette depicting work-family conflict or a control condition and examined the influence on parents' attempts to calm a crying baby. No effect was found. Importantly, the study also showed that there was no effect of condition on guilt, which we propose might be the reason for the null-finding.

In the current research, we hypothesize that work-family guilt is the underlying reason why parents adapt their behavior in response to work-family conflict and we further explore how work-family guilt may affect parenting behaviors.

Consequences for well-being

We also expect that work-family guilt will negatively influence well-being. Research on general guilt demonstrates that it is associated with both depression (e.g., Ghatavi, Nicolson, MacDonald, Osher, & Levitt, 2002) and anxiety (e.g., Shapiro & Stewart, 2011). Furthermore, guilt has been shown to lead to self-detrimental behavior. Specifically, participants who were manipulated to experience guilt held their hands in ice water for a longer time, and reported this experience to be more painful, compared to participants in a control condition (Nelissen & Zeelenberg, 2009).

This raises the question as to whether the negative consequences of general guilt for well-being extend to work-family guilt. A first cross-sectional study, using data from a survey of working Americans suggests that this might indeed be the case (Glavin, Schieman, & Reid, 2011). Women, but not men, reported higher feelings of guilt when doing more work outside normal work hours. This guilt, in turn, was associated with more general distress.

The present research

To examine consequences of work-family guilt, we conducted two studies using multiple methods. First, in Study 1 (N = 28) we conducted in-depth interviews with heterosexual, dual-earning parents to identify the consequences parents themselves report as a result of work-family guilt. In Study 2 (N = 122) we built upon the results of the interview study and report a daily diary study designed to test whether the relationships between work-family guilt and outcomes reported by individuals in the interview-study, indeed exist and can be generalized to a larger population of working mothers.

With the interview study, Study 1, we aim to achieve a deeper understanding of the pervasiveness of work-family guilt in the life of working fathers and mothers. Therefore, we examined how parents report feeling in work-family conflict situations. Then, for those parents who reported feeling guilty, we examined how they perceive the influence of this work-family guilt and the subsequent consequences it may have. This interview study is exploratory in nature and allows us to further inform our hypotheses on how guilt may result in a variety of consequences in different domains (i.e., work, parenting, and well-being). Theoretically, both fathers and mothers may experience work-family guilt and may suffer from consequences of work-family guilt. Therefore, we also included fathers in the interviews. However, given the nature of work-family guilt as a gendered phenomenon, we expect work-family guilt and subsequent consequences to be especially pervasive in the life of mothers.

Building upon the interview study we conducted a daily diary design (Study 2). We chose this design because of its various advantages. First, a diary study allows us to distinguish between *between-individual* differences, such that some individuals may feel more guilt than others, as well as *within-individual* differences, such that how guilty an individual feels may vary across time and circumstances. We were motivated to do so because between-individual effects, where mothers who in general feel more guilt also are less happy, are not necessarily the same as within-individual effects, where on days that mothers experience more guilt they feel less happy than on days that they experience less guilt (Berry & Willoughby, 2017). To clarify, a common example of such divergence is the relationship between exercise and blood pressure. Those individuals who exercise more, have lower blood pressure (i.e., between-individual effect), at the same time blood pressure tends to increase when individuals exercise (within-individual effect; Berry & Willoughby, 2017). Specifically, with work-family guilt it may be the case that those parents who experience more guilt may not necessarily be less happy than parents who experience less guilt, as they may have found ways to cope with the guilt. At the same time, we may still find the within-individual effect, such that the happiness of individuals decreases on days when they experience more work-family guilt.

A second advantage is that between-individual effects can be tested more reliably because data is collected over multiple days. Thus, compared to cross-sectional data, the measurement of guilt and its hypothesized consequences is more robust and retrospective bias is reduced (Ohly, Sonnetag, Niessen & Zapf, 2010). Third, a diary study allows us to use lagged within-individual analyses to examine the prolonged influence of work-family guilt on hypothesized outcomes (e.g., does work-family guilt spill over to outcomes the next day?). Finally, these lagged analyses are a good way to investigate the causal relationships between work-family guilt and consequences (Hamaker, Kuiper, & Grasman, 2015).

Based on the previous research discussed above, we expect that work-family guilt will be pervasive in the life of mothers in two ways. First, we hypothesize that work-family guilt will be prevalent in situations in which mothers experience that their work interferes with

their family. Second, we hypothesize that work-family guilt will have an effect on (a) making adjustments at work, (b) making adjustments in parenting, and (c) individual well-being.

Study 1: Interview Study

In Study 1, we used semi-structured interviews to explore two research questions: (1) how do parents feel (i.e., their affective state) when they experience work-family conflict, and (2) if parents do experience work-family guilt, what are the consequences?

Participants

Participants were recruited through flyers distributed by acquaintances in a primary school and using a snowballing technique. This resulted in a participant sample of 14 heterosexual, dual-earner couples, who had at least one child aged 6 years or younger ($N = 28$). Couples had on average 2.21 children ($SD = 0.69$). All couples were cohabiting and 71.4 percent was married. On average, participants were 37.39 years old ($SD = 4.18$). On average, female participants were contracted to work for 27.00 hours per week, whereas male participants were contracted to work for 38.95 hours per week.

Procedure

We conducted semi-structured, face-to-face interviews, which we audiotaped. Each interview was conducted by the first author (a female interviewer) in interviewee's own homes. While both members of the couple were typically present during the interview, they were interviewed separately, and in a random order. The duration of the interviews varied from 15 minutes to 47 minutes ($M = 28.82$, $SD = 7.16$). Participants gave verbal informed consent before starting the interview.

Each interview began with demographic questions and an explanation of work-family conflict. The interview questions were divided into three parts: 1) questions about participants' own experiences of work-family conflict, 2) questions about guilt, in particular, whether participants felt guilty after experiencing work-family conflict, and 3) questions about the consequences of work-family conflict. See online supplement (Appendix A) for an overview of the interview procedure and questions. At the end of the interview participants were provided with the opportunity to ask questions and they received a small gift (i.e., chocolates) as a 'thank you'.

Data analysis: Thematic analysis method

We audiotaped all interviews and transcribed them verbatim afterwards. We conducted thematic analysis, based on Braun and Clarke's (2006) stepwise procedure, to identify commonly recurring themes. The first author read the interview transcripts to identify initial codes in light of the research questions, that is, regarding affective states related

to work-family conflict and subsequent consequences. After initial codes were developed, we used an inductive approach to organize codes into broader themes. All of the authors reviewed the themes and some minor changes were made as a result of discussion. This process led to a template in which we organized the codes within themes; each code was accompanied by an example (see Table 1 and Table 2 for final templates). Then, the first author and a student-assistant (who was blind to the research hypotheses) performed a second round of coding where the coders independently applied the codes from the final template to the transcribed interviews. Where coders applied different codes to sections of text, discussion between the two coders led to an agreement in all cases.

Results

Feelings after work-family conflict

We first explored how parents felt when they experienced work-family conflict. Parents primarily reported negative emotions as a result of work-family conflict, however, the negative emotions mentioned were diverse. Based on the thematic analyses, we classified the emotions into 3 categories: *guilt*, *stress*, and *neutral* (see Table 1 for an overview and examples). We classified emotions as *guilt* when participants indicated that after work-family conflict they 'felt guilty', 'had the feeling they failed their family', or 'felt that they were a bad parent'. Emotions were classified as *stress* when participants reported 'feeling powerless', 'rushed', or that 'they perceived it as a difficult situation'. Finally, emotions were classified as *neutral*, when participants reported to easily be able to "put WFC into perspective" or that they just "perceived it as a part of normal life". The frequency with which each emotion is reported is shown in Table 1, separately for fathers and mothers.

Guilt: Parents often mentioned guilt as arising from work-family conflict. Predominantly, parents reported feeling guilty in relation to their children, particularly mothers (13 out of 14 mothers and 7 out of 14 fathers).

[Interviewer: "How do you feel when you experience this work-family conflict?"] "That makes me uneasy. Yes, then I feel guilty towards my children" (Mother, couple 9)

However, participants also reported feeling guilty in relation to a) their partner (6 out of 14 mothers and 4 out of 14 fathers), b) their work (5 out of 14 mothers, 1 out of 14 fathers), and c) the babysitter (2 out of 14 mothers and 2 out of 14 fathers). See below an example of a mother who reports feeling guilty in relation to her partner.

"You know, at these moments if I have to call my husband for the umpteenth time, and tell him I'll be back later; can you pick up the children? At these moments I feel guilty towards my husband..... more than towards my children." (Mother, Couple 12)

TABLE 1 Different Feelings Reported by Participants as a Result of Work-Family Conflict (WFC)

Theme	Code	Example
Guilt	Felt guilty/Felt as failing: towards child <i>Reported by 7 fathers and 13 mothers</i>	["How do you feel when you experience this work-family conflict?"] "That makes me uneasy. Yes, then I feel guilty towards my children" (Mother, couple 9)
	Felt guilty/Felt as failing: towards partner <i>Reported by 4 fathers and 6 mothers</i>	"You know, at these moments if I have to call my husband for the umpteenth time, and tell him I'll be back later; can you pick up the children? At these moments I feel guilty towards my husband... more than towards my children." (Mother, couple 12)
	Felt guilty/Felt as failing: towards work <i>Reported by 1 father and 5 mothers</i>	"Because my husband is also my employer, it is easy to solve situations in which our children are sick while we are at work. Then I just go home and work from home. Of course, that is less optimal than working at the workplace. We are very lucky that we can solve it this way, but sometimes I feel a little bit guilty towards work, that I am absent again." (Mother, couple 5)
	Felt guilty/Felt as failing: towards babysitter <i>Reported by 2 fathers and 2 mothers</i>	["And do you know towards whom you feel guilty?"] "More towards people who babysit our children, not towards my wife or children but more towards my parents or the babysitter, when I arrive late again." (Mother, couple 13)
Stress	Felt as a bad parent <i>Reported by 0 fathers and 3 mothers</i>	"I felt very guilty, not so much because things did not go well at home but because how it felt.... I just felt a bit like a bad mother." (Mother, Couple 1)
	Felt powerless <i>Reported by 2 fathers and 1 mother</i>	"This means that my wife has to bring the children to the day-care on her own in the morning. So that is very stressful and hectic for her and I cannot do much about it... I sometimes feel a bit powerless But that is my work and I can hardly ignore it" (Father, couple 1)
	Felt rushed <i>Reported by 4 fathers and 3 mothers</i>	"That was a very busy, hectic time. Then you do nothing else than hurrying. I find that rushed feeling a very negative feeling" (Father, couple 12)
	Perceived WFC as a difficult situation <i>Reported by 10 fathers and 7 mothers</i>	"Sometimes I have to finish some work at home. Then I have to work on my laptop while my husband does something nice with our daughters. Yes, I can find that a bit difficult" (Mother, couple 7)
	Put WFC into perspective <i>Reported by 3 fathers and 1 mother</i>	"Well, sometimes things go different than you planned. For example, we always eat at 18.00. And sometimes I am not home before 18.00 and then I miss (part of the) dinner. For example, when a work meeting ends late. But I do not get stressed about these situations. It is not a big deal" (Mother, couple 10)
Neutral	Perceived WFC as part of normal life <i>Reported by 2 fathers and 1 mother</i>	"I do the best I can, so I cannot really blame myself. That I sometimes arrive home late, that is part of life. It is not always fun, but it is just a given." (Father, couple 4)

Note. Sample size is 14 couples (14 mothers and 14 fathers).

Some guilt was not directly associated with a person, but rather related to a judgement about themselves as a bad parent (3 out of 14 mothers, no fathers). Consider this statement from a working mother:

"I felt very guilty, not so much because things did not go well at home but because of how it felt.... I just felt a bit like a bad mother" (Mother, Couple 1)

Consequences of work-family guilt

In the second section of the interviews we focused on the consequences of work-family guilt. Participants reported a range of different consequences, but almost all were actions focused on remedying previous behaviors about which they felt guilty. We identified five main categories: *compensatory parenting*, *adapting work*, *sacrificing personal time*, *time management*, and *justifying guilt* (see Table 2 for an overview and examples). Interestingly, the first four categories, which are focused on compensating for previous behaviors, are all more often reported by mothers than by fathers, only the last category, which is more focused on reappraising the behavior (i.e., 'justifying guilt'), is more likely to be reported to a larger extent by fathers. The frequency with which each consequence is reported is shown in Table 2, separately for fathers and mothers. Each of these categories is discussed below.

Compensatory parenting: We classified consequences of work-family guilt as compensatory parenting when participants indicated that they took actions at home to compensate for their guilt in relation to their children. For example, participants indicated that they "gave extra hugs to their children", "spent quality time with their children", "read an extra story to their children", "apologized to their children", "gave a tasty snack to their children", and "felt better, because they were able to provide their child with a bottle of breastmilk while on the day care". Consider the statement below from a mother:

"I really try to compensate. I do not want to feel guilty. So, when I am at home, I try to be available for my family. And every year I go away one weekend with one of my sons to spend some 100% quality time." (Mother, Couple 1)

Adapting work: Participants also indicated that they took actions at work as a consequence of work-family guilt. For example, participants described "taking leave days", "rescheduling their working hours", or "thinking about quitting their job". This last example is illustrated with a quote from a mother:

"Sometimes I think that if I quit work then I would have enough time for everybody. Then I would not have to choose, because you choose for work and you choose to put your child in daycare" (Mother, Couple 3)

TABLE 2 Consequences of Work-Family Guilt Reported by Participants

Theme	Code	Example
Compensatory parenting	Gave extra hugs to children <i>Reported by 0 fathers and 5 mothers</i>	["Does the guilt influence your behavior towards your children?"] "Maybe sometimes I give them an extra hug" (<i>Mother, couple 6</i>)
	Spent quality time with children <i>Reported by 0 fathers and 2 mothers</i>	"I really try to compensate. I do not want to feel guilty. So, when I am at home, I try to be available for my family. And every year I go away one weekend with one of my sons to spend some 100% quality time." (<i>Mother, Couple 1</i>)
	Read an extra story to their children <i>Reported by 0 fathers and 1 mother</i>	"And you will indeed show a little bit of compensatory behavior towards your children when you are at home". ["What then?"] "Well for example an extra bedtime story, yes, that sort of thing. To brush away your own guilt". (<i>Mother, couple 9</i>)
	Apologized to their children <i>Reported by 2 fathers and 2 mothers</i>	"When I feel in control of myself again, I explain what happened to the children. That I was tired and that it had nothing to do with them and that I should not have said or should not have done some things". (<i>Mother, couple 11</i>)
	Gave a tasty snack to their children <i>Reported by 0 fathers and 1 mother</i>	"Our children do not like it when they have to go to the daycare, and yes you know, then I put some delicious treat in their lunchbox. Just a little indulgence" (<i>Mother, couple 10</i>)
	Provided their child with a bottle of breastmilk while on the day care <i>Reported by 0 fathers and 1 mother</i>	"I was happy that I had the right to pump breastmilk for 9 months at my job. That made me feel a bit better. Then I could at least give a nice bottle of breastmilk for my child to the daycare" (<i>Mother, couple 3</i>)
Adapting work	Taking leave days <i>Reported by 0 fathers and 1 mother</i>	"I realized that this was not the way I wanted to be as a parent. That is why I started to take parental leave, used all my extra hours, and took some days off" (<i>Mother, couple 1</i>)
	Reschedule working hours <i>Reported by 3 fathers and 3 mothers</i>	"I try to do all the work that I bring home in the evening, when my daughters are asleep. So it will not interfere with my caring for them" (<i>Mother, couple 7</i>)
	Thinking about quitting <i>Reported by 0 fathers and 2 mothers</i>	"Sometimes I think I will quit working, then I have enough time for everybody. Then I do not have to choose, because you choose for work and you choose to put your child in daycare." (<i>Mother, couple 3</i>)
Sacrifice personal time	Sacrifice "own time" <i>Reported by 0 fathers and 2 mothers</i>	"Sometimes you also want to tell your own story but then I think my story has to wait. They need my attention first." (<i>Mother, couple 14</i>)
	Sacrifice leisure activities <i>Reported by 2 fathers and 2 mothers</i>	"Before we had children, I was away almost every evening, often playing sports, now I often stay at home... I made some personal concessions." (<i>Father, Couple 13</i>)
Time management	Organizing leisure activities differently <i>Reported by 0 fathers and 2 mothers</i>	"I try to be there for my children as much as possible. If I feel I am failing them, I change my schedule. All of my own leisure (like sports, meeting friends) I plan when the children are in school. I do not plan anything for myself in the evenings to be available for my children as much as possible". (<i>Mother, couple 1</i>).
	Outsourcing house work to gain family time <i>Reported by 0 fathers and 1 mother</i>	"We regularly outsource services. For example, we have a cleaning lady on Thursday and I order groceries online. That costs some money but you also buy extra time with it." (<i>Mother, couple 10</i>)

Theme	Code	Example
Justifying guilt	Wake-up call to change schedule <i>Reported by 1 father and 2 mothers</i>	"Sometimes I feel guilty, but my conclusion is then that I should act differently in the future. Overcompensating does not work. For me it is more a wake-up call to change my schedule" (<i>Father, couple 1</i>).
	Emphasize financial importance of working <i>Reported by 3 fathers and 2 mothers</i>	"On the one hand these situations really suck, on the other hand I also realize that I am an independent entrepreneur and with that I also take care of the main income of the family" (<i>Father, couple 3</i>)
	Emphasize WFC is part of life <i>Reported by 4 fathers and 1 mother</i>	"It is just part of the job. I cannot say that I will not work anymore during the weekends" (<i>Father, couple 10</i>)
	Wondering whether things would have been different when they would not work <i>Reported by 0 fathers and 1 mother</i>	"If I did not work, there might be other reasons why I might sometimes miss (school) activities from my daughter. For example, I would still have to watch my other child." (<i>Mother, couple 9</i>)

Note. Sample size is 28 parents (14 mothers and 14 fathers).

Sacrificing personal time: Many participants reported sacrificing their personal time as a consequence of feeling guilty. This involved a sacrifice of "own-time" and "leisure activities". One father describes this as follows:

"Before we had children, I was away almost every evening, often playing sports. Now I often stay at home... I made some personal concessions." (Father, Couple 13)

Time management: Apart from sacrificing their own time, participants also reported organizing their leisure activities differently, for example, doing their leisure activities when their children are at school. Furthermore, participants reported outsourcing housework to gain family time, and two participants reported seeing work-family conflict as "a wake-up call to change their schedule".

"We regularly outsource services. For example, we have a cleaning lady on Thursday and I order groceries online. That costs some money but you also buy extra time with it." (Mother, Couple 10)

Justifying guilt: In contrast to compensatory behaviors, justifying guilt is the only category that describes the more cognitive consequences of work-family guilt. For example, participants emphasized the financial importance of working or noted that work-family conflict is part of life, and/or they wondered whether things would have been different if they would not work. Consider this quote below as an example.

"On the one hand these situations really suck, on the other hand, I also realize that I am an independent entrepreneur and with that I also take care of the main income of the family" (Father, couple 3)

Discussion

Study 1 provides evidence that parents often reported feeling guilty as a result of work-family conflict. Moreover, parents indicated that they changed their behavior in several domains to compensate for their guilt. First, parents reported compensating for their guilt through their parenting, for example, by spending extra quality time with their children. Second, parents indicated adapting their work to compensate for their guilt, for example, by taking extra leave days. Furthermore, parents indicated to sacrifice their personal time. Finally, parents indicated to restructure their life (time management) to gain some more family time. Parents also cognitively reappraised the situation as a way of justifying the guilt, for example, by emphasizing the financial importance of working.

This interview study reveals that work-family guilt is an outcome of work-family conflict, and that such guilt has a clear influence on the lives of working parents. Interestingly, the behaviors parents report to compensate for their guilt are all in line with a more traditional maternal role (i.e., parents trying to gain more time and energy for their family and wanting to spend less time on their work). Since guilt may be especially prevalent in mothers (Borelli, 2016, 2017), it may reinforce traditional gender roles in parents. Although the sample is too small for inferential statistics, we do see that mothers experience more guilt and also report more compensatory behaviors as a consequence of their guilt than fathers while fathers more often report to justify their guilt compared to mothers.

Study 2

In Study 2, we conducted a daily diary study among working mothers to further examine whether work-family guilt results in (a) reducing commitment to work, (b) increasing compensatory parenting, and (c) sacrificing own time and time management to gain more family time. In addition, we also examined consequences for well-being, since the literature on guilt more generally suggests that guilt reduces the well-being of individuals (e.g., Ghatavi et al., 2002).

Since this is the first study to examine the broader consequences of work-family guilt, we decided to specifically focus on mothers for two reasons. First, the literature shows that work-family guilt is more prevalent in mothers (e.g., Borelli, 2017; Aarntzen, Derks, Van Steenbergen, Van der Lippe, 2019). Second, in our interview study we see that mothers not only report to feel more guilt, they also report to experience more consequences of guilt. Therefore, guilt may influence the daily life of mothers more than of fathers.

Additionally, although Study 1 suggests that guilt may also result in individuals trying to justify their behavior, we chose not to include this because the complexities of justificatory cognition are difficult to grasp in a diary study. Specifically, the effective use of cognitive justification, may lead to a reduction in guilt. Moreover, in line with Prinsen and colleagues (2018), we argue that direct measurement of cognitive justification may interfere with

justification processes themselves. For example, making participants aware of justification opportunities of prioritizing work may prompt them to cognitively justify prioritizing work in a way that would not have occurred spontaneously. Therefore, we decided to not to include cognitive justification and focus on more concrete, measurable consequences.

In this study, we hypothesized that guilt has a between-individual component, such that some individuals feel more guilty in general than other individuals, as well as a within-individuals component, such that the degree of guilt an individual feel varies across time and circumstances. Therefore, we analyzed our data on both the person-level (i.e., between-participants, across days) and day-level (i.e., within-participants, between days). Furthermore, we also examined whether guilt had a prolonged influence on consequences using lagged within-person analyses. These analyses addressed whether guilt on one day predicts consequences on the next day and whether guilt on a working day predicts consequences for mothers on their day off (e.g., guilt on a working day predicts how much mothers sacrifice their own leisure time 'Me-time' on their day off). In this way we could assess both the prolonged influence of guilt and examine the causality of the relationship, using temporal precedence as a proxy for causality (Hamaker, Kuiper, & Grasman, 2015).

Participants and procedure

We recruited 123 working mothers with children aged 13 years or younger in the Netherlands¹. Our initial goal was to collect usable data from at least 100 mothers (based upon criteria of Ohly et al., 2010). Participants were aged between 25 and 50 years ($M = 39.20$, $SD = 5.50$). On average, participants had 2.03 children (range = 1-5; $SD = 0.75$) and the mean age of their youngest (or only) child was 6.47 years (range = 1-13; $SD = 3.87$). Participants worked on average 28.69 hours per week ($SD = 8.99$), which is in line with the Dutch average for mothers (i.e., 26 hours per week; Van den Brakel & Merens, 2016).

Participants were recruited via the personal network of 9 undergraduate students who helped with data collection as part of their curriculum. Data collection took place in May and June 2017 and mothers participated over a period of 8 consecutive days (Saturday to Saturday). Upon signing up, participants provided an email address to which we sent the online surveys and their mobile phone number to which we sent a daily reminder.

On Day 1 we asked participants to complete a 15-minute online survey, to collect demographic information (e.g., age, working hours). We then asked participants to complete a daily online survey over eight consecutive days, including Day 1. In this daily questionnaire we assessed participants' daily levels of work-family guilt towards their family, their daily well-being, and whether or not they performed the behavioral outcomes uncovered in Study 1 - adapting work, compensatory parenting, sacrificing their own time, and restructuring their time management. The daily questionnaire took approximately 5 minutes to complete. To thank and motivate participants, they were put in a draw to win a gift voucher worth €50. It was emphasized that the research was confidential and that participant could stop at any given moment without providing a reason. All diary entries

that were recorded on the day itself or before 10.30 the following morning were included in our analyses. All other diary entries were marked as missing. This resulted in 826 entries, with a mean of 6.72 entries per person ($SD = 1.84$).

Daily measures

All items were asked on 5-point scales. For most variables, only a single item was used, to keep the daily diary questionnaire short to facilitate a reasonable response rate. Please note that all consequences of guilt measures (except well-being) were concrete measures of uni-dimensional constructs, based directly upon the interview study, which helps justify our approach to primarily use single-item or two-item measures (Fuchs & Diamantopoulos, 2009)

Work-family guilt was measured using one item: “When you think about how you combined work and family today, to what extent do you feel guilty towards your family. Today I feel...” with a scale ranging from 1 (not at all guilty) to 5 (very guilty), $M = 1.68$, $SD = 0.57$.

Well-being. We adapted the single-item general happiness measurement from Abdel-Khalek and Ahmed (2006) to measure daily *happiness*: “How happy do you feel today?” on a 5-point scale ranging from 1 (very unhappy) to 5 (very happy), $M = 3.86$, $SD = 1.68$. Furthermore, we adapted two items of satisfaction with work and satisfaction with family, developed by Fisher, Gibbons, and Matthews (2005), to reflect daily *satisfaction with work-family combination*: “Today I am satisfied with how I combined work and family” measured on a 5-point scale from 1 (totally disagree) to 5 (totally agree), $M = 3.67$, $SD = 0.71$.

Reducing work was measured with *considering reducing working hours* using two items: “Today I have been thinking about how I can reduce the number of hours that I am spend on work” and “Today I have considered whether I should approach things differently at work, so that I have more time left for home” on a 5-point scale from 1 (totally disagree) to 5 (totally agree), $r_{\text{range}}^2 = .87 - .90$, $M = 1.72$, $SD = 0.74$.

Compensatory parenting plans was measured with one item: *more time and energy for child*, “Today I have been thinking about how to reserve more time and/or energy for my child[ren], for example I thought about hiring domestic help or ordering the groceries online” on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree), $M = 1.89$, $SD = 0.81$.

Compensatory parenting behaviors were measured with attentive behaviors towards children using four items (e.g., “How often have you cuddled your child[ren] today?”) on a 5-point scale ranging from 1 (less than normal) to 3 (same as normal) to 5 (more than normal), $\alpha_{\text{range}}^2 = .81 - .82$, $M = 3.25$, $SD = 0.39$; and *applying rules consistently* with one item using the same 5-point scale: “To what extent were you consistent today in applying rules that you have at home for your child?”; $M = 3.40$, $SD = 0.93$).

Time management was measured with one item: organizing time more efficiently “Today I have been thinking about how to organize my time more efficiently” on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree), $M = 2.22$, $SD = 0.82$.

Me-time was measured with *minutes spent on own leisure* using the sum score of two items: “How many minutes did you spend on your own leisure today (hobby’s, sports, me-time etc.)” and “How many minutes do you still expect to spend on your own leisure today (hobby’s, sports, me-time etc.)”, $M = 139.58$, $SD = 84.11$.

Results

Preparatory analyses

To analyze our multilevel data (i.e., days nested within participants) we used the mixed model procedure in SPSS 21, with maximum likelihood estimation.

Intra-class correlations. We started by analyzing null models (i.e., estimate the model with only the dependent variable and no predictors), allowing us to calculate the Intraclass Correlations (ICCs; see online supplement, Appendix B). With the ICCs we were able to examine how much of the variance in the dependent variables was due to differences between participants. Specifically, a high ICC shows that greater variance in a variable can be explained by differences between individuals. Results showed that ICCs vary from .08 to .73 (i.e., the variance that can be explained by differences between participants varies from 8% to 73%). Importantly, for most dependent measures the largest part of the variance was within participants. For example, the ICC of happiness was .27, what indicates that 27% of the variance of happiness was between individuals and 73% of the variance was within individuals.

Correlations (between-participants). Correlations between all measurements between participants are presented in Table 3, thus correlations for person means (i.e., mean for each individual over 8 days) across all variables. In line with a first test of our hypotheses, these correlations suggest that work-family guilt is related to a number of consequences, such as greater consideration of reducing working hours, more plans to keep time and energy for child(ren), spending more quality time with their child(ren), dividing time more efficiently, lower happiness, lower satisfaction with work-family combination, and reducing amount of time planned for self. The correlations demonstrate that attentive behaviors towards children (e.g., giving hugs to their children) were negatively related to guilt, which might indicate that parents do not compensate with attentive behaviors towards their children, but do feel more guilt when they were not able to perform these behaviors.

TABLE 3 Correlations Between Study Variables (Between-Participants)

	1	2	3	4	5	6	7	8	9
1 Guilt	—								
2 Happiness	-0.36**	—							
3 Satisfaction	-0.66**	0.46**	—						
4 Me-time (minutes)	-0.03	0.18**	0.16**	—					
5 Reduce working	0.61**	-0.40**	-0.52**	-0.17**	—				
6 Parenting: Attentive	-0.26**	0.15**	0.27**	-0.08*	-0.06	—			
7 Parenting: Discipline	-0.00	-0.07	0.02	-0.16**	0.11**	0.33**	—		
8 Plans: Child	0.40**	-0.34*	-0.29**	-0.12**	0.62**	0.08*	0.07*	—	
9 Restructure time	0.37**	-0.22**	-0.21**	-0.06	0.61**	0.05	0.02	0.60**	—

Note. Guilt = Work-family guilt; Happiness = Happiness; Satisfaction = Satisfaction with work-family combination; Me-time (minutes) = Minutes spent on own leisure; Reduce working = Considering reducing working hours; Parenting: Attentive = Attentive behaviors towards children; Parenting: Discipline = Applying rules consistently; Plans: Child = More time and energy for child plans; Plans: Restructure time = Dividing time more efficiently. * $p < .05$, ** $p < .01$

Overview of main analyses

We examined all hypothesized outcomes of work-family guilt using separate regressions on each outcome (e.g., happiness) in multilevel analyses. First, we examined the **person-level** (i.e., between-individual, e.g., mothers who in general experience more work-family guilt also in general experience lower happiness) and the **day-level** (i.e., within individual, e.g., on days when mothers experience more work-family guilt their happiness is lower than on days when they experience less work-family guilt). It was important to test the person-level and day-level simultaneously to be able to test what part of the variance is explained by differences between participants and what part of the variance is explained by differences within participants. For example, is guilt related to happiness because mothers who in general experience more guilt also experience less happiness or because on days that mothers feel guilty, they experience less happiness or both? To do so, guilt was entered in each regression both as a person-mean predictor, to test our person-level hypothesis, and as person-mean centered predictor, to test our day-level hypothesis. For person-mean centering we took the daily ratings of guilt relative to that person's mean on guilt, so that each participant had an average score of 0 on guilt across days.

After this, we performed lagged analyses (i.e., lag from guilt) to examine whether the effect of guilt on a given day predicted consequences on the following day. Therefore, we modelled all hypothesized consequences of guilt on day i as a function of guilt and consequences of guilt on day $i-1$.³ Finally, we explored the possibility that guilt only results in consequences, such as compensatory parenting behaviors, when people have the time to enact these behaviors. Therefore, we tested whether guilt on a working day predicted consequences on participants' day off.⁴ For an overview of all results, see Table 4.

