

# **WORK SCHEDULES, CHILDCARE AND WELL-BEING**

Essays on the associations between modern-day job characteristics,  
childcare arrangements and the well-being of parents and children

Melissa Verhoef

**Manuscript committee:**

Prof. dr. M. A. G. van Aken (Utrecht University)

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Prof. dr. J. Plantenga (Utrecht University)

Dr. M. A. Yerkes (Utrecht University)

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## **WERKSHEMA'S, KINDEROPVANG EN WELZIJN**

Essays over de verbanden tussen hedendaagse baankenmerken,  
kinderopvangarrangementen en het welzijn van ouders en kinderen

(met een samenvatting in het Nederlands)

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**Melissa Verhoef**

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**Promotor:** Prof. dr. ir. A. G. van der Lippe

**Copromotor:** Dr. A. Roeters

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# Chapter 1

Introduction



## 1.1 Research problem

Arranging care for children can be challenging for working parents. This is for example illustrated in an article in the Dutch newspaper *NRC Handelsblad*, in which the childcare experiences of working parents were described as feeling like doing a jigsaw puzzle (Koops, 2015). Similarly, Professor Dianne Bevelander (2016) argued in the Dutch newspaper *de Volkskrant* that it is problematic for working mothers that childcare is expensive and limited to strict opening hours, which are only two of the many struggles that working parents encounter when combining work and family. The existence of strong norms on childcare use in the Dutch society (Merens & Van den Brakel, 2014) increases the complexity of arranging childcare even more. Nonetheless, two-thirds of Dutch children are growing up with two working parents (OECD Family Database, 2013); thus, arranging childcare is a daily reality for many Dutch parents. Because mothers no longer stay at home by default to care for their children, working parents need to find alternative ways to arrange childcare. This prompted Gornick and Meyers (2003) to ask the question “if everyone is at the workplace, who will care for the children?” (p. 8), emphasising the urgent nature of childcare in contemporary societies.

The relevance of examining childcare arrangements increases when considering how such arrangements may affect both parents and children. There is a lively, ongoing public and scientific debate on how childcare is related to children’s well-being (Social and Economic Council of the Netherlands, 2016; Tavecchio, 2015; Went, 2015). In this debate, the proponents of childcare strongly value its impact on cognitive development (e.g., Votruba-Drzal, Coley, Koury, Miller, 2013; Weiland & Yoshikawa, 2013). This view is in stark contrast with the opponents of childcare, who underline its dangers in terms of problem behaviour (e.g., Belsky, Burchinal, McCartney, Vandell, Clarke-Stewart, & Owen, 2007; Loeb, Bridges, Bassok, Fuller, & Rumberger, 2007). This debate not only illustrates ambiguity regarding the consequences for children, but also may evoke parental worry, because it seems that parents are never “doing it right” in regard to childcare. Little is known, however, about how childcare arrangements affect parents. From a policy perspective, childcare is considered a resource for parents, enabling them to combine work and family demands better (Hegewisch & Gornick, 2011). Research indicates that using childcare indeed is supportive for parents (Thomese & Liefbroer, 2013). Conversely, arranging childcare can be quite stressful for parents, especially if they have children of different ages who go to multiple caregivers with different opening hours (Belle, 2006).

Given that the ways in which working parents arrange childcare may affect both parents and children, more insight into how parental work is related to childcare arrangements is desirable. Considering solely whether parents have a job is insufficient; job characteristics also matter to childcare arrangements. With the recent increase in the proportion of parents who work during evenings, nights and weekends, so-called nonstandard hours (Bünning & Pollmann-Schult, 2016; Liu, Wang, Keesler, & Schneider, 2011), the timing of parental work has become increasingly relevant when arranging care for children. Correspondingly, flexible working arrangements have also become more common (Kelliher & Anderson, 2010; Peters, Den Dulk, & Van der Lippe, 2009). Both factors are likely to affect parents’ childcare arrangements. For example, working at night may result in difficulties in arranging nonparental care (Presser, 2003). However, this type of work may also create more opportunities to reduce overlap in parents’

working hours, thereby increasing parental availability for caregiving (Carriero, Ghysels, & Van Klaveren, 2009; Lesnard, 2008; Täht & Mills, 2012). This exemplifies how modern-day job characteristics are likely to affect parents' opportunities and constraints when arranging childcare.

Although some insights into how parental work affects childcare have already been provided, studies have seldom included the work schedules of both parents or focused on both parental and nonparental childcare. Given that the need for childcare depends on the combination of parents' work, both partners should be considered. Thus far, scholars have tended to focus on mothers primarily (Han, 2004; Presser, 2003). Furthermore, prior research has predominantly focused on parents' opportunities to provide childcare themselves (Carriero et al., 2009; Täht & Mills, 2012). However, parents consider different types of childcare simultaneously (Leslie, Ettenson, & Cumsille, 2000), which underlines the need to focus on both parental and nonparental childcare when examining childcare arrangements. Moreover, the debate on how childcare affects children is still ongoing, indicating that it is desirable to obtain more knowledge on how childcare arrangements relate to child well-being. Lastly, although most previous research on the consequences of childcare arrangements has focused on children, parents are also likely to be affected. Existing studies have not yet provided a thorough understanding of how childcare arrangements may affect parents.

Against this background, the present dissertation aims *to examine associations between parental work schedules, childcare arrangements and the well-being of parents and children*. To place this aim within a broader context, it is first important to get an understanding of what types of nonparental childcare are available to parents and how nonparental childcare is embedded in contemporary societies. Second, more insight into the challenges that working parents may face when arranging childcare—and how these challenges may affect parents' and children's well-being—is necessary. Lastly, the country context should be discussed, in order to get a grip on how country-specific policies, institutions and norms are related to the associations between parental work schedules, childcare arrangements and the well-being of parents and children.

### 1.1.1 Nonparental childcare use in Europe

In general, the supply of nonparental childcare can be categorised into two types: formal and informal care. Although exact definitions vary per country, formal care is most often restricted to care provided by professionals (Zinsser, 2001). This type of care usually occurs in childcare institutions, such as a daycare centre. Alternatively, informal care is care provided by family or friends (Duncan, Edwards, Reynolds, & Alldred, 2004). The venue of informal care shows more variation; for example, informal care can occur at a caregiver's house or at the child's house. When considering the type of care that parents use to cover their working hours, it is important to recognise that parents can enrol their children in both formal and informal childcare; therefore, these types of care are not mutually exclusive.

Almost one out of three children under the age of three is enrolled in formal childcare in Europe, for an average of 30 hours per week (Coyette, Fiasse, Johansson, Montaigne, & Strandell, 2015). Enrolment rates and the number of hours per week that children spend in care, however, vary considerably between countries. To illustrate, in Denmark, 67 per cent of children aged two and under are enrolled in formal care, almost all of them for 30 hours a week or more.

The enrolment rate in the Netherlands, to take another example, is 55 per cent for these young children, but the vast majority of Dutch children spend fewer than 30 hours a week in formal care. For children from three years old through the minimum compulsory school age, formal childcare use is significantly higher; on average, 82 per cent of these children are enrolled in formal care, although differences in hours per week remain considerable.

For informal childcare, enrolment rates appear relatively similar at first glance, given that approximately one-third of European children under three years old are cared for by relatives or friends. For this type of care as well, enrolment rates vary considerably among countries. For instance, less than five per cent of young children in Scandinavian countries are enrolled in this type of care, whereas more than half of young children receive informal care in countries with the highest enrolment rates, such as Switzerland, the Netherlands and Greece (Coyette et al., 2015). In contrast to formal care, children up to three years old spend less time in informal care, 20 hours per week on average. Moreover, enrolment rates for this type of care do not increase as children become older.

When arranging childcare, parents likely consider different types of childcare simultaneously (Leslie et al., 2000), thereby considering both parental and nonparental childcare. The result of parents' decisions is reflected in their childcare arrangements. These arrangements can therefore consist of one, two or three different types of care, and within these types of care, there may be several different caregivers. For example, a child may spend part of the week in parental care, several days in a formal childcare setting and one day at the grandparents' house. Childcare arrangements in this dissertation therefore refer to all the types of care that parents use during their working hours, including formal, informal and parental care, with parental care referring to care by one parent while the other parent is at work.

### 1.1.2 Childcare challenges of working parents

The ways in which working parents arrange care for their children largely depend on aspects of their job, because when and how parents work affects not only their own care provision, but also their demands concerning nonparental care. Different combinations of work schedules among dual earners are therefore likely to result in different challenges when arranging childcare. In this dissertation, the focus is on two aspects of work schedules: work during nonstandard hours and the degree of flexibility in parents' work.

Although work during nonstandard hours is not a completely new phenomenon, consider for example night shifts by factory workers (Beynon & Blackburn, 1972); in recent years, scholars have been writing about the rise of the '24/7 economy' (e.g., Presser, 2003; Strazdins, Clements, Korda, Broom, & D'Souza, 2006). This economy, in which the labour market is active around the clock, first developed in the United States (Presser, 2003), but other countries such as Australia, as well as countries within Europe, have also witnessed an increase in the share of employees who work during evenings, nights and weekends (Presser, Gornick, & Parashar, 2008; Strazdins et al., 2006). To illustrate, 36 per cent of European employees aged 25–49 (the age range within which it is most likely to have children living at home) recently reported to work sometimes or usually during evenings (EU Labour Force Survey, 2015a). On the country level, percentages are as high as 45 per cent for Poland, and even 66 per cent for Iceland. Although these statistics do

not specify whether employees are required to work these hours by contract, they do indicate that many families in the Western world are involved in nonstandard work.

Work during nonstandard hours matters in the context of childcare arrangements, because such working hours are likely to create not only specific challenges, but also new opportunities for parents. On the one hand, researchers have argued that employees who work during nonstandard hours are ‘out of sync’ with society (Jamal, 2004; Täht, 2011), because the majority of society functions on a nine-to-five weekday schedule. De Beer (2009) even wrote on the persistence of the nine-to-five economy in the Netherlands. Because parents who work during nonstandard hours have a deviating rhythm, they may face challenges in arranging childcare. This is because the services that they need have not adapted to this deviating rhythm, although changes have slowly begun to occur (Boogaard & Bollen, 2014; De Jong, 2013). On the other hand, parents may also use work during nonstandard hours to increase their own time available for caregiving (Presser, 2003).

Not only the times on which employees work have changed in recent years, also the way in which employees work has undergone alterations. Flexible working arrangements have become more common (Kelliher & Anderson, 2010; Peters et al., 2009), which are in this dissertation defined as being able to determine one’s own working hours (i.e., schedule flexibility) and to work at an alternative worksite (i.e., telework). For example, one can work from home and join a meeting via teleconference. Approximately one-quarter of European employees are involved in such working arrangements (Eurofound, 2015).

Similar to work during nonstandard hours, flexible working arrangements may bring parents both difficulties and new possibilities concerning childcare. For instance, formal childcare services have not experienced the same increase in flexibility as parental work has (Cloïn, Schols, Van den Broek, & Koutamanis, 2010; Del Boca & Vuri, 2007), indicating that this new way of working may complicate the ways in which parents arrange care for their children. From another perspective, flexible working arrangements are considered a work-life initiative, aimed at supporting the combination of employment and nonwork roles such as caregiving (Kossek, Lewis, & Hammer, 2010); hence, flexible working arrangements may also facilitate parents’ own provision of childcare.

Next to work schedules, income is a crucial factor when arranging childcare, because research has indicated that having a low income makes parents less likely to use formal childcare (Capizzano & Adams, 2004; Mamolo, Coppola, & Di Cesare, 2011; Statistics Netherlands, 2011a). These parents must therefore turn to their family or friends for childcare, but the availability of informal caregivers is limited, because these individuals may be otherwise engaged, for example, in work responsibilities (Chaudry, 2004). Low-income families may therefore need to rely on multiple care providers to cover the care of their children.

### **1.1.3 Childcare and the well-being of parents and children**

The challenges that working parents encounter when arranging childcare are likely to affect the well-being of both parents and children. Researchers have argued that foregoing formal childcare may harm children’s cognitive development, because this implies that children lack early childhood education (Dowsett, Huston, Imes, & Gennetian, 2008). Moreover, because formal

care has been shown to improve children's social development (Howes, 2011), not being enrolled in formal care may negatively affect children's sociability. Not only the type of care, but also the number of care providers has been linked to child well-being. Some parents need to use multiple care providers to cover their working hours, a situation that has been associated with increased problem behaviour among children (Morrissey, 2009). The relevance of the link between childcare and child well-being becomes more important when considering the significance of early childhood as a developmental period (Erwin & Brown, 2003). Research has illustrated that children's early-life experiences in childcare can have long-lasting effects, for example, on school outcomes or health (Campbell et al., 2014; Nores & Barnett, 2010).

Although most previous research on the consequences of childcare arrangements has focused on children, parents are also likely to be affected. On the one hand, parents may find it challenging to enrol their children in nonparental childcare, because this means that their working hours conflict with providing care themselves (Reynolds & Aletraris, 2007). Parents may also worry about the quality of nonparental childcare (Barnett & Gareis, 2006; Uttal, 2002). Moreover, when working nonstandard hours, parents may have difficulty finding childcare that matches their working hours (Strazdins et al., 2006), which also may negatively affect parents. On the other hand, Thomese and Liefbroer (2013) showed that formal and informal care provision is supportive for working parents who struggle with the combination of dual earnership and parenthood. Having a satisfactory childcare arrangement is therefore likely to be helpful and sustaining for parents.

#### 1.1.4 Country context

When examining childcare arrangements, the country where parents live constitutes an important factor. This is because the ways in which parents organise the care of their children are embedded in country-specific cultural and historical contexts (Sayer & Gornick, 2012). Given their past, countries may differ in their policies, institutions and norms with regard to women's working behaviour and childcare. Such differences may affect the availability, accessibility and characteristics of different types of childcare. Some comparative studies on childcare are available (e.g., Kröger, 2010; Mamolo et al., 2011). These studies primarily focused on specific types of childcare used by parents; for example, they showed that the use of formal care in France, Italy and Spain is strongly related to mothers' education and employment, whereas in the United Kingdom, the income of both parents seems to be the most influential factor (Mamolo et al., 2011). Therefore, the extent to which job characteristics are related to childcare arrangements likely varies between countries, and the country context should thus be considered when examining how working parents arrange care for their children.