TABLE 4 Relationships Between Work-Family Guilt and Hypothesized Consequences

Measures	Person-level (between partici- pants)	Day-level (within participants between days)	Lag from guilt (next day)	Lag from guilt (working day to day off)
	B (95% CI)	B (95% CI)	B (95% CI)	B (95% CI)
Adapting work				
Considering reducing working hours	0.82** (0.64, 1.01)	0.21** (0.15, 0.26)	0.05 (-0.01, 0.12)	0.19* (0.02, 0.36)
Compensatory parenting plans				
More time and energy for child plans	0.56** (0.33, 0.79)	0.09** (0.02, 0.16)	0.05 (-0.02, 0.12)	0.36** (0.15, 0.56)
Compensatory parenting behaviors				
Attentive behavior towards children	-0.17** (-0.29, -0.05)	-0.34** (-0.40, -0.28)	-0.05 (-0.13, 0.03)	-0.04 (-0.20, 0.11)
Applying rules consistently	0.01 (-0.10, 0.11)	-0.01 (-0.06, 0.04)	0.01 (-0.05, 0.06)	0.14 (-0.03, 0.30)
Restructuring time				
Organizing time more efficiently	0.54** (0.30, 0.77)	0.20** (0.12, 0.27)	-0.02 (-0.10, 0.07)	0.13 (-0.10, 0.36)
Me-time				
Minutes spent on own leisure	-4.93 (-29.39, 19.52)	-24.36** (-35.51, -13.21)	-5.91 (-18.20, 7.08)	-0.85 (-33.89, 32.18)
Wellbeing				
Happiness	-0.31** (-0.46, -0.17)	-0.27** (-0.32, -0.22)	-0.07* (-0.13, -0.004)	-0.25** (-0.40, -0.11)
Satisfaction with work-family combination	-0.81** (-0.97, -0.64)	-0.52** (-0.60, -0.43)	-0.15** (-0.26, -0.04)	-0.32** (-0.58, -0.07)

Note. Unstandardized regression coefficients with 95% confidence intervals between brackets are represented in table above. $\#p < .10$, * $p < .05$, ** $p < .01$

Work-family guilt and adapting work

Confirming our hypotheses, we found both a person-level effect (i.e., between-individual effect) and a day-level effect (i.e., within-individual effect, between days) for whether mothers considered reducing their working hours. Mothers who generally experienced more work-family guilt also thought more about reducing their working hours ($B = 0.82, p < .001$). Moreover, on days when mothers felt more work-family guilt they thought more about reducing their working hours compared to days when they experienced less work-family guilt ($B = 0.21, p < .001$).

Work-family guilt and compensatory parenting plans

As expected, we found both a person-level effect and a day-level effect on mothers' compensatory parenting plans. That is, mothers who in general experienced more work-family guilt, tended to make more plans about how to keep more time and energy for their children ($B = 0.56, p < .001$) and on days when mothers felt more work-family guilt they made more plans about how to keep more time and energy for their children in the future ($B = 0.09, p = .01$) compared to days when they experienced less work-family guilt.

Work-family guilt and compensatory parenting behaviors

We also found both a person-level effect and a day-level effect for whether mothers performed attentive parenting behaviors towards their children such as hugging or spending quality time with their children. However, this effect was in a different direction than anticipated. Mothers who in general experienced more guilt, performed less attentive parenting behaviors than mothers who in general experienced less guilt ($B = -0.17, p = .005$) and on days when mothers felt more work-family guilt they did less attentive parenting behaviors compared to days when they experienced less guilt ($B = -0.34, p < .001$). Furthermore, we did not find a significant person or day-level effect of guilt on how consistently parents applied the rules they have for their children ($B = 0.01, p = .87$; $B = -0.01, p = .73$ respectively).

Work-family guilt and restructuring time

Confirming our hypotheses, we found both a person-level effect and a day-level effect on the degree to which mothers thought about how they could organize their time more efficiently. Mothers who generally experienced more work-family guilt also tended to think more about how they could organize their time more efficiently ($B = 0.54, p < .001$). Furthermore, on days when mothers felt more work-family guilt they thought more about how they could divide their time more efficiently ($B = .20, p < .001$).

Work-family guilt and me-time

In contrast to our hypotheses, we did not find that mothers who generally experienced

more work-family guilt also generally spent less minutes on their own leisure ($B = -4.93, p = .69$). However, confirming our hypothesis, we found a significant day-level effect of work-family guilt on how much minutes' mothers spent on their own leisure. Specifically, on days when mothers felt more work-family guilt they spent fewer minutes on their own leisure than on days when they experienced less work-family guilt ($B = -24.36, p < .001$). These results suggest that higher work-family guilt is associated with mothers spending less time on their own leisure, even though they might not do this chronically.

Work-family guilt and well-being

Confirming our hypotheses, we found for each of the measures of well-being both a person-level effect and a day-level effect. Mothers who generally experienced more work-family guilt also generally experienced lower well-being; that is, in general felt less happy ($B = -0.31, p < .001$) and felt less satisfied with their work-family combination ($B = -0.81, p < .001$). Furthermore, on days when mothers felt more work-family guilt their well-being was lower than it was on days when they experienced less work-family guilt in terms of both happiness ($B = -0.27, p < .001$) and satisfaction with the work-family combination ($B = -0.52, p < .001$).

Consequences of guilt the next day.

For the most part, guilt did not seem to spill over to consequences the next day. However, lagged analyses showed a significant effect from guilt to both measures of well-being. Specifically, larger work-family guilt on day $i - 1$ was associated with lower happiness on day i ($B = -0.07, p = .04$) and with lower satisfaction with the work-family combination on day i ($B = -0.15, p < .001$). This suggests that work-family guilt has a persistent influence on well-being, causing happiness and satisfaction with the work-family combination to be still lower the next day.

Consequences of guilt when mothers have the day off

Other than well-being, we did not find evidence that guilt influenced consequences the next day. However, it could be that guilt only spills over to some consequences (e.g., thinking about reducing working hours) when individuals have the time to reflect upon their work-family balance. Therefore, we also performed lagged analyses to test whether guilt on a working day predicted consequences on days where the following day was participants' next day off. Here, we find that work-family guilt on a working day is significantly associated with a number of consequences when the next day is a non-working day.

First, higher work-family guilt on a working day was significantly associated with mothers thinking more about reducing their working hours on their day off ($B = 0.19, p = .03$). Second, higher work-family guilt on a working day was associated with mothers making more plans about how to keep extra time and energy for their child on their day off ($B = 0.36, p = .001$). Third, lagged analyses from work-family guilt on a working day to well-

being on the day off showed a significant effect of work-family guilt to well-being for both measures. Thus, stronger work-family guilt on working days was associated with lower happiness ($B = -0.25, p = .001$) and lower satisfaction with the work-family combination ($B = -0.32, p = 0.01$) on the mothers' day off. These analyses show that work-family guilt on a working day spills over to mothers' work plans, parenting plans, and her well-being on her non-working day.

Discussion

In line with our hypotheses, Study 2 revealed that work-family guilt was associated with several consequences for mothers. Both on a day-level and person-level, we found that mothers who felt more work-family guilt, thought more about reducing their working hours, made more plans on how to keep more time and energy for their children, tried to divide their time more efficiently, and experienced less happiness and satisfaction with the work-family combination. Additionally, we found that on days that mothers experience more work-family guilt, they spend less minutes on their own leisure.

Unexpectedly, higher work-family guilt was negatively associated with mothers' attentive behaviors towards their children (both person- and day-level effect) and we did not find a relationship between work-family guilt and how consistently mothers applied rules they have for their children. Possibly, this is because the days when mothers experience guilt are also the days that they have little time for their family resulting in less time than usual to perform attentive behaviors towards their children. It may also be the case that less time for attentive behaviors leads to greater guilt in mothers.

Moreover, with lagged analyses we established the causal order of work-family conflict and its' consequences, demonstrating some consequences of work-family guilt (plans to reduce working hours and plans to spend more time with their children, happiness, satisfaction with work-family balance) are invasive, because they still influence participants on their day off. Together, the results of Study 2 show that work-family guilt is associated with mothers struggling with making adaptations in their (daily) work-family life and decrease mothers' well-being.

General discussion

The present research demonstrates that work-family guilt is associated with many key aspects of the life of working parents. Importantly, the studies suggest that it is not only individual parents that may be affected by work-family guilt, but that their behavior and well-being may crossover to affect the well-being of their whole family and especially their children (e.g., guilt also influences parenting plans). Study 1 showed that parents try to relieve their work-family guilt by either justifying how they balance their work and family (e.g., after recognizing they felt guilty, they immediately stated the financial importance of

work) or by planning to adapt their behavior (e.g., wishing to reduce their working hours). Study 2 demonstrated that work-family guilt is associated with mothers' work, parenting, time management, leisure, and well-being. Specifically, daily work-family guilt is associated with (a) reductions in the time mothers want to spend on work, (b) intensification of the time and energy mothers plan to spend with their children, (c) increases in how much mothers think about dividing their time more efficiently (d) decreases in the time mothers planned for themselves, and (e) reductions in mothers' well-being. Moreover, lagged analysis suggests a causal relationship, such that work-family guilt on a work-day prior to a non-working day led to thinking about reducing their working hours, making more plans about how to keep extra time and energy for their child, lower happiness, and lower satisfaction with the work-family combination on the mothers' day off.

Although, on the basis on Study 1 we expected that a possible beneficial consequence of work-family guilt could be that mothers engage in more positive parenting behaviors, such as increasing attentive behavior towards their children (see also Cho & Allen, 2011), we do not find support for this in our diary study. Instead, guilt seemed to be associated with mothers displaying less attentive behaviors towards their children, both when they in general experience more guilt and on days that they experience more guilt. Although the causal nature of this relationship is unclear, and analyses from one day to the next day (i.e., lagged analyses) do not show this relationship.

Moreover, in contrast with previous evidence that guilt is associated with more permissive parenting (Borelli, et al., 2017), we did not find a relationship between guilt and how consistently parents applied rules for their children. It is important to note that previous research on parenting rests upon participants' self-report on how they plan to handle a certain parenting situation (e.g., whether they would spoil their child with a lollipop in an imaginary situation). Our research demonstrates that while parents may plan to adapt their parenting as a result of their guilt (i.e., making plans to have more time and energy for their children in the future in the diary study and reporting in the interview study that they compensate by spending extra time with their children), we do not find evidence for reported changes in parenting behaviors in the daily diary study. Instead, we found that when mothers experienced high work-family guilt, they actually reported spending less time with their children and they were unable to compensate for this guilt on their day off. This may be the case because parents simply do not have the time to enact the compensatory parenting behaviors, particularly at times when work-family conflict is high. Thus, this study reveals a possible lack of connection between parental plans and their actual parenting behaviors, in line with previous literature showing a gap between intentions and behavior (e.g., Sheeran, 2002).

Our findings complement previous research on showing that the consequences of guilt more generally can follow 'two different routes' - leading individuals to reappraise their behavior (e.g., Miceli & Castelfranchi, 1998), and prompting individuals to adapt their behavior to remedy the guilt-inducing act (e.g., Cryder, Springer, & Morewedge, 2012). In the context of work-family guilt, we speculate that, depending on whether individuals

have a choice to adapt their behavior, they cope with their guilt by either reappraising their behavior or adapting their behavior to compensate for the guilt. Importantly, this choice aspect is likely to be gendered; being able to make choices in relation to work is more normative for mothers than for fathers (e.g., Van Steenberg, 2007). For fathers, it is the default to work, whereas for many mothers it may be perceived more as a self-chosen role. This implies that some mothers may more easily adapt their work-family balance (e.g., working less) and thus compensate for their guilt, whereas this might be more difficult for fathers or for other mothers (e.g., mothers who base their identity on their work, single mothers). For parents for whom working is not a choice, the only option may be to reappraise (i.e., cognitively justify their behavior to cope with the guilt, because they cannot make the decision to work less hours). For parents who have a choice, it may be a better option to engage in reparative behaviors.

Finally, our findings demonstrate that the behaviors that parents report to compensate for their guilt are in line with 'ideal motherhood standards' (e.g., Hays, 1998). Specifically, in the interview study, parents reported compensating for their guilt by decreasing the time and energy they spent on work, increasing the time and energy for their family, restructuring how they spend their time, and sacrificing their me-time. In line with this, the diary study shows that on days when mothers experience more guilt, they think more about reducing their working hours, make more plans on how to increase the time and energy they have for their children, they think more about how to divide their time efficiently, and they may sacrifice their me-time. Moreover, the diary study provides evidence that, when mothers experience more guilt on a working day, they think more about reducing their working hours and increasing the time and energy they have for their children on their day-off. These behaviors may sometimes compensate for the guilt. For example, when mothers plan to increase the time and energy for their children, this may relieve their guilt. Together, these findings indicate that as result of their guilt, mothers may be pushed towards more traditional motherhood ideals, in which mothers always put their children's needs first, sacrifice their me-time, and sacrifice their work for the benefit on their children (e.g., Hays, 1998).

Importantly, work-family guilt has ongoing high cost; reducing the well-being of mothers not only on the day itself, but also the next day. We speculate that the guilt that mothers experience results in part from the highly normative standards for mothers to prioritize their family (e.g., Morgenroth & Heilman, 2017; Okimoto & Heilman, 2012; Park, Smith, & Correll, 2010). When this is the case, mothers may be in a catch-22 position: they are either unhappy because they feel guilty about not complying with ideal mother standards, or they are unhappy for not making the choices they want, or 'should' want (e.g., being ambitious at work) to be able to comply with ideal mother standards.

Strengths, limitations and future research

Our research has several strengths. First, the interview study allowed us to develop and refine our hypotheses on how work-family guilt may be related to several outcomes.

Second, the daily diary study showed that between-individual effects (e.g., mothers who in general experience more guilt, also experience less happiness) and within-individual effects (e.g., on days that mothers experience more guilt, they are less happy) were similar, adding to the robustness of the findings (see Van Steenberg, Ybema, & Lapierre, 2017 for similar reasoning). Third, the diary study allowed us to perform lagged analyses demonstrating that the effect of work-family guilt spills-over and predict consequences on the next day and/or the next day off, including decreases in well-being, thinking more about reducing working hours, and making more plans to spend extra time and energy on the children in the future.

Notwithstanding these various strengths, this research also has its limitations. First, we used single items to measure guilt and many outcome variables in the diary study. We chose to do so to keep the questionnaire as short as possible and to optimize response rates for a study with a high level of time investment using a sample that does not have much time. Research shows that shortening the survey length is a good way to boost overall response rates (Rogelberg & Stanton, 2007). A disadvantage of this approach is that our measurements may have been more prone to random measurement error and biases in interpretation of the measurement. However, part of this error and bias might be controlled for, and ruled out by, our diary design, in which we used each item eight times per participant. Moreover, research shows that participants themselves - especially in longitudinal/diary designs - prefer single items and are more motivated to provide accurate, careful responses (Wanous, Reichers, & Hudy, 1997).

Second, we did not directly measure participants' gender beliefs. So, even though we speculate that work-family guilt in mothers arise from gendered norms in our society, we cannot draw this conclusion. Future research should investigate this by measuring the degree to which parents internalized societal gender norms.

Third, although the interview study indicated parents may reappraise their behavior as a result of work-family guilt (i.e., cognitive justification), we did not further investigate this in Study 2. The diary methodology makes it difficult to accurately measure cognitive justification, as making participants aware of how they can justify prioritizing work, may prompt them to cognitively justify prioritizing work in a way that would not have occurred spontaneously. However, an experimental study in which some participants get the option to justify their work prioritization and others not, might be an interesting possibility to quantitatively further explore how guilt and cognitive justification influence one another.

In the current research, we focused specifically on guilt in mothers and find that mothers (try to) make adaptations to their life to cope with their guilt, but when they feel guilty, they report low well-being. We call future research to extend this work to fathers. What happens when fathers experience work-family guilt? Do they make similar adaptations in their life or does the relationship between work-family guilt and consequences work differently for fathers? A diary study specifically developed to measure consequences of fathers' work-family guilt is worthwhile. Future studies that include both fathers and mothers may

also include the extent to which individuals internalize societal gender norms. Guilt may work the same for egalitarian fathers and mothers (i.e., individuals who do not strongly associate fathers with work and mothers with family), whereas traditional fathers may be protected against feeling guilty and its consequences. Relatedly, popular media suggests that older men regret spending so much time on their work instead of their family (e.g., Ware, 2012). Is that because they did not properly perceive the warning signal of guilt and just reappraised their behavior instead of adapt their behavior? With a longitudinal research on guilt and regret, it might be possible to answer this question.

Future research may also examine to what extent the outcomes (e.g., reducing work) are specific to work-family guilt by including a broader range of emotions, such as shame or anxiety. We argue though that work-family guilt is a unique predictor because of its properties as a moral emotion that motivates individuals to engage in compensatory actions and to adapt their future choices and behavior (e.g., Ketelaar & Au, 2003).

Finally, using longitudinal research over a greater span of time may further illuminate the relationship between work-family guilt and parenting behaviors. Although in our research we did not find that guilt is related to compensatory parenting behaviors, we did find that parents plan to spend more time with their children in the future as a result of their guilt. In retrospect, it makes sense that parents who feel guilty about spending a lot of time at work are unable to make up for that by spending quality time with their children the same day, or even the day after. Possibly, there is a temporal gap before compensatory parenting behaviors are enacted. Over a greater timespan, such as a few months, parents may have more opportunity to adjust their work-family balance and to adjust their parenting. Therefore, these findings need further investigation using a longitudinal design.

Conclusion

With both an interview and a diary study, we provided evidence that guilt has important consequences for parents', and specifically mothers', work, parenting, time management, and well-being. We conclude that while it is easy to say that gender differences in work-family decisions (i.e., women doing more caregiving tasks, and working less hours than men) arise from women *preferring* to devote more time to their family instead of their work (e.g., Belkin, 2003), we should be critical about *why* women make these choices. In our research we demonstrate that these work-family decisions may in part be driven by the increased guilt that mothers experience about working. A guilt that may result from highly normative standards for mothers to prioritize their family (e.g., Morgenroth & Heilman, 2017; Okimoto & Heilman, 2012; Park, Smith, & Correll, 2010). Thus, guilt may limit women in their work and family choices and straightjacket mothers into complying with gender norms in which they prioritize caregiving tasks over their work.

Endnotes

¹This study was part of a larger study (the diary data is yet to be published elsewhere). In this paper we only discuss the measurement and results of work-family guilt and all hypothesized outcomes of work-family guilt. More details about the other measurements in this questionnaire are available from the first author.

²Internal consistency of scales was measured by separately analyzing each day and reporting the range of correlations (2 items) or Cronbach's alpha's (> 2 items).

³To be better able to assess the temporal precedence of guilt and its' consequences, we also examined whether the outcome variables could predict guilt, thus we examined guilt on day *i* as a function of consequences of guilt and guilt on day *i* -1 (i.e., lag to guilt). For clarity and brevity reasons we put this in the supplemental materials.

⁴For these analyses we only included observations of a working day immediately followed by a day off. This resulted in the inclusion of 84 days compared to 826 days in the non-lagged analyses.



3

When work-family guilt becomes a women's issue: Gender stereotypes predict high guilt among mothers but low guilt among fathers

Note. This chapter is based on **Aarntzen, L.**, Derks, B., Van Steenbergen, E., & Van der Lippe, T. (submitted). When work-family guilt becomes a women's issue: Gender stereotypes predict high guilt among mothers but low guilt among fathers. Submitted to *British Journal of Social Psychology*.

Abstract

Gender stereotypes prescribe mothers, but not fathers, to prioritize their family over their work. Therefore, internalization of these gender stereotypes may predict higher guilt among working mothers but lower guilt among working fathers. Study 1 (135 mothers and 116 fathers) indeed revealed that the stronger fathers' implicit gender stereotypes (measured with a gender-career implicit association task) the less guilt fathers reported in a fictitious work-interfering-with-family situation. Although mothers on average reported higher guilt than fathers, this effect was not moderated by their implicit gender stereotypes. Study 2 (daily diary study among 105 mothers), however, did reveal evidence for the moderating effect of implicit gender stereotypes on working mothers' guilt. The stronger mothers' implicit gender stereotypes the more work-family conflict and guilt they reported on days that they worked long hours. These results show that implicit gender stereotypes shape how parents feel about their work-family choices.

Gender differences in work-family decisions often develop or are magnified when men and women become parents. For example, after having a baby, mothers often decrease their paid working hours and increase the time they spend on care tasks at home (Paull, 2008; Nomaguchi & Milkie, 2003). Fathers, on the other hand, hardly change their time allocation or even tend to increase their working hours (Choi, Lundberg, & Joesch 2005; Kaufman & Uhlenberg, 2000). Relatedly, many more women than men give up their career, citing as primary reason that they wish to increase the time that they have with their family (Hewlett & Luce, 2005). Despite all scientific and societal attention, this situation exists already for a long time, and therefore demands more insight in the mechanisms behind it. Recent research has suggested that working mothers' guilt about how their work affects their family underlies at least part of these gendered work-family decisions (Aarntzen, Derks, Van Steenbergen, Ryan, & Van der Lippe, 2019). The question remains, however, why women are more prone to experience this work-family guilt compared to men.

We propose that the reason why mothers experience more work-family guilt than fathers is because societal expectations are different for men and women. While women are expected to prioritize the caregiver role, men are expected to prioritize the breadwinner role (e.g., Morgenroth & Heilman, 2017; Park, Smith, & Correll, 2010). The degree to which parents internalize these gender stereotypes and associate men more strongly with work and women more strongly with family, might predict how guilty they feel in situations in which their work interferes with their family. Our main hypothesis is that the stronger parents themselves implicitly associate women with family and men with work, the more guilt mothers experience and the less guilt fathers experience when their work interferes with their family time.

Implicit gender stereotypes

Nowadays, we often still see mothers performing most of the childcare and household tasks at home while fathers work more hours outside the home and earn most of the household income (Sayer, England, Bittmann, & Bianchi, 2009). Consequently, for most men and women it is easier to associate mothers with family and fathers with work than the other way around (Park, Smith, & Correll, 2010). Interestingly, even individuals who explicitly state that they strive towards gender equality are often found to more easily associate men with the role of breadwinner and women with the role of caregiver (Dovidio, Kawakami, & Beach, 2001). Thus, such implicit stereotypes are formed by what individuals see in society and in their direct environment and often do not correspond with their explicit opinions (Nosek, Banaji, & Greenwald, 2002).

Recently, several questions have been raised about the exact nature of implicit stereotypes. Are implicit stereotypes stable or susceptible to change? Are they mere associations or do they indicate an unconscious attitude towards different social groups (e.g., Payne, Vuletich, & Lundberg, 2017)? Although the debate about what implicit gender stereotypes actually are continues, there is ample research to suggest that implicit stereotypes indeed predict behavior. Meta-analytical research even showed implicit stereotypes to better

predict behavior on sensitive themes like racial and gender stereotypes compared to explicit measures (Greenwald, Poehlman, Uhlmann, & Banaji, 2009).

Importantly, research showed that individuals' own implicit stereotypes predict how they perceive and judge others. To illustrate, one study showed that participants' implicit associations between "fathers with work" and "mothers with family" predicted their explicit judgments on how they think that parents should resolve a situation in which work and family demands are incompatible (i.e., work-family conflict; Park, Smith, & Correll, 2010). The stronger participants had implicit associations that paired women with childcare and men with work, the more they indicated that the mother should resolve an imaginary work-family conflict situation by putting family first, while the father should resolve the identical conflict situation by putting work first. This effect existed over and above participants' explicit gender attitudes. Also, other studies showed that implicit stereotypes guide judgments about others. For example, a study using hypothetical divorce cases showed that the degree to which participants associated women more with warmth-related traits than men predicted how likely they were to give greater custody allocation to mothers than fathers (Costa, Estevez, Kreimer, Struchiner, & Hannikainen, 2019). In the current research, instead of focusing on how implicit gender stereotypes influence moral judgements about others, we examine how implicit gender stereotypes may influence moral judgement about the self. Specifically, we examine how the degree to which parents have internalized gender stereotypes in their implicit associations predicts feelings of parental guilt when their work interferes with their family.

How implicit gender stereotypes predict guilt

Guilt is a self-evaluative, moral emotion that individuals experience when they condemn their own actions (e.g., Tangney et al., 2007). Due to the gender stereotypes in our society women might be more prone to disapprove situations in which they prioritize their work over their family than men. Consequently, women may be more prone to feel guilty when their work interferes with their family (i.e., work-to-family conflict; WFC). Previous research indeed found that in the exact same WFC situation mothers experience more guilt than fathers do (Aarntzen, Derks, Van Steenbergen, & Van der Lippe, 2020). However, the question remains whether these gender differences in guilt result from gender differences in response to WFC or arise from parents' implicit gender stereotypes.

In order to explain gender differences in work-family guilt previous research mainly focused on explicit gender beliefs (Korabik, 2015; Livingston & Judge, 2008; Martinez, Carrasco, Aza, Blanco, & Espinar, 2011), that is on how parents' explicit opinions about appropriate gender roles influence how much guilt they experience when their work interferes with their family. As shown in Korabik's overview (Korabik, 2015), this literature is rife with inconsistent results. For example, some researchers found that individuals with more explicit egalitarian attitudes feel more work-family guilt, irrespective of their gender (Livingston & Judge, 2008), while other researchers found that especially women with traditional attitudes feel guilty when their work interferes with their family (Korabik, 2015),

and others found that men with more traditional attitudes feel less guilty when their work interferes with their family than men with more egalitarian attitudes while for women the traditionality of their attitudes do not predict their work-family guilt (Martinez et al., 2011).

In the current studies, we focus on implicit rather than explicit gender stereotypes, and examine how these implicit stereotypes predict parents' experience of WFC and work-family guilt. We choose to do so because while nowadays explicit societal norms emphasize primarily the importance of equality between genders (Bolzendahl & Meijer, 2004), more subtle, implicit gender stereotypes (e.g., schools often call the mother, not the father when the child is ill) still subtly convey that men should prioritize their breadwinning role and women their caregiving role. Therefore, parents' implicit gender stereotypes (instead of their explicit gender stereotypes) may be more important than their explicit gender stereotypes in understanding gender differences in work-family guilt.

By examining how implicit gender stereotypes predict fathers' and mothers' work-family guilt, we aim to increase our understanding of why gender differences in work-family guilt exist. This may not only be helpful in improving the well-being of working mothers, but also be crucial in understanding why mothers and fathers often make different work and family decisions. Previous research showed that higher work-family guilt in mothers relates to gendered behaviors: mothers who feel more guilty think more about reducing their working hours, reduce the time they planned for themselves, and plan to reserve more time and energy for their children in the future (Aarntzen, et al. 2019). Therefore, it is important to explore how implicit gender stereotypes may induce feelings of guilt in mothers and weaken feelings of guilt in fathers. This may generate insight in why mothers more often 'choose' to take on the majority of childcare tasks than their male counterparts and why women but not men often scale down their paid work, redefine their job or even leave the career field after becoming a parent (e.g., Belkin, 2003)

The present research

The aim of the current studies was to examine whether implicit gender stereotypes predict parental guilt when parents prioritize their work over their family. In Study 1, we used an imaginary WFC situation to test whether the relationship between gender and work-family guilt was moderated by parents' implicit gender stereotypes. We expected that the stronger the implicit gender stereotypes of mothers (i.e., the more mothers associate women with the family domain and men with the work domain) the more work-family guilt they would experience (H1). Furthermore, we expected that the stronger the implicit gender stereotypes of fathers the less work-family guilt they will experience (H2). In Study 2, we used a daily diary design to test whether day-to-day fluctuations in mothers' working hours predicted their experience of WFC and work-family guilt and how this depended upon mothers' implicit gender stereotypes. We expected that the stronger mothers' implicit gender stereotypes the more they would experience working more hours on a day as a WFC and would feel guilty about this (H3). In both studies implicit gender stereotypes were measured with the gender-career implicit association test (IAT; Nosek, Banaji, &

Greenwald, 2002), which is considered a valid way to assess these associations (Lane, Banaji, Nosek, & Greenwald, 2007).

Study 1

In Study 1 we asked participants to consider an imaginary WFC situation, and indicate how guilty they expected they would feel in that situation. We chose to let participant *imagine* a situation in which they prioritized work over family instead of *remember* such a situation because when parents are asked to remember a situation, mothers and fathers may come up with non-comparable situations that differ in severity (arriving home late or missing Christmas with family). When fathers come up with situations that are more severe than mothers, this would create a confound, making it difficult to pinpoint why gender differences in guilt emerge. An advantage of using an imaginary situation is that both men and women with more traditional as well as more egalitarian implicit gender stereotypes think about the same situation (i.e., they both prioritize work over family to the same degree).

Participants and procedure

Participants were 251 parents (53.8% women), who were recruited in a Dutch Science Museum in a free-play area and brought to a separate testing room. All parents met our participant criteria: They were in a heterosexual relationship, had a paid job, and had at least one child. After providing informed consent, they completed a computerized questionnaire (e.g., measuring their work-family guilt) and then an implicit association test. Parents had on average 2.24 children ($SD = 0.76$) and the mean age of their (youngest) child was 8.00 ($SD = 3.14$)¹. When asked about their highest educational 58.9% of the participants indicated university or higher vocational education, 28.3% indicated lower vocational education, 9.6% indicated high school, and one participant (0.4%) indicated primary school. Participants worked on average 34.19 hours ($SD = 11.63$). A large part of our data consisted of couples (i.e., 68 dyads, which is 54.18% of our total sample).

Measures

Implicit gender stereotypes. Participants' implicit gender stereotypes were assessed with a gender-career implicit association task (IAT; Nosek et al., 2002). This task measures the strength of each participant's associations between gender (male and female names) and family- versus work-related words. In the gender-career IAT participants are asked to categorize male names (i.e., 'Thomas', 'Daan', 'Tim', 'Lucas', 'Stijn', 'Luuk', 'Sven', 'Niels', 'Jasper'), female names (i.e., 'Anna', 'Sanne', 'Julia', 'Emma', 'Sophie', 'Lisa', 'Lotte', 'Eva', 'Lieke'), family word (i.e., Dutch translations of the following words: 'children', 'parents', 'family-members', 'diapers', 'caring', 'cooking', 'comforting', 'baby') and career words (i.e., Dutch translations of the following words: 'management', 'professional', 'business', 'salary', 'office', 'career', 'promotion', 'job') within the right category.

The task consisted of congruent blocks in which participants categorized female names and family items by pressing one key and male names and work items by pressing another key, and incongruent blocks in which participants categorized male names and family items by pressing one key and female names and work items by pressing another key. To reduce possible order effects, the presentation of congruent and incongruent blocks as well as the presentation of the names and items were in a random order (all names, items and blocks were presented once). We used the improved scoring algorithm of Greenwald et al. (2003) to calculate one IAT score per participant. Higher positive scores represent more traditional views (i.e., stronger associations between men and career and between women and family), 0 represents an egalitarian view (i.e., associate women and men equally strong with family and career), and higher negative scores represent stronger counter-stereotypical gender views (i.e., stronger associations between women and career and between men and family).

Work-family guilt. Participants were instructed to imagine a situation in which they could not stay home from work to take care of their sick child because they had to go to work, although their partner was able to stay home with the child. Then, we measured work-family guilt by asking participants how they would feel in this situation using three items (i.e., "I would feel fine", "I would feel bad", "I would feel guilty"; $\alpha = .86$; the first item was reverse coded) that participants could rate on a seven-point scale from (1) strongly disagree to (7) strongly agree.

Work-family choice. To measure how participants would normally act in the imaginary work-family situation they were asked how they probably would solve a situation in which their child was sick while they were very busy at work (i.e., "I cancel work and stay at home" [coded as prioritizing family] "My partner cancels work and stays at home" [coded as prioritizing work], "We both go to work and our child stays with the babysitter or goes to the daycare" [also coded as prioritizing work], "Other choice" [excluded these replies in our analyses; 29.5% of the participants indicated this response]).

Results

Table 1 shows the sample characteristics and correlations between the measures. The relatively high mean on guilt (i.e., 4.51 on a 7-point scale) shows that on average parents anticipated to feel guilty in the described WFC situation. Furthermore, results on the IAT showed that, on average, both male and female participants associated work more with men and family more with women (i.e., a traditional view; average IAT d-score = 0.41, $SD = 0.39$). The correlations (see Table 1) revealed that the less hours parents worked in real life the more guilt they anticipated to feel in the described imaginary WFC situation.

When asking participants how they normally would solve a situation in which their child is sick while they are busy at work, 41.2% of participants reported that they indeed would most likely go to work while their partner or babysitter stays with the sick child, while

58.8% reported that they would most likely stay at home themselves. Importantly, a chi-square test revealed a significant gender difference on this outcome ($\chi^2 [1] = 9.95, p = .002$), revealing that mothers were more likely to report they would stay at home (69% of mothers) while fathers were most likely to report that they would go into work (54.5% of fathers). Therefore, on average this situation may have been seen as more unusual and less likely to occur in real life by mothers than fathers, which also fits with the finding that mothers on average work less hours than fathers (See Table 1).

TABLE 1 Descriptive Statistics and Bivariate Correlations Among Measures.

	Women	Men	Correlations			
	<i>M (SD)</i>	<i>M (SD)</i>				
1 Working hours	27.21 (9.41) ^a	42.32 (8.18) ^b	-	-.03	.22*	-.09
2 Age youngest child ^d	8.14 (3.42) ^a	7.83 (2.79) ^a	.03	-	-.07	.20
3 IAT	0.44 (0.37) ^a	0.36 (0.40) ^a	.02	-.09	-	-.23*
4 Guilt	4.70 (1.76) ^a	4.29 (1.62) ^b	-.16±	.01	.04	-

Note. Correlations for women are presented below the diagonal and for men above the diagonal. Means in the same column with different subscripts differ (marginally) significant from each other (working hours $p < .01$; Guilt $p = .06$). IAT = Implicit Association Test d'score: positive scores represent a stronger association between 'work and men' and between 'family and woman'.

^dThese correlations are based upon a subset of participants (64%), since we do not have children's age for some participants.

± $p < .10$; * $p < .05$; ** $p < .01$

Data analysis

Since a large part of our data consists of couples, our dataset possibly did not meet the GLM assumption of independent observations (e.g., Hox, Moerbeek, & Van de Schoot, 2017). Therefore, we first determined whether the data needed to be analyzed with multi-level analysis. The intraclass correlation coefficient (ICC) was 0.20 for work-family guilt suggesting that the couple level explained 20% of the variance in work-family guilt. Therefore, we performed multilevel analysis using Maximum Likelihood Estimation in which we entered 1) *couple* as a cluster variable, 2) the main effects of *gender* and *implicit gender stereotypes* (mean-centered) and 3) the interaction effect between *gender* and *implicit gender stereotypes*.

Do implicit gender stereotypes predict higher work-family guilt in mothers and lower work-family guilt in fathers?

Analyses revealed a main effect of gender ($B = 0.42, S.E. = 0.20, p = .04, 95\% CI [0.02; 0.81]$) and a main effect of implicit stereotypes ($B = -0.99, S.E. = 0.38, p = .01, 95\% CI [-1.74; -0.24]$). Furthermore, analyses revealed a significant interaction effect between gender and implicit gender stereotypes on anticipated guilt ($B = 1.20, S.E. = 0.55, p = .03, 95\% CI [0.12; 2.28]$; see Figure 1).

To interpret this significant interaction, we tested simple slopes of parents with egalitarian implicit gender stereotypes (IAT-score = 0) and traditional implicit gender stereotypes (IAT-score = 0.65)². Mothers anticipated to feel more guilty than fathers both when comparing parents with more traditional gender stereotypes and when comparing parents with more egalitarian gender stereotypes. However, the gender difference was larger among mothers and fathers with more traditional implicit stereotypes than among mothers and fathers with more egalitarian implicit stereotypes (i.e., traditional parents: $B = 1.20, S.E. = 0.41, p = .004, 95\% CI [0.39; 2.01]$; egalitarian parents: $B = 0.42, S.E. = 0.20, p = .04, 95\% CI [0.02; 0.81]$).

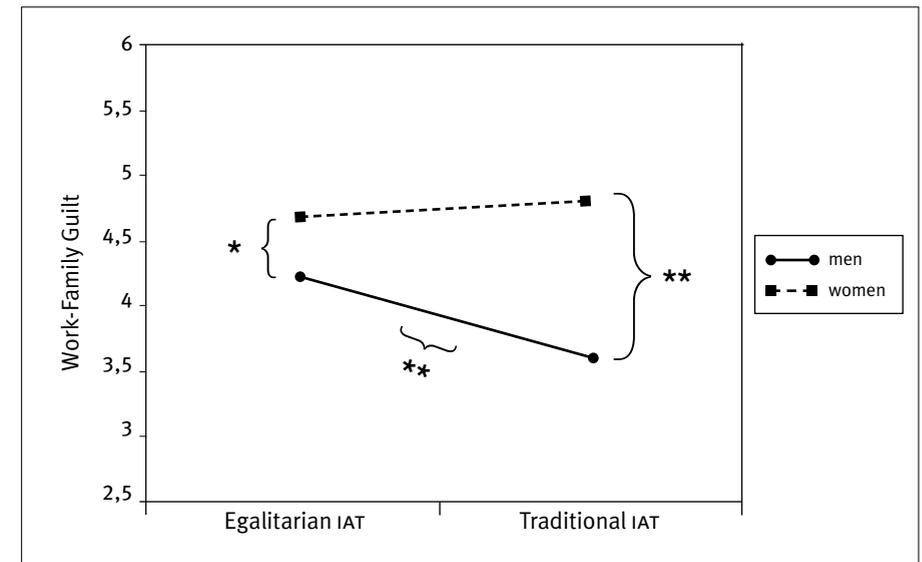


FIGURE 1 Parents' work-family guilt as a function of their gender and their gender-career implicit association test (IAT) score (Egalitarian: $D = 0$, Traditional: $D = 0.65$)
* $p < .05$; ** $p < .01$

Looking within gender, we found that men with more traditional stereotypes anticipated to feel less guilty in response to the scenario than men with more egalitarian stereotypes did

($B = -2.19$, $S.E. = 0.86$, $p = .01$, 95% CI [-3.89; -0.50]) whereas implicit gender stereotypes failed to predict anticipated guilt in mothers ($p = .58$). This suggests that when parents are confronted with WFC, gender stereotypes predict lower work-family guilt in fathers but do not predict work-family guilt in mothers, which is relatively high regardless of their implicit gender stereotypes.

Is guilt predicted by the implicit gender stereotypes of one's partner?

Research shows that parents' work-family decisions are interdependent. For example, after childbirth, women who have partners with more egalitarian attitudes, take shorter maternal leaves and decrease their working hours less compared to mothers whose partner have more traditional attitudes (Sterz, Grether, & Wiese, 2017). Taking advantage of our dyadic data, we also explored whether partners' implicit gender stereotypes predict parental guilt over and above the effect of one's own implicit gender stereotypes by using the actor-partner interdependence model (APIM). The results of these analyses are summarized in Figure 2. Adding to the robustness of our findings, we again showed that fathers' implicit gender stereotypes predicted how guilty they felt when they would not be there for their sick child and that mothers' implicit gender stereotypes did *not* predict how guilty mothers feel when they would not be there for their sick child. With respect to the interdependence between couples' gender stereotypes and each partner's work-family guilt, analyses showed that partners' IAT scores were positively correlated but that fathers' implicit gender stereotypes did not predict mothers' guilt and mothers' implicit gender stereotypes did not predict fathers' guilt.

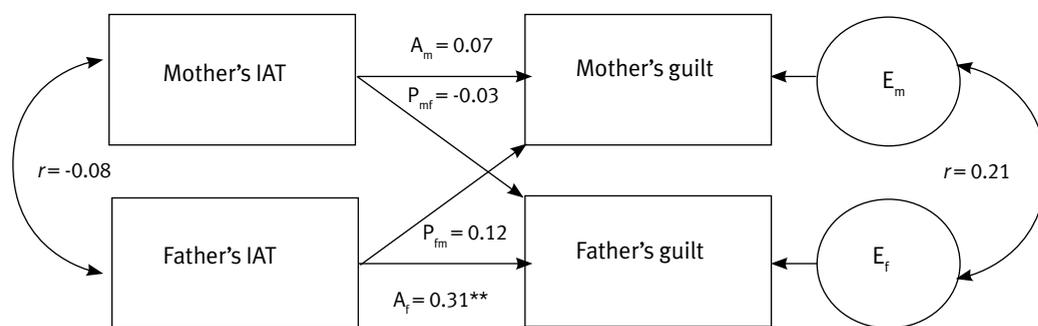


FIGURE 2 The actor-partner interdependence model, predicting mothers and fathers work-family guilt with their implicit gender stereotypes measured with the gender-career implicit association test (IAT). Standardized regression weights are presented.

A_m = effect mother's IAT on own guilt, A_f = effect father's IAT on fathers' guilt, P_{fm} = effect of mothers' IAT on fathers' guilt, P_{mf} = effect of fathers' IAT on mothers' guilt, E_m = unexplained portion for mothers' guilt, E_f = unexplained portion for fathers' guilt. Number of dyads = 68. $*p < .05$; $**p < .01$

Conclusion Study 1

Study 1 suggests that when parents are confronted with a situation in which they imagine to prioritize work over family, traditional implicit gender stereotypes that tie mothers to family and fathers to work, protect fathers from feeling guilty. Specifically, fathers with more egalitarian gender stereotypes (i.e., fathers who do not strongly associate women with childcare and men with work) anticipated to feel more guilty in the WFC situation than fathers with more traditional gender stereotypes did (i.e., fathers who strongly associate women with childcare and men with work).

In contrast to our hypothesis, we did not find that women with more traditional implicit gender stereotypes anticipated more guilt than mothers with more egalitarian associations. Instead, on average, mothers anticipated to feel more guilty in the fictitious WFC situation than fathers, irrespective of the strength of their associations. Possibly, this is because in this fictitious clear-cut situation, WFC was quite high for many mothers compared to what they experience in their own life (i.e., both more egalitarian and traditional women indicated that they would try to prevent such a situation in real life). All women may be confronted with the norm that they should prioritize their family over their work. In line with this, research shows that 71 percent of mothers rate childrearing as their most important aspiration (more important than work) compared to 49 percent of fathers (Van der Horst, Van der Lippe & Kluwer, 2014). Hence, this situation may be unfit to differentiate between traditional and egalitarian women.

However, in real life women may often encounter work-family situations that only some mothers interpret as WFC, and feel guilty about, while other mothers would not. For example, situations such as working more hours than usual or not having the energy to cook a healthy meal when coming home from work may constitute more common situations for working mothers in which women with more traditional gender stereotypes may experience more guilt than women with more egalitarian gender stereotypes would. Therefore, in Study 2 we decided to examine how daily working hours predict the experience of WFC in working women and how this WFC in turn predicts their feelings of guilt. We expected that the same objective situation (i.e., work more than the usual 8-hour working day) is more quickly interpreted by traditional women as WFC compared to egalitarian women, and consequently traditional women may be more likely to experience guilt than egalitarian women. As such, in Study 2, we further explored how gender stereotypes may predict real-life work-family experiences of mothers.

Study 2

In Study 2, we performed a daily diary study to examine whether women's WFC experiences and feelings of guilt in real life are affected by their implicit gender stereotypes.³ A first advantage of a daily diary design is that study variables are more reliably measured because retrospective bias is reduced and the study variables are measured multiple

times. A second advantage is that the diary study allows us to investigate how work hours, WFC and guilt fluctuate across days for the average woman depending on her implicit gender stereotypes (i.e., test relationships within individuals; Ohly, Sonnentag, Niessen, & Zaph, 2010). Women who experienced a lot of WFC and guilt in the past may have adapted their working hours, therefore we may not find the hypothesized relationships with a cross-sectional study. However, with the daily diary design, we can still reliably test these relationships because we can examine how day-to-day fluctuations in working hours predict levels of WFC and guilt. Moreover, we can examine whether the strength of these relationships depend upon women's implicit gender stereotypes.

Participants and procedure

One-hundred-and-five mothers were recruited via the personal network of nine undergraduate students who helped with data collection as part of their curriculum. On the first day, mothers provided informed consent, completed the implicit association task (IAT) and a 5-minute online questionnaire in which background characteristics were assessed (e.g., age, working hours). Then, over eight consecutive days mothers filled out a 5-minute online survey in which we assessed their work hours, WFC, and work-family guilt on that day. Each day participants received an online link to the questionnaire via their email address and they received a daily reminder on their cell phone. All daily questionnaires that were filled out on the day itself or before 10.30 the next morning were included in our analyses. All other diary entries were marked as missing. This resulted in 724 entries distributed with a mean of 6.90 entries per person ($SD = 0.70$).

Most participants were either married or cohabiting (98.09%) and had between 1 and 4 children ($M = 2.01$; $SD = 0.74$). The age of their youngest child (or only child) ranged between one and 13 years ($M = 6.58$; $SD = 3.85$). Mothers worked on average 28.66 hours per week ($SD = 8.86$). This is in line with the Dutch average of working hours among mothers (i.e., 26 hours per week; Van den Brakel & Merens, 2016) and almost the same as in Study 1 (i.e., $M = 27.21$). When asked about their highest educational degree, 74.4 % of participants indicated university or higher vocational education, 22.9% indicated lower vocational education, and 2.9% indicated high school.

Measures

Implicit gender stereotypes were assessed on day 1. All other measures were assessed daily (8 consecutive days) with a single item using a 5-point scale. We chose to use single-item measures to optimize response rates (see Van Steenbergen, Ybema & Lapierre, 2017 for a similar approach in a diary study).

Implicit gender stereotypes. Participants completed the same gender-career IAT test as in Study 1. Only in this study participants completed the IAT online instead of in a testing room.

Daily work-family conflict was measured with the question "Did your work interfere with your activities at home today?" (1 = Not at all - 5 = Very much). Participants who did not go to work that day were still asked to estimate whether their work had an influence on their home activities.

Daily work-family guilt was measured with the item "If you think about how you combined work and family today, to what extent do you feel guilty towards your family. Today I feel..." (1 = Not at all guilty - 5 = Very guilty).

Results

Table 2 presents all between-participants correlations, means and standard deviations for the study variables (based on 8 day-aggregates for the daily measures). Similar to Study 1, participants associated work more with men and family more with women (i.e., a traditional view; average IAT d-score = 0.51, $SD = 0.27$). IAT-score was not directly related to how much WFC and guilt mothers experienced over the week. However, IAT-score was related to the daily workhours of mothers (i.e., more traditional mothers worked fewer hours). Furthermore, on average participants did not experience much WFC during the week (mean 2.15 on a seven-point scale).

TABLE 2 Descriptive Statistics and Bivariate Correlations Among Measures and Background Variables.

Measures	<i>M</i> (<i>SD</i>)	Correlations						
		1	2	3	4	5	6	7
1 Implicit Association Test ¹	0.50 (0.28)	-						
2 Workhours (general)	28.66 (8.86)	-.18	-					
3 Workhours partner (general)	38.84 (9.87)	.05	-.18	-				
4 Daily workhours	3.93 (2.31)	-.21*	.64**	-.16	-			
5 Daily work-family conflict	2.19 (0.76)	-.02	.29**	-.20*	.31**	-		
6 Daily work-family guilt	1.69 (0.59)	.02	.33**	-.29**	.28**	.75**	-	
7 Age youngest child	6.58 (3.85)	.09	-.05	-.004	-.10	.02	-.05	-

Note. Daily workhours, daily work-family conflict and daily guilt are aggregates of variables that are measured daily. ¹IAT d-score: Higher positive scores represent a stronger association between 'work and men' and between 'family and woman'. * $p < .05$; ** $p < .01$

Overview of analyses

We again had multilevel data (i.e., days nested within participants). Intraclass correlation coefficients (ICCs) were 0.19 for WFC and 0.22 for work-family guilt suggesting that a significant proportion of both variables could be explained by differences between participants (19% and 22% of the variance). Therefore, we again performed multilevel analysis using Maximum Likelihood Estimation. We tested our entire model at once using the MLMED Matrix in SPSS (see Figure 3 for an overview of the model and the regression weights; Hayes & Rockwood, 2019).

Do implicit gender stereotypes predict guilt among mothers?

Results of the analyses are presented in Table 3 and visualized in Figure 3. As expected, on days that mothers worked longer hours, they reported feeling more guilty and this relationship was mediated by mothers' experiencing more WFC on days that they worked longer hours.

TABLE 3 Relationships Between Daily Working Hours and Guilt through WFC Moderated by Gender-Career Implicit Associations Test Score.

Path/effect	B	SE	95% confidence interval
c (work hours → guilt)	.02**	.01	-.007, .039
a (work hours → WFC)	.09**	.02	.039, .136
b (WFC → guilt)	.48**	.03	.426, .534
a x b (mediation effect)	.04**	.01	.019, .066
m1 (work hours x IAT → WFC)	.10*	.04	.017, .188

Note. WFC = work-family conflict, Guilt = work-family guilt, IAT = implicit association test (higher positive scores represent a stronger association between 'work and men' and between 'family and woman'). Estimates are unstandardized.

* $p < .05$; ** $p < .01$

Furthermore, we found a significant interaction between working hours and implicit gender stereotypes on WFC (see Figure 4).⁴ To interpret this significant interaction, we calculated the region of significance, using Preacher, Curran, and Bauer's (2006) online calculator. This showed that the cut-off was daily hours > 8.53, indicating that for mothers who worked more than 8.53 hours on a day their degree of internalized gender stereotypes mattered significantly for the level of WFC they reported. Thus, on days that women worked more than 8 and a half hours more traditional women were more likely to experience WFC than more egalitarian women.

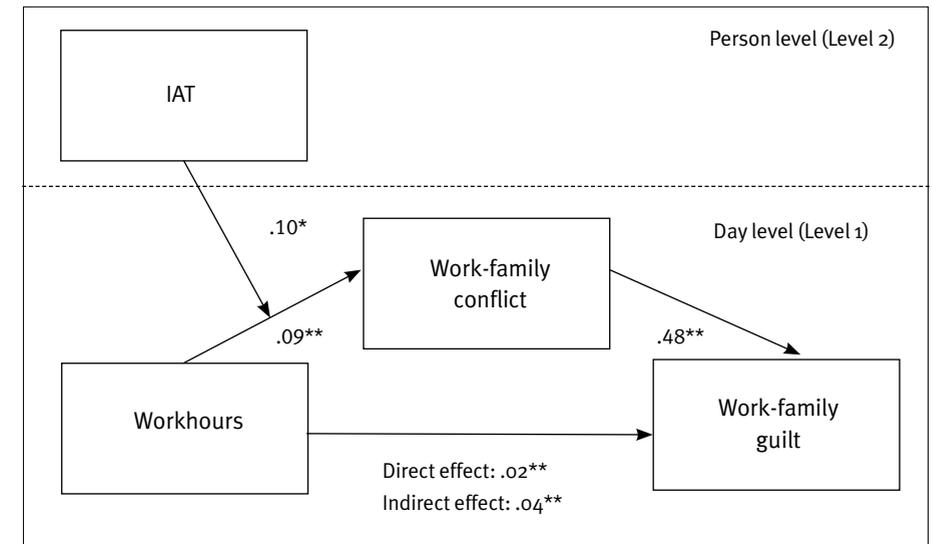


FIGURE 3 Multilevel moderated mediation model showing how daily work-family conflict mediates the relationship between daily workhours and daily work-family conflict and how implicit gender stereotypes (measured with the gender-career implicit association test [IAT] on the person level) moderate the relationship between workhours and work-family conflict. * $p < .05$; ** $p < .01$

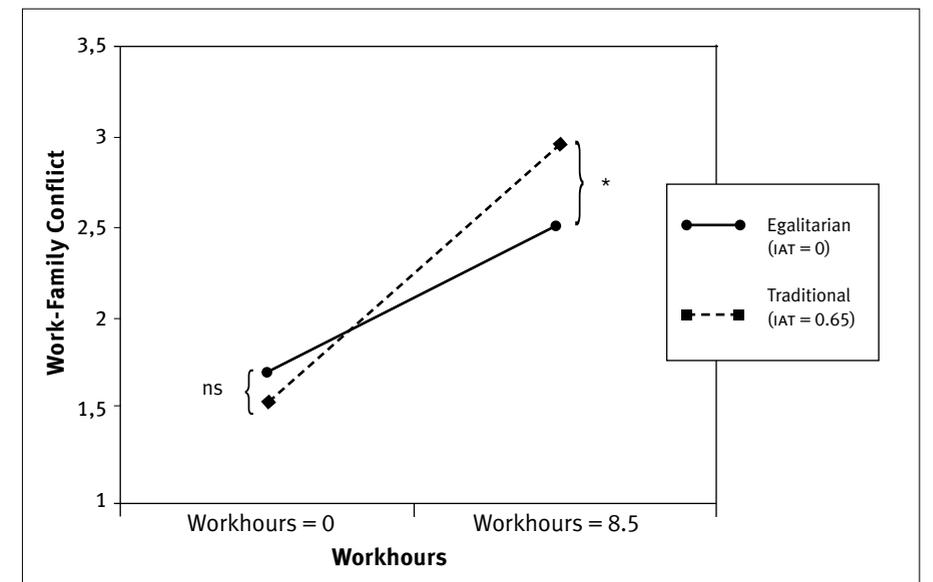


FIGURE 4 Interaction effect of implicit gender stereotypes (measured with the gender-career implicit association test [IAT]) and daily workhours on daily work-family conflict. The graph shows work-family conflict as a function of workhours per week and participants' IAT score (Egalitarian = 0, Traditional = 0.65) * $p < .05$; ^{ns}not significant

Conclusion Study 2

The results from Study 2 suggest that mothers interpret an objectively similar work day (working a full day) differentially depending upon how much they implicitly associate women with childcare and men with work. When working more than a fulltime day (+/- 8 hours) mothers with more traditional associations interpret such a situation more as WFC and in turn experience more guilt than mothers with more egalitarian associations. This aligns with our reasoning that the imaginary WFC situation in Study 1 was too unusual to differentiate between mothers with more traditional and more egalitarian implicit gender stereotypes in Study 1 as here we show that when looking at day-to-day fluctuations in mothers' working hours their implicit gender stereotypes matter.

General discussion

Previous studies have found that mothers experience more work-family guilt than fathers (e.g., Borelli, et al. 2017). We show that this is not because men and women differ so much, but that norms about what are appropriate priorities for mothers and fathers are different. The more parents have internalized gender stereotypes (i.e. stronger associate men with work and women with family), the more guilty mothers feel and the less guilty fathers feel when their work role interferes with their parent role. Our findings contradict popular media articles that have suggested that mothers have a guilt-gene (Boevink, 2017) and also differ from the explanation that mothers feel more guilt than fathers because mothers themselves opine that a mother's primary role should be caregiving (e.g., see Korabik, 2015 for an overview of research on explicit gender beliefs and work-family guilt). Instead, because implicit associations arise at least in part from what individuals see in their environment (e.g., Greenwald & Banaji, 2017; Payne, Vuletich, & Lundberg, 2017) our results imply that gender differences in work-family guilt are a result of an environment in which women often are the primary caregiver and men often are the primary breadwinner.

Our research shows that internalized gender stereotypes predict parents' level of work-family guilt and thus also offers insight into how work-family guilt could be alleviated. This is important because work-family guilt is detrimental for the well-being of working parents and contributes to gendered choices. Specifically, higher work-family guilt in mothers is associated with lower well-being, the decision to work less hours, and plans to intensify parenting (Aarntzen et al., 2019). Taking into account how 1) work-family guilt may arise from gender stereotypes in our society and how 2) gendered work-family choices may be a direct result of work-family guilt, a vicious cycle may be at play: As parents often see in their direct environment or through media portrayals that women take on the role of primary caregiver and men of primary breadwinner, gender differences in work-family guilt arise, which results in gendered choices, and again leads to an environment that is typified by caregiving mothers and breadwinning fathers. The knowledge that work-family guilt arises at least in part from gender stereotypes in our society gives insight into how to break this vicious cycle.

Although previous research indicated that men and women in real life often experience similar levels of WFC (e.g., Herman & Gyllstrom, 1977; Byron, 2005), we demonstrate that WFC in itself is a gendered experience. When men and women find themselves in the same work-family situation, their levels of WFC and guilt do differ depending upon their implicit gender stereotypes. In Study 1, in which working fathers and mothers were asked to imagine the same situation in which they prioritized their work over their family, mothers anticipated to feel more guilty than fathers did. Interestingly, fathers with more traditional gender stereotypes anticipated to feel less guilty compared to fathers with less traditional gender stereotypes. In a similar vein, in Study 2, we found that an objectively same work-family situation - working more than the regular 8 hours a day - was interpreted by mothers with more traditional gender stereotypes more as WFC, resulting in more guilt, compared to mothers with less traditional gender stereotypes. Combined these studies contest the idea that mothers are generally more likely to experience work-family guilt than fathers and propose opportunities to break the vicious cycle in which gender stereotypes result in more guilt among mothers than fathers. Our results suggest that in couples in which both parents have relatively egalitarian implicit gender stereotypes mothers and fathers may experience similar levels of guilt when their work interferes with their family. This in turn may lead parents to share work and family tasks more equally.

If societal norms that place responsibility for family tasks on women are so strong, why then have large meta-analyses not found consistent evidence for gender differences in levels of WFC or even found men to experience more WFC (e.g., Byron, 2005)? We propose that this is because in real life the work-family division of men and women often differ a lot. For example, on average women spend less time on paid work and more on childcare than men do (European Commission, 2019). Possibly, the lack of difference in the levels of mothers' and fathers' WFC is due to the fact that the experience of WFC and the resulting guilt motivates parents to adapt their life in a way that they can feel more satisfied with how they combine work and family. For example, a working mother who feels guilty because she often misses her children's bedtime ritual because of a long travel time may choose to take on a less challenging, more poorly paid job because it is in her place of residence. As a result, mothers and fathers on average may experience similar amounts of work-family guilt, but when you compare their actual situation it becomes visible that in order to maintain a bearable level of WFC mothers work much less hours and take on more time with their children than fathers do. Therefore, research that investigates gender differences in WFC in 'real life' need to take into account these differences in work-family combination between mothers and fathers in order to draw meaningful conclusions about differences in work-family guilt between men and women.

Limitations and future research

With these two studies we are the first to provide evidence that objectively identical work-family circumstances can result in different levels of guilt in fathers and mothers depending on their internalized gender stereotypes. However, this research also has its' limitations. An obvious limitation is the correlational nature of both studies which makes

that we cannot rule out the possibility of reversed causality. For example, it is possible that instead of the proposed relationship (i.e., working more hours leads to increased WFC and guilt especially among traditional mothers) it is the case that experiencing more WFC and more guilt makes - especially traditional - women work more hours. However, not only is it hard to explain why this would be the case, this is also inconsistent with previous research that shows that on days that mothers experience more WFC, they want to work less hours instead of more hours (Aarntzen, et al., 2019). Furthermore, it could not have been the case that higher WFC and work-family guilt cause more traditional implicit associations in mothers - especially when they work more hours - because implicit gender stereotypes were measured at the start of Study before we began our daily measures of working hours, WFC and guilt. Therefore, we feel confident that the most plausible causal paths (with work-family guilt as an outcome of gender stereotypes, work-family conflict, and working hours) were tested in the current studies.

A question that may be raised by this research is how the relationship between parents' working hours, their implicit gender stereotypes and their work-family guilt develops over time. Possibly, stronger traditional implicit gender stereotypes lead mothers to work less hours because they experience higher WFC and guilt if they would work more. Or in line with research showing that implicit associations can change through personal experiences (e.g., Endendijk, Derks & Mesman, 2017), mothers who work less hours may develop more traditional associations resulting in enhanced work-family guilt in situations in which they still prioritize work. Note regarding this that in Study 2 we indeed found that stronger implicit gender stereotypes were related to mother working fewer hours, however, when testing our hypothesis, we focused on day-to-day fluctuations of women's working hours and therefore it was not problematic in this study to treat them both as independent variables.

Finally, the current results indicate that high work-family guilt in mothers is a consequence of socio-contextual circumstances rather than pre-existing gender differences. Therefore, one might wonder whether there are also contexts in which fathers experience more guilt than mothers. We propose that when parents fail to meet a parenting task that is typically associated with the father role (e.g., not being able to coach your child's soccer team or not putting up the baby stairgates on time) fathers indeed may experience more guilt than mothers, especially fathers with strong implicit gender stereotypes. Future research is needed to further explore WFC situations in which guilt may be especially high in fathers with more traditional implicit gender stereotypes (compared to mothers or fathers with more egalitarian implicit gender stereotypes).

Implications

Our research reveals that higher work-family guilt in mothers than fathers arises from internalized gender stereotypes. Promoting equal levels of guilt in mothers and fathers may be a first step to create more gender equality as gendered choices that result from work-family would then be prevented. We propose that to prevent the gendered choices

resulting from work-family guilt it may not only be necessary to decrease levels of guilt in mothers but also elevate levels of guilt in fathers. This is because although work-family guilt is a negative emotion, it also has a function as "guard of interpersonal relationships" (Baumeister, Stillwell, & Heatherton, 1994, p. 262) and therefore may help with good parenting (e.g., wanting to spend extra quality time with the children). We argue that when guilt is divided more equally between parents, a more equal division of care and work responsibilities will follow.

One way to promote equal levels of guilt in fathers and mothers may be to change parents' implicit associations and thus take away the gendered aspect of feeling guilty. Although implicit associations may not be easily malleable, a recent longitudinal study among parents of young children suggested that implicit gender associations may change as a function of personal experiences (Endendijk, Derks, & Mesman, 2018). Specifically, during the first years of parenthood, parents developed not only more traditional behaviors but also more traditional implicit gender stereotypes. Although in need for further research, this provides promising possibilities for interventions. For example, making parents aware of their implicit associations and exposing them frequently to caregiving fathers and working mothers (e.g., reading counter stereotypical books) may decrease high guilt in mothers with more traditional associations and increase guilt in fathers with more traditional associations. Similarly, by encouraging parents to enact more egalitarian behaviors themselves (e.g., by having fathers more often take the responsibility when a child is sick) implicit gender stereotypes of both parents may become more egalitarian over time.

Conclusion

Gender stereotypes in our society of "men as breadwinners" and "women as caregivers" shape how we evaluate fathers and mothers' choices and behaviors (i.e., a mother who prioritizes work is seen as a bad parent; Okimoto & Heilman, 2012). Our research highlights that these gender stereotypes do not only shape evaluations of others but also shape how parents themselves feel about their work-family choices. Stronger internalization of gender stereotypes, tying mothers to family and fathers to work, predicted high work-family guilt among working mothers and low work-family guilt among working fathers. Guilt may underlie gendered work-family decisions, making mothers wanting to work less and invest more time in their parenting (Aarntzen, et al., 2019). At the same time low guilt in fathers may allow them to keep prioritizing work. Hence through work-family guilt, internalized gender stereotypes make it difficult for mothers to focus on their career next to their family while they make it easier for fathers to solely focus on their career. In order to reach gender equality in work and family roles, taking away the gendered aspect of feeling guilty when parents' work interferes with their parenting tasks is an important first step.