Studying childcare arrangements from a comparative perspective not only helps to disentangle how the results of a single-country study can be generalised to other countries, but also provides more insight into how the specific country context may affect child well-being. For instance, formal childcare is likely more beneficial for children in countries that monitor childcare quality more closely, with higher-quality care being associated with better child outcomes (Broekhuizen, Mokra, Burchinal & Garnett-Peters, 2016; Li, Farkas, Duncan, Burchinal, &

Vandell, 2013). This exemplifies the possible impact of country context on the association between childcare arrangements and child well-being.

### 1.1.5 Overarching research question

How parents arrange care for their children no longer depends solely on whether parents work; it is also based on when and how parents work. Given the rise of work during nonstandard hours and the increase in flexible working arrangements, childcare is needed not only during traditional office hours, but also during evenings, nights and weekends, preferably flexible in nature. This dissertation incorporates these new dimensions of parental work schedules, by examining how these dimensions are related to childcare arrangements. Because the childcare decisions parents make, given the opportunities and constraints of their work, are likely to affect parental and child well-being, I examine how parental work and childcare arrangements are related to both parental and child well-being. By providing a more complex approach with a more detailed account of parental work and childcare arrangements, this dissertation addresses the following research question: *To what extent are modern-day job characteristics associated with childcare arrangements, and how does the combination of parental work and childcare arrangements affect parental and child well-being?*

The main part of this dissertation focuses on the Netherlands, which provides a unique context to examine childcare arrangements. Although this country is known for its high prevalence of part-time work (EU Labour Force Survey, 2015b), the Netherlands also has a high percentage of dual earners (OECD Family Database, 2015). This indicates that parents have a need for nonparental childcare. Moreover, approximately one-third of Dutch parents work during evenings, nights or weekends (Presser et al., 2008), which indicates that many Dutch families need to arrange childcare outside of standard office hours. To gain greater insight into how the specific situation of Dutch parents can be compared with that of parents in other European countries, I partially contrast the Netherlands with Finland and the United Kingdom. These three countries have different policies and norms regarding paid work and childcare.

## 1.2 Theoretical approach and findings of previous research

### 1.2.1 Parental work schedules and childcare

Prior research on parental work schedules and childcare has primarily focused on parents' own provision of care, with researchers often employing an implicit opportunities and constraints framework. Employing such a framework enables researchers to explain how specific aspects of work schedules facilitate or hamper parental caregiving. For example, Täht and Mills (2012) showed that fathers who work nonstandard hours have more opportunities for caregiving than do their counterparts who work standard hours. Some parents maximise time with their children through split-shift parenting. Split-shift parenting entails that parents consciously use nonstandard working hours to increase their opportunities for parental care, by minimising the overlap in their working hours (Presser, 2003). Working nonstandard hours has indeed been linked to less overlap in working hours, compared to working standard hours (Lesnard, 2008).



The distinction between standard and nonstandard work schedules has therefore proved to be meaningful when examining parents' caregiving opportunities.

Flexible working arrangements have also been found to increase parents' caregiving opportunities, for example, by allowing parents to structure the day around children's rhythm. Osnowitz (2005) demonstrated how home-based telework is positively related to parental caregiving. This appears to be especially applicable for mothers (Noonan, Estes, & Glass, 2007). Furthermore, schedule flexibility has been linked to parental care provision. The study of He (2013), for example, showed that parents who are able to determine their own working hours bring their children to school themselves more often than do parents who work a fixed schedule. This implies that with schedule flexibility, parents do not need a caregiver to cover the hours between the start of their working day and the start of school, highlighting the opportunities offered by flexible working arrangements.

Although prior studies have demonstrated how different dimensions of parental work schedules are likely to increase opportunities for parental provision care, scholars have seldom included alternative forms of childcare. Nevertheless, research has shown that parents consider different types of childcare simultaneously (Leslie et al., 2000). Therefore, three types of childcare should be distinguished when examining how parental work schedules are related to parents' care arrangements: parental, formal and informal childcare. The few existing studies on nonparental care demonstrated how work during nonstandard hours constrains parents' use of formal care (Han, 2004; Presser, 2003) and that formal childcare is not as flexible as parental work is nowadays (Cloïn et al., 2010; Del Boca & Vuri, 2007). This illustrates that parental work schedules create not only opportunities, but also constraints with respect to organising childcare.

Parental work schedules are, however, not the only factor affecting whether parents outsource the care of their children. The availability and accessibility of nonparental childcare should also be considered (Kim & Fram, 2009; Liu, 2015). Despite the increased scholarly interest in childcare arrangements, previous studies have considered these demand and supply arguments as separate explanations, but these arguments should be considered together. For instance, parental demands for formal care may not align with the availability of this type of care. To gain a thorough understanding of childcare arrangements, it is therefore important to encompass not only multiple dimensions of parental work, but also differential access to nonparental childcare providers.

### **1.2.2 Work schedules and parental well-being**

With the increase in work during nonstandard hours, researchers have increasingly focused on the consequences of nonstandard work for the physical and mental health of employees. These studies, however, have not provided a clear picture of how the timing of work affects employee well-being. One stream of the literature shows predominantly negative consequences of work during evenings, nights and weekends, indicated by emotional exhaustion and depressive symptoms (Jamal, 2004; Press, Fagan, & Bernd, 2006). For instance, the study of Jamal (2004) shows that employees who work during nonstandard hours report higher levels of emotional exhaustion, job stress and burnout, compared to employees who work a standard shift. He explains that employees who work during nonstandard hours find themselves at odds with the

physiological and social rhythms of society, and as a result, encounter greater problems. Studies have also found more marital instability and greater work-family conflict among nonstandard workers (Barnett, Gareis, & Brennan, 2008; Perry-Jenkins, Goldberg, Pierce, & Sayer, 2007; Tammelin, Malinen, Rönkä, & Verhoef, 2017), indicating that not only employees, but also their partners may be affected by work during evenings, nights and weekends.

By contrast, another body of research demonstrates that work during nonstandard hours can be positive for workers. Liu and colleagues (2011), for example, report that work during nonstandard hours is related to higher levels of life satisfaction and lower levels of psychological distress. These scholars describe how nonstandard work schedules may offer parents the option to provide more childcare during the day, which likely results in a more flexible and economical distribution of child-rearing tasks. This, in turn, is expected to enhance well-being. In line with this explanation, work during evenings, nights and weekends has indeed been linked to higher levels of parent-child interaction (Täht & Mills, 2012).

The conflict approach, which assumes that work and family are two conflicting domains (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Greenhaus & Beutell, 1985), may offer a possible explanation for the mixed findings of previous research. That is, the degree of conflict that parents encounter when combining nonstandard work schedules with family life may differ depending on whether parents enrol their children in nonparental childcare. If parents who work during nonstandard working hours are able to arrange nonparental childcare in an uncomplicated manner, the level of conflict between work and family is minimal. Consequently, the positive aspects of work during nonstandard hours are likely to prevail. However, if parents who work nonstandard hours encounter problems in arranging nonparental childcare, work and family become conflicting domains. Hence, the negative aspects of work during evenings, nights or weekends may become more prevalent.

Thus far, previous studies have considered only parents' own caregiving in the association between parental work and mental health (e.g., Hsueh & Yoshikawa, 2007; Milkie, Bianchi, Mattingly, & Robinson, 2002). For example, Milkie and colleagues explain higher levels of stress among working fathers by stating that these fathers are less engaged in caregiving than they would like to be (i.e., working fathers experience conflict between work and family life). The role of nonparental childcare, however, has largely been neglected, although this type of care can offer support to parents (Thomese & Liebroer, 2013) as well as result in parental worry (Barnett & Gareis, 2006; Uttal, 2002). Given the proportion of parents who work during nonstandard hours currently, it is essential to examine whether the use of nonparental childcare may explain the mixed findings of previous research. In addition, prior research on this topic has tended to focus on one parent, typically mothers (Barnett et al., 2008; Liu et al., 2011), but it has been argued that work schedules of dual earners affect not only themselves, but also their partners (Gareis, Barnett, & Brennan, 2003). Hence, adopting a couple-level perspective is useful.

### **1.2.3 Childcare arrangements and child well-being**

A central topic in the childcare literature is the association between formal childcare and child well-being. Concerning children's cognitive development, results have been predominantly positive. For example, children who are enrolled in formal childcare have been shown to develop

better cognitive and language skills over time (e.g., Votruba-Drzal et al., 2013; Weiland & Yoshikawa, 2013). Children in formal childcare have also been found to outperform children in informal care on both language and school achievement (Bradley & Vandell, 2007). This has been explained by the higher educational level of formal caregivers and the more structured activities in formal care compared to informal care. With respect to children's social development, the interactions that children have with peers and nonrelative adults in formal care are thought to increase children's sociability (Howes, 2011). In contrast, results on the socioemotional consequences for children have been less positive, with scholars reporting higher levels of behavioural problems among children who are enrolled in formal childcare (e.g., Belsky et al., 2007; Loeb et al., 2007).

Studies have shown that experiences early in life may have long-lasting consequences, for instance on health outcomes or school progress (Campbell et al., 2014; Nores & Barnett, 2010). Scholars have therefore attempted to determine when children are most affected by enrolment in nonparental childcare, by examining the characteristics of this care. Negative consequences for children have been found to become more pronounced when they spend more hours in care (Bradley & Vandell, 2007), receive lower-quality care (Broekhuizen et al., 2016; Li et al., 2013), or receive care from multiple caregivers (Morrissey, 2009). Studies have also considered the relationship between the child and the caregiver, with results showing more favourable child outcomes when children have a more sensitive caregiver and a lower child-caregiver ratio (De Schipper, Van IJzendoorn, & Tavecchio, 2004; Gerber, Whitebook, & Weinstein, 2007). The relationship between parents and the caregiver, however, has rarely been considered. This is striking, given that the educational literature has demonstrated the benefits of a positive parent-teacher relationship for child well-being (Froiland & Davison, 2014; Sheridan, Bovaird, Glover, Garbacz, Witte, & Kwon, 2012).

The rationale behind the link between the parent-caregiver relationship and child well-being can be explained by Bronfenbrenner's ecological systems theory (1979). According to this theory, children develop within a context of different systems, such as home, childcare, school or sport. Bronfenbrenner argues that because these systems are not isolated, the interaction between different systems is likely to have an impact on the child. In the case of childcare, the interaction would be between parents and caregivers. Nonetheless, this interaction has largely been neglected in previous studies, although examination of the parent-caregiver relationship may inform the debate on the consequences of formal childcare. Children of parents who work during nonstandard hours are likely to benefit most from a positive parent-caregiver relationship. This is because these children exhibit lower well-being than children whose parents work during standard hours (Gassman-Pines, 2011; Li et al., 2014; Strazdins et al., 2006). Thus, a positive parent-caregiver relationship is especially important for these children. This illustrates how parental work schedules, childcare and child well-being are intertwined.

### 1.3 Contributions

This dissertation aims to improve knowledge on the associations between parental work, childcare arrangements and parental and child well-being. In doing so, this study contributes to the existing literature in several ways.

First, I extend prior research by examining not only how parental work schedules affect parents' own care provision (e.g., Carriero et al., 2009; Täht & Mills, 2012), but also how work schedules affect parents' use of formal and informal childcare. Moreover, I focus both on whether parents use these different types of care and on the variability and length of childcare arrangements. By doing so, this dissertation contributes to the literature by providing a broader perspective on how parents arrange care for their children.

Second, by focusing on work during nonstandard hours and the degree of flexibility in parents' work, this dissertation incorporates modern-day job characteristics into the examination of childcare arrangements. Arranging childcare clearly no longer depends solely on whether parents work; it is also based on when and how they work. Therefore, I not only distinguish between standard and nonstandard work schedules, but also incorporate schedule flexibility and home-based telework. Through this approach, I can shed light on the childcare arrangements of a new and growing group of parents.

Third, in examining work schedules, this dissertation focuses on couples. Whereas previous research predominantly focused on mothers (Han, 2004; Presser, 2003), I account for the work schedules of both partners because parents' needs for childcare depend on the combination of their work schedules. For instance, work during nonstandard hours is likely to be particularly difficult for parents if both of them work evenings, nights or weekends. Furthermore, research has indicated that employees are affected by both their own work schedule and that of their partner (Gareis et al., 2003), which also underlines the relevance of a couple-level approach. Moreover, a couple-level approach allows me to examine gender differences in how parental work schedules are related to childcare arrangements and in the extent to which parents are affected by the combination of work and childcare.

Fourth, I examine a new dimension of nonparental childcare by studying the extent to which the parent-caregiver relationship is associated with child well-being in formal childcare. Moreover, I examine whether this relationship is more relevant to children of parents who work during nonstandard hours. For this purpose, this dissertation combines insights from two strands of the literature: the strand that examines the bond between parents and teachers later in children's life (Froiland & Davison, 2014; Sheridan et al., 2012) and the strand that focuses on the difficulties faced by children whose parents work nonstandard hours (Gassman-Pines, 2011; Li et al., 2014; Strazdins et al., 2006).

Fifth, this dissertation not only draws on existing datasets to answer its research question, but also utilises new data that are part of an international project specifically targeting working parents (including those working either standard or nonstandard hours) with children between 0 and 12 years old. These data were in part specifically collected for this dissertation. Data on employees who work during nonstandard hours are scarce, especially in Europe (Täht, 2011). The dataset therefore contains a higher number of parents working nonstandard schedules than previous data have, and it thus facilitates more reliable comparisons between parents who work standard schedules and parents who work nonstandard schedules. Moreover, the survey includes a 24-hour childcare diary in which parents indicate who is caring for their child throughout the day. Such detailed information on care arrangements, combined with questions on parental work, is not available in other datasets, especially not from a comparative perspective. Data were collected in Finland, the Netherlands and the United Kingdom.

Sixth, by adopting a cross-national perspective, this dissertation places the examination of childcare arrangements in the country context, thereby incorporating arguments not only on the affordability and accessibility of nonparental childcare, but also on norms regarding parental work and childcare use. Furthermore, this perspective allows for studying how the country context affects the way in which parents arrange childcare and the association between childcare and child well-being. Most research on childcare arrangements has been restricted to single countries and therefore has not allowed for an analysis of how the associations between parental work, childcare and subsequent well-being may differ depending on the specific country context in which parents live.