Endnotes

¹Due to a programming error in display logic, we miss the age of the (youngest) child when parents have two or more children of the same gender. Therefore, mean and sd's of age (youngest) child are based on only 168 participants (66.4 %).

²To plot traditional associations, we chose the well-known cut-off criterium of 0.65. This value also corresponds with typical effect size characterizations (Cohen, 1977). To plot the egalitarian associations, we used 0, because 0 represents exactly equally strong associations for men and women with work and family

³This study was part of a larger research project. Other parts of this dataset are reported in Aarntzen et al., 2019 and Vink, Derks, Ellemers, & Van der Lippe, submitted. In this paper we only reported the measures relevant to answer the current research question. More details about other measurements and research questions in the larger research project are available from the first author.

⁴Since there was a very high correlation between WFC and guilt, these concepts may not be statistically different. Therefore, we also tested the interaction between working hours and gender stereotypes on the aggregated variable of WFC and guilt (i.e., computing a mean-score of the WFC item and the guilt item). With this aggregated concept we also found a significant interaction effect between gender stereotypes and working hours that could be interpreted along the same lines as the interaction between gender stereotypes and working hours on WFC. Because we think that WFC and guilt are theoretically different concepts (e.g., when measuring the well-validated concept of WFC, guilt is never included as an item) and because we also measured work-family guilt independently of WFC in Study 1, we decided to keep the concepts separate in Study 2.



4

How individual gender role beliefs and organizational gender cultures predict parents' work-family guilt in Europe

Note. This chapter is based on **Aarntzen, L.**, Derks, B., Van Steenbergen, E., & Van der Lippe, T. (under review). How individual gender role beliefs and organizational gender cultures predict parents' work-family guilt in Europe. Manuscript resubmitted after minor revisions at *Community, Work & Family*.

Abstract

The guilt that mothers feel about the time and energy that they invest in work instead of their family is often proposed to be an important reason for why mothers “opt-out” the career track. We sought to understand *if* mothers indeed experience more work-family guilt than fathers and *how* this relates to both their own gender role beliefs and organizational gender culture across nine European countries. Analyses draw on the European Social Workforce Survey, with data from 2619 working parents nested in 110 organizations in 9 European countries. Results showed that when fathers and mothers work more than a full-time week (a) fathers with traditional gender role beliefs felt less guilty, and (b) especially mothers who work in an organization in which there is less support for the parent role of working fathers feel guilty. Explorative analyses showed no effect of national gender culture on gender differences in guilt. Our results are beneficial for organizations and policy makers by showing that guilt in working mothers can be reduced by developing an egalitarian organizational culture, in which there is support for the parent role of mothers and fathers, potentially helping mothers to focus on their careers alongside their families.

The traditional family with the man as sole breadwinner and the woman as sole caregiver is no longer representative for how parents in today’s Western society structure their life. Roughly in 60% of families with children under 18 both the father and the mother work (Pew Research Center, 2013). Furthermore, partners in heterosexual couples more often attain similar levels of education than before (Domansky & Przybysz, 2007), mothers’ participation in the workforce increased tremendously in the last decades (Cipollone, Patacchini, & Vallanti, 2014), and fathers take on more household responsibilities and childcare than they once did (Bünning, 2015). Yet, despite these changes, work-family divisions within the majority of heterosexual couples remains highly gendered with men still working most of the paid hours and women still taking on the majority of household and caregiving tasks (Craig & Mullan, 2010; European Commission, 2018; Pew Research Center, 2019). Such gendered divisions appear to develop and/or magnify after the first child is born (Endendijk, Derks, & Mesman, 2018; Grunow, Schulz, & Blossfeld, 2012).

As underlying reason for this persistent gendered work-family division within heterosexual couples, it has been proposed that mothers experience more guilt than fathers when they invest a lot of time and energy in their work instead of their family (i.e., work-family guilt; Redrick, 2011; Sandberg, 2013). This guilt, in turn, is argued to cause mothers to opt-out the career track and focus on their family instead (Redrick, 2011; Sandberg, 2013). Research indeed shows that on days that mothers experience more work-family guilt, they think more about reducing their working hours and make plans to increase the time they spend with their children (Aarntzen, Derks, Van Steenberghe, Ryan, & Van der Lippe, 2019). Furthermore, given that societal gender norms still prescribe mothers, but not fathers, to prioritize childcare over work (for an overview, see Haines & Stroessner, 2019), it seems likely that mothers experience more work-family guilt than fathers.

However, research findings on gender differences in guilt are mixed: While some studies show that mothers experience more guilt than fathers (Borelli, Nelson-Coffey, River, Birken, & Moss-Racusin, 2017; Glavin, Schieman, & Reid, 2011), other studies do not find gender differences in guilt (Korabik, 2017; Livingston & Judge, 2008). In this paper, we propose that to gain insight in *when* gender differences in work-family guilt occur, it is crucial to examine the role of the context. Specifically, we propose that work-family guilt arises by a mismatch in the *actual* time and energy that parents invest in their work and their family and how much time and energy parents think that they *should* invest in their work and their family. Moreover, we propose that parents’ idea about how they *should* divide their time and energy is in large part based upon parents’ own gender role beliefs and gender norms within their immediate context. For example, a father who endorses traditional gender role beliefs (i.e., who strongly believes that mothers should be the primary caregiver and fathers should be the primary breadwinner) may not feel guilty at all about working a 60-hour week (he is just fulfilling his breadwinner role), while a father who endorses egalitarian gender role beliefs would feel very guilty. In a similar vein, a mother who works in an organization with a relatively egalitarian gender culture may feel less work-family guilt than a mother who works in an organization with a more traditional gender culture. To investigate the role of context in gender differences in work-family guilt, we draw upon

a large cross-sectional survey (European Social Workforce Survey; Van der Lippe et al., 2016) containing 2619 employees nested in 110 organizations in nine European countries (for more information on the sampling strategy and nature of the sample, see Van der Lippe, Van Breeschoten, & Van Hek, 2009). Specifically, we examine how working hours are related to mothers' and fathers' work-family guilt, and whether the strength of this relationship depends on their individual gender role beliefs, the organizational gender culture, and national gender culture.

Studying *if* gender differences in work-family guilt exist, and which micro-, meso-, and macro-level factors drive mothers' and fathers' guilt may help to advance our understanding of how work-family decisions become gendered. The main argument guiding this research is that parents' work-family guilt does not occur in a social vacuum but is dependent upon the context in which parents find themselves. We move beyond previous research on gendered work-family guilt which merely looked at the role of individual gender beliefs (Korabik, 2017; Livingston & Judge, 2008; Martinez, Carrasco, Aza, Blanco, & Espinar, 2011) by also exploring how contextual factors (i.e., parents own working hours, the organizational gender culture, and national gender culture) may drive gender differences in guilt.

Explanations for work-family guilt

Individual gender role beliefs

Gender role beliefs are widely held beliefs about what roles are appropriate for men and what roles are appropriate for women (e.g., Eagly & Karau, 2002). With regard to parenting, normative gender role beliefs persist that the time and energy that a mother dedicates to her children is crucial for children's well-being and is perceived to be more important than the time and energy that fathers and other caregivers dedicate to the children (Haines, 2019; Liss, Schiffrin, Mackintosh, Miles-McLean, & Erchull, 2013; Hays, 1996). Based upon these persisting normative beliefs, it seems a valid hypothesis that mothers experience more work-family guilt than fathers. This may especially be the case when parents themselves more strongly endorse such gender role beliefs.

However, research findings on how parents' gender together with their gender role beliefs shape their work-family guilt are mixed. For example, one study suggests that stronger traditional gender role beliefs are related to higher work-family guilt in mothers but are not related to work-family guilt in fathers (Korabik, 2017). Another study, however, indicates that stronger traditional gender role beliefs are related to lower work-family guilt in fathers but do not predict work-family guilt in mothers (Martinez, et al., 2011). Yet another study suggests that irrespective of their gender, parents feel more work-family guilt when their gender role beliefs are more egalitarian (Livingston & Judge, 2008). An explanation for these inconsistent findings is that previous research barely took parents' own work-context (e.g., their working hours) into account. Specifically, we expect that work-family guilt occurs when there is a mismatch between the actual time and energy that parents spend on work/family and the time and energy they think that they *should* spend on work/family. As such,

the more traditional parents' gender role beliefs, the more work-family guilt mothers may experience and the less work-family fathers may experience, but only when mothers and fathers work approximately the same number of hours. Gender role beliefs, however, also predict mothers' and fathers' actual working hours often resulting in mothers working less hours than fathers (Corrigan & Konrad, 2007). Therefore, the relationship between fathers' and mothers' gender role beliefs and their work-family guilt may be clouded when *not* taking into account that parents with traditional gender-role beliefs tend to make different decisions regarding work hours than parents with more egalitarian gender role beliefs. For example, if a traditional-minded mother works 10 hours a week and reports equal levels of work-family guilt as an egalitarian-minded mother who works 40 hours a week, the conclusion that their levels of guilt are independent of their gender beliefs is too simplistic. Only when working approximately the same number of hours per week, would you expect the mother with more traditional gender role beliefs to experience more work-family guilt than the mother with more egalitarian gender role beliefs.

At the same time, gender role beliefs are changing and therefore not only mothers but also increasingly fathers may experience work-family guilt when they work many hours. For instance, fathers are involved in childcare more and more (Jones & Mosher, 2013). Additionally, although fathers still devote less time than mothers to childcare, twice as many fathers compared to mothers wish that they could spend more time with their children (i.e., 46% vs. 23%; Pew Research Center, 2013). Thus, traditional behaviors of fathers (i.e., working many hours) may no longer fit with their desire to be an active parent. Therefore, for fathers who believe that men and women are equals in raising children (i.e., fathers who endorse egalitarian gender role beliefs), the relationship between working hours and work-family guilt may be equally strong as for the average mother. However, for fathers who endorse more traditional gender role beliefs, the relationship between working hours and work-family guilt may be weaker or even absent. After all, when a father thinks that raising a child is best done by the mother and that his primary contribution to the family is financial, he has little to feel guilty about when working many hours; he is just fulfilling his breadwinner role. In sum, we hypothesize that parents experience more work-family guilt when they work longer hours but expect this main effect to be stronger for mothers who endorse more traditional gender role beliefs, and weaker for fathers who endorse more traditional gender role beliefs (*Hypothesis 1*).

Organizational gender culture

Parents' work-family guilt may not only depend upon the extent to which parents themselves endorse traditional gender role beliefs but also upon the context in which parents find themselves. An important context that may influence parents' work-family guilt is the organization in which parents work, considering that parents have (almost) daily interactions with their co-workers. For instance, when a mother of a three-year old child is away on a business trip for a few days, she may initially not feel bad about being away from her family. However, critical comments from colleagues on how her child may suffer from her absence at home may still induce her to feel guilty. In a similar vein, when the mother

would work in an organization in which mothers and fathers are seen as equals in raising children, she may get reassurance from her colleagues that her husband will manage at home and therefore feels better about being away from home. Furthermore, when a father would work in an organization in which co-workers often ask how his children are doing, he may feel more responsible for childcare and, in turn, he may be quicker to experience work-family guilt than a father who is working in an organization in which co-workers assume that a fathers have a female partner who takes on all the childcare.

It is widely recognized that organizations have their own distinctive culture in which there are shared beliefs, values and norms that shape employees' experiences and behaviors (Trice & Bejjer, 1993). Within such an organizational culture often strong gender norms are embedded and reproduced (Acker, 2012). These organizational cultures have been shown to be influential in shaping fathers' and mothers' work-family experiences. For example, mothers experience the need to suppress their parent identity in organizations in which the dominant cultural ideal is that work and family are two non-overlapping spheres (Cahusac & Kanji, 2014). Other research shows that when an organization supports and values the integration of employees' work and family life, employees experience less work-family conflict (Allen, 2001; Thompson, Beauvais, & Lyness, 1999).

Although organizations are increasingly stimulated to create an egalitarian organizational gender culture (think of quota to increase the number of women in top positions that are imposed on large organizations in some countries; Idea, 2020), organizational efforts to reduce gender inequality are mostly focused on improving mothers' work-family experiences (Wise & Bond, 2003). However, just targeting women's work-family balance can backfire, because while such maternal benefits can reduce the stress of balancing multiple roles, they also communicate the norm to mothers that they are more responsible for taking care of the children than their male partner is (Gerson, 2002). Therefore, we argue that only organizations that treat fathers as active caregivers (e.g., supporting paternal leave) communicate the norm to fathers and mothers that they are seen as equal partner in raising children (see Haas & Hwang, 2007 for similar reasoning). We propose that in such "father-friendly" organizations, gender differences in work-family guilt will be smaller (or even absent) than in organizations with a more traditional gender culture. The unique dataset used in our study allows us to study how the organizational gender culture (i.e., top management's support for fathers' work-family balance rated by the HR-manager) relates to parents' own work-family guilt (i.e., rated by the parent him/herself). Specifically, we hypothesize that in an organization with a more traditional gender culture the effect of working hours on work-family guilt is stronger for mothers while weaker for fathers, whereas in an organization with a more egalitarian gender culture the effect of working hours on work-family guilt is more similar for mothers and fathers (*Hypothesis 2*).

National gender culture

Gender differences in work-family guilt may not only be explained by individual gender norms and organizational gender norms, but also by the national context in which parents

live. Countries in Europe differ in their gender norms and gender (in)equality (European Commission, 2018; Lewis, Brannen, & Nilsen, 2009). For example, whereas 81% of the Bulgarians agrees with the statement that the most important role of a woman is to take care of her home and family, only 11% of the Swedes agree with this statement (European Commission, 2018). The belief that mothers' primary role is to take care of her home and family communicates a strong prescriptive norm that mothers should prioritize their caregiver role over their worker role. When mothers work many hours, they do not adhere to this norm and therefore may experience more guilt than fathers, who by working many hours actually fulfill their primary role as breadwinner.

To examine how the relationship between working hours and gendered work-family guilt may be shaped by the national gender culture, we group the nine countries in the dataset into a traditional and an egalitarian cluster based on the percentage of citizens that endorse traditional gender role belief according to statistics of the European Commission (2018). To get groups of about the same size, we used a cut-off score of 35%. That is, the traditional cluster is composed of countries in which at least 35% of residents agrees with the statement that the most important role of a woman is to take care of her home and family (Bulgaria, Finland, Hungary, Portugal, and United Kingdom) while the egalitarian cluster is composed of countries in which less than 35% agrees with this statement (Germany, The Netherlands, Spain, and Sweden) based upon statistics of the European Commission (2018)². Note that because only nine countries are included in our dataset, we do just a first exploration on how national context may predict work-family guilt in fathers and mothers. Specifically, although we can test whether countries differ from each other, we cannot be certain whether it is our hypothesized national indicator (i.e., belief that mothers should be the primary caregiver) that accounts for the country differences or whether other cultural differences account for these gender differences (e.g., differences in national income). To study thoroughly how a national indicator of gender culture predicts outcomes, most previous research used at least 25 countries; Nosek, et al., 2009; Gonzalez, et al. 2004; Treas, Van der Lippe, Tai, 2011). However, if we find that the relationship between working longer hours and work-family guilt is stronger for mothers than for fathers *especially* in countries that are categorized as more traditional compared to countries that are categorized as egalitarian, this is a first indication that national gender norms matter in predicting fathers' and mothers' work-family guilt.

Method

Sample

To test our hypotheses, we used data from wave 2018 of the European Sustainable Workforce Survey (ESWS; Van der Lippe et al., 2016). The ESWS is a multilevel organizational survey that contains data of employees, managers, and the organization (as reported by the HR-manager) from nine European countries: Bulgaria, Finland, Germany, Hungary, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. In 2018, a total of

8690 (employees and managers) participants nested in 113 organizations participated in the survey. For more information about how organizations were recruited and for general information on this dataset, we refer to Van der Lippe and colleagues (2016). We only included a subset of participants who had at least one child living at home (excluding 5555 responses), worked at least 8 hours a week (excluding 152 responses), and had complete information on all relevant measures (excluding 337 responses), resulting in an analytical sample of 2601 participants (47.1% women) nested within 110 organizations.

Participants' (youngest) child was on average 10.42 years old ($SD = 6.82$). Most participants were married to their partner (69.9%) or were living together with their partner (21.2%). As highest educational degree 35.5% of participants had completed a second stage of tertiary education (MA or MSC), 26.8% had completed a first stage of tertiary education (BA or BSC), 16% had completed postsecondary nontertiary education, 13.0% had completed upper secondary education, and 8.3% attained a lower level secondary education or lower degree. Participants worked on average 42.39 hours ($SD = 8.84$) a week.

Measures

Gender was measured by a dummy variable: ("Are you male/female?" [0 = male, 1 = female]).

Work-family guilt was measured with one item on a five-point Likert scale and was reverse coded: "How often does it happen that you feel guilty about how your obligations at work are affecting your family?" (1 = Always, 5 = Seldom).

Individuals' gender role beliefs were measured with four items on a five-point Likert scale (i.e., "A man is just as capable of taking care of a baby as a woman", "It's unnatural for a man to do housework" [reverse coded], "Man and wife should contribute equally to raising a child", and "It's good for a young child if the father also contributes to taking care of him/her" [1 = Strongly agree, 5 = Strongly disagree], $\alpha = .66$; see Poortman & Van der Lippe, 2009).

Individuals' working hours was measured with the question: "How many hours a week do you actually work for this organization? Include any paid or unpaid overtime, but not your commuting time." Although this was an open question, we recoded this question to have a maximum value of 80 hours a week (42 responses were recoded). Not only may an average workweek of more than 80 hours be highly unlikely, these replies are also outliers and therefore may influence the findings unproportionally.

Organizational gender culture was measured by asking HR-managers to rate their perception of the top management's support for men's work-family balance and consisted of four items on a five-point Likert scale (i.e., "Top management cares about how men's job affect family life", "Over time, top management has become more positive towards supporting fathers who try to combine employment and parenthood", "According to top

management, it is OK for men to develop a career and at the same time have a practical responsibility for taking care of children", "Top management encourages men to take parental leave" [1 = A lot more than other companies, 5 = A lot less than other companies, $\alpha = .90$).

National gender culture was measured by using statistics of the European Commission report (European Commission, 2018) where we looked at the percentage of Europeans who agrees with the statement: "The most important role of a woman is to take care of her home and family". Based upon these percentage we created a dichotomous variable in which we coded Sweden (11% agrees), The Netherlands (15% agrees), Germany (28% agrees) and Spain (29% agrees) as egalitarian countries and the United Kingdom (38% agrees), Finland (40% agrees), Portugal (47% agrees), Hungary (78% agrees), and Bulgaria (81% agrees) as traditional countries².

Control variables. To control for family circumstances, we added age of (youngest) child, age of (youngest) child squared and whether participants live together with a partner (0 = no, 1 = yes). In addition, we controlled for participants' level of education, the organizational industry (e.g., healthcare) and the country.

Analytic strategy

The hypothesized relationships were analyzed using two-level random-intercept regression models in SPSS 21. In line with the aim of this study to explain cross-organizational variation of the effect of gender on work-family guilt, we allowed the effect of gender to vary across both the individual and the organizational level. First, we estimated a null model (model without predictors) to determine how much of the variance in work-family guilt could be explained by the organization in which parents work. Next, we tested a model containing only the control variables (e.g., age youngest child), participants' working hours and their gender (i.e., Model 1). Then, to test Hypothesis 1, we tested a model (i.e., Model 2) in which we stepwise added parents' traditional mothering beliefs (step 1), all possible two-way interactions between gender, working hours, and traditional mothering beliefs (step 2) and the hypothesized three-way interaction (step 3). Subsequently, to test Hypothesis 2, we went back to Model 1 and tested a model (i.e., Model 3) in which we stepwise added organizational gender culture (step 1) all possible two-way interactions between gender, working hours, and organizational gender culture (step 2), and the hypothesized three-way interaction (step 3). All predictors were standardized before calculating the interaction. The jackknife procedure was performed to examine the influence of single countries on our results.¹ Finally, to get some insight in the role of national context on the relationship between working hours and guilt, we compared the two country clusters: the traditional country cluster and the egalitarian country cluster. We present these results separately for the country clusters rather than as a three-way interaction (i.e., working hours * gender * country cluster) because this better fits our exploratory purpose (i.e., with only nine countries we cannot draw firm conclusions on national context).

Results

Table 1 shows the correlations between study and background variables. These correlations suggest that participants who had younger children (or one younger child), who had a higher education and who lived together experienced more guilt than participants with older children, lower education or who lived alone. Interestingly, the correlation between gender and guilt in Table 1 suggests that when not adjusting for control variables (e.g., working hours) mothers experienced less work-family guilt than fathers. Table 2 shows the correlations between study and background variables separately for mothers and fathers. These correlations indeed suggest that the more hours mothers work the more guilt they experience. Moreover, the correlations suggest that the stronger mothers' gender role beliefs, the less hours they worked.

Before testing our hypotheses, we analyzed the null model with organization as Level 2 variable (i.e., model without predictors). This showed that 24.4 % of the variance in work-family guilt was due to differences between organizations (i.e., Intraclass correlation = 0.24) and this justifies the need for random-intercept models. In addition, we looked at the effect of gender on guilt when controlling for background variables (e.g., working hours; Model 1). The effect of gender on guilt was not significant ($B = .15$, $p = .098$). Next, we tested our hypotheses. Table 3 provides an overview of the tests of hypotheses (with Appendix A providing an overview of the standardized regression weights of the control variables).

TABLE 1 Descriptive Statistics and Correlations Among Dependent, Independent, and Background Variables.

	Mean (SD) ^a	Correlations						
		1	2	3	4	5	6	7
1 Gender ^b	0.47 (0.50)	—						
2 Guilt	2.15 (1.13)	-.05*	—					
3 Age (youngest) child	10.42 (6.82)	.05**	-.07**	—				
4 Living with partner ^c	0.91 (0.28)	-.11**	.04*	-.21**	—			
5 Education ^d	5.75 (1.45)	.09**	.08**	-.26**	.05*	—		
6 Working hours	42.65 (9.47)	-.25**	.15**	-.03	.04	.10**	—	
7 Gender role beliefs	1.80 (0.62)	-.17**	.03	.12	.04*	-.11**	.00	—

Note. $N = 2601$. ^aSD = Standard deviation; ^bGender was coded: 0 for men and 1 for women; ^cLiving with partner was coded 0 for no and 1 for yes; ^dEducation was coded: 1 not completed primary education, 2 Primary education, 3 Lower level secondary education, 4 Upper secondary education, 5 Post-secondary non-tertiary education, 6 First stage of tertiary education, 7 Second stage of tertiary education, 8 Doctoral degree
* $p < .05$; ** $p < .01$

TABLE 2 Correlations Among Dependent, Independent, and Background Variables Separately for Mothers and Fathers.

	1	2	3	4	5	6
1 Guilt	—	-.01	.02	.11**	.09**	.04
2 Age (youngest) child	-.13**	—	-.25**	-.35**	-.06*	.14**
3 Living with partner ^b	.06*	-.14**	—	.14**	.04	-.02
4 Education ^c	.07*	-.19**	-.04	—	.21**	-.09**
5 Working hours	.21**	-.03	-.03	.05	—	-.06*
6 Gender role beliefs	.02	.13	.07**	-.11**	-.03	—

Note. $N = 2601$. Correlations for fathers are presented below the diagonal; Correlations for mothers are presented above the diagonal. ^aGender was coded: 0 for men and 1 for women; ^bLiving with partner was coded 0 for no and 1 for yes; ^cEducation was coded: 1 not completed primary education, 2 Primary education, 3 Lower level secondary education, 4 Upper secondary education, 5 Post-secondary non-tertiary education, 6 First stage of tertiary education, 7 Second stage of tertiary education, 8 Doctoral degree
* $p < .05$; ** $p < .01$.

Do parents' own traditional mothering beliefs and their working hours predict how guilty they feel?

We hypothesized that parents experience more work-family guilt when they work longer hours but that this effect is stronger for mothers who endorse more traditional gender role beliefs and weaker for fathers who endorse more traditional gender role beliefs. Indeed, we found that mothers and fathers experienced more work-family guilt when they worked longer hours (Model 1). Moreover, we found that the two-way interaction between working hours and gender role beliefs on work-family guilt was significant (Model 2, Step 2). Simple slopes showed that working hours increased work-family guilt in parents with more egalitarian gender role beliefs (-1 SD; $B = 0.22$, $t = 4.22$, $p < .001$) but working hours was not related to work-family guilt in parents with more traditional gender role beliefs ($+1$ SD; $p = .246$; the other two 2-way interactions were not significant).

To examine if the interplay between gender and gender role beliefs influenced the effect of working hours on guilt, we tested a three-way interaction between parents' gender, their working hours, and their gendered parenting beliefs on guilt (Model 2, Step 3). This interaction was significant and is depicted in Figure 1. In contrast to our prediction, for mothers, the effect of working hours on work-family guilt was independent of their own gender role beliefs (slope difference = -0.08 , $t = -0.96$, $p = .336$). However, in line with our predictions the effect of working hours on guilt was weaker (even absent) for fathers with more traditional gender role beliefs ($+1$ SD) than for fathers with more egalitarian gender role beliefs (-1 SD) and mothers (all slope differences > 0.150 , $t > 2.15$, $p < .04$). Specifically, only for fathers with more traditional gender role beliefs working more hours did not result

TABLE 3 Multilevel Analyses for Predicting Parents' Work-Family Guilt in Nine European Countries (Control Variables in Appendix A).

	Model 1	Model 2 (Step 1)	Model 2 (Step 2)	Model 2 (Step 3)	Model 3 (Step 1)	Model 3 (Step 2)	Model 3 (Step 3)
<i>Main effects</i>							
Working hours	0.146 (0.024)**	0.146 (0.241)**	0.139 (0.036)**	0.138 (0.036)**	0.138 (0.036)**	0.185 (0.038)**	0.154 (0.039)**
Gender	0.146 (0.088) †	0.146 (0.088) †	0.140 (0.088)	0.145 (0.088) †	0.148 (0.088) †	0.172 (0.090) †	0.177 (0.091) †
Gender role beliefs		0.001 (0.024) †	0.006 (0.031)	0.015 (0.0315)	0.015 (0.031)		
Organizational gender culture						0.079 (0.079)	0.095 (0.079)
<i>Two-way interactions</i>							
Gender role beliefs * Working hours		-0.077 (0.038)*	-0.181 (0.052)**	-0.181 (0.052)**	-0.181 (0.052)**		
Gender role beliefs * Gender		-0.022 (0.049)	0.000 (0.049)	0.000 (0.049)	0.000 (0.049)		
Working hours * Gender		0.001 (0.049)	0.019 (0.049)	0.188 (0.488)	-0.020 (0.049)	0.085 (0.024)**	0.027 (0.051)
Organizational gender culture * Working hours						-0.006 (0.37)	-0.006 (0.37)
Organizational gender culture * Gender						0.050 (0.089)	0.063 (0.090)
<i>Three-way interactions</i>							
Gender role beliefs * Gender * Working hours			0.140 (0.047)**				0.154 (0.048)**
Organizational gender culture * Gender * Working hours							

Note. Standardized regression weights of Models 1, 2 and 3 are presented. Standard errors are in parentheses. An overview of the standardized regression weights of the control variables is presented in Appendix A. Gender was coded: 0 for men and 1 for women

* $p < .05$, ** $p < .01$, † $p < .10$.

in more work-family guilt ($B = -0.04, t = -0.67, p = .502$) while working more hours did predict higher work-family guilt in fathers with more egalitarian gender role beliefs ($B = 0.32, t = 5.11, p < .01$) and mothers with more egalitarian gender role beliefs ($B = 0.20, t = 3.85, p < .01$) as well as mothers with more traditional gender role beliefs ($B = 0.12, t = 2.06, p = .039$).

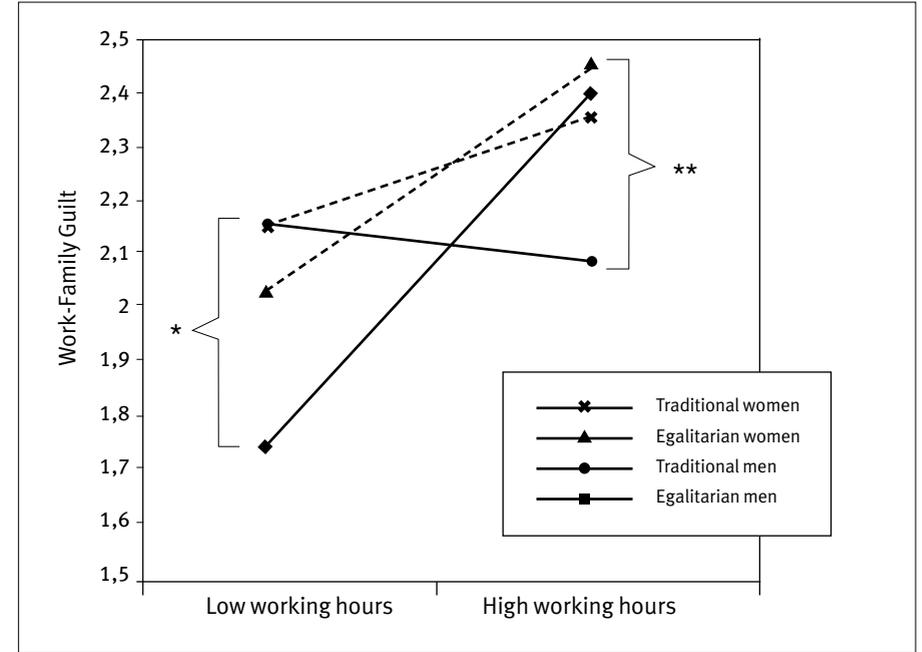


FIGURE 1 Fathers' and mothers' work-family guilt predicted by their traditional mothering beliefs (egalitarian = -1 SD; traditional = +1 SD) and their working hours (low = -1 SD; high = +1 SD). * $p < .05$; ** $p < .01$

Unexpectedly, we also found that when working fewer hours (-1 SD) fathers with more egalitarian gender role beliefs (-1 SD) reported even lower levels of guilt compared to fathers with more traditional gender role beliefs (+1 SD; $B = 0.32, t = 4.97, p < .001$) and mothers irrespective of their gender role beliefs (slope difference = -0.14, $t = -2.20, p = .03$ [i.e., slope of gender role beliefs on work-family guilt, is stronger for fathers than mothers when they work few hours]). The jackknife procedure showed that results stayed largely the same when single countries were removed from the analyses, except the interaction between gender, working hours and individual gender role beliefs went to marginal significant when excluding Germany and disappeared when excluding Hungary, although the direction of relationships remained the same.¹ Together, these results partially confirm our hypothesis, showing that when parents work more hours, they experience more work-family guilt *except* fathers with more traditional gender role beliefs. Furthermore, work-family guilt

is lowest among fathers with more egalitarian gender role beliefs who work relatively few hours. However, in contrast to our hypothesis, we do not find that the relationship between working hours and work-family guilt is stronger for mothers with more traditional gender role beliefs than for mothers with more egalitarian gender role beliefs.

Does organizational support for fathers' work-family balance and parents' working hours predict how guilty parents feel?

We hypothesized that in an organization with a less father-friendly culture the effect of working hours on work-family guilt is stronger for mothers while weaker for fathers, whereas in an organization with a more father-friendly gender culture the effect of working hours on work-family guilt is similar for mothers and fathers. First, we found a significant two-way interaction between working hours and organizational culture on work-family guilt (Model 3, Step 2). Simple slopes showed that working hours increased work-family guilt in both parents who worked in a more egalitarian organization ($-1 SD$; $B = 0.10$, $t = 2.51$, $p = .01$) and parents who worked in a more traditional organization ($+1 SD$; $B = 0.27$, $t = 5.57$, $p < .001$) but the effect was stronger for parents who worked in a more traditional organization (the other two 2-way interactions were not significant). Furthermore, we also found that the predicted three-way interaction between parents' gender, their working hours, and the organizational gender culture was significant (Model 3, Step 3). This interaction is depicted in Figure 2.

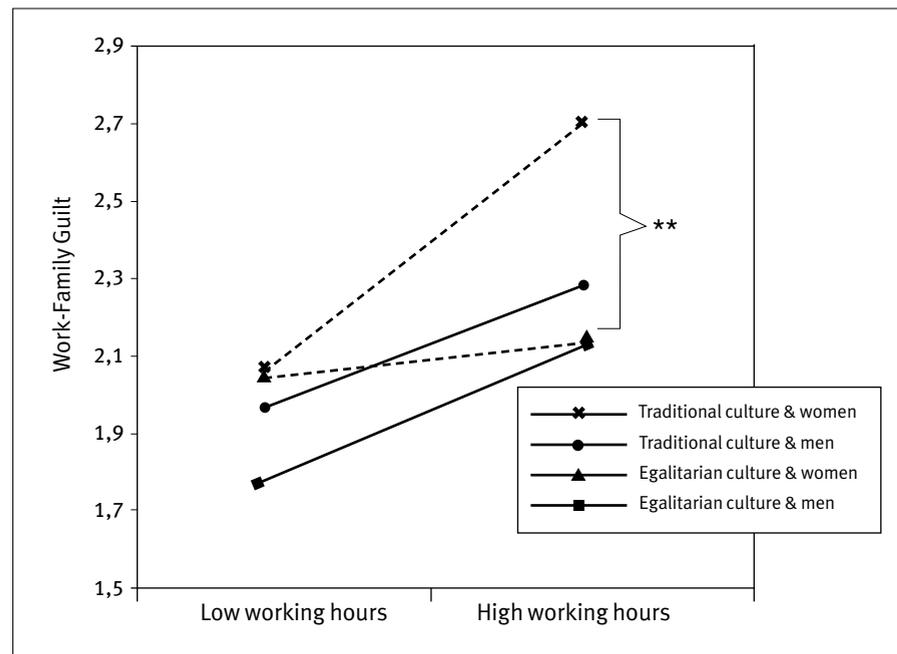


FIGURE 2 Fathers' and mothers' work-family guilt predicted by the gender culture of their organization (egalitarian = $-1 SD$; traditional = $+1 SD$) and their working hours (low = $-1 SD$; high = $+1 SD$). * $p < .05$; ** $p < .01$

In line with our prediction, the effect of working hours on work-family guilt was stronger for mothers who worked in a more traditional organization ($+1 SD$; $B = 0.33$, $t = 7.73$, $p < .001$) than for mothers who worked in a more egalitarian organization (i.e., the effect was even absent for them; $-1 SD$; $B = 0.03$, $t = 0.68$, $p = .497$) and for fathers independent of the organizational norms (traditional organization: $B = 0.15$, $t = 2.70$, $p = .007$; egalitarian organization: $B = 0.16$, $t = 3.07$, $p = .002$; all slope differences > 0.160 , $t > 2.20$, $p < .03$). In contrast to our prediction, for fathers the effect of working hours on work-family guilt was independent of the gender culture of their organization (slope difference = -0.01 , $t = -0.16$, $p = .87$). The jackknife procedure showed that results stayed exactly the same when single countries were removed from the analyses. Together, these results partially confirm our hypothesis, showing that work-family guilt is highest among mothers who work many hours in an organization with a more traditional gender culture while levels of guilt do not differ among fathers and mothers who work many hours in an organization with a more egalitarian gender culture. However, we do not find that in an organization with a more traditional gender culture, the effect of working hours on work-family guilt is weaker for fathers than in an organization with a more egalitarian culture.

How does the effect of gender on work-family guilt vary across European countries?

Table 4 shows the results for the hypothesized gender differences in work-family guilt depending upon participant' working hours separately for the two country clusters (i.e., division in traditional and egalitarian countries based upon national mothering norms). Results are similar for the countries that are grouped as egalitarian (i.e., Sweden, The Netherlands, Germany, and Spain) and the countries that are grouped as traditional (i.e., the United Kingdom, Finland, Portugal, Hungary, and Bulgaria)^{2,3}. First, working hours again significantly predicted parents' work-family guilt in both the traditional and egalitarian countries. Second, we did not find a main effect of gender on guilt in both country clusters. Finally, we did not find an interaction effect between working hours and gender on work-family guilt in both country clusters. To conclude, in contrast to our reasoning, we do not find evidence for the hypothesis that especially in traditional countries (compared to egalitarian countries) working longer hours is related to higher work-family guilt in mothers than fathers.

TABLE 4 Multilevel Analyses for Predicting Parents' Work-Family Guilt in Country Clusters (Standardized Regression Weights are Presented).

	National gender culture	
	Egalitarian	Traditional
Gender	0.052 (0.114)	0.223 (0.127) [†]
Working hours	0.113 (0.056)*	0.149 (0.047)**
Gender X Working hours	0.013 (0.073)	0.024 (0.065)

Note. Standard errors are in parentheses. Control variables are presented in Appendix B. Gender was coded: 0 for men and 1 for women. * $p < .05$, ** $p < .01$, [†] $p < .10$.

General discussion

Addressing how mothers' and fathers' work-family guilt is shaped by their gender role beliefs and norms within their environment may help us understand more deeply why couples divide work-family tasks the way they do. This study provides a comprehensive analysis of the conditions under which work-family guilt becomes gendered. Using unique data of 2601 employees nested within 110 organizations in nine European countries, we examined how working hours are related to mothers' and fathers' work-family guilt depending upon their individual gender role beliefs, organizational gender culture, and national gender culture. Note that we do not provide an extensive overview of all contexts that may be important in shaping parents' work-family guilt (e.g., partner, neighborhood, etc.), but we looked at the contexts that we could investigate with our dataset. Our study results in substantive findings at the individual and the organizational level.

First, at the individual level, we show that generally when parents work more hours, they also experience more work-family guilt. However, one group is an exception to this rule: Fathers with relatively strong traditional gender role beliefs. For them working more hours did not predict an increase in work-family guilt. This suggests that when fathers believe that mothers are superior in caregiving, they are protected against feeling guilty when they work many hours. Unexpectedly, we also found that when working fewer hours, fathers with more egalitarian gender role beliefs (i.e., who believe that mothers and fathers are equally capable in taking care of children) felt even *less* guilty than the other parents (i.e., traditional fathers and both traditional and egalitarian mothers). One possible explanation is that working fewer hours than the average employee is remarkable for fathers but not for mothers because mothers usually work less hours than fathers. Therefore, fathers who work relatively few hours compared to the average employee may receive more praise about being a caring parent (e.g., Haines, 2019) and feel extra satisfied about the time they spend on their caregiver role provided that this is does not conflict with their own gender role beliefs. Together, these findings show that fathers' work-family guilt is driven in part by the interplay between their working hours and their traditional versus egalitarian gender role beliefs.

In contrast to our expectations, we did not find that the relationship between working hours and work-family guilt is strongest for mothers with more traditional gender role beliefs compared to fathers and mothers with more egalitarian gender role beliefs. It is possible that mothers who endorse more traditional gender role beliefs, only work many hours when there is a financial necessity. Although we cannot test this hypothesis with current dataset, there are indications that working out of financial necessity makes it easier for mothers to justify their working hours compared to other working motives (e.g., working for personal fulfillment; Heckert, Nowak, & Snyder, 1998). Therefore, working long hours may be done by mothers with more traditional gender role beliefs out of financial necessity while mothers with more egalitarian gender role beliefs work longer hours for personal fulfillment, making it easier for mothers with more traditional gender role beliefs to justify their working hours and as such they may experience less guilt than mothers

with egalitarian gender role beliefs. Future research should therefore not only incorporate the number of hours that parents work but also parents' motivation for working when investigating work-family guilt.

Second, on the organizational level, our findings show that in an organization characterized by lower support for men's work-family balance, mothers who worked many hours (i.e., hereby deviating from the traditional mother role) experienced much more work-family guilt than fathers who worked many hours. However, in an organization with high support for men's work-family balance, the relationship between working hours and work-family guilt did not differ among mothers and fathers. This illustrates the importance of the organizational context for mothers' work-family experiences. In line with prior research showing the impact of organizational cultures on employees' work-family experiences (e.g., Cahusac & Kanji, 2014; Allen, 2001; Thompson, Beauvais, & Lyness, 1999), our data thus revealed that a father-friendly organizational culture reduces mothers' work-family guilt. This knowledge may benefit organizations, because it shows that by creating a culture in which fathers are supported in their parent role (e.g., introducing extra paternity leave and stimulating men to take up this leave), you can actually improve mothers' work-family balance by reducing their guilt. This may create more opportunities for female employees to focus on their career while they are still satisfied with how they fulfill their mother role.

In contrast to our expectations, we did not find that the organizational gender culture predicted fathers' work-family guilt (i.e., our data suggests that for fathers the relationship between working hours and work-family guilt was equally strong when working in an organization with a more traditional gender culture as when working in an organization with a more egalitarian gender culture). It could be that mothers are more confronted than fathers with gender norms within their direct context. For example, in an organization with a traditional gender culture, colleagues may ask women, but not men, if they are reducing their working hours after they had a child. As such, because gender norms within the organizational context may be less clear for fathers, their own gender role beliefs may be more important in shaping their levels of work-family guilt in comparison with mothers.

Finally, we also explored the role of national gender culture but we do not find evidence for the hypothesis that national endorsement of traditional mothering norms affects the relationship between working hours and fathers' and mothers' work-family guilt. We may not have picked up the role of national context because only nine countries were included, and we only looked at one indicator of national gender role beliefs. Therefore, we encourage future research to further examine this using a large sample of parents nested within many different countries (i.e., $n > 30$). Furthermore, in addition to the national endorsement of traditional mothering beliefs, it may be interesting to investigate how other national indicators of gender norms such as gender policies regarding paternity leave predict gender differences in work-family guilt. Alternatively, it could also be the case that national gender culture is less important in shaping parents' work-family experiences than their direct context, such as their organization. For example, even if a mother lives in a country in which the gender norm strongly prescribes that her primary role should be to

take care of her children, she may still feel good about working a full-time week when her direct context (i.e., her organization, her family, her neighbors, her friends) endorse more egalitarian gender norms.

Our findings show that it is important to take into account the work context (e.g., working hours) of parents when examining the gendered aspect of work-family guilt. Namely, it were organizational characteristics (i.e., working hours and gender culture) that predicted the extent to which fathers and mothers experienced work-family guilt. Previous research often examined the effect of gender and gender role beliefs on work-family guilt without considering this work context (Korabik, 2017; Livingston & Judge, 2008; Martinez, et. al., 2011). For example, Livingston and Judge (2008) did not find that the interplay between gender, gender role beliefs and the degree of work-family interference that participants experienced predicted their levels of guilt. However, we propose that this may be the case because the experience of work-family interference is already gendered in itself. For example, a mother who endorses traditional gender beliefs may already think of working an eight-hour workday as a high work-family interference while a mother who endorses more egalitarian gender beliefs may not see this as a work-family interference at all. Therefore, we encourage future research to always take into account more object work-context measures, such as parents' working hours.

Our study raises several questions as well, such as what happens when we look at other aspects of the organizational gender culture? In this study, we focused on support for fathers' work-family balance but we encourage future research to also look at other aspects of the organizational gender culture such as support for mothers' work-family balance. We suggest that well-intended organizational policies that focus exclusively on helping mothers in creating work-family balance may backfire because they communicate to mothers that they are solely responsible for taking care of the children and the household which may elicit work-family guilt in mothers. However, when organizations combine support for mothers' work-family balance with equal support for fathers' work-family balance, they are likely to reduce maternal guilt. We propose that this may be the case because in such organizations, mothers are not only supported in their work-family balance, but it is also communicated to mothers that they are not solely responsible for childcare and household. We encourage future research to further explore what underlying effects of a "father-friendly" organization reduce mothers' work-family guilt (e.g., do direct colleagues and managers talk differently about the work-family division in a "father-friendly culture compared to a less "father-friendly" culture or do they see the "father-role" of their male colleagues to a bigger extent?)

Furthermore, it would be valuable in future research to take into account the role of the broader context of parents instead of just focusing on the organizational context, such as gender role beliefs of partners, families, neighbors and friends. It would be interesting to disentangle which factors are most important in explaining parents' work-family guilt. Are this the gender norms endorsed by the partner or is the organizational culture more important? Moreover, we encourage researchers to collect longitudinal data because this

way we will be better able to infer causality on how contexts *influence* parents' work-family guilt and how this guilt in turn may *influence* the work-family choices that parents make.

Conclusion

Using a large-scale survey of employees nested within organizations, this study demonstrates under what conditions working mothers experience more work-family guilt than working fathers. First, this study shows that the more fathers endorse the traditional gender role belief that mothers are the most important caregiver, the less likely they are to feel guilty when working many hours. Moreover, this study demonstrates that when parents work more hours, mothers will experience more guilt than fathers but only if they work in an organization with a more traditional gender culture while in an organization with an egalitarian gender culture mothers and fathers experience similar levels of guilt. As such, creating equal treatment of fathers and mothers in work environments can be an important step in preventing gendered work-family experiences, possibly reducing gendered work-family choices.

Endnotes

¹Results of the jackknife procedure are available upon request.

²We also explored the interplay between working hours and gender when dividing the countries in three clusters: egalitarian countries (i.e., the Netherlands and Sweden), middle countries (i.e., Germany, Finland, Portugal, Spain, United Kingdom), and traditional countries (i.e., Hungary and Bulgaria). Here, we find that only in the traditional cluster an interaction effect between working hours and gender ($B = 0.22, SE = .09, t[920.85] = 2.32, p = 0.021$). Simple slope analysis reveals that this interaction means that while for men working more hours does not result in more work-family guilt ($p = .47$), for women working more hours increases their work-family guilt ($B = .16, t = 3.58, p < .001$).

³Additionally, we explored gender differences in work-family guilt depending upon participant' working hours for each country separately, see Appendix C for an overview.



5

How a gendered cost-benefit analysis explains gender differences in work-family guilt

Note. This chapter is based on **Aarntzen, L.**, Derks, B., Van Steenbergen, E., & Van der Lippe, T. (in prep.). How a gendered cost-benefit analysis explains gender differences in work-family guilt.

Abstract

Even though gender roles are changing, fathers are still expected to fulfill the role of main breadwinner and mothers are still expected to fulfill the role of main caregiver. As a result, fathers may more easily pay attention to the career benefits that come from the time and energy they invest in their work, while mothers may be more inclined than fathers to notice the costs for their family that the time and energy they invest in their work brings. As such, we propose that the cost-benefit analysis is gendered, resulting in higher levels of work-family guilt in mothers than fathers. Consistent with this view, Study 1 (N = 265) and Study 2 (N = 255) showed that mothers experience more guilt than fathers in fictitious situations in which they prioritize their work over their family. Furthermore, Study 2 found that mothers' higher appraisals of family costs underlie these gender differences in guilt. However, no evidence was found for the hypothesis that fathers appraise higher career benefits of the time and energy they invest in their work than mothers. Finally, Study 3 (N = 222) showed that maternal guilt, but not paternal guilt, can be reduced by experimentally elevating experienced career benefits from investing time and energy in work. Together, these studies show that mothers experience more work-family guilt than fathers because they appraise their time and investment in work as bringing a higher cost for their family. Moreover, findings suggest that mothers can be partially protected from feeling guilty when they experience clear career benefits when they prioritize work.

"I could not quite subdue the plain little voice in the back of my skull asking why I had abandoned my children for this. As luck would have it, I ran into an old pal at lunch [...]. What is new with you I asked. 'I'm married! And we have a toddler!' he announced. [...] 'Yes, life is great' he continued [...] 'My wife has quit her job, so I can be absolutely confident our child's getting the best of care. It's all worked out really well'." (p.2).

A woman telling about her experience when being on a business trip for a few days
– Annabel Crabb, *The Wife Drought* –

Although over the last decades mothers' participation in the workforce has increased tremendously and fathers take on more childcare and household responsibilities than they once did, societal norms still prescribe mothers to prioritize the caregiving role and fathers to prioritize the breadwinner role (e.g., Haines & Stroessner, 2019). As exemplified by the opening quote above, these differential gender norms may cause fathers and mothers to experience situations in which they prioritize their worker role over their parenting role (such as a business trip) differently. The mother, Annabel, seems to feel guilty about "abandoning her children" while the father, Stan, does not seem to suffer from guilt at all. A first reason for this differential experience seems to be that Stan believes that he left his children with the best caregiver possible "their mother" and therefore appraises his absence from home as not bringing any *costs for his family*. However, given strong gender beliefs that mothers are the best at parenting (Hays, 1996; Liss, Schiffrin, MackinTosh, Miles-McLean, & Erchull, 2013) Annabel may appraise her absence from home as bringing high costs for her family. Second, this quote illustrates that guilt may increase when there are few *career benefits* justifying the prioritization of work (i.e., "why I had abandoned my children for this"). However, given that career benefits are often more easily attained by fathers than mothers (e.g., gender pay gap, gendered performance evaluations; Ellemers, 2014), it may be harder for Annabel to appraise career benefits of going on a business trip than for Stan. In the current paper, we test the hypotheses that 1) mothers experience more guilt than fathers when they prioritize their work over their family, and 2) that this happens because they appraise this as bringing higher costs for their family and simultaneously bringing fewer benefits for their career.

Gender differences in work-family guilt

Societal beliefs about 'intensive mothering' have been theorized to play a large role in work-family guilt (e.g., Borelli, Nelson-Coffey, River, Birken, & Moss-Racusin, 2017; Borelli, Nelson-Coffey, River, Birken, & Moss-Racusin, 2016; Hays, 1996). These beliefs entail that the care of mothers is especially important for the well-being of children (more important than that of fathers and/or other caregivers), and relatedly that mothers, but not fathers, should prioritize their caregiving tasks over their work (Haines & Stroessner, 2019; Hays, 1996; Arendell, 2000). As such, the societal standards of what it means to be a good mother (i.e., prioritize family) are in conflict with the standards of being a successful, committed professional (i.e., prioritize work). As a result, working mothers may experience more guilt about combining work and family than working fathers.

However, empirical findings on gender differences in work-family guilt are indecisive. On the one hand two studies in the U.S. showed that mothers of young children reported more guilt when they thought about how their employment affected their family compared to fathers of young children (Borelli et al., 2017; Borelli et al., 2016). Furthermore, another U.S. study found that boundary spanning work demands (such as work-related phone calls outside working hours) are associated with guilt among women, but not among men (Glavin et al., 2011). On the other hand, a large cross-cultural study that compared 10 countries and that measured work-family guilt with a validated scale (e.g. “I regret not being around my family as much as I would like”) did not find any gender differences in how much work-family guilt men and women experienced (Korabik, 2017). Similarly, another study found similar levels of work-family guilt in mothers and fathers (Martínez, Carrasco, Aza, Blanco, & Espinar, 2011). Thus, although it is theorized that work-family guilt is stronger in mothers than fathers, research does not always confirm this.

We propose that this discrepancy arises because men and women combine work and family differently, and therefore it is difficult to make valid cross-gender comparisons in work-family guilt. For example, on average, women still do more household and caregiving tasks compared to men and men still work more hours per week than women (e.g., Sayer, England, Bittman & Bianchi, 2009). When a father works 40 hours a week and a mother 30 hours a week and they report similar levels of work-family guilt, the conclusion that they experience similar levels of guilt does not tell the whole story. What would happen if the roles were reversed? Rather than seeing men and women as passive victims that suffer from guilt, it may be more appropriate to see them as active agents trying to arrange their life in such a way that their satisfaction with their work and family life is maximized and their guilt is minimized. Research indeed demonstrates that men and women restructure their work-family balance as a consequence of their guilt (e.g., women who feel guilty about working, think more about reducing their working hours; Aarntzen, et. al., 2019). Therefore, in the current research we tested the hypothesis that mothers experience more guilt than fathers when they find themselves in the same situation in which they (have to) prioritize their work over their family (i.e., an imaginary work-interfering-with-family situation; *Hypothesis 1*).

Work-family guilt

Guilt is a moral emotion that people experience when they perceive to have violated a societal or moral standard (e.g., Tangney, Stuewig, & Mashek, 2007). When parents prioritize their work over their family (i.e., go into work even though their child has the flu), mothers are thus more prone than fathers to violate societal standards and as consequence may be more prone to feel guilty. It is crucial to get more insight in 1) if mothers indeed experience more guilt than fathers, and 2) why this is the case, because guilt can have severe consequences. For example, the general guilt literature shows that guilt is associated with anxiety and depression (e.g., Ghatavi, Nicolson, MacDonald, Osher, & Levitt, 2002) and research specifically on work-family guilt shows that it increases psychological distress (Glavin, Schieman, & Reid, 2011) and decreases happiness in working parents (Aarntzen,

Derks, Van Steenberghe, Ryan, & Van der Lippe, 2019). Moreover, higher work-family guilt in mothers is related to gendered behaviors: Mothers think more about reducing their working hours, reduce the time they planned for themselves, and plan to reserve more time and energy for their children in the future (Aarntzen, et. al., 2019). Therefore, it is important to further examine 1) if mothers indeed experience more guilt than fathers, and 2) *why* this the case.

Gendered appraisal of family costs

Many working parents will recognize situations in which they temporarily prioritize their work over their family (e.g., not reading your children a bedtime story because you had to work till late in the evening). We propose that mothers' and fathers' appraisal of such situations predict how guilty they will feel. The Transactional Model of Stress posits that a situation is not aversive and stressful in itself, but that it is individuals' cognitive construal what makes a situation more or less stressful (Lazarus & Folkman, 1984). Building on this model, we propose that a same work-over-family-prioritizing situation (e.g., going into work even though your child is sick) can elicit different emotions in different people, depending on how they appraise that situation. For example, in an interview study that we performed, parents reported to experience guilt especially when they felt that they failed their children and/or partner because of their work (Aarntzen, et al., 2019). That is, they *appraised* their prioritization of work (e.g., going to work even though your child is sick) as bringing a high cost for their family.

These family costs appraisals may be higher in mothers than fathers because of persisting societal beliefs (as described above) that mothers, but not fathers, should prioritize caregiving and are the most important caregiver (e.g., Liss, Schiffrin, Mackintosh, Miles-McLean, & Erchull, 2013; Morgenroth & Heilman, 2017; Park, Smith, & Correll, 2010). To clarify, when parents believe that it is the mothers' task and it is best for children's wellbeing to be cared for by the mother, the father can go to work without feeling guilty but the mother might still feel she is denying her children her own superior care. Therefore, we hypothesize that on average mothers will appraise prioritizing work as bringing a larger costs to their family than fathers and that this is a first reason why mothers experience more guilt than fathers (*Hypothesis 2*).

Gendered appraisal of career benefits

Prioritizing work over family (e.g., missing a family dinner) may not only be appraised as costly for the family but may also be appraised as beneficial for work (e.g., working on a nice project that may benefit one's career). When demands between work and family are incompatible and parents (temporarily) prioritize their work, they might do so because they believe that this is beneficial for their career. The more parents appraise the prioritization of work as a career benefit, the easier it might be for them to justify their (temporary) prioritization of work and the less guilt they may experience. This reasoning closely adheres to the effort-reward imbalance model that suggests that high rewards (i.e.,

career benefits) can buffer for the negative effects of costs (i.e., family costs) on well-being (Siegrist, 1996). So, when parents perceive that their investment in work results in career benefits, they may feel less guilty than when they cannot see career benefits.

Gender differences in appraisal of career benefits may be a second reason why fathers experience less guilt than mothers. Possibly, for fathers it is easier to appraise work prioritization as a career benefit than for mothers. Ample research shows that the time and energy women invest in work is less rewarded than that of men (Ellemers, 2014). Compared to men, women get fewer financial rewards, such as payment (Catalyst, 2014) and bonuses (Kulich, Trojanowski, Ryan, Haslam, & Renneboog, 2011) but also less psychological rewards, such as support (Faniko, Ellemers, Derks, & Lorenzi-Cioldi, 2017), representation opportunities (Johnson, Smith, & Wang, 2017), and being perceived as competent (Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012). Furthermore, once women become mothers they are often sidelined to lower-status work roles in which they feel undervalued in relation to their work experience and that they experience as less fulfilling than their previous higher-status work role (Cahusac & Kanji, 2014). Consequently, mothers may appraise lower career benefits than fathers of prioritizing work, resulting in higher maternal guilt. Thus, we hypothesize that mothers appraise lower career benefits from prioritizing work than fathers and that this is a second reason why mothers experience more guilt than fathers (*Hypothesis 3*).

The present research

The current research is the first to test whether 1) gender differences in work-family exist when fathers and mothers are put in an exact same work-family situation and whether 2) a gendered cost-benefit analysis underlies these gender difference in guilt. In Figure 1, an overview of the hypothesized model is presented. Study 1 was set out to check our assumption that prioritizing work over family (i.e., work prioritization) *causes* work-family guilt in parents by presenting fathers and mothers with an imaginary work-family situation in which they either went into work even though their child was sick (i.e., work prioritization condition) or in which the combination went smoothly (i.e., control condition). In addition, in Study 1, we did a first test on gender differences in work-family guilt, and appraisals of career benefits and family costs. Then, in Study 2, we present parents with six different work prioritization situations (e.g., you have to go into work even though you promised your children to do a fun activity together) and tested gender differences in work-family guilt, career benefits and family costs appraisals across these situations. In addition, we tested the general career benefits and family costs that parents appraise and finally we tested whether a gendered cost-benefit analysis (i.e., gender differences in appraisal of career benefits and family costs) underlies gender differences in guilt. Lastly, in Study 3, we manipulated parents' appraisal of career benefits to test the causal relationship between career benefits and work-family guilt, this way examining if attaining clear career benefits could be a way to reduce work-family guilt in parents.

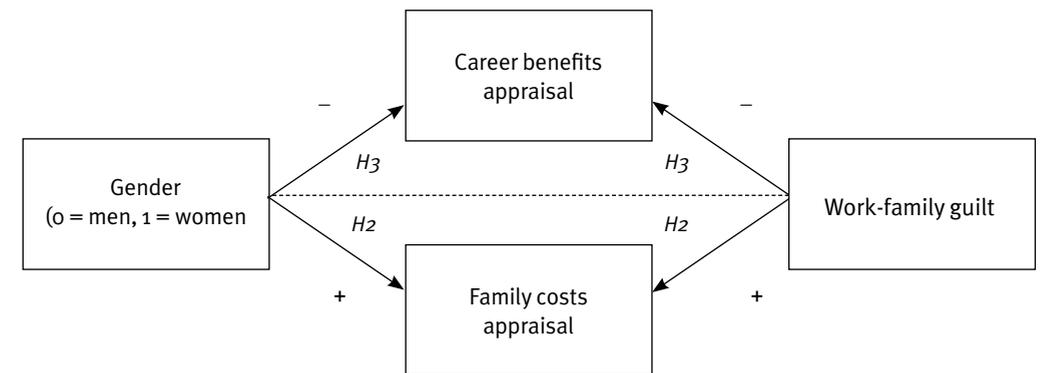


FIGURE 1 The hypothesized model

Study 1

Overview and design

In Study 1, we performed an experiment to establish whether prioritizing work over family *causes* higher reported guilt in mothers compared to fathers. Work prioritization was manipulated by letting participants read a vignette in which they either imagined a situation in which they prioritized work over family or a situation in which the demands between work and family were compatible. After the manipulation, we measured participants' appraisal of career benefits, their appraisal of family costs and their guilt. Study 1 had a 2 (Gender: man, woman) × 2 (Work prioritization: yes, no) quasi experimental design.

Participants and procedure

Parents waiting for their children at primary schools were approached to participate in our survey and to provide their e-mail address. All parents willing to participate received an e-mail invitation (and one reminder) through which they could complete the online survey. The sample consisted of 146 working mothers and 119 working fathers¹ (age between 25 and 58, $M = 39.65$, $SD = 5.86$). On average, participants had 2.08 children ($range = 1-6$; $SD = 0.83$) and the mean age of their youngest child was 4.50 years ($range = 0-11$; $SD = 3.05$). The majority of participants completed university or higher vocational education (87.4%) and almost all participants were married or cohabiting (98.5%).

After providing informed consent and demographic information, participants were instructed to carefully read a short text about combining work and family. In both conditions participants were asked to imagine that they had had a busy week at work and that their (youngest) child got the flu. However, participants in the work prioritization condition were instructed to imagine that they could not stay at home from work to take care for

their sick child (although their partner could) while participants in the control condition were instructed to imagine that they could stay at home to care for their child. After the manipulation, participants completed several measures. See Appendix A for the exact manipulation texts and additional explorative measures that were included.

Measures

All items were assessed on 7-point scales (1 = not at all; 7 = very much).

Family costs appraisal was measured with two items (i.e. “I would see this situation as a sacrifice at the expense of my family” and “I would see this situation as a threat to the quality of my family life”; $r = .65, p < .001, M = 3.12, SD = 1.74$).

Career benefits appraisal was measured with two items (i.e. “I would see this situation as a nice investment in my career” and “I would see this situation as an opportunity that promotes the quality of my career”; $r = .85, p < .001, M = 2.56, SD = 1.48$).

Guilt was assessed with one item: “I would feel guilty”; $M = 3.32, SD = 2.03$).

Furthermore, we included some additional explorative measures (e.g., perceived difficulty of the situation, see Appendix A for further information).

Results

Descriptive statistics and overview of analyses

See Table 1 for an overview of the means, standard deviations and correlations between background and study variables. To ensure that possible gender differences were not due to age differences between men and women and the number of children they had, we controlled for age of youngest child and number of children in all our analyses.

All measures (i.e., guilt, family costs appraisal and career benefits appraisal) were submitted to separate 2 Prioritization (work prioritization, control) x 2 Gender (men, women) ANCOVA's (controlling for number of children and age of their youngest child). Significant interactions were interpreted by testing the simple effects.

TABLE 1 Descriptive Statistics and Correlations of Background and Study Variables

	Mothers <i>N</i> = 146 <i>M</i> (<i>SD</i>)	Fathers <i>N</i> = 119 <i>M</i> (<i>SD</i>)	<i>t</i> -tests	1	2	3	4	5	6	7
1 Age	37.81 (5.36)	41.92 (5.68)	6.04**	—	.73**	.05	.17*	-.10	.01	.06
2 Age (youngest child)	3.78 (2.94)	5.39 (2.97)	0.32	.62**	—	-.03	.23**	.05	.02	.06
3 Number of children	2.07 (0.88)	2.10 (0.76)	4.40**	.08	-.14	—	-.06	.07	.21*	.13
4 Workhours	29.03 (6.76)	35.36 (5.36)	8.50**	-.05	.00	.02	—	.09	-.14	-.08
5 Career benefits	2.50 (1.51)	2.64 (1.44)	-0.72	-.20*	-.11	-.08	.21*	—	.13	.17*
6 Family costs	3.19 (1.86)	3.03 (1.59)	-0.80	-.11	-.06*	.05	-.03	.10	—	.67**
7 Guilt	3.65 (2.13)	2.91 (1.82)	-3.06**	-.14	-.15	.04	-.05	.04	.66**	—

Note. For mothers, correlations are presented above the diagonal and for fathers, correlations are presented below the diagonal. **Workhours**: workhours per week according to contract or for entrepreneurs according to their own estimation of workhours per week. Levene's test indicated unequal variances for workhours ($F = 7.64, p = .01$), family costs appraisal ($F = 5.64, p = .02$), and guilt ($F = 10.64, p < .01$), so degrees of freedom were adjusted accordingly. * $p < .05$, ** $p < .01$.