## 1.4 Overview of the empirical chapters

Each empirical chapter of this dissertation examines a specific aspect of the overarching research question on the interplay between work schedules, childcare and well-being. The five empirical chapters are outlined below and are summarised in Table 1.1, which is presented at the end of this chapter.

The first part of the dissertation (Chapters 2 and 3) focuses on the link between parental work schedules and parents' childcare arrangements. Chapter 2 studies associations between parental work schedules and parents' use of formal and informal childcare in Finland, the Netherlands and the United Kingdom. Chapter 3 takes a couple-level approach and examines how different combinations of parental work schedules are related to parental, formal and informal childcare use, with a specific focus on gender differences.

In the second part of the dissertation (Chapters 4, 5 and 6), the focus shifts to how the combination of parental work and childcare affects the well-being of parents and children. Chapter 4 concentrates on parental well-being and examines whether the use of nonparental childcare makes a difference in the association between work schedule combinations and parental mental health. This chapter considers the work schedules of both parents and pays specific attention to gender differences. In Chapters 5 and 6, the emphasis is on child well-being. More specifically, Chapter 5 examines the extent to which the parent-caregiver relationship is associated with child well-being in formal childcare. Lastly, Chapter 6 returns to the comparative perspective and examines whether the country context moderates the association between different characteristics of formal childcare and children's socioemotional well-being.

### 1.4.1 Chapter 2: Parental work schedules and nonparental childcare in Finland, the Netherlands and the United Kingdom

The first empirical chapter examines the association between parental work schedules and the use of nonparental childcare among dual-earner families in Finland, the Netherlands and the United Kingdom. These countries can be regarded as different types of welfare states that have distinct institutions and cultural norms. Consequently, these countries likely have different policies and standards referring to both paid work and childcare (León, 2005; Mandel & Semyonov, 2006). The associations between parental work and the use of nonparental childcare are therefore likely to differ between these three countries. The central research question is as follows: *To what extent*

*are parental work schedules associated with parents' use of formal and informal childcare, and how is this association shaped by the country context?*

This chapter extends prior research that examined how parental work schedules are related to parental well-being, spousal relationships and parent-child interaction (Liu et al., 2011; Presser, 2000; Täht & Mills, 2012) by examining how work schedules affect parents' opportunities to use formal and informal childcare. Moreover, it studies differences in the variability and time that children spend in childcare among Finland, the Netherlands and the United Kingdom. Three types of hypotheses are developed. In the first set of hypotheses, the focus is on individual-level mechanisms, more specifically, how the type of work schedule, the number of working hours and changes in work schedules affect the type, variability and time in childcare. The second set of hypotheses concerns how the country context affects childcare use. The third set of hypotheses is on the interaction between the individual-level mechanisms and the country context, because the effects of the type of work schedule, number of working hours and changes in work schedule on childcare use are expected to differ among countries. To test the hypotheses, cross-national data from the 2012 'Families 24/7' study are used in multinomial logistic and multivariate multiple regression.

#### **1.4.2 Chapter 3: A couple-level approach to arranging childcare in dual-earner families**

Chapter 3 examines the link between parental work and childcare use by adopting a couple-level perspective and examining gender differences. This chapter recognises that the ways in which parents arrange care for their children depend on both parents' work schedules, thereby extending prior research that predominantly focused on mothers (Han, 2004; Presser, 2003). An opportunities and constraints framework is employed to disentangle how the timing of work (i.e., having a standard or nonstandard work schedule), schedule flexibility and home-based telework are related to parents' childcare arrangements. The following research question is addressed in this chapter: *To what extent are nonstandard work schedules, schedule flexibility and home-based telework of dual-earning parents associated with their use of formal, informal and parental childcare?*

While acknowledging that parents arrange different types of childcare simultaneously (Leslie et al., 2000), parental, formal and informal childcare are discussed separately in order to gain insight into the underlying mechanisms. The hypotheses involve comparisons between different types of schedule combinations, such as couples in which none, one or both parents work during nonstandard hours. This chapter also differentiates between mothers and fathers because research has argued that mothers are more prone to use work-related resources for the benefit of the family (Bielby, 1992). In this chapter, Dutch data from the 2013 'Krimp in Kinderopvang' (KiK) study are used, which are analysed using ordinary least squares (OLS) and multivariate logistic regression.

#### **1.4.3 Chapter 4: Work schedule combinations and mental health: Does using nonparental childcare matter?**

In Chapter 4, the focus shifts to how the combination of parental work and childcare

arrangements may affect parents. This chapter examines the relevance of nonparental childcare for the association between work schedules and parental mental health. Given that previous studies have produced mixed findings on this association (e.g., Barnett et al., 2008; Jamal, 2004; Liu et al., 2011), this chapter aims to provide more insight into the heterogeneity of the effects of nonstandard hours on parental mental health. Furthermore, this chapter adds to prior research by adopting a couple-level approach, because scholars have previously focused primarily on mothers (Barnett et al., 2008; Liu et al., 2011). This approach allows not only for examining gender differences, but also for incorporating the interdependency between partners, which has been demonstrated by prior research (Gareis et al., 2003). This chapter addresses the following question: *To what extent does the use of nonparental childcare affect the association between work schedule combinations and parental mental health?*

The theoretical framework of this chapter draws upon insights from the conflict approach (Eby et al., 2005; Greenhaus & Beutell, 1985) and thus assumes that work and family are two conflicting domains. This framework is used to theorise on how nonparental childcare affects the degree of conflict between these two domains. Gender differences in this association are examined as well. Using data from the 2006 Netherlands Kinship Panel Study (Wave 2), I estimate a multiple-group structural equation model to test whether the association between work schedules and parental mental health differs between parents who do use nonparental childcare and those who do not.

#### 1.4.4 Chapter 5: The parent-caregiver relationship and child well-being in formal childcare

The fifth chapter turns from parental well-being to child well-being and examines the extent to which the parent-caregiver relationship is associated with the socioemotional well-being of children in formal childcare. Given that educational research has firmly established that a positive parent-teacher relationship is beneficial for children (Froiland & Davison, 2014; Sheridan et al., 2012), it is striking that the consequences of such a relationship have not been examined for younger children. This chapter therefore adds to the existing literature by applying insights from educational research to younger children, which enables testing the relevance of the bond between parents and caregivers for children in formal childcare. Moreover, the literature on the challenges of parents who work during nonstandard hours is used to examine whether the parent-caregiver relationship is more important for children of these parents. The central question of this chapter is as follows: *To what extent is the parent-caregiver relationship associated with socioemotional child well-being in formal childcare, and is this association stronger among children of parents who work during nonstandard hours?*

The conceptual model of this chapter starts with the ecological systems theory of Bronfenbrenner (1979), which outlines how the parent-caregiver relationship may affect child well-being. To capitalise on the importance of communication within this relationship, insights from Coleman (1990) are applied. The literature on the difficulties of children whose parents work evenings, nights and weekends is used to explain the difference between children of parents with standard and nonstandard work schedules (Gassman-Pines, 2011; Li et al., 2014; Strazdins et al., 2006). Structural equation modelling is used to test the hypotheses, by employing Dutch data

from the 2012 ‘Families 24/7’ study, which includes a newly developed measure concerning the parent-caregiver relationship.

#### **1.4.5 Chapter 6: Linking characteristics of formal childcare to child well-being: A comparative perspective**

The final empirical chapter of this dissertation returns to the comparative perspective and examines the link between several characteristics of formal childcare and child well-being in the Netherlands, Finland and the United Kingdom. Prior research on formal childcare and consequences for children has predominantly focused on single countries. However, this chapter explains how the country context may moderate this association. Formal childcare is provided in country-specific contexts, with specific family policies that are likely to vary between countries. In this chapter, I argue that childcare may be more beneficial for children in countries that ensure higher-quality childcare and that provide better support for parents. This argument is examined by comparing the Netherlands, Finland and the United Kingdom, beginning with the following question: *To what extent does the country context moderate the association between characteristics of formal childcare and children’s socioemotional well-being?*

This chapter builds on Bronfenbrenner’s (1979) ecological systems theory to explain why the country-specific policy context matters for the extent to which formal childcare characteristics affect child well-being. It is hypothesised how different characteristics of formal childcare, in particular, how many hours per month children spend in care, the scheduling of the hours (i.e., during standard or nonstandard hours) and the number of care arrangements, are likely to be associated with child well-being differently across the three countries that differ in their family policies. Two age groups of children are differentiated: children aged two and under and children aged three and older. Cross-national data from the 2012 ‘Families 24/7’ study are used to test the hypotheses, by estimating multivariate hierarchical OLS regression models.

### **1.5 Data and national context**

#### **1.5.1 Data**

In this dissertation, different datasets that provide information about the Netherlands, Finland and the United Kingdom are used. Chapters 2, 5 and 6 utilise data from the *Families 24/7* study, which was in part specifically collected for this dissertation. *Families 24/7* is an international project targeting Dutch, Finnish and British parents who work either standard or nonstandard hours and have children between 0 and 12 years old. This survey contains detailed information about parental work, childcare arrangements and child well-being. Parents with multiple children were asked to answer the questions on childcare use and child well-being with a specific child in mind (i.e., the target child, which was the child closest to age four). Data were collected between November 2012 and January 2013 using a web survey, which was distributed to parents via childcare organisations, employers and labour unions. In Chapter 5, the Dutch data from the *Families 24/7* dataset are used; Chapters 2 and 6 adopt a comparative perspective and utilise the Dutch, Finnish and British data.



In Chapter 3, data from the *Krimp in Kinderopvang (KiK)* study are used, which were collected by the Netherlands Institute for Social Research and Statistics Netherlands. This dataset is based on a large-scale survey on the childcare use of Dutch parents, who were randomly selected using child-related information from the Dutch Municipal Personal Records Database and the Dutch Tax Administration. The survey focused on several dimensions of the work schedules of both parents, on parents' own provision of childcare, and on the use of both formal and informal childcare. Data were collected between September and November 2013.

Chapter 4 uses data from the *Netherlands Kinship Panel Study (NKPS)* (Dykstra et al., 2007), a nationally representative multi-actor study. Wave 2 of this study includes data on the work schedules, childcare use and mental health of both parents. Respondents were interviewed face-to-face and were asked to complete a questionnaire; when applicable, their partners were also asked to complete this questionnaire. The nature of these data therefore facilitates a couple-level analysis. The data were collected between September 2006 and June 2007.

### 1.5.2 National context

Two empirical chapters of this dissertation adopt a comparative perspective by contrasting the Netherlands with Finland and the United Kingdom. These three countries reflect different welfare states with distinct institutions and cultural norms regarding paid work and childcare. Below, the country context is briefly outlined. A more elaborate explanation is provided in Chapters 2 and 6.

In the *Netherlands*, part-time work is widely accepted, especially for mothers. Statistics from the EU Labour Force Survey (2015b) indicate that 83.6 per cent of mothers with children up to age 14 work fewer than 35 hours, which was the case for 16.0 per cent of fathers. Work during evenings, nights and weekends is relatively common in the Netherlands, with approximately one of three parents reporting that they usually work during these nonstandard hours (Presser et al., 2008). Considering the incidence of part-time work among Dutch parents, it is not surprising that Dutch children spend limited hours in nonparental care (Coyette et al., 2015). This especially refers to formal childcare, whose use in the Netherlands seems to be accepted when children attend only a few days a week (Merens & Van den Brakel, 2014). Dutch norms regarding childcare are more accepting for older children. Formal childcare during office hours is available, but limited (Boogaard & Bollen, 2014; De Jong, 2013).

In *Finland*, only 14.0 per cent of mothers and 3.8 per cent of fathers work fewer than 35 hours on a weekly basis (EU Labour Force Survey, 2015b), illustrating that part-time work is far less common in Finland than in the Netherlands. Work during nonstandard hours is slightly less common in Finland than in the Netherlands, with Finnish employees in particular working less in the weekends (Presser et al., 2008). The predominantly full-time work culture is partly reflected in Finnish childcare usage, with the majority of children attending childcare for long hours each week. Parents even have the legal right to place their children in childcare centres (Finnish Ministry of Social Affairs and Health, 2013). These centres are required to provide care at the times that parents need it, including nights or weekends (Plantenga & Remery, 2009). However, Finnish people also highly value the presence of parents in the lives of their young children. This

is reflected in the subsidised homecare leave that is available to parents of children under three years old (Finnish Ministry of Social Affairs and Health, 2013).

The *United Kingdom* occupies a middle position between the Netherlands and Finland regarding part-time employment, with 51.7 per cent of mothers and 9.2 per cent of fathers working fewer than 35 hours a week (EU Labour Force Survey, 2015b). The picture of nonstandard work schedules in the United Kingdom looks comparable to that of the Netherlands, with British men working more often during nonstandard hours (Presser et al., 2008). The nonparental childcare enrolment of British children is also relatively similar to that of the Netherlands, as the majority of children are in care by professionals, relatives or friends for limited hours. The use of formal care is moderately accepted in the United Kingdom, especially when it is only part-time care (Fagan & Norman, 2012). Formal childcare services outside of office hours are practically non-existent (Singler, 2011), which may indicate that British parents who work nonstandard hours are the most disadvantaged in this regard among these three countries.

## 1.6 Dissertation at a glance

The five empirical chapters of this dissertation are presented in Table 1.1. For each chapter, the table indicates the specific focus of the chapter, its main contributions and the dataset and method that were used.