Work-family guilt

As predicted, participants in the work prioritization condition reported more guilt ($M = 4.51, SE = 0.13, 95\% CI [4.24, 4.77]$) than participants in the control condition ($M = 2.01, SE = 0.14, 95\% CI [1.74, 2.28]$), $F(1, 259) = 172.52, p < .001$, partial $\eta^2 = .40$. Also, the main effect of gender on guilt was significant, $F(1, 259) = 9.99, p = .002$. In line with our predictions, we found a Gender x Work prioritization interaction effect on guilt, $F(1, 259) = 4.31, p = .04$, partial $\eta^2 = .02$ (see Figure 2). Simple effect showed that in the control condition there were no gender differences in guilt, $p = .45$. However, in line with our expectations, in the work prioritization condition women reported to feel more guilty ($M = 5.02, SE = 0.18, 95\% CI [4.66, 5.37]$) than men ($M = 4.00, SE = 0.20, 95\% CI [3.61, 4.40]$), $F(1, 259) = 14.33, p < .001$, partial $\eta^2 = .05$.

Appraisal of family costs and career benefits

As predicted, participants in the Work Prioritization condition reported higher family costs appraisals ($M = 4.04, SE = 0.13, 95\% CI [3.78, 4.28]$) than participants in the control condition ($M = 2.16, SE = 0.13, 95\% CI [1.91, 2.41]$), $F(1, 260) = 108.67, p < .001$, partial $\eta^2 = .309$. In contrast to our predictions, we did not find a main effect of gender ($p = .61$) or an interaction effect ($p = .13$).

In contrast to our predictions, the main effect of gender on career benefits appraisal ($p = .37$) did not reach significance. Also, we did not find a main effect of Work Prioritization on career benefits appraisal ($p = .41$) or for a Gender x Prioritization interaction effect ($p = .24$).

Discussion

In the current study, participants were asked to reflect upon an imagined work-family situation. Whereas mothers and fathers reported similar levels of guilt in the control condition, in the Work Prioritization condition mothers reported more guilt than fathers. This suggests that gender differences in work-family guilt may be specific for more conflicting work-family situations, rather than mothers always experiencing more guilt than fathers. However, we do not find support for our hypotheses that mothers appraise a

work prioritization situation as bringing higher family costs and lower career benefits than fathers. Possibly, it is difficult for participants to see career benefits and family costs in an imaginary situation because this requires deeply thinking about a situation that is not real. Therefore, in Study 2, we not only looked at appraisal of career benefits and family costs in an imaginary work-family situation but we also examined to what extent parents in their own life appraise investing time and energy in their work and/or family as resulting in career benefits and/or family costs.

Study 2

Overview and design

In Study 2, we again tested gender differences in guilt and appraisals of family costs and career benefits by using six imaginary work-prioritization situations. Furthermore, as appraising costs and benefits may be hard in an imaginary situation, we also examined to what extent parents see the time and energy they invest in their work in their own lives as a family cost and/or career benefit. Additionally, in this study we also explored the reversed side of the coin by examining to what extent fathers and mothers see the time and energy they invest in their family as a *career cost* and/or *family benefit*. Finally, we tested our hypothesized two-way mediation model (i.e., if gendered appraisals of career benefits and family costs underlie gender differences in guilt). This study had a correlational design.

Participant and procedure

Heterosexual working parents of young children (till 14 years) were invited to participate in the survey. To increase the reliability of the imaginary situations all parents needed to live together with a partner (i.e., in some situations they have to imagine that their partner is also not able to take care of the children). Parents were recruited with the assistance of three undergraduate students who posted advertisement on online platforms, sent e-mail invitations through contact lists of primary schools and actively recruited participants through their personal network and by approaching parents that were waiting for their children at schools. After parents agreed to participate, they were contacted via e-mail to complete the online survey. Furthermore, upon completion, participants were encouraged to forward the survey to their partner and partners were coupled with a unique code that

was generated for them. This resulted in a sample of 166 working mothers and 89 working fathers² (age between 3 and 55, $M = 40.74$, $SD = 6.38$), and the sample consisted of 15 couples. On average, participants had 2.10 children ($range = 1-4$; $SD = 0.63$) and the mean age of their youngest child was 5.99 years ($range = 0-14$; $SD = 3.61$). The majority of participants completed university or higher vocational education (74.6%) and all participants were married or cohabiting (100%).

After providing informed consent and demographic information, participants filled out the general appraisal measures (i.e., to what extent they generally appraised investing time and energy in their work as bringing career benefits and family costs and to what extent they generally appraised investing time and energy in their family as bringing career costs, and family benefits). Then, participants were asked to consider six imaginary work prioritization situation and to carefully answer how they would experience each situation (i.e., specific appraisal of career benefits and family costs, and guilt). For the exact work-prioritization situation descriptions and additional explorative measures that were included, see Appendix B).

Measures

We constructed scales to measure **general appraisal** of career benefits, family costs, career costs, and family benefits. Each scale consisted of three statements to which participants rated their agreement on a Likert scale from 1 (not at all) to 7 (very much). See Table 2 for all items and reliabilities. For the measurement of general appraisal of family costs, we deleted the first item as this increased the reliability of the scale, however, note that all significant levels and conclusions are identical (but less strong) when this item is left in.

To measure **specific appraisal** of career benefits and family costs we constructed slightly different scales than the ones we used in Study 1 (with the aim to make the items more easily understandable for the participants). The newly constructed scales consisted each of three items. After reading each work-prioritization situation participants rated their agreement with these three statements on a Likert scale from 1 (not at all) to 5 (very much). Furthermore, participants rated how much guilt they would feel in each situation (i.e., 1 item). The measures were analyzed by taking the average of all six situations resulting in one score for participants' guilt, one score for their specific appraised career benefits, and one score for their specific appraised family costs. See Table 2 for all items and reliabilities. In Appendix B the reliability of each situation separately is presented.

TABLE 2 Scales, Items and Reliabilities.

Measure	Items	α
General career benefits	<i>When I put extra time and energy into my work...</i>	.71
	1 I get recognition of my work environment such as my colleagues, boss, and / or cooperation partners.	
	2 I feel that I am making an important contribution to work. 3 I think this is good for my career (for example: a future promotion).	
General career costs	<i>When I spend less time and energy in my work...</i>	.71
	1 I experience disapproval of my work environment such as my colleagues, boss, and/or cooperation partners.	
	2 I feel that I neglect my work. 3 I think this is a disadvantage for my career (for example: less chance of promotion).	
General family benefits	<i>When I spend extra time at home or put extra energy into my usual parenting duties at home....</i>	.83
	1 I make my children happy.	
	2 I feel that I play an important role at home. 3 Runs everything at home (even) more smoothly than normal.	
General family costs	<i>When I spend less time at home or have less energy to do my usual parenting duties at home...</i>	.77
	1 My children miss me (item excluded, with item $\alpha = .74$).	
	2 I feel that I am neglecting my family/things at home. 3 Things at home run less smoothly than normal (is it difficult at home)	
Specific family costs (asked in 6 situations)	1 To what extent would you feel that you are damaging your family?	.92
	2 To what extent would you see this as something unpleasant for your family?	
	3 How disappointed do you think your children will be?	
Specific career benefits (asked in 6 situations)	1 To what extent would you see this as something positive for your work?	.91
	2 How much benefit do you think this would bring for your career?	
	3 How satisfied would your boss and / or colleagues be?	
Specific guilt (asked in 6 situations)	1. How guilty would you feel?	.78

Results

Descriptive statistics and overview of analyses

For an overview of means, standard deviations and correlations, see Table 3. All measures were submitted to separate ANCOVA's testing the main effect of gender. We ensured that possible gender differences were not due to number of children and age of the youngest child by controlling for these variables in all our analyses. Note that partner dependencies in our data did not affect any of our conclusions (i.e., all significance levels were identical when we applied multilevel models with partner as level 2 variable). Finally, our hypothesized two-way mediation model (i.e., for a visual illustration, see Figure 1) was tested with bootstrapping (5000 samples) using model 4 of the PROCESS macro (Hayes, 2013). First, we tested the appraised career benefits and family costs in the proposed situations as mediators and second we tested the general appraised benefits and family costs of investing time and energy in work as the mediators.

TABLE 3 Descriptive Statistics of Background and Study Variables

	Mother N = 166 ^a M(SD)	Fathers N = 89 ^a M(SD)	t-tests	1	2	3	4	5	6	7	8	9	10	11
1 Age	39.33 (6.47)	43.38 (5.32)	5.07**	—	.67**	-.03	-.17*	-.03	.02	-.19*	-.11	-.01	-.18*	-.21**
2 Age (youngest) child	5.66 (3.74)	6.60 (3.28)	1.98*	.59**	—	.18*	-.04	-.15	-.15	-.13	-.18*	.08	-.21**	-.27**
3 Number of children	2.13 (0.66)	2.06 (0.55)	-0.90	.13	.17	—	-.14	-.01	-.02	.04	.09	-.07	.01	-.00
4 Workhours	27.74 (7.70)	38.70 (10.32)	9.86**	-.07	.02	.13	—	.25**	.16*	.13	-.15	-.10	-.42**	-.36**
5 General career benefits	4.35 (1.30)	4.58 (1.34)	1.38	-.28	-.06	-.16	.13	—	-.33**	.09	.08	.23**	-.12	-.12
6 General career costs	3.79 (1.34)	3.51 (1.43)	-1.55	-.08	-.08	-.18	.03	.13	—	.04	.31**	.30	-.08	-.03
7 General family benefits	5.64 (1.13)	5.53 (1.04)	-0.78	-.12	-.22*	-.01	-.11	.23*	.08	—	.44	.43	.32**	.36**
8 General family costs	5.12 (1.14)	4.73 (1.22)	-2.54*	-.08	-.09	-.03	-.06	.10	.37**	.31**	—	.43	.33**	.33**
9 Specific career benefits ^a	2.76 (0.61)	2.72 (0.65)	-0.37	-.08	-.17	-.12	.04	.08	.20	.02	-.01	—	.06	.18*
10 Specific family costs ^a	3.72 (0.71)	3.55 (0.75)	-1.76†	-.31**	-.28**	-.02	-.02	-.08	.02	.13	.43**	.43	—	.82**
11 Guiltita	3.75 (0.75)	3.46 (0.82)	-2.87**	-.35**	-.30**	-.09	-.02	-.04	-.06	.15	.34**	.08	.84**	—

Note. For mothers, correlations are presented above the diagonal and for fathers, correlations are presented below the diagonal. Gender: 0 = Men, 1 = Women; Workhours: workhours per week according to contract or for entrepreneurs according to their own estimation of workhours per week. Levene's test indicated unequal variances for number of children so degrees of freedom were adjusted accordingly. ^aCalculations of specific career benefits, family costs and guilt were based upon 150 mothers and 83 fathers due to drop-out. * $p < .05$, ** $p < .01$.

Gender differences in general appraisal of investing in work (family costs and career benefits)

In line with H2, mothers appraised higher family costs of investing time and energy in their work ($M = 5.01$, $SE = 0.10$, 95% CI [4.80, 5.21]) than fathers ($M = 4.52$, $SE = 0.14$, 95% CI [4.25, 4.81]), $F(1, 251) = 7.28$, $p = .007$, partial $\eta^2 = .03$. However, in contrast to H3, mothers and fathers did not differ significantly in their appraisal of career benefits ($p = .16$).

Gender differences in general appraisal of investing in family (career costs and family benefits)

We also explored if fathers and mothers differed in how they appraised investing time and energy in their family (we did not have specific hypotheses about this). Results showed that fathers and mothers did not differ significantly in their appraisal of career costs ($p = .18$) and family benefits ($p = .66$).

Gender differences in appraisal of family costs and career benefits in specific situations

In line with H2, mothers appraised higher family costs across the six different fictitious work-over-family prioritization situations ($M = 3.74$, $SE = 0.06$, 95% CI [3.63, 3.85]) than fathers ($M = 3.56$, $SE = 0.08$, 95% CI [3.41, 3.71]), $F(1, 229) = 3.90$, $p = .049$, partial $\eta^2 = .02$. However, again in contrast to H3, no gender differences in the appraisal of career benefits were found ($p = .74$).

Gender differences in guilt in specific situations

Confirming H1, mothers experienced more guilt ($M = 3.75$, $SE = 0.06$, 95% CI [3.63, 3.87]) than fathers across the six different fictitious work-over-family prioritization situations ($M = 3.48$, $SE = 0.08$, 95% CI [3.31, 3.64]), $F(1, 229) = 7.09$, $p = .001$, partial $\eta^2 = .03$).

Two-way mediation model

We hypothesized that mothers would experience more guilt than fathers and that this relationship would be mediated by mothers' higher appraisal of family costs and by mothers' lower appraisal of career benefits. We first examined a model with the average *specific appraisal of family costs and career benefits across the six situations* as mediators. Figure 2 gives a graphic overview of the regression weights and Table 4 provides an overview of all tested relations. The indirect effect of gender on guilt through family costs appraisal was significant (Indirect effect = 0.16, $SE = .08$, 95% CI [0.0001, 0.33]). Confirming H2, mothers appraised higher family costs than fathers ($B = .19$, $SE = .09$, $t = 1.97$, $p = .049$) and these higher family costs, in turn, were related to higher levels of guilt ($B = .87$, $SE = .04$, $t = 21.17$, $p < .001$). However, in contrast to H3, we did not find a significant indirect effect of career benefit appraisal on the relation between gender and work-family

guilt: gender was not related to career benefits appraisal ($p = .74$) and career benefits appraisal was not related to guilt ($p = .11$).

Then, we examined the model with *general appraisal of family costs and career benefits* as mediators. Figure 2 gives a graphic overview of the regression weights and Table 5 provides an overview of all tested relations in this model, including the covariates. Again, in line with H2, the indirect effect of gender on guilt through family costs appraisal was significant (Indirect effect = 0.07, $SE = 0.03$, 95% CI [0.016, 0.15]). Mothers appraised higher family costs than fathers and these higher family costs, in turn, were related to higher levels of guilt. Again, in contrast to H3, there was no significant indirect effect of career benefit appraisal on work-family guilt: gender was not related to career benefits appraisal and career benefits appraisal ($p = .16$) was not related to guilt ($p = .08$).

To summarize, Study 2 we found support for H1 (i.e., mothers experience more work-family guilt than fathers), H2 (mothers experience more guilt because they appraise higher family costs of investing time and energy in their work than fathers) but not for H3 (we did not find that mothers experience more guilt because they appraise lower career benefits of investing time and energy in their work than fathers).

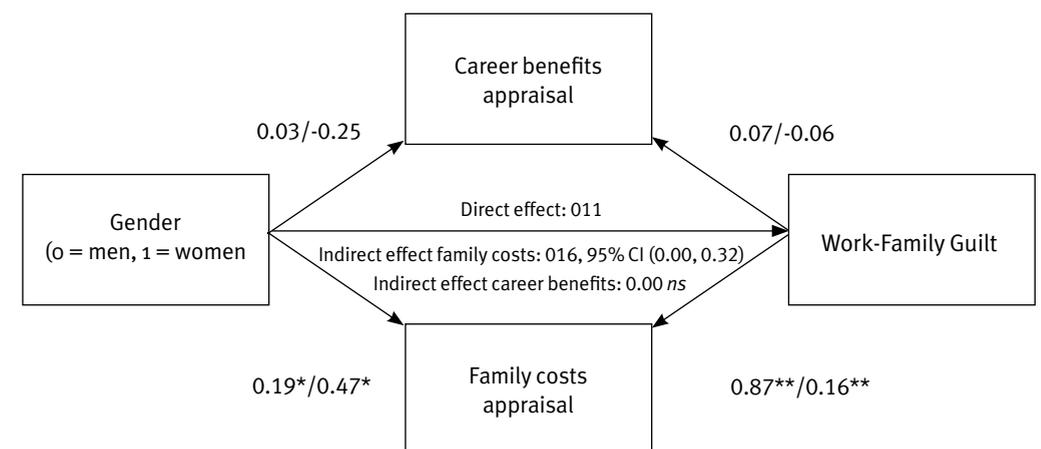


FIGURE 2 Overview of unstandardized regressions weights: Specific appraisal of career benefits and family costs as mediators between gender and work-family guilt are presented before the slash (i.e., /) and general appraisal of career benefits and family costs as mediators between gender and work-family guilt are presented after the slash (i.e., /). For ease of reading, the control variables (i.e., number of children and age of youngest child) are not included in the figure (but are presented in Table 4 and 5). * $p < .05$, ** $p < .01$.

TABLE 4 Results of Specific Appraisal of Career Benefits and Family Costs as Mediators Between Gender and Work-Family Guilt.

Direct paths	β (SE)	<i>p</i>
Gender → Family costs	0.19 (0.09)	.049
Gender → Career benefits	0.03 (0.09)	.741
Career benefits → Guilt	0.07 (0.05)	.106
Family costs → Guilt	0.87 (0.04)	<.001
Gender → Guilt	0.11 (0.06)	.077
Indirect paths	β (SE)	95% CI
Gender → Family costs → Guilt	0.16 (0.08)	0.000, 0.328
Gender → Career benefits → Guilt	0.00 (0.01)	-0.012, 0.021
Covariates	β (SE)	<i>p</i>
Number of children → Family costs	-0.02 (0.07)	.823
Age of children → Family costs	-0.05 (0.01)	.001
Number of children → Career benefits	-0.08 (0.07)	.197
Age of children → Career benefits	-0.02 (0.01)	.150
Number of children → Guilt	0.02 (0.04)	.671
Age of children → Guilt	0.02 (0.01)	.051

TABLE 5 Results of General Appraisal of Career Benefits and Family Costs as Mediators Between Gender and Work-Family Guilt.

Direct paths	β (SE)	<i>p</i>
Gender → Family costs	0.47 (0.18)	.010
Gender → Career benefits	-0.25 (0.18)	.155
Career benefits → Guilt	-0.06 (0.03)	.081
Family costs → Guilt	0.16 (0.03)	<.001
Gender → Guilt	0.15 (0.10)	.122
Indirect paths	β (SE)	95% CI
Gender → Family costs → Guilt	0.07 (0.03)	0.016, 0.147
Gender → Career benefits → Guilt	0.02 (0.02)	-0.008, 0.056
Covariates	β (SE)	<i>p</i>
Number of children → Family costs	0.08 (0.13)	0.570
Age of children → Family costs	-0.04 (0.02)	0.096
Number of children → Career benefits	-0.14 (0.13)	0.304
Age of children → Career benefits	-0.02 (0.02)	0.482
Number of children → Guilt	-0.06 (0.07)	0.390
Age of children → Guilt	-0.05 (0.01)	<.001

Discussion

Study 2 showed that mothers appraise investing time and energy in their work as bringing higher costs for their family than fathers. Moreover, this results in mothers feeling more guilty in situations in which they prioritize their work over their family than fathers. Although, we expected that fathers would appraise higher career benefits of investing time and energy in their work than mothers, Study 2 does not support this. Also, Study 2 does not show that higher appraised career benefits help in reducing work-family guilt. Possibly, this is due to a reversed causation effect. Specifically, the more prone participants were to feel guilty in general and the described situations, the more they may have felt the need to justify their investment in work by reporting career benefits. As such the effect of appraising career benefits on reducing guilt may have been cancelled out by the reversed effect of guilt on enhancing appraisal of career benefits. We further investigated if higher appraisal of career benefits *causally* reduces parents' work-family guilt in Study 3.

Study 3

Overview and design

In Study 3, we manipulated appraisal of career benefits in fathers and mothers to test our hypothesis that higher appraisal of career benefits *causally* reduces work-family guilt. Additionally, we manipulated parents' work-over-family prioritization (Work Prioritization condition, control condition) and we measured parents' family costs appraisal to explore how parents' higher appraisal of career benefits may reduce their guilt: a) through appraising work prioritization as less costly for the family, b) through feeling less guilty about the appraised costs for the family or c) through directly reducing guilt. See Figure 2 for an overview of the tested model with the proposed paths a, b, and c. Study 3 had a 2 (Work Prioritization: high, low) * 2 (Career Benefits: high, low) factorial design. Because Study 1 and 2 show that guilt is gendered, we analyzed this model separately for fathers and mothers. Finally, we included some explorative measures (see Appendix C).

Participants and procedure

Working parents were recruited with the assistance of three undergraduate students who posted advertisement on online platforms and actively recruited participants through their personal network, the personal network of the first author and by approaching parents that were waiting for their children at schools. Participants were contacted via e-mail to complete the online survey. Furthermore, we invited parents who previously participated in a study of the first author (study not reported in this paper) to fill out this online survey as well. The final sample consisted of 223 working parents (57.8% mothers; age between 25 and 61, $M = 38.62$; $SD = 6.89$). On average, participants had 2.08 children ($range = 1-5$; $SD = 0.77$) and the mean age of their youngest child was 4.68 years ($range = 0-12$; $SD = 3.65$).

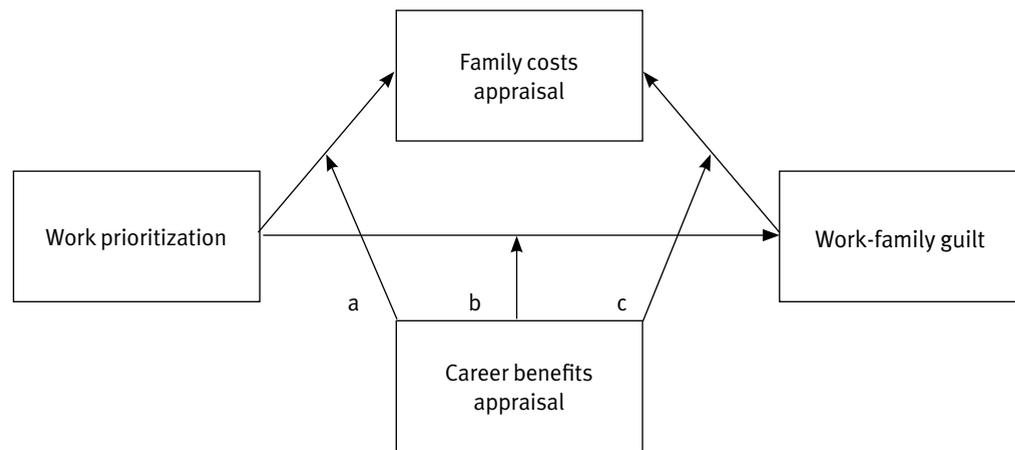


FIGURE 3 The moderated mediation model.

After providing informed consent and demographics (e.g., gender, age etc.), participants were asked to carefully read a short text about combining work and family. Then, participants in the Work Prioritization condition were asked to describe a situation in their own life in which they prioritized their work over their family, whereas participants in the control condition were asked to describe a situation in which combining work and family went well.

Subsequently, we manipulated career benefits appraisal by asking participants in the *high benefits* condition to describe up to three reasons why temporarily prioritizing work can benefit their career. In contrast, participants in the *low benefits* condition were asked to describe up to three reasons why temporarily prioritizing work does sometimes not result in benefits for their career. Finally, participants completed a brief questionnaire.

Measures

Family costs appraisal was measured by reminding participants of the situation they described and asking them to rate their agreement with two statements slightly adapted from Study 1 (i.e., “I saw this situation as a sacrifice at the expense of my family” and “I saw this situation as a threat to the quality of my family life”; $r = .73$, $M = 3.16$, $SD = 1.83$) on a 7-point scale ranging from 1 (totally disagree) to 7 (totally agree).

Work-family guilt was measured by reminding participants of the described situation and asking them their agreement with the statement “I felt guilty” on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree; $M = 2.78$, $SD = 1.51$).

Results

Descriptive statistics and overview of analyses

For an overview of means, standard deviations and correlations, see Table 6. We tested the proposed moderated mediation model (see visualization in Figure 2) with bootstrapping (5000 samples) using model 59 of the PROCESS macro (Hayes, 2013).

Moderated mediation model

We examined if experimentally manipulating career benefits would result in lower guilt in mothers and fathers a) through appraising work prioritization as less costly for the family, b) through feeling less guilty about the appraised costs for the family or c) through directly reducing guilt. Figure 4 presents a graphic overview of the regression weights (without the two control variables number of children and age of youngest child and the main effects of career benefits appraisal), and Table 7 provides an overview of all tested relations separately for fathers and mothers. For both mothers and fathers, the work-over-family prioritization manipulation caused higher work-family guilt through higher appraised family costs. In addition, for mothers, career benefits appraisal significantly moderated the relation between family costs appraisal and work-family guilt, however, the other two moderation paths were not significant. Thus, for mothers appraising higher career benefits of prioritizing work reduces guilt arising from the (high) appraisal of family costs. For fathers none of the moderation paths of career benefits reached significance and as such appraising higher career benefits of prioritizing work may not help fathers in reducing their guilt.

TABLE 6 Descriptive Statistics and Correlations of Background and Study Variables

	Mothers <i>N</i> = 129 <i>M</i> (<i>SD</i>)	Fathers <i>N</i> = 94 <i>M</i> (<i>SD</i>)	<i>t</i> -tests	1	2	3	4	5	6
1 Age	36.79(6.32)	41.14 (6.87)	4.89**	—	.73**	.22*	.28**	.11	.05
2 Age (youngest) child [†]	3.96(3.53)	5.66 (3.61)	0.96	.62**	—	.05	.26**	.06	-.02
3 Number of children	2.04(0.74)	2.14 (0.78)	3.51**	.29**	.04	—	-.10	-.06	.04
4 Workhours	27.49(7.02)	37.21 (4.90)	12.18**	.11	.16	.03	—	.10	.04
5 Family costs appraisal	3.37(1.88)	2.89 (1.75)	-1.89	-.29**	-.11	-.13	-.02	—	.68**

Note. For mothers, correlations are presented above the diagonal and for fathers, correlations are presented below the diagonal. Levene’s test indicated unequal variances for Workhours ($F = 19.83$, $p < .01$), so degrees of freedom were adjusted accordingly.

[†]When people had one child, this number is taken as age of youngest child.

* $p < .05$, ** $p < .01$.

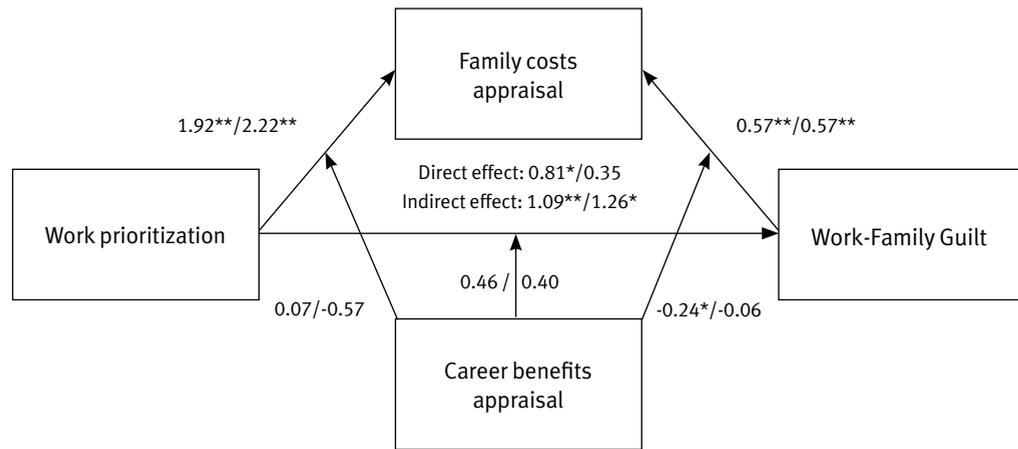


FIGURE 4 Overview of unstandardized regressions weights: Career benefits appraisal as moderator between work-prioritization and family costs appraisal, between work-prioritization and guilt, and between family costs appraisal and guilt. For mothers, results are presented before the slash (i.e., /) and for fathers, results are presented after the slash (i.e., /). * $p < .05$, ** $p < .01$.

Discussion

Study 3 showed that when mothers think of how the time and energy, they invest in their work results in career benefits, they feel less guilty about the potential costs for their family that their investment in work brings. However, for fathers this was not the case. An explanation might be that fathers see the time and energy that they invest into their work less as a choice than mothers and therefore although fathers may appraise career benefits of their investment in work, this does not lead them to be better able to justify the time and energy they invest in their work and reduce their guilt (i.e., for fathers it is the default, so it is always justified). Additionally, Study 3 replicated the finding that work-over-family prioritization *causes* guilt in fathers and mothers and showed that this relationship was indeed mediated by appraised family costs.

General discussion

Incompatibility between demands of work and family life is an inevitable experience for most working parents. Many parents will recognize situations in which they temporarily prioritized their work over their family (e.g. going to work even though your child is sick, missing a child's football match because of work, or coming home late and not reading a bedtime story to your children). Grounded in research showing that social norms dictate mothers (but not fathers) to always prioritize their family, we hypothesized that mothers

TABLE 7 Results of Moderated-Mediation Model: Career Benefits Appraisal as Moderator Between Work-Prioritization and Family Costs Appraisal, Between Work-Prioritization and Guilt, and Between Family Costs Appraisal and Guilt.

	Mothers		Fathers	
	β (SE)	p	β (SE)	p
Direct paths				
Work prioritization → Family costs	1.92 (0.45)	<.001	2.22 (0.43)	<.001
Family costs → Guilt	0.57 (0.09)	<.001	0.57 (0.11)	<.001
Work prioritization → Guilt	0.81 (0.33)	.015	0.35 (0.36)	.332
Career benefits → Family costs	0.32 (0.45)	.477	0.42 (0.44)	.342
Career benefits → Guilt	0.17 (0.37)	.643	0.04 (0.39)	.927
Indirect paths				
Work prioritization → Family costs → Guilt (condition: low career gains)	1.09 (0.26) 95% CI: 0.60, 1.64		1.26 (0.34) 95% CI: 0.61, 1.95	
Work prioritization → Family costs → Guilt (condition: high career gains)	0.65 (0.20) 95% CI: 0.27, 1.05		0.84 (0.29) 95% CI: 0.32, 1.44	
Moderation paths				
Career benefits x Work prioritization → Family costs	0.07 (0.59)	.072	-0.57 (0.61)	.350
Career benefits x Work prioritization → Guilt	0.46 (0.43)	.292	0.41 (0.48)	.397
Career benefits x Family costs → Guilt	-0.24 (0.11)	.036	-0.06 (0.14)	.671
Covariates				
Number of children → Family costs	-0.01 (0.19)	0.997	-0.29 (0.19)	.145
Age of children → Family costs	0.03 (0.04)	0.449	-0.07 (0.04)	.123
Number of children → Guilt	0.19 (0.12)	0.112	-0.03 (0.13)	.797
Age of children → Guilt	-0.03 (0.03)	0.237	-0.00 (0.03)	.970

experience more guilt in such situations than fathers (e.g., Morgenroth & Heilman, 2017; Park, Smith, & Correll, 2010).