**Table 1.1** Overview of the empirical chapters of the dissertation

Chapter	Focus	Main contributions	Data; method
2	Parental work schedules and nonparental childcare in Finland, the Netherlands and the United Kingdom	<ul style="list-style-type: none"> <li>- Examining the link between parental work and formal and informal care in different countries</li> <li>- Studying not only different types of childcare, but also differences in variability and time spent in childcare</li> </ul>	Families 24/7 study; multinomial logistic regression and multivariate multiple regression
3	A couple-level approach to arranging childcare in dual-earner families	<ul style="list-style-type: none"> <li>- Employing a couple-level perspective</li> <li>- Examining gender differences</li> <li>- Studying all types of care that parents may use: parental, formal and informal care</li> </ul>	Krimp in Kinderopvang ( <i>KiK</i> ) study; OLS regression and multivariate logistic regression
4	Work schedule combinations and mental health: Does using nonparental childcare matter?	<ul style="list-style-type: none"> <li>- Providing more insight into the mixed findings on the association between work schedules and mental health</li> <li>- Incorporating the interdependency between partners</li> <li>- Examining gender differences</li> </ul>	Wave 2 of the Netherlands Kinship Panel Study ( <i>NKPS</i> ); multiple-group structural equation modelling
5	The parent-caregiver relationship and child well-being in formal childcare	<ul style="list-style-type: none"> <li>- Examining the parent-caregiver relationship for young children, that is, before they go to school</li> <li>- Combining insights from educational literature and literature on nonstandard work schedules</li> <li>- Employing a newly developed measure that captures the parent-caregiver relationship</li> </ul>	Dutch data from the Families 24/7 study; structural equation modelling
6	Linking characteristics of formal childcare to child well-being: A comparative perspective	<ul style="list-style-type: none"> <li>- Providing more insight into child well-being in formal childcare</li> <li>- Studying the association between characteristics of formal childcare and child well-being from a comparative perspective</li> </ul>	Families 24/7 study; multivariate hierarchical OLS regression



# Chapter 2

## Parental work schedules and nonparental childcare in Finland, the Netherlands and the United Kingdom<sup>1</sup>

### **Abstract**

This study examined the association between parental work schedules and nonparental childcare among dual-earner families in Finland, the Netherlands and the United Kingdom. Data from the 'Families 24/7' web survey were used, including 937 parents with children aged 0–12 years. Results showed a negative association between nonstandard work and formal childcare across all countries. A similar association was found for using a combination of formal and informal childcare, whereas solely using informal childcare was not associated with work characteristics. Country differences showed that, compared with Finland, the probability of using formal childcare was lower in the Netherlands, whereas the probability of using informal childcare was higher in the UK. Interaction effects showed that the negative association between nonstandard work and formal childcare was stronger in the Netherlands, compared with Finland. Also, the positive association between working hours and formal childcare was weaker for Dutch and British parents. This study identified the challenges that parents face when arranging childcare outside of office hours. Although the supply of formal childcare seems to be insufficient, using informal childcare introduces other potential problems. Because a considerable proportion of employees work nonstandard hours, governments should help these parents in meeting their need for high-quality childcare.

<sup>1</sup>A slightly different version is published as: Verhoef, M., Tammelin, M., May, V., Rönkä, A., & Roeters, A. (2016). Childcare and parental work schedules: a comparison of childcare arrangements among Finnish, British and Dutch dual-earner families. *Community, Work & Family*, 19, 261-289. Verhoef wrote the main part of the manuscript and conducted the analyses. Tammelin, May, Rönkä and Roeters substantially contributed to the manuscript. The authors jointly developed the idea and design of the study. An earlier version of this chapter was presented at the European Conference for Social Work Research (Jyväskylä, Finland, 2013). The research reported in this chapter was funded in part by the Academy of Finland (grant number 251096).



## 2.1 Introduction

Parents encounter various challenges and difficulties in arranging their daily family life, such as matching their work schedules with the opening hours of childcare centres (Rönkä & Korvela, 2009). These challenges may be especially difficult when one or both parents work during so-called nonstandard or atypical hours (Strazdins, Clements, Korda, Broom, & D'Souza, 2006), but at the same time these parents may plan their hours in this way in order to maximise parental coverage of children (Presser, 2003).

A considerable proportion of employees work outside traditional office hours; EU averages range from 17.6 per cent for shift work to 27.2 per cent for evening and night work and 39.7 per cent for weekend work (EU Labour Force Survey, 2012a). Taking into account the increasing proportion of dual-earner families (Margherita, O'Dorchai, & Bosch, 2009), this implies that significant numbers of European families need to arrange childcare outside of standard service hours. This study therefore focuses on the associations between parental work schedules and nonparental childcare arrangements in Finland, the Netherlands and the UK. These countries reflect different welfare states with distinct institutions and cultural norms, which are likely to affect policies and norms with regard to both paid work and nonparental childcare (e.g., León, 2005; Mandel & Semyonov, 2006). Hence, the associations between parental work schedules and nonparental childcare are likely to vary.

Previous research has centred on how nonstandard work affects employees and their families, by focusing on parental well-being (Liu, Wang, Keesler, & Schneider, 2011), relationship conflict and instability (Presser, 2000) and parent–child interaction (Täht & Mills, 2012). Less is known about parents' demands and opportunities with regard to nonparental childcare. Comparing parents working standard and nonstandard hours is specifically interesting, because formal childcare is more available to the former group (Plantenga & Remery, 2009). In addition to comparing parents' use of different types of childcare, we study the variability and time spent in childcare. It is relevant to study multiple aspects of childcare, because variations in the quality, type and amount of childcare are related to differences in child well-being. For example, Bradley and Vandell (2007) showed that children who were cared for in childcare centres obtained higher cognitive and social outcomes, compared with children cared for by family members. Yet, children who were in childcare for 30 or more hours per week had an increased risk of behavioural problems. In addition, Morrissey (2009) showed that increases in the number of childcare arrangements were related to increases in children's problem behaviour. These findings stress the relevance of examining the determinants of childcare arrangements.

## 2.2 Background

Nonparental childcare is an important aspect in the daily lives of many parents, because it facilitates the combination of work and family life (Craig & Powell, 2012). Two types of nonparental childcare can be distinguished: formal and informal care. Formal childcare can be defined as care provided by professionals, such as in a childcare centre (Zinsser, 2001), whereas informal childcare entails care provided by relatives or friends (Duncan, Edwards, Reynolds, & Alldred, 2004). Some have argued that if parents use multiple forms of childcare (e.g., formal and

informal care, or care provided by grandparents and friends), this indicates that arranging appropriate childcare is challenging (Chaudry et al., 2011). Because of the limited availability of childcare centres that are open during atypical hours (Presser, 2003), childcare challenges may even increase when parents work outside traditional office hours. Parents who work during nonstandard hours therefore may have to rely on informal care, which in turn can mean that they have to use multiple caregivers to cover their working hours.

Parents can also use their nonstandard working hours as a conscious strategy to maximise parental care through ‘split-shift parenting’ (Presser, 2003), thereby reducing parents’ need for nonparental childcare. Consider for example a couple in which one parent works during the day and the other works during the evening; these parents are able to maximise parental caregiving. Due to differences in demands and possibilities, childcare arrangements are likely to differ between parents working standard and nonstandard schedules. These differences, however, seem to be contingent upon the country context, mainly because the provision of formal childcare varies among countries (Kröger, 2010).

Work schedules and access to formal childcare services are not the only factors affecting parental childcare use. Contextual factors such as cultural norms have to be taken into account as well (Sayer & Gornick, 2012). Because parental demands and opportunities may vary among countries due to existing cultural norms, it is relevant to study these decisions in a comparative perspective. Some comparative studies on childcare use are available (e.g., Kröger, 2010; Mamolo, Coppola, & Di Cesare, 2011), but these studies primarily focused on the type of childcare parents use. In this chapter, we add to existing knowledge by examining not only associations between parental work schedules and the type of childcare used, but also differences concerning the variability within childcare arrangements and the number of hours children spend in childcare. We proceed in two steps. First, we use statistics from the EU Labour Force Survey (2012a, 2012b) to describe the employment patterns in the three countries involved. Second, we utilise data from the ‘Families 24/7’ study to examine cross-national differences in the associations between parental work schedules and childcare arrangements.

### **2.2.1 Length and timing of paid work in Finland, the Netherlands and the United Kingdom**

Table 2.1 provides an overview of recent employment patterns in Finland, the Netherlands and the United Kingdom, obtained from the EU Labour Force Survey. This survey, provided by Eurostat, is conducted in 33 European countries and includes data on labour participation of people aged 15 and over. In this survey, parental status is defined as living with at least one child aged less than 15, or a dependent child aged 15–24. Table 2.1 presents the proportion of parents who have a paid job, who work part-time and who work some kind of nonstandard schedule. The number of hours parents work partly determines how many hours of childcare parents need (Mamolo et al., 2011), whereas their work schedule may be associated with the type of childcare that is available (Liu & Anderson, 2012).

Although nowadays women’s labour force participation is common and widely accepted in many Western countries, there is still clear variation in employment rates among Finland, the Netherlands and the UK. Table 2.1 shows that maternal employment rates are quite similar in the



Netherlands and Finland, but considerably lower in the UK. Paternal employment rates are substantially higher, but also show some variation, with Dutch fathers having the highest employment rate and British fathers the lowest.

**Table 2.1** Employment patterns in Finland, the Netherlands and the UK

	Finland		The Netherlands		UK	
	Women	Men	Women	Men	Women	Men
Parental employment rate (per cent) <sup>a</sup>	77.2	88.8	77.9	92.3	67.4	86.9
Parental part-time employment (per cent) <sup>a</sup>	13.9	3.3	85.0	14.9	54.5	9.0
Shift work (per cent of total employees) <sup>b</sup>	25.2	20.5	7.1	10.0	16.3	21.0
Evening work (per cent of total employees) <sup>b</sup>	20.1	20.0	25.4	27.3	8.5	11.5
Night work (per cent of total employees) <sup>b</sup>	7.4	10.8	6.8	11.3	4.6	8.0
Work on Saturdays (per cent of total employees) <sup>b</sup>	19.7	17.1	23.3	20.8	21.3	29.3
Work on Sundays (per cent of total employees) <sup>b</sup>	14.4	13.6	18.0	14.1	14.5	19.1

*Source:* EU Labour Force Survey 2012a and 2012b. <sup>a</sup>Parental status is determined as having at least one child aged less than 15 living at home, or a dependent child aged 15-24. <sup>b</sup>Only for employees aged 25-49, the age range within which it is most likely to have children living at home.

The differences among the countries are further highlighted when looking at the proportion of parents who work part-time. Only a small percentage of Finnish mothers work part-time (<35 hours per week), whereas this is the case for more than half of British mothers and more than four-fifths of Dutch mothers. For fathers, the differences concerning part-time employment are smaller, but still substantial, with only a small proportion of the Finnish fathers working part-time, whereas this is more common in the UK and the Netherlands.

Patterns in the timing of work also vary among the countries. Because the EU Labour Force Survey does not distinguish between parents and nonparents in the reports of nonstandard work, we restricted the sample to employees aged 25–49, the age range wherein it is most likely to have children living at home. Table 2.1 shows that 10 per cent of male and female employees in the Netherlands usually work shifts. In Finland, one-fourth of women and one-fifth of men are involved in shift work, with the UK lying in-between these two countries. Evening work is far more common in the Netherlands, with over 25 per cent of women and men reporting that they usually work during evenings. For Finland, these proportions are somewhat lower, whereas British employees work least during evenings. Night work is not common in any of the three countries, but the proportions are highest in Finland. Saturday work for women is most common in the Netherlands, where almost 25 per cent reported working on Saturdays. The proportions in Finland and the UK are somewhat lower, with around one-fifth of women involved in Saturday work. British men work most on Saturdays, which is less common for Dutch and Finnish men. The percentages who work on Sundays are lower than for work on Saturday, but again highest in the Netherlands for women, closely followed by Finnish and British women. Again, British men work most on Sundays, whereas the percentages are slightly lower for Dutch and Finnish men.

In addition to examining the proportion of parents who work part-time or some kind of nonstandard schedule, it is important to consider the stability in parental work schedules, because having a schedule that changes regularly may make it difficult to arrange formal childcare. Informal childcare, on the other hand, is perceived to be more flexible (Bakker & Karsten, 2013).

Focusing solely on parental work schedules, however, gives too limited a view on the association with nonparental childcare. To understand fully the opportunities and constraints parental work schedules pose in each country, the supply of childcare services and cultural norms also need to be taken into consideration.

### 2.2.2 Childcare services and norms regarding the use of formal childcare

Nonparental childcare enrolment rates indicate that, for children under the age of three, enrolment is highest in the Netherlands (45%), followed by the UK (30%) and Finland (27%) (Plantenga & Remery, 2009). However, Finnish children primarily spend more than 30 hours per week in childcare, while this amount is lower for Dutch and British children. Also, Finnish children spend their time mostly in formal childcare, whereas more than half of the Dutch and more than one-third of the British children are placed in informal childcare. The patterns for children aged three until the mandatory school age look similar, although the nonparental childcare enrolment rates in all three countries are higher (varying between 80% and 90%).

In Finland, formal childcare for children under school age is guaranteed by law and is heavily subsidised by the government, while care at home is also subsidised (Finnish Ministry of Social Affairs and Health, 2013). Formal childcare is organised in family childcare, which takes place in the homes of childcare providers and in childcare centres. Due to the availability of childcare leave, 63 per cent of children under the age of three are looked after at home, mostly by their mothers, after which children attend a childcare centre or family childcare. When children turn six, they are entitled to free preschool education for one year, after which they start school. Opening hours of childcare centres vary from normal hours (7am to 5pm) to extended hours and 24/7 childcare. In 62 per cent of the municipalities, parental demands for day-and-night care are met (Plantenga & Remery, 2009). The costs for childcare depend on the size and the income of the family; parents pay on average 15 per cent of the total childcare costs, with payment varying between approximately €264 and €2,904 per year for the first child, with costs diminishing slightly for subsequent children (Plantenga & Remery, 2009; Sosiaali- ja terveystieteiden ministeriö [STM], 2013). Nonparental childcare is widely accepted in Finland (Salmi, 2006), although periodically there are lively public debates over whether parents – that is, mothers – should stay at home. This debate has similarities with the ‘mommy wars’ in the USA (Craig & Powell, 2013), although in Finland the focus lies particularly on children under the age of three.

In the UK, over 920,000 new publicly subsidised or funded childcare places have been created since the 1998 National Childcare Strategy. Nevertheless, the availability and affordability of childcare remains problematic, and the system is experienced as complicated (Fagan & Norman, 2012). In addition, although local authorities in the UK have a duty to ensure sufficient childcare, they often fail to meet these needs, for example, due to parental nonstandard working hours (Singler, 2011). There is as yet little support from the government for childcare centres to extend their opening hours, and very few centres are open before 8am or after 6pm. A small number of childminders offer services outside these hours, and they tend to be expensive (Statham & Mooney, 2003). Only parents living in deprived areas have access to free childcare, but all children aged three and four have access to free early education for 15 hours per week. The government does offer some financial support to low-income parents through the Working

Tax Credit, which can cover up to 70 per cent of childcare costs, while some employers offer childcare vouchers. These, however, only go so far, especially as childcare in the UK remains the most expensive in Europe. In 2013, the average yearly cost for 50 hours of childcare per week was €13,000 (£11,000; Daycare Trust & Family and Parenting Institute, 2013). The use of formal childcare is less accepted than in Finland, particularly among working-class mothers (Fagan & Norman, 2012), and many British parents rely on informal care. However, this form of care is not free of problems either, as it may not always be reliable or available when needed.

The involvement of the Dutch government concerning childcare takes a middle position between Finland and the UK. Dutch children do not have a legal right to childcare, but childcare is partly subsidised by the government, depending on family income. However, childcare is not universal and especially rural areas can suffer from a lack of available childcare. This is an unanticipated effect of the 2005 Child Care Act, which introduced market forces to the childcare sector (Noailly & Visser, 2009). Formal childcare possibilities for under school-aged children (under the age of four) include childcare centres and childminders. Just as in the UK, the Dutch government does not actively stimulate childcare services outside office hours, although there are some centres that offer extended opening hours or even 24/7 childcare. This is, however, minimal when compared with the Finnish system, leaving Dutch parents who work nonstandard hours dependent on informal care. In 2011, Dutch parents paid, on average, €7,300 per year for childcare, of which the majority is covered by the childcare allowance parents receive from the government; parents' own contribution is, on average, €2,000 (Statistics Netherlands, 2011b). Regarding norms on nonparental childcare use, the majority of Dutch people feel that spending several days per week in childcare is not good for a child, although the acceptance increases when the age of the child increases (Merens, Hartgers, & Van den Brakel, 2012). This level of support is in line with the norm that Dutch mothers should work relatively limited hours (Mills & Täht, 2010). Indeed, almost 40 per cent of people in both the Netherlands and the UK think that preschool children are likely to suffer if their mother works (Pfau-Effinger, 2008). Interestingly, in Finland this figure is only a few percentage points lower, namely just over 35 per cent, showing that norms about childcare use do not always translate directly into the decisions families make.

Whereas most research focuses on childcare for preschool-aged children, where provision varies greatly among the countries as detailed above, a focus on school-aged children is also necessary. Due to the limited school hours during primary school, many working parents have to find appropriate before and after school care (Barnett, Gareis, Sabattini, & Carter, 2010). Although there are variations in the provision of such care among Finland, the Netherlands and the UK (Daycare Trust, 2012; Dutch Government, 2013; Finnish National Board of Education, 2011), in all three countries childcare for school-aged children is mainly available during standard working hours, causing problems for parents working nonstandard hours. For this reason, we extended prior research by also examining care of school-aged children, by including children up to the age of 12 years.

### 2.3 Research focus

For this chapter, we examined parents' use of nonparental childcare and compared the likelihood of using parental care with that of formal childcare, informal childcare and a combination of

formal and informal childcare, thereby focusing on dual-earner couples. In addition, we examined differences in the variability within childcare arrangements and the time children spend in childcare. We formulated three types of hypotheses, focusing on individual-level mechanisms, the country of residence and the variation of individual-level mechanisms across countries.

*Individual-level mechanisms.* Due to the lack of formal childcare services offering extended opening hours in the UK and the Netherlands, and the fact that these services are insufficient in Finland, we expected that nonstandard work schedules would be negatively related to formal childcare use, and positively related to the use of informal childcare or a combination of these two (Hypothesis 1a). Following the same logic, we expected that working nonstandard hours would be related to fewer hours in formal childcare (Hypothesis 1b) and more variability in childcare arrangements (Hypothesis 1c). Regarding parental working hours, we expected a positive association with the use of nonparental childcare and the hours children spend in childcare (Hypothesis 1d). Lastly, for all countries we expected that regular changes in parental work schedule would be related to both more use (and more hours) of informal childcare (Hypothesis 1e), because parents consider this form of childcare as more flexible (Bakker & Karsten, 2013).

*Country of residence.* We expected that the country context would have a direct effect on childcare use, because country-specific norms and childcare facilities affect parents' opportunities and constraints. Finnish parents are likely to make the most use of formal childcare (Hypothesis 2a), as formal childcare is widely accepted and heavily subsidised, and most parents work full-time. We therefore also expected the most hours and the least variability in Finnish childcare arrangements (Hypothesis 2b). In the UK, parents may be more likely (compared with Finland) to use informal childcare and a combination of formal/informal childcare (Hypothesis 2c), due to the complex and expensive formal childcare system. Also, we expected more variability in British childcare arrangements, compared with Finland (Hypothesis 2d). Lastly, due to the significant number of British women working part-time, British children are expected to spend less time in childcare than Finnish children (Hypothesis 2e). For Dutch parents, we expected a middle position in the use of nonparental childcare, as Dutch formal childcare is better regulated than in the UK but less well than in Finland. Therefore we expected more formal and less informal childcare use or a combination of both (and therefore less variability) than in the UK (Hypothesis 2f). Because the Netherlands has the highest proportion of part-time working parents, we expected Dutch children to spend the least hours in childcare (Hypothesis 2g).

*Cross-country variations of individual-level mechanisms.* We hypothesised that the effects of the individual-level mechanisms would vary across countries. Starting with nonstandard schedules and the type of childcare used by parents, we expected the negative association between nonstandard schedule and formal childcare use to be weakest in Finland (Hypothesis 3a), because Finnish parents have more access to 24/7 childcare. Moreover, this association is likely to be stronger in the Netherlands, because Dutch parents have fewer opportunities for formal childcare outside office hours and nonparental childcare is less accepted. This suggests a stronger negative effect of nonstandard work on formal childcare use, and a positive effect on informal or combination care as compared to Finland (Hypothesis 3b). The negative effect of nonstandard

work on formal childcare use is hypothesised to be even stronger in the UK, compared to the Netherlands, because formal childcare outside office hours is practically non-existent (Hypothesis 3c). Regarding working hours and the type of care used by parents, we hypothesised that the positive association between working hours and formal childcare use would be strongest in Finland (Hypothesis 3d). In a similar vein, we expected the positive effect of working hours on informal childcare and on the combination of formal and informal care to be weakest in Finland, somewhat stronger in the Netherlands, and strongest in the UK, due to the lower supply of formal childcare and the conservative cultural norms in the last two countries (Hypothesis 3e). Lastly, concerning the association between changes in work schedules and type of childcare used, we hypothesised that the positive effect of changes in work schedules on informal childcare use to be strongest in Finland (Hypothesis 3f), as parents in the UK and in the Netherlands already use a significant amount of informal childcare.

## 2.4 Data, operationalisation and methods

### 2.4.1 Data

This chapter analysed data from the cross-national study ‘Families 24/7’ targeted to Finnish, British and Dutch working parents with children aged between 0 and 12 years, who worked either standard or nonstandard hours. Respondents were recruited via childcare organisations, unions and employers, which were invited by letter or email to promote the study. The cooperating institutions were not selected randomly in all countries (only in the Netherlands were childcare organisations selected randomly); we therefore have no random sample of parents with young children. Because in Finland day-and-night childcare centres were invited to participate, which are rare or non-existent in the other two countries, it is likely that parents who work during nonstandard hours in Finland were overrepresented in our data. We were also not able to evaluate the response rate.

Data collection took place between November 2012 and January 2013 using a web survey. The survey questionnaire was first prepared in English, and later translated into Finnish and Dutch. Some of the questions included in the questionnaire were obtained from existing surveys, for which we used existing translations from the national surveys. For the questions with no existing translation, back-translation was used.

Our total sample consisted of 1,294 parents and was restricted in three ways. First, 141 respondents were excluded because they reported not having a partner. Second, 148 respondents were excluded because of non-employment of either the respondent or his/her partner. Third, 68 respondents provided no information about their working time patterns, resulting in a sample of 937 dual-earning parents (316 from Finland, 304 from the Netherlands and 317 from the UK). Respondents’ age ranged between 22 and 58 years ( $M = 36.68$ ,  $SD = 5.71$ ). The majority of the sample was female (82.39%) and either married/in a civil partnership (73.64%) or cohabitating (24.87%). The majority of the respondents (69.73%) had completed at least post-secondary education. For some of the childcare questions, respondents were asked to think about one specific child, the so-called ‘target child’ (the child closest to age four). The target child’s age

varied between 0 and 12 years ( $M = 4.12$ ,  $SD = 2.67$ ). The majority of the respondents had one (35.15%) or two (48.50%) children.

### 2.4.2 Measures

*Parental work schedule.* Respondents' *work schedule* was assessed with the question 'What is your working time pattern?' There were seven response categories (e.g., regular day work or irregular working hours). The responses were categorised into two groups: 0 = *standard schedule* and 1 = *nonstandard schedule* (including evening/night/morning work, irregular work, shift work and other work schedules). In addition, respondents were asked whether *changes in their work schedule* occurred regularly (1 = *yes*) and about their *working hours*, referring to the actual hours worked per week.

*Childcare arrangements.* In the first step, respondents were asked which out of 16 forms of childcare they used for more than one hour during their latest working day. In the second step, respondents were asked to provide the start and end time of each form of care they used, between 00.00 and 23.59. The different forms of childcare were divided in three groups: childcare at home (e.g., 'My child was at home cared for by a relative'), professional childcare outside the home (e.g., 'My child was in a nursery') and other childcare outside the home (e.g., 'My child was cared for outside the home by a family friend'). From this 24h childcare diary, the *type of care* used, the *variability* within the childcare arrangements and the *time* children spent in childcare during these 24 hours were computed. For the type of care used, a categorical variable was computed with four categories: parental care, formal childcare, informal childcare and a combination of formal and informal childcare. For variability, the different forms of childcare used by parents were counted separately for formal and informal childcare. The total time spent in childcare was calculated by summing the time spent in childcare, separately for formal and informal care, reflecting the hours that these children spend in care during the 24 hour period.

*Country of residence.* To be able to test the effects of country of residence, we created three dummy variables for the three separate countries, Finland, the Netherlands and the UK (1 = *yes*). In our analyses, Finland was used as the reference country.

*Control variables.* We controlled for the gender of the respondent (1 = *female*), respondents' monthly earnings (1 = *less than €2,000/£1,800*) and education (1 = *post-secondary education or more*), the number of children living at home (1 = *three or more children*) and the age of the target child. We expected that parents' use of nonparental childcare would be reduced when they had more children, that is, it would be more likely that mothers were not employed (OECD Family Database, 2009); when they had a lower income, lower education levels and an older target child (more likely that a child can be alone for short periods) (Casper & Smith, 2004). Because we acknowledge that, when arranging childcare, the work schedule of the partner is an important factor to consider, we included a dummy variable representing the partner's work schedule (1 = *nonstandard*). Lastly, because the sample of the current study was recruited via different channels, namely via childcare organisations, unions and employers, we also included way of recruitment as

a control variable in our analyses. Two dummy variables were used, for childcare organisations and unions, with employers being the reference category.

### 2.4.3 Analytical strategy

Associations between parental work schedules and the type of childcare used were examined using multinomial logistic regression. This type of analysis is used when the dependent variable is categorical, with three or more categories (Hosmer & Lemeshow, 2000). The dependent variable in this analysis (type of childcare) includes four categories: parental childcare (reference category), formal childcare, informal childcare and a combination of formal and informal childcare. Main effects were analysed first, after which separate models were estimated including multiple interaction terms. In order to avoid entering too many variables in the interaction models, we included the interaction terms in sets, while retaining the other independent and control variables. The first model included interaction terms between work schedule and the country dummies. In the second and third model, the same approach was used, including interactions with either working hours or changes in work schedule and the country dummies. In the second part of the analysis, concerning the variability and time spent in formal and informal childcare, we applied the same procedure using multivariate multiple regression. Two separate analyses were performed, one focusing on variability and one focusing on time spent in childcare.

## 2.5 Results

### 2.5.1 Descriptive statistics

Table 2.2 presents the means and standard deviations of the dependent, independent and control variables and distinguishes among Finland, the Netherlands and the UK. The majority of the parents in all countries used only formal childcare. Solely using informal childcare was far less common, especially in Finland. This is as expected, due to the extensive formal childcare system in Finland. Using a combination of formal and informal childcare was also not common in Finland, whereas British and Dutch parents used this option somewhat more often, which is also in line with our expectations. In contrast to our expectations, there were only small differences among countries concerning the variability within childcare arrangements; for all countries variability was higher in informal childcare. Finnish and Dutch children spent 8 hours and 15 minutes per day in nonparental childcare, 8.24 and 8.28 hours, respectively. British children, on the other hand, spent about 45 minutes less in childcare, namely 7.47 hours per day, which equals 7 hours and 30 minutes. For the Netherlands this is not as expected; we hypothesised that Dutch children would spend the least hours in childcare, due to the large proportion of part-time working parents. Time spent in formal childcare was highest in Finland, whereas Dutch children spent most time in informal childcare.