The findings of the current three studies indeed suggest that mothers experience more guilt than fathers when they find themselves in the same work-family situation. In Study 1, we showed that mothers reported more guilt than fathers when asked to reflect upon an exact same situation in which they prioritize work over family whereas when reflecting upon a neutral work-family situation (no prioritization of work), men and women experience similar levels of guilt. These findings argue against the idea that higher work-family guilt in mothers is due to an innate tendency of mothers to always experience more

guilt than fathers. Rather, specifically in situations in which women prioritize their work over their family are they more likely to experience guilt than fathers. This can also explain why some previous research did not find gender differences in work-family guilt (Korabik, 2017). When men and women have to rate statements such as “I regret not being around my family as much as I would like”, they can have different standards for what is enough time around the family.

To explain gender differences in work-family guilt, we proposed that the cost-benefit analysis that parents make when they invest time and energy in their work (instead of their family) is gendered. Specifically, we expected mothers to appraise situations in which they prioritize their work over their family as bringing higher costs for their family and lower benefits for their career than fathers resulting in higher maternal guilt. Study 2 indeed demonstrated that the gender difference in work-family guilt was explained in full by the fact that mothers appraise higher costs for their family of the time and energy they invest in their work. We did not find evidence for our hypothesis that fathers’ higher career benefits explain gender differences in guilt. We proposed that this might be due to cognitive justification leading to the fact that precisely the parents who feel guilty report higher career benefits of their investment in work. So, when mothers experience more guilt than fathers, they also want to justify their investment in work more by reporting higher career benefits erasing gender differences and reversing the effect of career benefits on guilt. We recommend future research to test this proposal. For example, by manipulating guilt and testing how this influences appraised career benefits in father and mothers.

Study 3 indeed showed that when parents are stimulated to think about and see career benefits of prioritizing work (by manipulating career benefits appraisal), mothers experienced less guilt about the perceived family costs. Probably, appraising career benefits makes the family costs seem worthwhile. A possible explanation why higher appraised career benefits only reduce work-family guilt in mothers but not in fathers, is that fathers see their work less as a choice than mothers (e.g., Van Steenbergen, Ellemers, & Mooijaart, 2007). Therefore, even though fathers may feel guilty when they appraise family costs resulting from their investment in work, they may not feel the need to justify the time and energy they invest in their work to the same degree as mothers and as such fathers’ guilt may not be reduced by appraised career benefits.

Strengths, limitations and directions for future research

We believe that the current research had several strengths. First, these studies demonstrate that prioritizing work over family *induces* guilt (using both actual and hypothetical work-family scenarios), herewith answering to a call-in previous research for experimental inductions of work-family guilt (Borelli et al., 2017). Second, we are the first to show that the cost-benefit analysis that parents make about their investment in work is gendered and impacts parents’ work-family experiences. Third, by using imaginary situations, we demonstrate that when parents are asked to think about a same work-over-family prioritization situation, mothers indeed report more guilt than fathers. This is a more

reliable gender comparison because it accounts for the fact that the way that parents structure their life is already gendered. Fourth, we are the first to demonstrate a way to relieve work-family guilt, namely we show that seeing higher career benefits of prioritizing work reduces guilt. Finally, we contribute to literature demonstrating that appraisals can indeed guide emotions (e.g., Siemer, Mauss, & Gross, 2007) and are important in better understanding the relationship between the work-family combination and guilt

Despite several strengths, this research also has its limitations. First, although we based our reasoning on why mothers would experience more guilt than fathers on gender stereotypes research, we did not directly measure participants’ gender stereotypes. Therefore, we cannot be sure whether gender differences in guilt are really the result of gender stereotypes in our society or that other factors such as biological dispositions cause gender differences in guilt. In future research, measuring gender stereotypes, with for example an implicit association task can help us disentangle this.

Second, participants in all studies were higher educated than the general Dutch population (e.g., in Study 2 almost 75% of participants completed university or higher vocational education compared to 30% of the average Dutch population; CBS, 2018), limiting the generalizability of our findings. Research shows that highly educated individuals generally have higher egalitarian gender role beliefs (e.g., Marks, Bun, & McHale, 2009). As a result, lower educated working mothers might have to deal with stronger environmental norms prescribing that women should prioritize caregiving, possibly causing them to feel even more guilty than higher educated mothers. Accordingly, our studies may actually underestimate gender differences in guilt in the Dutch population.

Third, our studies only included individuals who were in a relationship and thus we could not be sure that effects are similar for single parents. Possibly, guilt works differently in single parents, who may experience that they have to be a mother and father simultaneously. Therefore, we recommend future research to further examine work-family guilt in lower educated and single parents.

Furthermore, we encourage future research to take into account the choice aspect of working and how this is related to the need to cognitively justify the investment in work. This may give insight into why we did not find gender differences in the appraisal of career benefits even though research clearly shows that fathers more easily attain career benefits than mothers (Ellemers, 2014). Mothers may have a stronger need to justify their investment in work by reporting and appraising career benefits, because they perceive their work more as a choice than fathers (e.g., Van Steenbergen, Ellemers, & Mooijaart, 2007). Relatedly, future research may distinguish between mothers who work out of financial necessity and mothers who work for personal fulfillment and development. As the choice aspect is more salient for the second group of mothers, they especially may feel guilty.

Finally, it may be interesting in future research to look at partners’ combined cost-benefit analysis. For example, what happens when the mother appraises her work especially in

terms of career benefits and less in terms of family costs but her husband sees her work as highly costly for their children and does see her job as a hobby instead of a contribution to the family income? Does the mother over time also see her job especially as costly for her family? A study on couples' division of childcare indeed suggests that it is the interplay between couples' gender role beliefs that predicts how they divide childcare (Nitsche & Grunow, 2018).

Implications

Our research has clear practical implications, as we show that mothers feel less guilty about potential family costs that their investment in work brings when they also see the career benefits associated with it. Because guilt is associated with lower well-being in mothers and makes mothers want to reduce the time and energy they invest in their work (Aarntzen, Derks, Van Steenbergen, Ryan, & Van der Lippe, 2019), organizations might benefit from this knowledge by making sure that women receive and see career benefits for their investment in work. Making mothers aware of career benefits may result in female employees who are more willing to prioritize work and may improve female employee's general well-being.

Conclusion

Results of the current three studies demonstrate that guilt arises when parents prioritize their work over their family and appraise this as bringing high costs for their family. Especially mothers are vulnerable to experience this work-family guilt. A way to reduce guilt in mothers is by giving them the opportunity to see the career benefits that their investment in work brings.

Endnotes

¹In all studies participants were only categorized as working and included in the analyses if they worked at least 8 hours a week.

²We aimed to get at least 65 fathers and 65 mothers because the main effect of gender on guilt (in the work-prioritization condition) in Study 1 was of a medium effect size. As such we expected that the main effect of gender on guilt and appraisals to be of medium effect size as well. An a-priori g*power analysis indicated that with a medium effect size, a power of at least .80 and a p-value of smaller than .05, we needed a sample of 128 participants.



6

Appendices

Nederlandse samenvatting (Summary in Dutch)

In de westerse samenleving heerst het idee dat moeders zich schuldiger voelen dan vaders over de tijd en energie die ze aan hun werk besteden. Het wordt zelfs als reden gegeven waarom nog steeds zo weinig hoogopgeleide vrouwen topfuncties bereiken (Redrick, 2011; Sandberg, 2013). Werkende moeders zouden overmand door schuldgevoelens, of in anticipatie hierop, kiezen om een stap terug te doen in hun werk zodat ze zich vooral op hun gezin kunnen focussen. Zelfhulpboeken voor ambitieuze werkende moeders leren hen om hun schuldgevoelens te managen zodat ze zich toch kunnen blijven richten op hun werk (zie bijvoorbeeld Sandberg, 2013). Wanneer echter de focus ligt op hoe vrouwen moeten veranderen (hun werk-familie schuldgevoelens moeten managen), wordt de suggestie gewekt dat vrouwen hoofdverantwoordelijke zijn voor genderongelijkheid in onze samenleving in plaats van dat maatschappelijke normen moeders en vaders in traditionele rollen houden. Klopt deze manier van denken wel? Het onderzoek naar werk-familie schuldgevoelens onder ouders is schaars. Het is onduidelijk of moeders meer werk-familie schuldgevoelens ervaren dan vaders en/of dat dit alleen het geval is onder bepaalde omstandigheden. Ook is niet bekend wat de consequenties van deze schuldgevoelens zijn. In dit proefschrift demonstreer ik dat werk-familie schuldgevoelens van ouders inderdaad de werk-familie keuzes van ouders vormgeven. Verder laat ik zien dat de mate waarin vaders en moeders werk-familie schuldgevoelens ervaren, voorspeld wordt door (geïnternaliseerde) genderstereotypen en dat het dus afhankelijk is van de context of moeders zich überhaupt schuldiger voelen dan vaders.

Genderstereotypen

De afgelopen decennia is de manier waarop mannen en vrouwen hun leven inrichten ingrijpend veranderd. De standaardlevensloop, waarbij de man voltijds werkt en het gezinsinkomen verdient en de vrouw thuis blijft en voor het huishouden en de kinderen zorgt, heeft plaatsgemaakt voor een grote verscheidenheid aan huishoudens waarbij persoonlijke keuze als leidend wordt gezien in hoe ouders werk en gezin combineren (European Commission, 2018; Pew Research Center, 2019a; Stephens & Levine, 2011). Tegelijkertijd blijven de werk-familie keuzes die mannen en vrouwen maken nog steeds sterk verweven met hun gender. Zo hebben vrouwen in vergelijking met mannen nog steeds minder vaak een betaalde baan, nemen ze meer loopbaanonderbrekingen en werken ze minder betaalde uren (Europese Commissie, 2018). Bovendien nemen moeders nog steeds een onevenredig groot deel van de zorg voor de kinderen en huishoudelijke taken op zich in vergelijking met vaders (Craig & Mullan, 2010; Sayer, Engeland, Bittman, & Bianchi, 2009).

Overeenkomstig deze traditionele man/vrouw verdeling van werk- en zorgtaken blijven de maatschappelijke gendernormen voor ouders traditioneel. Hoewel het tegenwoordig geaccepteerd is dat moeders werken en vaders een deel van het huishouden en de zorg

voor de kinderen op zich nemen, wordt van moeders nog steeds verwacht dat zij de hoofdverantwoordelijkheid dragen over de zorg voor de kinderen en het huishouden, en van vaders dat zij de hoofdverantwoordelijkheid dragen voor het verdienen van het gezinsinkomen (Haines & Stroessner, 2019; Morgenroth & Heilman, 2017; Park, Smith, & Correll, 2010). Deze genderstereotypen zijn niet alleen descriptief (verwachtingen over hoe mannen en vrouwen zijn en zich gedragen), maar ook prescriptief (ze fungeren als sociale regels over hoe mannen en vrouwen zich zouden moeten gedragen) en proscriptief (ze fungeren als sociale regels over hoe mannen en vrouwen zich *niet* zouden moeten gedragen).

De Rol Prioritatie Theorie (Haines & Stroessner, 2019) stelt dat zolang ouders prioriteit lijken te geven aan de typische verantwoordelijkheden die bij hun geslacht horen volgens maatschappelijke normen, hun gedrag als acceptabel zal worden beoordeeld (Haines, 2019). Zo kan een ambitieuze, fulltime werkende vrouw nog steeds gezien worden als een geweldige moeder, zolang haar werk haar vermogen om haar kinderen altijd op de eerste plaats te zetten maar niet ondermijnt. Maar wanneer waargenomen wordt dat ouders voorrang geven aan een atypische genderrol, dan zullen zij negatief worden beoordeeld. Zo laat onderzoek zien dat een vader die veel zorgtaken draagt maar niet voor het financiële inkomen van het gezin zorgt, als incompetent wordt beoordeeld (bijvoorbeeld Coleman & Franuik, 2011) en eerder sociaal wordt uitgesloten (Berdahl & Moon, 2013). Ook wordt een moeder die ervoor kiest om minder bevallingsverlof op te nemen dan wettelijk gezien mag, als een slechtere ouder gezien dan een moeder die volledig bevallingsverlof opneemt (Morgenroth & Heilman, 2017; Okimoto & Heilman, 2012).

Hoe beïnvloeden deze genderstereotypen in onze samenleving hoe vaders en moeders zelf de werk-familie combinatie ervaren? In dit proefschrift beargumenteer ik dat door bestaande genderstereotypen moeders situaties waarin zij hun werk even voorrang geven op hun gezin (bijvoorbeeld wanneer een moeder naar haar werk gaat ondanks dat haar kind griep heeft) als negatiever ervaren dan vaders en dat moeders zich ook schuldiger voelen in deze situaties. In het huidige proefschrift heb ik mij specifiek op heteroseksuele ouders gericht. Ik heb hiervoor gekozen omdat bij homoseksuele ouders de taakverdelingsnorm minder eenduidig is dan bij heteroseksuele ouders. Wordt bij een gezin met twee vaders bijvoorbeeld verwacht dat één vader de zorgende rol op zich neemt en één vader de werkende rol, of mogen zij flexibel hierin wisselen? De invloed van genderstereotypen op werk-familie schuldgevoelens is hierdoor bij homoseksuele ouders waarschijnlijk anders dan bij heteroseksuele ouders en verdient daarom een eigen onderzoek.

Schuldgevoelens

Om dieper in te gaan op de reden dat ik verwacht dat genderstereotypen leiden tot hoge niveaus van werk-familie schuldgevoelens bij moeders en lage werk-familie schuldgevoelens bij vaders is het belangrijk om te weten wat schuldgevoelens inhouden. Schuld wordt gedefinieerd als een morele en zelfbewuste emotie die voortkomt uit

maatschappelijke of sociale afkeuring van specifieke gedragingen (Tangney, Stuewig, & Mashek, 2007). Wanneer ouders zich dus bevinden in een (sociale, organisatorische of maatschappelijke) context waarin sterke afkeuring is voor moeders die hun werk (even) voorrang geven boven hun gezin maar hetzelfde gedrag geaccepteerd of zelfs toegejuicht wordt bij vaders, dan is het een plausibele hypothese dat moeders zich veel schuldiger voelen dan vaders in zulke situaties.

Over de consequenties die deze *werk-familie schuldgevoelens* kunnen hebben, is nog nauwelijks iets bekend. Literatuur over *algemene schuldgevoelens* toont echter dat het ervaren van hoge schuldgevoelens gerelateerd is aan een lager welzijn en dat schuldgevoelens “goedmaakgedrag” stimuleren (Tangney, Stuewig, & Mashek, 2007). Wanneer deelnemers bijvoorbeeld in een studie een spelletje deden en zij zich schuldig voelden over het niet samenwerken in een eerste ronde, deden ze de tweede ronde van het spelletje extra goed hun best om toch samen te werken (Ketelaar & Au, 2003). Gebaseerd op deze literatuur onderzochten wij in hoeverre werk-familie schuldgevoelens consequenties hadden voor onder meer het welzijn van ouders en hun gedrag met betrekking tot hun werk en hun kinderen (bijvoorbeeld: minder uur willen gaan werken of hun kind extra verwennen).

Samenvattend wordt in de vier empirische hoofdstukken van dit proefschrift onderzocht of een hogere mate van werk-familie schuldgevoelens bij moeders inderdaad leiden tot meer traditionele keuzes (Hoofdstuk 2), of moeders inderdaad meer werk-familie schuldgevoelens ervaren dan vaders (Hoofdstuk 3, 4, & 5), *wanneer* deze man/vrouw verschillen in werk-familie schuldgevoelens optreden (Hoofdstuk 3 & 4) en *hoe* we deze man/vrouw verschillen in werk-familie schuldgevoelens kunnen verklaren (Hoofdstuk 5).

Hoofdstuk 2: Werk-familie schuldgevoelens bij moeders voorspellen traditionele keuzes

Hoofdstuk 2 verschaft meer inzicht in de consequenties van werk-familie schuldgevoelens. Gebaseerd op de literatuur over de impact die schuldgevoelens in het algemeen hebben (Tangney et al., 2007) veronderstelde ik dat werk-familie schuldgevoelens bij ouders impact zouden hebben op hun welzijn, hun werkgerelateerde beslissingen en hun ouderschap. Een eerste kwalitatieve studie (interviews, $N = 28$) onder vaders en moeders laat zien dat ouders inderdaad regelmatig kampen met werk-familie schuldgevoelens in hun eigen leven. Ook herkennen ze dat dit schuldgevoel hun verdere gedrag en beslissingen beïnvloedt. Zo geven ouders aan dat zij compenseren voor hun schuldgevoelens door hun ouderschap aan te passen (bijvoorbeeld door extra kwaliteitstijd met de kinderen in te plannen), hun werk aan te passen (bijvoorbeeld door extra verlofdagen op te nemen), hun vrijetijdsbesteding aan te passen (bijvoorbeeld door eigen hobby's af te zeggen) en door de werk-familie combinatie anders te organiseren (bijvoorbeeld door het aannemen van een hulp in de huishouding). Verder minimaliseerden sommige ouders hun schuldgevoelens door de situatie in een ander perspectief te plaatsen (zij benadrukten bijvoorbeeld het

financiële belang van werken nadat zij aangaven zich schuldig te voelen). Kortom, uit deze interviewstudie blijkt dat werk-familie schuldgevoelens impact hebben op hoe werkende ouders hun leven inrichten.

Een hierop volgende kwantitatieve dagboekstudie ($N = 123$), waarbij moeders acht opeenvolgende dagen gevolgd werden, leverde verder bewijs voor de impact van schuldgevoelens op werk, ouderschap, vrije tijd en het anders willen organiseren van de werk-familie combinatie. Deze studie laat zien dat op dagen dat moeders meer werk-familie schuldgevoelens ervaren, zij meer nadenken over het reduceren van hun werkuren, hoe ze meer tijd kunnen doorbrengen met hun kinderen en hoe ze hun tijd effectiever kunnen verdelen. Ook zijn moeders minder gelukkig en offeren ze hun eigen vrije tijd op, op dagen dat ze meer werk-familie schuldgevoelens ervaren. Concluderend laten deze bevindingen zien dat werk-familie schuldgevoelens een belangrijke impact hebben op het leven van werkende ouders en gedragingen induceren die in lijn zijn met het vervullen van een traditionele moederrol, zoals minder uur willen gaan werken.

Hoofdstuk 3: Genderstereotypen verklaren dat moeders zich schuldiger voelen dan vaders

In Hoofdstuk 3 testte ik de hypothese dat geïnternaliseerde genderstereotypen zouden resulteren in hoge werk-familie schuldgevoelens bij moeders, maar lage werk-familie schuldgevoelens bij vaders. Om geïnternaliseerde genderstereotypen te meten werd gebruikgemaakt van de Impliciete Associatie Test. Bij deze test krijgen deelnemers steeds één woord op het scherm te zien die ze moeten categoriseren onder man, vrouw, familie of werk. Deze woorden zijn: vrouwen- en mannennamen (bijvoorbeeld Ellen en Sjoerd), werkgerelateerde woorden (bijvoorbeeld salaris) en familiegerelateerde woorden (bijvoorbeeld baby). Deelnemers krijgen in één blok de opdracht om bij vrouwennamen en familiegerelateerde woorden op de linkertoets te drukken en bij mannennamen en werkgerelateerde woorden op de rechtertoets, en in een ander blok is dit omgedraaid (dus krijgen deelnemers de opdracht om bij mannennamen en familiegerelateerde woorden op dezelfde toets te drukken en bij vrouwennamen en werkgerelateerde woorden). Bij deze test vinden de meeste mensen het makkelijker en zijn ze sneller wanneer bij vrouwennamen en familiegerelateerde woorden op dezelfde toets gedrukt mag worden en bij mannennamen en werkgerelateerde woorden. Dit suggereert dat de meeste mensen vrouwen meer met familie associëren en mannen meer met werk associëren en dus maatschappelijke genderstereotypen in enige mate geïnternaliseerd hebben.

In een eerste cross-sectionele studie onder vaders en moeders ($N = 251$) onderzocht ik in hoeverre deze geïnternaliseerde genderstereotypen voorspelden hoe schuldig ouders zich zouden voelen in een imaginaire situatie waarin hun kind ziek was maar ze toch moesten gaan werken. In overeenstemming met mijn hypothese vond ik dat hoe sterker vaders genderstereotypen geïnternaliseerd hadden (dus hoe meer zij vrouwen met familie en mannen met werk associeerden) hoe minder schuld zij anticipeerden te voelen in deze

imaginaire situatie. Hoewel moeders gemiddeld genomen anticipeerden zich schuldiger te voelen dan vaders in deze situatie, vond ik geen bewijs voor de hypothese dat sterkere geïnternaliseerde gender stereotypen bij moeders zouden zorgen voor meer schuldgevoel.

In een tweede studie heb ik moeders intensief gevolgd met een dagboekstudie om te onderzoeken of in het echte dagelijkse leven van moeders (in plaats van een imaginaire situatie) hun schuldgevoelens wel voorspeld zouden worden door de mate waarin zij genderstereotypen geïnternaliseerd hadden. De resultaten suggereren dat moeders eenzelfde soort werksituatie (op een dag meer dan acht uur werken) verschillend interpreteren afhankelijk van hun geïnternaliseerde genderstereotypen. Hoe sterker de geïnternaliseerde genderstereotypen van moeders, hoe meer zij een dergelijke situatie interpreteren als een conflict tussen werk en gezin en hoe meer schuldgevoelens zij ervaren. Samen laten deze twee studies zien dat hoe sterker ouders genderstereotypen geïnternaliseerd hebben, hoe meer werk-familie schuldgevoelens moeders ervaren en hoe minder werk-familie schuldgevoelens vaders ervaren in situaties waarin zij hun werk prioriteit (moeten) geven boven hun gezin.

Hoofdstuk 4: Een egalitaire organisatiecultuur kan hoge schuldgevoelens bij werkende moeders voorkomen

In Hoofdstuk 4 onderzocht ik hoe de werk-familie schuldgevoelens van ouders gevormd worden door de micro-, meso- en macro context waarin zij zich bevinden. In dit hoofdstuk beargumenteerde ik dat werk-familie schuldgevoelens van ouders niet ontstaan in een sociaal vacuüm maar door een waargenomen mismatch tussen de eigen werk-familie situatie (bijvoorbeeld het aantal uren dat ze werken) en hoeveel tijd en energie ze vinden dat ze *zouden moeten* besteden aan hun werk versus familie. Ik beargumenteer dat dit *zouden moeten* voor een groot deel gebaseerd is op de eigen genderlovertuigingen van ouders en op de organisatorische en nationale context waarin ouders zich bevinden. Daarom onderzoek ik in dit hoofdstuk hoe - afhankelijk van de werken van ouders - individuele genderrol overtuigingen, organisatorische genderculturen en nationale genderculturen impact hebben op de mate waarin vaders en moeders werk-familie schuldgevoelens ervaren. Om deze onderzoeksvraag te testen, maakte ik gebruik van data van de European Social WorkForce Survey, wat resulteerde in een steekproef van 2601 werkende vaders en moeders uit 110 organisaties in 9 Europese landen (Bulgarije, Finland, Duitsland, Hongarije, Nederland, Portugal, Spanje, Zweden en Verenigd Koninkrijk).

Op microniveau laten de resultaten zien dat wanneer ouders meer uur werken, zij meer werk-familie schuldgevoelens ervaren. Eén groep vormt echter een uitzondering op deze regel, namelijk vaders met relatief traditionele genderrol overtuigingen. Voor hen was een hoger aantal werken niet gerelateerd aan hogere werk-familie schuldgevoelens. Dit suggereert dat wanneer vaders geloven dat moeders zorgtaken op zich horen te nemen en hier ook het beste in zijn, zij beschermd zijn tegen het ervaren van een hoge mate van werk-familie schuldgevoelens, zelfs wanneer zij veel uur werken.

Op mesoniveau richtte ik mij op de mate waarin organisaties zich kenmerkten door een vadersvriendelijke cultuur (dus het ondersteunen van de werk-familie balans van vaders) omdat in dergelijke culturen de norm wordt gecommuniceerd dat zowel moeders als vaders worden gezien als verantwoordelijk voor de zorg voor de kinderen, in tegenstelling tot organisatieculturen die alleen maar de werk-gezinsbalans van moeders faciliteren. De resultaten tonen inderdaad aan dat in organisaties die gekenmerkt worden door een meer traditionele gendercultuur (een minder “vadersvriendelijke” cultuur) de relatie tussen werken en werk-familie schuldgevoelens voor moeders sterker was dan in een organisatie die gekenmerkt wordt door een meer egalitaire gendercultuur (meer “vadersvriendelijke” cultuur). Echter voor vaders was de relatie tussen werken en werk-familie schuldgevoelens onafhankelijk van de organisatiecultuur. Dus wanneer ouders vele uren werkten, waren werk-familie schuldgevoelens het hoogst bij moeders die werkten in een organisatie met een traditionele gendercultuur, terwijl de mate van schuld niet verschilde tussen vaders en moeders die werkten in een organisatie met een egalitaire gendercultuur.

Ten slotte richtte ik mij bij het macroniveau op de nationale gender cultuur geoperationaliseerd als de mate waarin bewoners van verschillende landen de overtuiging aanhangen dat de moeder de primaire zorg voor het gezin hoort te dragen. Ik deelde de negen landen op in meer traditionele en meer egalitaire landen, gebaseerd op het percentage inwoners dat het eens was met de stelling dat de belangrijkste rol van de vrouw is om voor haar thuis en haar gezin te zorgen (percentages variëren van 11% in Zweden tot 81% in Bulgarije). Ik vond echter geen bewijs dat deze nationale gendercultuur de mate waarin ouders werk-familie schuldgevoelens ervaren voorspelde.

Concluderend suggereren deze bevindingen dat de schuldgevoelens van moeders meer beïnvloed worden door de organisatorische context (gendernormen in de organisatie) en de schuldgevoelens van vaders meer door hun eigen overtuigingen (eigen genderrol overtuigingen). Een verklaring voor deze discrepantie is dat de gendernormen die in een organisatie gelden wellicht meer aan moeders dan aan vaders worden gecommuniceerd. Een moeder krijgt bijvoorbeeld eerder kritische vragen van collega's over wie voor haar kinderen zorgt als ze fulltime werkt. Daarom zijn de heersende gendernormen in een organisatie wellicht minder duidelijk voor vaders, waardoor hun eigen genderlovertuigingen belangrijker worden in het vormen van hun werk-familie schuldgevoelens. Een belangrijke bevinding van deze studie is dat moeders dus beschermd kunnen worden tegen hoge werk-familie schuldgevoelens wanneer zij werken in een vadersvriendelijke organisatie, dus een organisatie waar naast aandacht voor de werk-familie balans van moeders ook aandacht voor de werk-familie balans van vaders is. Dit impliceert dat het belangrijk is om een organisatiebeleid te creëren waarin vaders en moeders in gelijke mate ondersteund worden in hun werk-familie balans om gendernormatieve werk-familie schuldgevoelens en -keuzes te voorkomen.

Hoofdstuk 5: Moeders zien hogere kosten voor de familie dan vaders in situaties waarin zij hun werk voorrang geven, resulterend in meer schuldgevoelens bij moeders

Hoofdstuk 3 en 4 hebben laten zien dat werk-familie schuldgevoelens *gendered* zijn. Dat wil zeggen dat de mate waarin ouders werk-familie schuldgevoelens ervaren, afhangt van (1) de mate waarin ouders genderstereotypen geïnternaliseerd hebben, (2) van hun eigen expliciete mening over hoe werk/thuis rollen verdeeld moeten zijn tussen mannen en vrouwen, en (3) van de heersende gendercultuur op het werk. Een beperking van deze hoofdstukken is dat het onduidelijk blijft wat *binnen* ouders zelf gebeurt waardoor moeders eerder werk-familie schuldgevoelens ervaren dan vaders. Is dit het geval omdat zij eenzelfde situatie (bijvoorbeeld: gaan werken terwijl je kind ziek is) anders interpreteren? Gegeven de sterke maatschappelijke normen dat moeders niet alleen de hoofdverantwoordelijkheid dragen om voor de kinderen te zorgen maar ook dat zij hier het beste in zijn (superieur aan vaders en andere zorggevers; Hays, 1996; Liss et. al., 2013), zien moeders hun afwezigheid thuis wellicht eerder als nadelig voor het gezin dan vaders. Daarnaast worden vaders vaak makkelijker beloond voor de tijd en energie die zij in werk steken dan moeders (bijvoorbeeld de loonkloof tussen mannen en vrouwen, man/vrouw bevooroordeelde prestatie-evaluaties; Barretto, Ryan, & Schmitt, 2009; Ellemers, 2014), en hierdoor is het wellicht moeilijker voor moeders om de tijd en energie die zij in werk steken te rechtvaardigen dan voor vaders. Dit kan vervolgens weer resulteren in hogere werk-familie schuldgevoelens bij moeders dan bij vaders. Daarom testte ik in dit laatste empirische hoofdstuk de hypothese dat moeders meer werk-familie schuldgevoelens ervaren dan vaders omdat zij een situatie waarin hun werk interfereert met hun gezinsleven eerder zien als het met zich meebrengen van hoge kosten voor de familie en tegelijkertijd minder zien welke *baten* dit voor hun loopbaan oplevert.

De resultaten van zowel Studie 1 ($N = 265$) als Studie 2 ($N = 255$) bevestigen dat moeders anticiperen zich schuldiger te voelen dan vaders in imaginaire situaties waarin zij hun werk voorrang geven boven hun gezin. Zo voelden moeders zich bijvoorbeeld schuldiger dan vaders in een situatie waarin ze een leuk uitje met hun kind afzeggen om toch naar hun werk te gaan. Verder tonen de resultaten van Studie 2, in overeenstemming met mijn hypothese, dat deze genderverschillen in schuldgevoelens gedeeltelijk te wijten zijn aan het gegeven dat moeders in zulke situaties hogere kosten voor het gezin waarnemen dan vaders. Ik vond echter geen bevestiging voor mijn verwachting dat genderverschillen in schuldgevoelens zouden voortkomen uit de lagere baten voor hun loopbaan die moeders in vergelijking met vaders zouden waarnemen in situaties waarin zij hun werk voorrang geven. Een mogelijke verklaring hiervoor is dat juist die deelnemers die zich schuldig voelden hogere carrièrebaten rapporteerden als manier omw het voorrang geven aan werk te rechtvaardigen. In Studie 3 ($N = 222$) manipuleerden we daarom het waarnemen van carrièrebaten (deelnemers beschreven redenen waarom het steken van tijd en energie in werk hun carrière kan helpen óf waarom het soms juist niet oplevert voor hun carrière). Resultaten bevestigden inderdaad dat wanneer moeders meer nadachten over hoe de tijd en energie die zij in hun werk steken voordelig is voor hun carrière, zij zich minder schuldig

voelden. Bij vaders had de manipulatie echter geen effect. Een verklaring hiervoor kan zijn dat vaders de hoeveelheid tijd en energie die zij in hun werk steken minder als een keuze ervaren dan moeders. Dit kan als gevolg hebben dat vaders wel carrièrebaten waarnemen, maar het hen niet helpt om de tijd en energie die zij in het werk steken te rechtvaardigen (de default is immers vaker een hoge investering in werk) en zodoende heeft het geen invloed op hun schuldgevoel.

Samen suggereren de bevindingen van deze drie studies dat moeders eerder werk-familie schuldgevoelens ervaren dan vaders, omdat zij situaties waarin zij voorrang geven aan hun werk boven hun gezin in hogere mate zien als nadelig voor hun gezin. Moeders kunnen echter beschermd worden tegen deze schuldgevoelens wanneer zij carrièrebaten ervaren van de tijd en energie die zij gestoken hebben in het werk. Dit helpt moeders om de waargenomen gezinskosten als de moeite waard te zien. Voor organisaties en beleidsmakers betekenen deze resultaten een extra stimulans om ongelijke man/vrouw carrièrebepalingen tegen te gaan, want dit zal helpen om schuldgevoelens bij moeders te reduceren en hen gemotiveerd houden om te investeren in hun loopbaan.

Conclusie

De manier waarop heteroseksuele ouders betaald werk, kinderopvang en huishoudelijke taken verdelen is vaak nog steeds zeer traditioneel. Zo zien we binnen heel Europa dat mannen gemiddeld meer betaalde uren werken en dat vrouwen nog steeds het leeuwendeel van de huishoudelijke en zorgtaken op zich nemen (Europese Commissie, 2018). In dit proefschrift laat ik zien dat deze traditionele manier van verdelen in ieder geval ten dele ontstaat als reactie op gendernormen in de maatschappij. Hoewel het tegenwoordig geaccepteerd is dat vrouwen betaald werk verrichten en mannen zorg- en huishoudelijke taken op zich nemen, zijn de normen over de taken die ouders prioriteit zouden moeten geven nog steeds verschillend voor mannen en vrouwen. In situaties waarin werk en gezin met elkaar interfereren, wordt van mannen nog steeds verwacht dat zij prioriteit geven aan hun carrière terwijl van vrouwen nog steeds wordt verwacht dat zij prioriteit geven aan hun gezin. Empirische bevindingen van dit proefschrift laten zien dat hoe meer ouders deze traditionele gendernormen geïnternaliseerd hebben, hoe meer werk-familie schuldgevoelens moeders ervaren en hoe minder werk-familie schuldgevoelens vaders ervaren. Gerelateerd hieraan nemen moeders hogere kosten voor hun gezin waar wanneer zij veel tijd en energie in hun werk steken dan vaders, resulterend in een hogere mate van schuldgevoelens bij moeders dan bij vaders. Dit schuldgevoel fungeert als het ware als een keurslijf dat moeders in de traditionele rol van zorggever duwt. Verder suggereren mijn empirische bevindingen dat een belangrijke eerste stap in het voorkomen van deze gendernormatieve schuldgevoelens is het behandelen van vaders en moeders als gelijkwaardige partners bij het opvoeden van kinderen. Zo ervaren moeders meer werk-familie schuldgevoelens in traditionele organisaties dan in organisaties met een 'vadvriendelijke' cultuur, waarin naast aandacht voor de werk-familie balans van moeders ook veel aandacht is voor de werk-familie balans van vaders.

Discussies in de media en de politiek over hoe meer gelijkheid bereikt kan worden tussen mannen en vrouwen op de arbeidsmarkt, richten zich vaak op hoe vrouwen moeten veranderen om deze gelijkheid te bereiken. Zo wordt in de Nederlandse media het vele parttime werken onder moeders vaak verklaard door het vermeende gebrek aan ambitie bij moeders en de persoonlijke keuze van moeders om parttime te werken. Bevindingen van dit proefschrift laten echter zien dat er vaak weinig sprake is van een echte persoonlijke keuze. Maatschappelijke gendernormen zorgen er namelijk voor dat moeders veel meer schuldgevoelens ervaren dan vaders, en als gevolg van deze schuldgevoelens maken vrouwen meer traditionele keuzes (zoals minder uur werken). Een belangrijke aanbeveling die hieruit voortvloeit is dat in plaats van het focussen op het “repareren” van moeders, beter gefocust kan worden op het “repareren” van de sociale en organisatorische context waarin gendernormatieve schuldgevoelens en keuzes gecreëerd worden.

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Supplementary materials

Chapter 2

Appendix A: Interview questions

Demographic questions

- 1 Are you married/living together with your partner?
- 2 How long have you been together with your partner?
- 3 How many children do you have?
 - a) Sons/daughters?
 - b) How old are your children?
 - c) Further details, such as stepchildren?
- 4 What is your profession?
- 5 How many hours per week do you work (according to your contract and in reality)? And on how many days?
 - a) Regular/irregular working hours? Other details?
- 6 What is your birth year?
- 7 What is your highest level of education completed?

Explanation of work-family conflict

With the explanation of work-family conflict we used the diagram (see Figure 1) as a visual aid. The explanation of work-family conflict was more elaborate (including some examples) if participants had problems to grasp the concept.

We would like to see how your work can influence your private life. We already know from previous research that work can positively influence your private life, so for example because you had a nice, inspiring day at work, you have gained a lot of energy and you are in a good mood when you come home. We also know that work can negatively affect your private life. We refer to this as work-family conflict.

Work-family conflict is the experience that the work role and the family role are not compatible with each other. So:

- When you have the idea that you cannot be present at home during activities due to your work. This is time-based conflict.
- Or when you feel that you are stressed and tired because of your work at home. This is energy-based conflict
- Or because certain behavior is required at your work (for example, you have to be very formal towards customizers), it is difficult to switch to informal behavior at home. This is behavioral conflict.

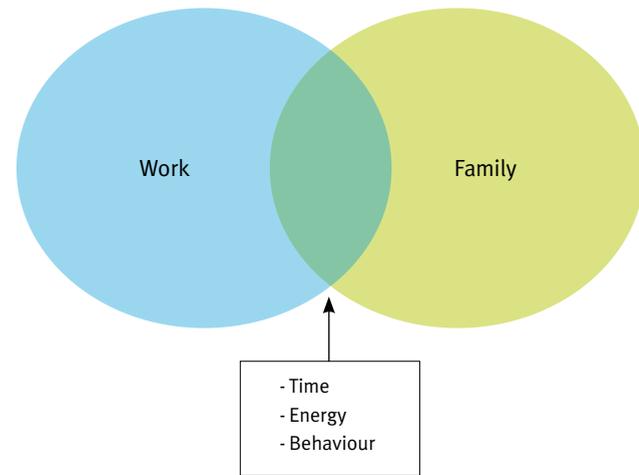


FIGURE 1 Supporting diagram to explain that there are three types of work-family conflict (time-based, energy-based, and behavioral).

Interview questions

Part 1: Work-family conflict experiences

1 Can you give some own examples of work-family conflict? So, the experience that your private life is negatively influence by your work?

For each example:

- 2 How did you experience this?
3. How did you feel? (Towards your partner? Towards your children? Towards your work? How did you feel about yourself?)

Part 2: Work-family guilt

If participants mentioned guilt

- 4 How often do you feel guilty?
- 5 In what situations does that guilt especially occur?
- 6 Is there a particular person (your partner, children etc.) towards whom you feel guilty in the situations you described?
- 7 Why do you think you feel guilty?

If participants did not mention guilt

- 8 From previous research we know that parents sometimes feel guilty when they experience work-family conflict. Do you also sometimes feel guilty?
- 9 If yes: In what situations does that guilt especially occur?
- 10 If yes: Would you also define this as guilt or would you use a different term?
- 11 If yes: Is there a particular person (your partner, children etc.) towards whom you feel guilty in the situations you described?
- 12 If yes: Why do you think you feel guilty?

Part 3: Consequences of work-family guilt

If participants indicated to sometimes feel guilty about the work-family combination

13. Do you think the guilt affects your behavior? (To your partner? Children? Work?)

14 If yes: How?

15 Do you think the guilt affects you in other ways?

Appendix B: Intra-class correlations

TABLE 1 Intra-Class Correlations (ICC's) for all Measures.

	Measures	ICC
Predictor		
Work-family guilt	Work-family guilt	0.21
Outcomes		
Reducing work	Considering reducing working hours	0.53
Compensatory parenting plans	More time and energy for child plans	0.46
Compensatory parenting behaviors	Attentive behaviors towards children	0.08
	Applying rules consistently	0.16
Restructuring time	Organizing time more efficiently	0.39
Me-time	Minutes spent on own leisure	0.20
Well-being	Happiness	0.27
	Satisfaction with work-family combination	0.20

Note. Intra-class correlations (ICC's) indicate how much of the variance in a measurement can be explained between-participants

Chapter 4

Appendix A. Effects of control variables of Table 3
(Predicting parents' work-family guilt)

Control variables	Model 1	Model 2 (Step 1)	Model 2 (Step 2)	Model 3 (Step 1)	Model 3 (Step 2)	Model 3 (Step 3)
Individual level						
Age (youngest) child	-0.062 (0.053)	-0.062 (0.053)	-0.070 (0.053)	-0.070 (0.053)	-0.067 (0.054)	-0.071 (0.054)
Age (youngest) child squared	-0.038 (0.051)	-0.037 (0.052)	-0.031 (0.052)	-0.031 (0.052)	-0.034 (0.052)	-0.028 (0.052)
Partner	0.048 (0.079)	0.048 (0.079)	0.047 (0.079)	0.047 (0.079)	0.048 (0.081)	0.066 (0.081)
Level of education	0.057 (0.017)**	0.082 (0.025)**	0.081 (0.025)**	0.082 (0.025)**	0.084 (0.026)**	0.083 (0.026)**
Industry ^a						
Manufacturing	0.035 (0.232)	0.035 (0.232)	0.036 (0.231)	0.031 (0.229)	0.122 (0.250)	0.100 (0.250)
Healthcare	0.119 (0.129)	0.119 (0.129)	0.120 (0.128)	0.121 (0.127)	0.164 (0.138)	0.175 (0.138)
Higher education	0.068 (0.079)	0.068 (0.079)	0.069 (0.079)	0.068 (0.078)	0.085 (0.083)	0.084 (0.084)
Transport	0.081 (0.069)	0.081 (0.069)	0.081 (0.069)	0.078 (0.068)	0.088 (0.072)	0.080 (0.072)
Financial services	-0.020 (0.610)	-0.020 (0.061)	-0.020 (0.061)	-0.018 (0.060)	-0.034 (0.065)	-0.037 (0.065)
Country ^b						
Bulgaria	-0.209 (0.300)	-0.209 (0.301)	-0.212 (0.299)	-0.207 (0.297)	-0.220 (0.309)	-0.251 (0.309)
Finland	-0.066 (0.372)	-0.066 (0.372)	-0.072 (0.370)	-0.074 (0.367)	-0.007 (0.371)	-0.037 (0.371)
Germany	-0.331 (0.381)	-0.331 (0.381)	-0.344 (0.378)	-0.341 (0.375)	-0.232 (0.385)	-0.302 (0.385)
Hungary	0.005 (0.314)	0.004 (0.314)	0.012 (0.312)	0.024 (0.310)	-0.151 (0.325)	-0.170 (0.325)
Netherlands	-0.079 (0.291)	-0.080 (0.291)	-0.065 (0.289)	-0.039 (0.287)	-0.154 (0.292)	-0.157 (0.292)
Portugal	-0.008 (0.359)	-0.008 (0.359)	-0.002 (0.357)	0.009 (0.354)	0.049 (0.371)	0.025 (0.371)
Sweden	-0.002 (0.330)	-0.002 (0.330)	0.005 (0.328)	0.016 (0.325)	-0.005 (0.334)	-0.013 (0.335)
Spain	-0.152 (0.394)	-0.152 (0.394)	-0.139 (0.392)	-0.113 (0.389)	-0.065 (0.411)	-0.091 (0.412)

Note. Standardized regression weights are presented. Model 1 is the same as step 1 of Model 2 and 3, therefore only Model 1 is included in the table to prevent redundancy. Standard errors are in parentheses. ^aReference category is telecommunication; ^bReference category is United Kingdom. * $p < .05$, ** $p < .01$, † $p < .10$.

Appendix B. Effects of control variables of Table 4
(Predicting work-family guilt with country clusters)

	National gender culture	
	Egalitarian	Traditional
<i>Individual level</i>		
Age (youngest) child	0.206 (0.087)*	-0.147 (0.076)†
Age (youngest) child squared	-0.396 (0.105)**	0.059 (0.065)
Partner	-0.146 (0.109)	0.256 (0.115)*
Level of education	0.129 (0.038)**	0.048 (0.034)
<i>Industry^a</i>		
Manufacturing	0.413 (0.316)	-0.091 (0.298)
Healthcare	0.204 (0.190)	0.109 (0.165)
Higher education	0.132 (0.110)	0.047 (0.107)
Transport	0.090 (0.088)	0.164 (0.097)†
Financial services	0.080 (0.080)	-0.065 (0.082)

Note. Regression weights are presented. Standard errors are in parentheses.

^aReference category is telecommunication

* $p < .05$, ** $p < .01$, † $p < .10$.

Appendix C. Multilevel analyses for predicting parents' work-family guilt for each country separately

	Bulgaria	Finland	Germany	Hungary	Netherlands	Portugal	Spain	Sweden	UK
Gender	0.425 (0.191)*	0.259 (0.369)	0.198 (0.275)	0.199 (0.284)	0.138 (0.149)	0.458 (0.293)	0.028 (0.334)	-0.167 (0.210)	0.651 (0.497)
Working hours	0.098 (0.048)*	0.103 (0.069)	-0.064 (0.051)	0.139 (0.076)†	0.242 (0.049)**	0.195 (0.115)†	0.166 (0.143)	0.193 (0.101)†	0.420 (0.158)*
Gender x working hours	0.229 (0.137)†	0.187 (0.530)	-0.037 (0.111)	0.349 (0.152)*	0.007 (0.097)	0.247 (0.251)	1.082 (0.272)**	-0.226 (0.214)	-0.743 (0.309)*
<i>Individual level</i>									
Age (youngest) child	-0.174 (0.111)	-0.266 (0.572)	0.888 (0.189)**	-0.178 (0.138)	0.065 (0.100)	-0.241 (0.355)	0.619 (0.318)†	-0.742 (0.286)*	0.481 (0.494)
Age (youngest) child squared	0.085 (0.093)	0.346 (0.871)	-1.045 (0.229)**	0.109 (0.112)	-0.365 (0.119)**	-0.105 (0.420)	-0.709 (0.363)†	0.943 (0.380)*	-0.701 (0.687)
Level of education	0.012 (0.046)	-0.687 (0.204)**	0.062 (0.079)	0.270 (0.062)**	-0.089 (0.052)†	-0.321 (0.131)*	0.272 (0.104)*	0.447 (0.086)**	0.004 (0.136)
Partner	0.035 (0.183)	1.052 (0.502)*	-0.090 (0.224)	0.165 (0.196)	0.016 (0.149)	0.458 (0.296)	0.290 (0.359)	-0.602 (0.228)**	-0.256 (0.705)
<i>Industry^a</i>									
Manufacturing	-0.156 (0.361)	-0.930 (0.987)	oa	-0.118 (1.023)	0.008 (0.550)	-0.066 (0.624)	oa	1.322 (0.533)*	0.952 (0.563)
Healthcare	-0.106 (0.205)	oa	0.038 (0.222)	0.329 (0.533)	-0.069 (0.346)	-0.224 (0.322)	-0.750 (0.166)**	0.894 (0.309)*	oa
Higher education	-0.012 (0.439)	0.032 (0.268)	0.090 (0.101)	0.092 (0.364)	0.190 (0.205)	0.111 (0.199)	-0.674 (0.098)**	0.495 (0.191)*	oa
Transport	0.237 (0.146)	0.094 (0.234)	oa	-0.138 (0.306)	-0.031 (0.147)	oa	-0.459 (0.104)**	0.388 (0.178)†	0.458 (0.167)†
Financial services	0.056 (0.100)	oa	oa	oa	-0.101 (0.147)	-0.115 (0.132)	oa	0.220 (0.116)†	oa

Note. In Step 1 of the multilevel regression analyses gender and working hours were entered, in step 2 the interaction effect between gender and working hours was entered. Standardized regression weights are presented. Standard errors are in parentheses. Gender was coded: 0 for men and 1 for women. Partner was coded 0 for no partner and 1 for partner. For industry, telecommunication was taken as reference category. ^aThis regression weight was set to 0 because it is redundant. * $p < .05$, ** $p < .01$, † $p < .10$.

Chapter 5

Appendix A: Overview of work-over-family prioritization situation and control situation plus extra measurements from Chapter 5, Study 1

Manipulation text: High Work Prioritization condition

Imagine the following:

This week it is very busy at your work. Because of this you worked a few extra hours for a few days in a row, and therefore, this week, you were home later than usual on each working day. This evening you came home later than usual and your **daughter** is already in bed. You and your partner exchange stories about how your day has been. Your partner tells you that your **daughter** has become ill during dinner and is likely to catch the flu. Furthermore, your partner tells you that your **daughter** wanted you to put **her** to bed and give **her** a hug. However, your **daughter** is already asleep, so you decide not to wake **her** up again. You decide to go to bed on time, because it has been a busy week and you have to work again the next day. So, you cannot stay at home with your sick **daughter** tomorrow, but your partner will.

*The red words were adapted to the specific situation of the participant. For example, if a participant has two daughters 'your daughter' changed to 'your youngest daughter'.

Manipulation text: Low work prioritization condition

Imagine the following:

This week it is very busy at your work. Because of this you worked extra hard for a few days in a row, but you were able to go home on time. This evening you also came home on time and your evening is more or less as usual. You and your partner exchange stories about how your day has been. During dinner your **daughter** gets sick and **she** probably has the flu. Your **daughter** wants you to put **her** to bed and wants you to give **her** an extra hug, which **she** naturally gets. You decide to go to bed on time, because it has been a busy week. Fortunately, you have a day off tomorrow and you can stay at home with your sick **daughter**.

*The red words were adapted to the specific situation of the participant. For example if a participant has two daughters 'your daughter' changed to 'your youngest daughter'.

Extra measurements:

Difficulty of situation: to test whether the work prioritization vignette was indeed perceived more conflicting than the neutral work-family vignette we asked participants to rate the *difficulty of the situation*: "To what degree do you perceive this as a situation in which it

is difficult to combine work and family?”, ($M = 3.99$, $SD = 1.90$). ANCOVA's with gender and condition as independent variables, controlling for age youngest child and number of children showed that, as intended, participants in the work-prioritization condition rated the described situation as more difficult ($M = 4.62$, $SE = 0.15$, 95% CI [4.32, 4.92]) than participants in the control condition ($M = 3.25$, $SE = 0.16$, 95% CI [2.93, 3.56]), $F(1, 253) = 38.93$, $p < .001$, partial $\eta^2 = .13$. Moreover, on average, women experienced the situation as more difficult ($M = 4.20$, $SE = 0.15$, 95% CI [3.90, 4.50]) than men ($M = 3.67$, $SE = 0.17$, 95% CI [3.33, 4.01]), $F(1, 253) = 5.11$, $p = .03$, partial $\eta^2 = .02$. No interaction of gender X condition on perceived difficulty of the situation was found ($p = .52$).

Probability of the situation: To get an indication of the ecological validity of the vignette, we asked participants to rate the probability of the situation: “How likely is it that such a situation would occur in your own life”, ($M = 4.47$, $SD = 1.50$). An ANCOVA with gender and condition as independent variables, controlling for age youngest child and number of children, showed that a Gender x Work prioritization interaction effect on how likely participants estimated the chance that this situation would happen in their life, $F(1, 252) = 13.27$, $p < .001$, partial $\eta^2 = .05$. Simple effect showed that men estimated both conditions equally likely to really happen in their life ($M_{\text{control}} = 4.39$, $SE = 0.19$, 95% CI [4.01, 4.77]; $M_{\text{workprioritization}} = 4.24$, $SE = 0.18$, 95% CI [3.88, 4.60]; $p = .56$) whereas women estimated the control condition as more likely to happen in their life than the work prioritization condition ($M_{\text{control}} = 5.33$, $SE = 0.17$, 95% CI [4.99, 5.66]; $M_{\text{workprioritization}} = 3.89$, $SE = 0.16$, 95% CI [3.57, 4.10]; $F(1, 252) = 13.27$, $p < .001$).

Imagining situation: Participants were asked: “How accurately can you imagine the above situation” to check whether participants could relate to the vignette, ($M = 5.86$, $SD = 1.14$). Considering the high mean well-above the midpoint of the 7-point scale, participants could easily imagine the fictitious situation. Furthermore, as intended, an ANCOVA showed that there were no significant differences in how well participants indicated in the Work Prioritization vs. Control condition that they could imagine the situation ($p = .18$). Also, there was no main effect of gender ($p = .07$) or an interaction effect ($p = .23$).

Other emotions: Besides guilt, participants were also asked to rate two positive emotion (i.e. ‘satisfied’ and ‘relieved’, $r = .52$, $p < .01$) and four negative emotions (‘ashamed’, ‘dissatisfied with self’, ‘angry at self’, and ‘disapproval towards self’, $\alpha = .94$). An ANCOVA with condition and gender as independent variables and positive emotions as dependent variable (controlling for age youngest child and number of children) revealed that only the main effect of condition was significant, $F(1, 259) = 177.23$, $p < .001$, partial $\eta^2 = .41$. In the work-prioritization condition, parents experience lower positive emotions ($M = 2.38$, $SD = 1.35$) than in the control condition ($M = 4.62$, $SD = 1.39$). An ANCOVA with condition and gender as independent variables and negative emotions as dependent variable (controlling for age youngest child and number of children) again revealed that only the main effect of condition was significant, $F(1, 259) = 94.39$, $p < .001$, partial $\eta^2 = .27$. In the work-prioritization condition, parents experience higher negative emotions ($M = 3.31$, $SD = 1.63$) than in the control condition ($M = 1.68$, $SD = 0.94$).

Appendix B: Overview of different work-over-family prioritization situations from Chapter 5, Study 2

Please note that when participants had more than one child, all situations were adapted to reflect more children.

Situation 1

It's 5:00 p.m. You almost finished your working day and are getting ready to pick up your child from school/ childcare as you promised this morning to your child. In addition, your partner has already picked up your child in the past two days. However, your boss asks you to stay longer at work to prepare a meeting for tomorrow. You hesitate, but eventually decide to stay longer at work. You arrange for someone else (e.g. the child's grandparents or your neighbor) to pick up your child from school/childcare.

Situation 2

You're watching your child's sporting event. Your child is very proud of his/her performance on the sports field and regularly seeks eye contact with you. Unfortunately, a colleague from work calls you multiple times and you are a bit distracted.

Situation 3

It's your day off and you promised your child you would do something fun together. However, someone from work calls to ask if you can come for an emergency meeting because something went wrong and you are considered the most suitable person to solve this problem. You tell your child that you are going to do something nice together on another day and rush to work.

Situation 4

You and your child are at home together. You are playing your child's favorite game but you keep receiving important messages from colleagues that you have to answer. Because of this, you are not paying attention to the game. You decide to answer another quick message and you again interrupt the game.

Situation 5

Thursday morning is the day on which your partner normally takes your child to school/ childcare. At 7:00 a.m. your partner tells you that he or she has an early meeting and asks you if it is possible for you to go to work a little bit later to take your child to school/ childcare. Since this is really inconvenient for you, you choose to take your child to your neighbors so that they can take him/her to school/childcare.

Situation 6

You are working from home today. At noon you pick up your child from school/ childcare. After a short lunch with your child, you start working again in front of your laptop. Your child is playing quietly for an hour. Then he/she wants to play outside with you. You say that you have to finish something for work and that he/she has to entertain him/herself for a little while longer.

*Original situations in Dutch***Situatie 1**

Het is 17:00. U bent aan het einde van uw werkdag en maakt u klaar om uw kind op te halen van school/de kinderopvang. U had dit vanochtend al aan hem/haar beloofd. Bovendien heeft uw partner hem/haar de afgelopen twee dagen al opgehaald. Echter vraagt uw baas u om langer te blijven op werk om een bijeenkomst voor morgen voor te bereiden. U twijfelt, maar besluit uiteindelijk toch om langer op uw werk te blijven. U regelt dat iemand anders (bijvoorbeeld de oma/opa van uw kind of de buurvrouw) uw kind van school/de kinderopvang haalt.

Situatie 2

U bent aan het kijken bij de sportwedstrijd van uw kind. Uw kind is heel trots op zijn/haar prestaties op het sportveld en zoekt regelmatig oogcontact met u. Helaas wordt u telkens gebeld door een collega van uw werk en u bent daardoor toch wat afgeleid.

Situatie 3

Het is uw vrije dag en u had aan uw kind beloofd om samen wat leuks te gaan doen. Iemand van werk belt echter met de vraag of u kunt komen voor een spoedvergadering, omdat er iets mis is gegaan en u het meest geschikt wordt geacht om het probleem op te lossen. U zegt tegen uw kind dat jullie op een andere dag wat samen gaan doen en haast u naar uw werk.

Situatie 4

Uw kind en u zijn samen thuis. Jullie spelen samen zijn/haar favoriete spelletje. U krijgt steeds belangrijke berichtjes van collega's die u moet beantwoorden. Hierdoor bent u niet aan het opletten bij het spelletje. U besluit om nog snel een berichtje te beantwoorden en even te stoppen met het spelletje.

Situatie 5

Donderdagochtend is de dag waarop uw partner uw kind naar school/de opvang brengt. Om 7 uur 's ochtends geeft uw partner aan dat hij/zij een vroege meeting heeft en of u niet iets later naar uw werk kunt gaan om uw kind naar school te brengen. Dit komt u echt niet uit. U kiest ervoor uw kind naar de burens te brengen, zodat zij hem/haar weg kunnen brengen.

Situatie 6

U werkt een dagje thuis. Om 12 uur 's middags haalt u uw kind op uit school/de kinderopvang. Na kort met uw kind geluncht te hebben, gaat u weer achter uw laptop zitten. Uw kind is een uur lang rustig aan het spelen. Dan wil hij/zij met u buiten gaan spelen. U zegt dat u iets moet afmaken en dat hij/zij nog even zelf moet spelen.

Appendix C: Reliabilities per situation from Chapter 5, Study 2*Reliabilities of family costs and career benefits per situation.*

Situation	α
Sit 1: Family loss	.84
Sit 1: Career gains	.70
Sit 2: Family loss	.90
Sit 2: Career gains	.77
Sit 3: Family loss	.88
Sit 3: Career gains	.80
Sit 4: Family loss	.89
Sit 4: Career gains	.80
Sit 5: Family loss	.92
Sit 5: Career gains	.88
Sit 6: Family loss	.92
Sit 6: Career gains	.89

Appendix D: Manipulation texts and additional measures from Chapter 5, Study 3.

Manipulation texts

Introduction text about work-family combination (all participants)

This research attempts to gain insight into how working parents experience combining work and family life. Many parents experience both moments when combining work and family goes smoothly and moments when combining work and family results in conflict. When work demands cause family tasks and activities to be compromised, we refer to this as **work-family conflict**. However, there are also situations in which everything runs smoothly and combining work and family does not cause any problems. Thus, situations when your family activities and / or responsibilities are not hindered by your work.

Work Prioritization manipulation text (only participants in the Work Prioritization condition)

Think back to a specific situation in which you experienced work-family conflict. So, a situation in which your work had a negative influence on your family life (for example: Because you had to work late, you could not read your children a bed-time story or because you had to work many extra hours, your partner had to take over a lot of your tasks at home). Describe such a situation below.

Take a moment for this and describe this situation as accurately as possible (for example: How was it at work? How was it afterwards at home?)

No Work Prioritization manipulation text (only participants in the control condition)

Think back to a specific situation in which you experienced that combining work and family went well. So, a situation in which it did not matter for your family life that you were busy at work (for example: Although it was busy at work you could be home at a normal time and you could read your children a bed-time story or because your work was finished on time, you could also carry out your usual tasks at home).

Take a moment for this and describe this situation as accurately as possible (for example: How was it at work? How was it afterwards at home?)

Extra measurements

Attention check experienced gains. To test the success of our gain manipulation, we coded the examples participants provided on 1) why prioritizing work can result in career benefits, 2) why prioritizing work sometimes does not result in career benefits. As intended, 85.5% of participants in the high gain condition listed at least one example of why prioritizing work can benefit their career while only 6.1% of participants in the low gain condition listed

such an example. Moreover, 65.3% of participants in the low gain condition listed at least one example why prioritizing work sometimes does not result in career benefits while only 0.8% of participants in the high gains condition mentioned such an example. This suggests that it was somewhat easier for participants to think of the presence of career gains, than of the absence of such gains.

Attention check experienced work-family conflict. An attention check was included to measure the degree to which participants indeed experienced incompatible demands between their work and family in the situation they described i.e., “To what extent do you see this as a situation in which combining work and family went fine” (reverse coded) and “To what extent do you see this as a situation in which combining work and family produced conflict” ($r = -.70$, $M = 3.49$, $SD = 1.86$). An ANCOVA with work prioritization condition and gender as independent variables revealed that, as intended, participants in the work prioritization condition rated the incompatible demands between work and family as higher ($M = 4.61$, $SD = 1.52$) than participants in the control condition ($M = 2.04$, $SD = 1.09$, $F[1, 217] = 186.04$, $p < .001$). This was not predicted by gender ($p = .46$), nor was there an interaction between gender and work prioritization ($p = .43$).

Finally, we measured participants' *general experience of work-family conflict* and their *general career benefits appraisal* to see if these were affected by our manipulation. *General experience of work-family conflict* was measured with a five item work-family conflict scale (Netemeyer, Boles, & Mcmurrian, 1996; e.g., “The demands of my work interfere with my home and family life”; $\alpha = .90$, $M = 3.22$, $SD = 1.42$) and general appraisal of career benefits was measured with two items (“The time and energy I devoted to my work, has been useful for my career” and “I have the idea that the time and energy I spent on my work, is useful for my career”; $r = .75$, $M = 4.96$, $SD = 1.38$). An ANCOVA with work prioritization condition and gender as independent variables revealed that participants general experience of work-family conflict was not predicted (and as such seemed not to be affected) by the Work Prioritization condition ($p = .14$), their gender ($p = .38$), nor was there an interaction between gender and condition ($p = .11$). Additionally, an ANCOVA with work prioritization condition, career benefits condition and gender as independent variables revealed that participants general experience of career benefit was also not predicted (and as such seemed not to be affected) by their condition ($p = .09$) and all two-way interaction effects and the three-way interaction were not significant (all p-values $> .36$). However, men experienced on average more career gains in their own lives ($M = 5.21$, $SD = 1.48$) than women ($M = 4.77$, $SD = 1.27$, $F(1,213) = 6.68$, $p = .01$).

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Curriculum Vitae



Lianne Aarntzen was born on April 8th, 1989 in Doetinchem, the Netherlands. In 2008, she started studying Psychology at the Radboud University in Nijmegen. During her studies, she participated in the disciplinary honours program, as part of which she completed a research internship at Princeton University, U.S. After completing her bachelor (bene meritum), she obtained a research master's degree in Behavioral Science (cum laude) and a master's degree in Healthcare Psychology at the Radboud University Nijmegen. She then worked as a junior researcher at VanDoorneHuiskes

& Partners investigating diversity issues. In 2015, she started her PhD-project on work-family guilt at Utrecht University. As part of her PhD project, she supervised students' bachelor and master theses and taught undergraduate psychology courses. Additionally, she visited Exeter University for one month to collaborate with Michelle Ryan. Currently, Lianne is employed at Twente University as a postdoctoral researcher. In her new job, she examines which contextual factors may obstruct (or be helpful for) the professional identity development and career advancement of Science, Technology, Engineering, and Mathematics (STEM) newcomers.

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