Regarding the independent variables, Table 2.2 shows that in Finland the majority of the respondents had a nonstandard work schedule, whereas the opposite was the case in the Netherlands and the UK. Weekly working hours were highest in Finland, closely followed by the UK and lowest in the Netherlands. Only 12 per cent of the Dutch respondents responded that

**Table 2.2** Descriptive statistics for childcare, work schedules and control variables ( $N = 937$ )

	FI ( $n = 316$ ) <i>M (SD)</i>	NL ( $n = 304$ ) <i>M (SD)</i>	UK ( $n = 317$ ) <i>M (SD)</i>
<i>Dependent variables</i>			
Type of childcare used (0 = no/1 = yes)			
Only parental care	0.17	0.16	0.13
Formal childcare	0.68	0.54	0.59
Informal childcare	0.05	0.13	0.15
Combination formal/informal	0.10	0.17	0.13
Total variability in nonparental childcare	1.21 (0.42)	1.21 (0.47)	1.27 (0.58)
Variability in formal childcare <sup>a</sup>	1.11 (0.30)	1.05 (0.14)	1.09 (0.26)
Variability in informal childcare <sup>b</sup>	1.18 (0.11)	1.16 (0.17)	1.21 (0.24)
Total hours in nonparental childcare during 24h	8.24 (2.89)	8.28 (4.44)	7.47 (3.86)
Hours spent in formal childcare during 24h <sup>a</sup>	7.87 (2.15)	7.28 (3.06)	6.92 (3.18)
Hours spent in informal childcare during 24h <sup>b</sup>	6.86 (1.66)	7.04 (1.83)	6.86 (2.13)
<i>Independent variables</i>			
Work schedule (0 = standard/1 = nonstandard)	0.72	0.30	0.24
Weekly working hours	36.93 (8.33)	30.51 (8.88)	35.99 (10.82)
Regular changes in work schedule (0 = no/1 = yes)	0.36	0.12	0.35
<i>Control variables</i>			
Sex (0 = male/1 = female)	0.79	0.86	0.83
Monthly earnings (0 = more than €2,000/£1,800/ 1 = less than €2,000/£1,800)	0.42	0.54	0.56
Education (0 = less than post-secondary education/ 1 = post-secondary education or more)	0.41	0.72	0.97
Children living at home (0 = 1 or 2/1 = 3 or more)	0.21	0.16	0.11
Age target child (in years)	4.68 (2.52)	3.33 (2.47)	4.33 (2.82)
Work schedule partner (0 = standard/1 = nonstandard)	0.52	0.22	0.29
Way of recruitment (0 = no/1 = yes)			
Via childcare organisation	0.53	0.94	0.20
Via union	0.00	0.05	0.17
Via employer	0.47	0.01	0.63

*Note.* *SD* is not reported for dichotomous variables. <sup>a</sup>Calculated using only respondents who reported using formal childcare; <sup>b</sup>Calculated using only respondents who reported using informal childcare.

changes in their work schedule occurred regularly, whereas this was the case for more than one-third of the Finnish and British respondents. Comparable data suggest that Finnish parents who work during nonstandard hours were overrepresented in our sample and that these parents were somewhat underrepresented in the Netherlands and the UK (Presser, Gornick, & Parashar, 2008). Weekly working hours were comparable with recent statistics from the EU Labour Force Survey (2012b). For Finland and the UK, the proportions of respondents who reported that changes in their work schedule occurred regularly are similar to data from the 2010 European Working Condition Survey, while for the Dutch respondents this percentage is slightly lower (Eurofound, 2012).

Descriptive statistics for the control variables show that the age of the target child varies slightly among countries, which is probably related to the way in which parents were recruited to



the study. Furthermore, the dummy variable representing partner's work schedule indicates that nonstandard work was again most prevalent in Finland. Lastly, the dummy variables concerning method of recruitment show that the majority of the respondents were recruited via childcare organisations in Finland and in the Netherlands, whereas in the UK the majority of the respondents were contacted via employers.

### 2.5.2 Explanatory analyses: Type of childcare used

Table 2.3 shows the results of the multinomial logistic regression analysis including only the main effects, in which the likelihood of using formal childcare, informal childcare or a combination of these is presented relative to the likelihood of relying on parental childcare. To calculate the effect of work schedule, we compared parents with a nonstandard work schedule with those with a standard work schedule in their use of different types of nonparental childcare (relative to parental care). Results show that having a nonstandard work schedule was associated with a decrease in the odds of using formal childcare ( $OR = 0.38, p = .002$ ; as compared with parental care). This indicates that when parents have a nonstandard work schedule, the likelihood of using formal childcare is reduced. More precisely, the predicted probability of using formal childcare is 62 per cent higher for parents with a standard work schedule, compared with parents with a nonstandard work schedule. This finding is in line with Hypothesis 1a, because across all three countries the supply of childcare services outside office hours is limited compared with the supply during office hours. In addition, weekly working hours were positively associated with the likelihood of using formal childcare ( $OR = 1.03, p = .047$ ). This finding is in line with Hypothesis 1d, although the effect is quite small. Lastly, the odds of using formal childcare were significantly lower for Dutch parents ( $OR = 0.37, p = .011$ ), compared with Finnish parents, which is in line with Hypothesis 2a.

Second, the likelihood of using informal childcare (instead of parental care) seems not to be associated with work characteristics, which implies that we found no support for Hypothesis 1e. The country context yielded a direct effect on informal childcare use, as the odds of using informal childcare were higher for British parents ( $OR = 4.08, p = .026$ ), compared with Finnish parents. This corresponds with Hypothesis 2c. We did not find significant differences between British and Dutch parents, indicating that Hypothesis 2f is not supported.

Third, having a nonstandard work schedule was negatively associated with the likelihood of using a combination of formal and informal childcare ( $OR = 0.50, p = .071$ ), although this effect was only marginally significant. This result indicates that when parents have a nonstandard work schedule, they are less likely to use a combination of formal and informal childcare, which is in contrast to Hypothesis 1a. No further significant effects were found for either work characteristics or country for predicting the odds of using a combination of formal and informal childcare.

Few of the control variables yielded a significant effect on childcare use. The effects that did reach significance were mainly restricted to formal childcare and in line with our expectations. For example, having an older target child decreased the odds of using formal childcare (compared with parental care). A similar effect was found for having a partner with a nonstandard work schedule, although this effect was only marginally significant.

**Table 2.3** Summary of multinomial logistic regression analysis for variables that predict the type of childcare used (reference = parental childcare; N = 937)

Variables	Formal childcare (n = 539)			Informal childcare (n = 112)			Combination formal/informal (n = 132)		
	B (SE)	OR	95% CI	B (SE)	OR	95% CI	B (SE)	OR	95% CI
Intercept	0.35 (0.87)			-1.35 (1.29)			0.86 (1.05)		
<i>Independent variables</i>									
Work schedule (0 = standard/1 = nonstandard)	-0.97 (0.32)**	0.38	[0.20, 0.71]	-0.71 (0.45)	0.49	[0.21, 1.18]	-0.70 (0.39)†	0.50	[0.23, 1.06]
Weekly working hours	0.03 (0.02)*	1.03	[1.00, 1.07]	0.00 (0.02)	1.00	[0.96, 1.05]	-0.01 (0.02)	0.99	[0.95, 1.03]
Regular changes in work schedule (0 = no/1 = yes)	0.27 (0.33)	1.31	[0.69, 2.48]	0.44 (0.46)	1.55	[0.63, 3.82]	0.58 (0.39)	1.78	[0.83, 3.84]
Country (reference = Finland)									
NL	-0.99 (0.39)*	0.37	[0.17, 0.80]	0.44 (0.62)	1.55	[0.46, 5.25]	0.34 (0.50)	1.41	[0.53, 3.75]
UK	-0.27 (0.44)	0.77	[0.33, 1.79]	1.41 (0.63)*	4.08	[1.18, 14.06]	0.56 (0.53)	1.74	[0.62, 4.93]
<i>Control variables</i>									
Sex (0 = male/1 = female)	1.51 (0.35)***	4.53	[2.29, 8.96]	0.51 (0.49)	1.66	[0.64, 4.31]	0.79 (0.43)†	2.20	[0.94, 5.14]
Monthly earnings (0 = more than €2,000/£1,800/ 1 = less than €2,000/£1,800)	-0.33 (0.31)	0.72	[0.39, 1.30]	-0.24 (0.42)	0.78	[0.34, 1.80]	-0.65 (0.37)	0.52	[0.25, 1.08]
Education (0 = less than post-secondary education/1 = post-secondary education or more)	0.25 (0.32)	1.28	[0.68, 2.41]	0.35 (0.51)	1.42	[0.52, 3.85]	-0.20 (0.40)	0.82	[0.37, 1.80]
Children living at home (0 = 1 to 3/1 = 3 or more)	0.09 (0.39)	1.10	[0.51, 2.35]	-0.22 (0.60)	0.81	[0.25, 2.61]	-0.36 (0.53)	0.70	[0.25, 1.97]
Age target child (in years)	-0.12 (0.06)*	0.88	[0.79, 0.99]	-0.01 (0.08)	0.99	[0.85, 1.16]	-0.12 (0.08)	0.89	[0.77, 1.03]
Work schedule partner (0 = standard/ 1 = nonstandard)	-0.56 (0.31)†	0.57	[0.31, 1.04]	-0.62 (0.45)	0.54	[0.22, 1.30]	-0.04 (0.37)	0.91	[0.47, 1.98]
Way of recruitment (reference = via employer)									
Via childcare organisation	0.56 (0.39)	1.75	[0.82, 3.73]	0.31 (0.59)	1.36	[0.43, 4.32]	-0.36 (0.49)	0.70	[0.27, 1.84]
Via union	-0.12 (0.64)	0.88	[0.25, 3.09]	-0.19 (0.79)	0.83	[0.18, 3.84]	-0.72 (0.80)	0.49	[0.10, 2.34]

Note. OR = odds ratio; CI = confidence interval. Nagelkerke R<sup>2</sup> = .19. †p < .10; \*p < .05; \*\*p < .01; \*\*\*p < .001.

Next, we estimated models in which the interaction terms between the work variables and country were included, to test whether the main effects differ among the three countries. The results of these analyses are presented in Table 2.4. Results showed a significant negative interaction between nonstandard work and living in the Netherlands regarding the use of formal childcare compared to Finland ( $OR = 0.26, p = .081$ ). The negative coefficient indicates that the negative association between nonstandard work and formal childcare use is stronger when parents are from the Netherlands. This corresponds with Hypothesis 3b; we expected the effect of nonstandard work to be more negative in the Netherlands, compared to Finland, due to the limited availability of around-the-clock childcare and the fact that formal childcare is less accepted in the Netherlands. No significant interaction was found for the UK, indicating that we did not find support for Hypotheses 3a and 3c.

Second, results showed a significant negative interaction between working hours and living in the Netherlands compared to Finland ( $OR = 0.85, p < .001$ ) and living in the UK compared to Finland ( $OR = 0.93, p = .090$ ) concerning the use of formal childcare. This finding corresponds with Hypothesis 3d. The negative coefficients indicate that the positive association between working hours and the use of formal childcare was weaker both in the Netherlands and in the UK, compared with Finland. For example, in Finland the increase in the odds of using formal childcare between a parent who works 20 and 50 hours per week was 0.79, while the same difference in working hours resulted in a decrease of 0.14 in the odds of using formal care in the Netherlands. We found a similar effect concerning the likelihood of using a combination of formal and informal childcare ( $OR = 0.92, p = .043$ ) for Dutch parents. This result is partly in line with Hypothesis 3e, as we did not find a similar effect for the UK, and is possibly related to the restrictive cultural norms about nonparental care in the Netherlands.

Third, we found a significant negative interaction between changes in work schedule and living in the UK compared to Finland, for the use of informal childcare ( $OR = 0.06, p = .049$ ). This indicates that the negative association between having a regularly changing work schedule and informal childcare use is stronger in the UK. This is in contrast to Hypothesis 3f, as we expected a positive association between changes in parents' work schedule and the use of informal childcare.

### 2.5.3 Explanatory analyses: Variability and time spent in childcare

We continued the analyses for the variability and the time spent in formal and informal childcare, using the same variables for predicting the type of childcare. However, results (not shown) indicated that the explained variance of these models was very low: 4 per cent (formal) and 3 per cent (informal) for variability and 6 per cent (formal) and 2 per cent (informal) for time in childcare. Regarding variability, only one effect reached significance, showing that there was more variability in British informal childcare compared with Finland ( $B = 0.05, SE B = 0.03, \eta^2 = .008, p = .046$ ) which is in line with Hypothesis 2d. Although this difference is statistically significant, the effect is so small that it becomes negligible. For time spent in childcare, only marginally significant results were found, which were again small in size. It would therefore appear that variability and time spent in childcare are not associated with the work variables in our data. For this reason, no support was found for Hypotheses 1b, 1c, 2b, 2e and 2g.

**Table 2.4** Summary of multinomial logistic regression analyses for variables that predict the type of childcare used, including interaction terms between parental work and country (reference = parental childcare;  $N = 937$ )

Variables	Formal childcare ( $n = 539$ )			Informal childcare ( $n = 112$ )			Combination formal/informal ( $n = 132$ )		
	<i>B</i> ( <i>SE</i> )	OR	95% CI	<i>B</i> ( <i>SE</i> )	OR	95% CI	<i>B</i> ( <i>SE</i> )	OR	95% CI
<i>Model 1<sup>a</sup></i>									
Intercept	2.18 (2.25)			-3.10 (3.97)			2.60 (2.74)		
Work schedule (0 = standard/1 = nonstandard)	-0.81 (0.67)**	0.16	[0.04, 0.60]	-0.35 (1.27)	0.70	[0.06, 8.39]	-1.25 (0.82)	0.29	[0.06, 1.44]
Country (reference = Finland)									
NL	-0.62 (0.71)*	0.20	[0.05, 0.80]	0.92 (1.27)	2.52	[0.21, 3.08]	-0.18 (0.88)	0.84	[0.15, 4.65]
UK	-0.59 (0.80)	0.55	[0.12, 2.64]	1.86 (1.30)	6.43	[0.50, 8.10]	0.09 (0.95)	1.10	[0.17, 7.02]
Work schedule * NL	-1.07 (0.78)†	0.26	[0.06, 1.19]	0.50 (1.41)	1.65	[0.10, 6.03]	-0.66 (0.96)	0.52	[0.08, 3.41]
Work schedule * UK	-0.11 (0.96)	0.90	[0.14, 5.86]	0.76 (1.50)	2.13	[0.11, 4.02]	-0.64 (1.13)	0.53	[0.06, 4.85]
<i>Model 2<sup>b</sup></i>									
Intercept	-2.31 (0.16)			-2.63 (2.10)			0.52 (1.16)		
Weekly working hours	0.12 (0.03)***	1.12	[1.06, 1.19]	0.05 (0.05)	1.05	[0.95, 1.16]	0.01 (0.03)	1.01	[0.96, 1.06]
Country (reference = Finland)									
NL	-0.54 (0.43)	0.58	[0.25, 1.36]	0.64 (0.68)	1.89	[0.50, 7.18]	0.43 (0.51)	1.53	[0.56, 4.19]
UK	-0.41 (0.46)	0.66	[0.27, 1.61]	1.22 (0.65)†	3.39	[0.95, 12.13]	0.33 (0.56)	1.39	[0.47, 4.13]
Working hours * NL	-0.16 (0.04)***	0.85	[0.79, 0.92]	-0.10 (0.06)	0.91	[0.81, 1.02]	-0.08 (0.04)*	0.92	[0.86, 1.00]
Working hours * UK	-0.07 (0.04)†	0.93	[0.86, 1.01]	-0.04 (0.06)	0.97	[0.85, 1.09]	0.02 (0.04)	1.02	[0.93, 1.11]
<i>Model 3<sup>c</sup></i>									
Intercept	1.97 (1.70)			3.39 (3.09)			2.43 (2.10)		
Regular changes in work schedule (0 = no/1 = yes)	-0.04 (0.45)	0.97	[0.40, 2.31]	-1.08 (1.15)	0.34	[0.04, 3.23]	0.27 (0.60)	1.31	[0.41, 4.24]
Country (reference = Finland)									
NL	-1.12 (0.44)**	0.33	[0.14, 0.77]	-0.03 (0.68)	0.97	[0.26, 3.67]	0.27 (0.57)	1.31	[0.43, 3.99]
UK	-0.64 (0.50)	0.53	[0.20, 1.40]	0.59 (0.72)	1.81	[0.44, 7.43]	0.06 (0.64)	1.06	[0.31, 3.68]
Changes * NL	-0.21 (0.75)	0.81	[0.19, 3.51]	-1.42 (1.41)	0.24	[0.02, 3.87]	0.17 (0.94)	1.19	[0.19, 7.41]
Changes * UK	-1.23 (0.86)	0.29	[0.05, 1.58]	-2.78 (1.42)*	0.06	[0.00, 0.99]	-1.53 (1.01)	0.22	[0.03, 1.56]

*Note.* This table presents results of the effects of interaction terms between work characteristics and country dummies on the type of childcare used by parents. In addition to the variables presented in the table, the same set of independent and control variables was entered as in Table 2.3. OR = odds ratio; CI = confidence interval. <sup>a</sup>Nagelkerke  $R^2 = .19$ . <sup>b</sup>Nagelkerke  $R^2 = .23$ . <sup>c</sup> $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ . <sup>d</sup> $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

## 2.6 Discussion

The focus of this study was to examine the association between parental work schedules and nonparental childcare arrangements among dual-earner families in Finland, the Netherlands and the United Kingdom. We looked into within and between country differences, and were particularly interested in the association between nonstandard working hours and childcare arrangements. The study analysed three countries that differ quite distinctively on their provision and organisation of childcare services, especially concerning services outside office hours. By comparing these countries, we aimed to disentangle how the associations between parental work and childcare differ depending on the country context.

Just as expected, given the universal nature of Finnish formal childcare policy, as well as the fact that Finnish parents pay the lowest proportion of formal childcare costs, Finnish parents in our study relied more on formal childcare than British and Dutch parents. Finnish children also spent the most hours in childcare, though the difference was not as substantial as assumed based on the full-time working culture in Finland. Yet, our data referred to one 24 hour period, and therefore did not allow for a comparison on a weekly or monthly basis, which may have decreased the differences between countries. On average, Finnish children spent about 30 minutes more in formal daycare compared with British and Dutch children. The British parents in our sample had a relatively high reliance on formal childcare, indicating that regardless of the issues concerning affordability and availability, formal childcare was essential for many British parents. The finding that British parents with regularly changing work schedules were less likely to use informal childcare, compared to Finnish parents, was unforeseen. This may be explained by the lower reliance of Finnish parents on informal childcare, which may weaken the association between changing work schedules and informal care in Finland. Lastly, across countries we found that working a nonstandard schedule reduced parents' use of a combination of formal and informal childcare. Even though this finding was only marginally significant, it is possible that the lack of formal childcare outside office hours makes it harder for parents who work during nonstandard hours to use a combination of formal and informal childcare.

The 'Families 24/7' survey was conducted with the aim of getting detailed information on parents who work during nonstandard hours. For the purposes of our research project, it was necessary to collect information on parental working hours and on where and how children under the age of 13 are being cared for. It was not possible to get this information from any existing datasets. There are some limitations with our data that should be considered when thinking of the implications of this study. These are related to the recruitment of the sample and the use of a web survey. First, the sample used in our study was not randomly selected. In cross-national web surveys, the sample selection strategies are of special interest because the aim is to get data as comparable as possible. To ensure this, we made our recruitment strategies as similar as possible. The three countries, however, differed in one central way. Because only Finland systematically provides formal childcare outside office hours, it was easiest to recruit Finnish parents who work during nonstandard hours, who are, therefore, overrepresented in our dataset (Presser et al., 2008). Second, the challenge with the web survey we used is that we were not able to evaluate the response rate. Response rates are of critical interest in survey studies, because the greater the response the more likely it is that the study will accurately estimate the parameters of

the population sampled (Dillman, Eltinge, Groves, & Little, 2002). Web surveys usually have a lower response rate than traditional mail surveys (Fan & Yan, 2010). Accordingly, there is a risk of nonresponse bias, that is, those who respond may differ from non-respondents in a systematic way. In our study, however, we used several tactics to be able to control the sample and response rate: the web survey was administered to a special target group via childcare centres, work places and unions. To increase our knowledge about the respondents, we asked them where they had heard about the study and included this information as a control variable in our analyses.

On the basis of our findings, we would like to underline three issues as main implications for policymakers and future research. The first one is related to the availability of formal childcare outside office hours. The fact that nonstandard work schedules were related to a lower likelihood to use formal childcare can be explained in two ways. It is possible that parents use their working hours to maximise parental care (Presser, 2003), by reducing the overlap in their working hours. However, additional analyses (not shown) revealed no increase in parental care for parents working nonstandard hours. Therefore, it is likely that the supply of childcare at atypical hours is insufficient. Although informal childcare can, for example, support building a positive intergenerational relationship between a grand-child and grand-parent, it is also associated with a risk if the child misses out on early childhood education, which has been found to be beneficial to child development (Dowsett, Huston, Imes, & Gennetian, 2008). Aiming to reduce parents' difficulties in finding appropriate childcare, the governments in these countries should seek possibilities in organising high-quality formal childcare outside office hours. There is, however, also a lack of information on the availability and quality of childcare services outside of the usual office hours, as well as on the effects of day-and-night care on children's well-being. Moreover, it seems that we still lack in-depth information on the cultural norms concerning childcare and the appropriate length and timing of childcare. It is clear that, besides cost and availability, cultural norms affect parental decisions on childcare. For example, Dutch parents are not doubtful about the use of formal childcare per se, but they do believe that spending several days in formal childcare is not beneficial for children (Merens et al., 2012). Therefore, future research should try to incorporate these norms when examining childcare.

A second issue we wish to underline is that work schedules have important implications for the degree of variability in childcare arrangements. Our data showed that British children in particular experienced a low continuity of care. We expected that this was because British parents have trouble finding childcare outside of office hours, but British parents who work during nonstandard hours did not report lower formal childcare use compared to Finnish parents. The low continuity in care possibly entails that parents have to combine multiple care arrangements, making the organisation of childcare and the family's daily life a more complex and stressful endeavour for these parents. In such situations, it is difficult for parents to ensure a coherent chain of care for their children (Andenaes, 2011). In addition, the high variability also renders these arrangements at greater risk of disruption, for example, if a carer falls ill. Because multiple care arrangements are associated with children's problem behaviour (Morrissey, 2009), we encourage future studies to examine this variability in care arrangements more closely. One suggestion for future research concerning variability is to differentiate more within nonstandard work schedules. It is likely that specifically those parents who have an irregular work schedule or work via on-call scheduling use more complex childcare arrangements.

Third, because our study points to the importance of work characteristics in arranging childcare, we believe future research should pay more attention to work-family policies in studying childcare arrangements. Arranging childcare is not only a question of meeting the preferences and needs of families, but also about what is possible when combining family and work. For example, if parents can adjust their working hours, or are allowed to work from home, their childcare needs may change. Therefore, future research is needed to examine how such policies affect parents' use of nonparental childcare. Because work-family policies are likely to differ among countries, a cross-national perspective is desirable.





# Chapter 3

## A couple-level approach to arranging childcare in dual-earner families<sup>1</sup>

### **Abstract**

Various aspects of parental work schedules affect the opportunities and constraints that parents encounter when arranging care for their children. This study examined the extent to which the combination of couples' work schedules was associated with their use of different types of childcare, focusing on parental, formal and informal childcare. We considered multiple dimensions of couples' work schedules, namely, the timing of work, schedule flexibility and home-based telework. Data from a recent Dutch survey were used, including information about 1,599 dual-earner couples with children aged 0–6 years. The results indicated that paid work during nonstandard hours increased the amount of parental childcare that was provided by one parent while the other parent was working, whereas work during evenings, nights and weekends decreased the likelihood of using both formal and informal childcare. Results further revealed gender differences for nonstandard hours and schedule flexibility. We found stronger effects of mothers' work schedules, indicating that a gender-neutral approach to parental work is not justified. We provide recommendations for future research, specifically regarding the possible consequences for parental well-being.

<sup>1</sup>A slightly different version is published as: Verhoef, M., Roeters, A., & Van der Lippe, T. (2016). Couples' work schedules and child-care use in the Netherlands. *Journal of Child and Family Studies*, 25, 1119-1130. Verhoef wrote the main part of the manuscript and conducted the analyses. Roeters and Van der Lippe substantially contributed to the manuscript. The authors jointly developed the idea and design of the study. An earlier version of this chapter was presented at the Day of Sociology (Antwerp, Belgium, 2014).



### 3.1 Introduction

Childcare arrangements are a key factor within working families' daily lives. In many families, parents outsource part of their childcare to formal and informal caregivers. Childcare arrangements matter because they are central to parents' everyday life. On the one hand, they can facilitate the combination of paid work and family life, an issue with which parents nowadays often struggle (Duncan & Pettigrew, 2012). On the other hand, the coordination of childcare can be quite complex in itself (Sandstrom & Chaudry, 2012). Childcare arrangements are also associated with differences in child well-being (e.g., Bradley & Vandell, 2007). Prior research has demonstrated that the extent to which parents outsource, and to whom they outsource, depends on characteristics of the parents, such as their work schedules, as well as on the characteristics of the available care, such as the availability and the accessibility (Kim & Fram, 2009; Kimmel & Powell, 2006; Verhoef, Roeters, & Van der Lippe, 2016; for a review, see Liu, 2015).

Although previous studies considered the demand and supply arguments to be separate explanations, these arguments can also be considered in conjunction. Namely, parents' childcare arrangements depend on what is possible within the constraints of their work schedules. Some parents' needs may not align with the availability and accessibility of childcare. This risk is likely to be highest for parents who work outside of office hours: these parents need to arrange care for their children during evenings, nights and weekends when most formal childcare is unavailable. At the same time, these parents may be better able to coordinate their working hours with those of their partner and the availability of their children, because of the low overlap in the working hours of parents who work outside of office hours. These alternatives present scholars with an interesting puzzle concerning parents' work and their use of different types of childcare. Even though parents consider different types of childcare simultaneously (Leslie, Ettenson, & Cumsille, 2000), prior research on parental work schedules and childcare tended to focus on the impact on parent-child time and neglected nonparental childcare, with a few notable exceptions (Han, 2004; Presser, 2003). Nonparental childcare can be categorised into formal childcare, provided by professionals (Zinsser, 2001), and informal childcare, provided by relatives or friends (Duncan, Edwards, Reynolds, & Alldred, 2004).

Comparable to many other Western countries, various types of formal childcare are available in the Netherlands. Parents can choose from daycare for preschoolers, out-of-school care for school-aged children and care provided by childminders for children of all ages (Dutch Government, 2014). Formal childcare is partially subsidised by the government depending on parents' income. In 2013, parents' share of childcare costs was, on average, 37 per cent (Statistics Netherlands, 2014). The price for one hour of care varied from €5.44 to €6.57, depending on the type of care (Dutch Ministry of Social Affairs and Employment, 2014). A large proportion of Dutch parents use formal childcare, but this is often for only a limited amount of hours (Plantenga & Remery, 2009). Many Dutch parents also use informal childcare to cover their working hours. Informal childcare in the Netherlands covers a broad range of care, including care provided by au pairs or in playgroups, but the majority of informal care is provided by relatives and friends (Plantenga & Remery, 2009). In the Netherlands, parental childcare, defined here as care that is provided by one parent of the child while the other parent is at work, is mainly provided by mothers. Recent figures show that Dutch mothers spend, on average, three times as

many hours on childcare compared with Dutch fathers (Merens, Hartgens, & Van den Brakel, 2012). Although the Netherlands is known for its high part-time employment rates (EU Labour Force Survey, 2013), the Netherlands also has a high percentage of dual-earner couples (OECD Family Database, 2012), indicating a need for childcare. Furthermore, up to 30 per cent of Dutch parents work nonstandard schedules, which places the Netherlands among the European countries with the highest prevalence of parental nonstandard work (Presser, Gornick, & Parashar, 2008). Thus, a significant proportion of Dutch parents has to arrange childcare outside of standard service hours. This indicates that it is relevant to examine the link between parental work and childcare arrangements among Dutch parents.

Because the need for childcare depends on the combination of parents' schedules, both partners should be taken into account. For example, the lack of childcare outside office hours is particularly problematic if both parents work nonstandard hours. Although taking a couple-level approach is increasingly common in time use research that explains parental childcare (e.g., Lesnard, 2008; Roeters, Van der Lippe, & Kluwer, 2009), it is surprisingly uncommon in the literature on nonparental childcare. Although previous studies have provided valuable insights into how different types of nonstandard work schedules are related to childcare, their focus has primarily been on mothers (Han, 2004; Presser, 2003). However, Gareis, Barnett and Brennan (2003) demonstrate that parents are affected not only by the timing of their own work, but also by that of their partner. This points to the importance of taking a couple-level approach.

The timing of work is only one dimension of work schedules. Scholars consider schedule flexibility and the opportunity to work from home as resources that enable parents to improve their combination of work and family demands (e.g., Fleetwood, 2007). These are dimensions of work schedules that, similar to the timing of work, may affect couples' childcare opportunities and constraints because they facilitate the combination of paid work and childcare (Osnowitz, 2005; Tijdens & Dragstra, 2007; Van Wel & Knijn, 2006). The effects of these other dimensions of work schedules have been examined for parental childcare (Carriero, Ghysels, & Van Klaveren, 2009; Täht & Mills, 2012), but they have not yet been examined for formal and informal childcare, although similar mechanisms are applicable. So, when examining parents' childcare arrangements, multiple dimensions of work schedules need to be included, because these create different opportunities and constraints. As a result, parents evaluate parental, formal and informal childcare differently. This study therefore examines the extent to which the timing of work, schedule flexibility and home-based telework of dual-earning parents are associated with their use of formal, informal and parental childcare.

### **3.2 Theoretical considerations and prior research**

Below, we elaborate on how the work schedules of dual earners affect their use of parental, formal and informal childcare. By focusing on the combination of work schedules, we exclude single parents, a group that has been found to encounter childcare related challenges more often than two-parent families (Moilanen, May, Räikkönen, Sevón, & Laakso, 2016). Nevertheless, we are interested in the combination of work schedules and therefore we consider two parent households. Although we recognise that parents consider different types of childcare simultaneously (Leslie et al., 2000), we discuss each type of childcare separately to unravel the

factors that are associated with arranging parental, formal and informal childcare. In our discussion of the previous literature, we consider multiple dimensions of couples' work schedules: the timing of work, schedule flexibility and home-based telework. Each of these dimensions is likely to shape parents' opportunities and constraints when arranging different types of childcare.

### 3.2.1 Parental childcare

The combination of both parents' work schedules, in terms of the timing of work, schedule flexibility and home-based telework, determines the availability and flexibility of parental care. The time that parents spend on certain tasks, such as work, is no longer available for other tasks, such as childcare. Therefore, when discussing the time that couples have available to care for their children, the combination of parents' work schedules needs to be considered as well as the overlap between their work schedules.

Work during standard office hours, compared to other types of work schedules, is positively related to the level of overlap in parents' working hours (Lesnard, 2008), which limits the time that parents have available to provide parental care. Multiple scholars argue that parental availability is higher when parents work nonstandard working hours, due to lower overlap in parents' working hours (e.g., Lesnard, 2008; Presser, 2003; Täht & Mills, 2012). These studies, however, do not distinguish between couples with one or two nonstandard work schedules. This is a relevant distinction, because the level of overlap in parents' working hours is likely to be larger when both work nonstandard hours. To illustrate, with two parents working nonstandard hours it is likely that both work during the evenings, whereas in couples in which only one parent works nonstandard hours the other parent is likely to be at home. Barnes, Bryson and Smith (2006) confirm this by showing that there is a substantial degree of overlap in the working hours of two parents who work during nonstandard hours, especially during the weekends. The combination of one standard and one nonstandard work schedule is examined more often (e.g., Hattery, 2001; Wight, Raley, & Bianchi, 2008), with results indicating that there is little overlap in parents' working hours if one parent works weekdays and the other parent works evenings, nights or weekends. This situation gives parents the opportunity to 'split-shift' their parenting duties (Presser, 2003), which allows parents to maximise child supervision (but see Han, 2004, for a slightly different view on this subject). Thus, the level of overlap (and thus the need for nonparental childcare) is likely to be highest when both parents work standard hours, lower when both work nonstandard hours and lowest when one parent works standard and the other parent works nonstandard hours.

Concerning the link between the other dimensions of couples' work schedules and parental childcare, previous research has first shown that schedule flexibility gives employees the opportunity to determine their working times to a certain degree (Anderson, Coffey, & Byerly, 2002). For example, employees are able, within a range, to choose the hours of their working day. Schedule flexibility has been found to reduce work interference with family (Byron, 2005), which indicates that the ability to plan one's own working hours facilitates the combination of work and family. Parents could use this flexibility to make their working hours more compatible with their childcare needs, for example, by reducing the overlap in their work schedules. In this way,

parents have more opportunities to care for their children themselves than do parents who not have schedule flexibility. Second, home-based telework can be associated with parents' coordination of childcare, because this type of work makes it possible to structure the day around children's schedules (Osnowitz, 2005). Home-based telework could therefore increase parents' opportunities to care for their children themselves compared with parents who do not work from home, because parents can work when their children are otherwise occupied (e.g., sleeping). Additionally, home-based telework eliminates parents' commuting time (Peters & Den Dulk, 2003), which leaves more time available for other tasks, such as childcare.

### 3.2.2 Formal childcare

The availability of formal childcare in the Netherlands is mainly restricted to standard service hours (8.00–18.00) on working days only (EACEA, 2009), although childminders offer somewhat more extensive possibilities. The flexibility of formal childcare is also limited, because there is almost no variation possible in dropping-off and picking-up times, particularly at day-care institutions (Cloïn, Schols, Van den Broek, & Koutamanis, 2010). When considering the availability and flexibility of formal childcare, this type of care seems to offer especially good opportunities for dual-earner couples who have standard working hours. This is due to the large degree of overlap between parents' standard working hours and the open hours of formal childcare institutions. For couples in which one parent works nonstandard hours, the same reasoning applies to a certain extent, because the parent who works during standard hours is able to drop off and pick up the children during standard service hours. Yet, because these parents cannot share the formal childcare responsibilities, arranging formal childcare could become problematic. Availability and flexibility certainly form a constraint for couples in which both parents work nonstandard hours, because these couples need childcare outside standard service hours and preferably flexible in nature (Kimmel & Powell, 2006). Hence, formal childcare will be a less logical option for these couples.

With regard to the link between the other dimensions of work schedules and formal childcare, parents with schedule flexibility are able to plan their work around the open hours of formal childcare institutions. Because the open hours of Dutch formal childcare institutions are quite strict (EACEA, 2009), schedule flexibility gives parents the opportunity to match these open hours with their working hours, thereby increasing the likelihood that they will use formal childcare. The same reasoning applies to home-based telework, because working at home makes it possible to structure the working day around the children (Osnowitz, 2005). Therefore, parents who work at home are better able to work around the open hours of childcare institutions and have a higher likelihood of using formal childcare than parents who do not work from home.

### 3.2.3 Informal childcare

Existing literature offers three possible reasons why informal childcare is most likely to be used by parents who work outside office hours. First, in contrast to formal childcare institutions, which often have limited availability outside of office hours, the availability of informal care is not restricted to particular opening hours. Presser (2003) argued that as a result of the wide

availability of informal childcare, parents who work evenings, nights or weekends often rely on informal childcare. Second, parents may feel more comfortable to place their children in informal care overnight (Brown-Lyons, Robertson, & Layzer, 2001). Third, parents perceive informal care as more flexible than formal childcare (Bakker & Karsten, 2013), which is likely to be another advantage of informal childcare that is especially relevant to parents who work irregular hours. Yet, the availability and flexibility of informal childcare can only go so far, because informal caregivers may be otherwise engaged, for example, in work responsibilities (Chaudry, 2004). Nonetheless, this type of care offers good opportunities for parents with nonstandard working hours, particularly when both parents work during evenings, nights or weekends. Due to their working hours, these couples namely need flexible childcare outside of standard service hours (Kimmel & Powell, 2006). The same reasoning applies, to a certain extent, to couples in which one parent works nonstandard hours. But because one parent works during standard hours in these couples, flexibility may be less of an issue. These couples, therefore, rely less heavily on informal childcare than do couples in which both parents work nonstandard hours. The likelihood of using informal childcare for couples with two standard work schedules will be the lowest, because these couples can benefit the most from the opportunities offered by formal childcare services. Still, because previous research has shown that Dutch parents only use formal childcare for a limited amount of hours (Plantenga & Remery, 2009), these parents will still use informal childcare to a certain degree.

Existing literature provides a less clear picture regarding the associations between the other dimensions of work schedules and the use of informal childcare. Informal childcare is perceived as flexible (Bakker & Karsten, 2013) and usually unpaid (Wheelock & Jones, 2002), which makes it an affordable and accessible type of childcare. Therefore, arguments similar to the case of formal childcare are absent, which makes it hard to discuss the likelihood of using informal childcare for parents who have schedule flexibility or work from home.

### 3.2.4 Gender differences in parental work schedules

Previous research has provided several arguments regarding the importance of differentiating between mothers and fathers when examining work schedules of dual-earner couples. According to Bielby (1992), mothers are more motivated than fathers to use work-related resources for the benefit of the family. This difference reflects a distinction in mothers and fathers' sense of responsibility for childcare. In addition, mothers have greater responsibility for managing family time, compared to fathers (Craig & Powell, 2011). Several time use studies confirmed this idea by showing that, among dual-earner couples, mothers' work schedules are more strongly related to parent-child time, compared to fathers' work schedules (Lesnard, 2008; Roeters, Van der Lippe, & Kluwer, 2010). Therefore, it is likely that mothers' work schedules have a stronger association with childcare arrangements than fathers' work schedules do.

## 3.3 Research focus

The current study aims to create more insight into the association between couples' work schedules and their childcare arrangements among Dutch parents. We build on earlier research by

taking a couple-level perspective and examining gender differences. We hypothesize on the amount of parental childcare parents provide and about parents' likelihood to use formal and informal childcare. In our hypotheses, we compare different schedule combinations, focusing on the timing of work, schedule flexibility and home-based telework.

We expect the highest amount of provided parental childcare among couples in which one parent works nonstandard hours, lower if both parents work nonstandard hours, and lowest if both parents work standard hours (Hypothesis 1). Furthermore, we expect that the amount of provided parental childcare will be higher among couples in which one parent (a) has schedule flexibility or (b) works from home compared to couples in which both parents have no schedule flexibility, and do not work from home (Hypothesis 2). The likelihood of using formal childcare is expected to be highest among couples in which both parents work standard hours, lower if one parent works nonstandard hours, and lowest if both parents work nonstandard hours (Hypothesis 3). Moreover, couples are expected to have a higher likelihood of using formal childcare if one parent (a) has schedule flexibility or (b) works from home than if both parents have no schedule flexibility, and do not work from home (Hypothesis 4). Lastly, we hypothesize that the likelihood of using informal childcare will be highest among couples in which both parents work nonstandard hours, lower if one parent works nonstandard hours, and lowest if both parents work standard hours (Hypothesis 5).

For Hypotheses 2 and 4, we expect the associations to be stronger if both parents have schedule flexibility or work from home. We differentiate between mothers and fathers, because the associations between parental work and childcare are expected to be more pronounced for mothers.

### **3.4 Data, operationalisation and methods**

#### **3.4.1 Data**

For this chapter, we analysed data from the 2013 'Krimp in Kinderopvang' (KiK) study on childcare use in the Netherlands (Netherlands Institute for Social Research & Statistics Netherlands, 2013). This is a rich dataset containing recent information about how Dutch parents arrange care for their children. Parents were randomly selected based on the characteristics of their children by using information from the Dutch Municipal Personal Records Database and the Dutch Tax Administration (Portegijs, Cloin, & Merens, 2014). Two groups of parents were approached. The first group consisted of 81,617 parents who had their first child in 2012, of whom 2500 parents were randomly selected to participate in the survey. The second group consisted of 83,335 parents whose first child started primary school in 2012, of whom another 2500 randomly selected parents were invited to participate.

A paper-and-pencil questionnaire was attached to the letter of invitation along with a link to the digital questionnaire, which enabled parents to choose the most convenient way to respond to the survey. One parent per family responded to the survey, with the majority (91.32%) being female. Parents were instructed to answer all of the child-related questions with information about either their child who was born in 2012 or their child who started primary school in 2012 (i.e., the target child). Each respondent also provided information about his or her



partner, such as information on the partner's background, childcare provision and work schedule. Data collection took place between September and November 2013. The response rate of the survey was 43.56 per cent, which is comparable to that of other family surveys in the Netherlands (e.g., Dykstra et al., 2005). In the Netherlands, response rates are often lower than in other countries (De Leeuw & De Heer, 2001).

The total sample consisted of 2,178 parents with children aged six or younger. Because the focus of this chapter is on dual earners, 116 parents were excluded for not having a partner. Another 384 parents were excluded because they reported that either they ( $n = 248$ ) or their partner ( $n = 92$ ) did not have a job. Because most of the variables that are included in the analyses have a few missing values (ranging from 0.06 to 2.93%), another 123 parents were excluded due to listwise deletion. The final sample consists of 1,599 dual-earner couples. In 1,473 (92.12%) of the cases, the mother responded to the questionnaire. A comparison of the characteristics of the sample with the general Dutch population with children showed that our sample is higher educated and has a higher household income (Statistics Netherlands, 2012a; 2012b). The majority of the mothers (54.35%) and 46.03 per cent of the fathers finished at least post-secondary education. The average yearly household income was €89,384 ( $SD = 43,367$ ) before taxes.

### 3.4.2 Measures

*Childcare use.* The amount of parental childcare that couples provide was measured by asking whether the respondent or their partner was at home during workdays to care for their child while the other parent was at work. Respondents could either reply no or yes, after which they were asked for how many days a week. This information was used to calculate the amount of days that parents were at home to care for their child while their partner was at work, which represents the amount of provided parental childcare.

Formal and informal childcare use was assessed by asking whether the target child was regularly (at least half a day on a weekly basis) cared for by someone other than the respondent or their partner while they were at work. If so, the next question asked about who cared for the child, for which the respondents could choose daycare, out-of-school care, childminder and relatives, friends, or acquaintances. From these questions, two binary variables were computed: formal childcare for those whose child was cared for in daycare, out-of-school care, or by a childminder (0 = *no*, 1 = *yes*), and informal childcare for those whose child was cared for by relatives, friends, or acquaintances (0 = *no*, 1 = *yes*). Please note that these binary variables are not mutually exclusive; it is possible that couples reported using both formal and informal childcare.

*Timing of work.* Respondents were asked about the timing of their work in the following way: 'Do your official working hours always take place on weekdays between 7 a.m. and 6 p.m.?' Respondents could reply yes, or they could reply no, which would mean that they (also) worked outside office hours or during the weekend. Respondents were also asked about the timing of their partner's work, using the same question. The combination of couples' responses was divided into three categories, for which dummy variables were created (0 = *no*, 1 = *yes*): both

parents work a standard schedule; one parent works a standard schedule and the other parent works a nonstandard schedule; both parents work a nonstandard schedule.

*Schedule flexibility.* Schedule flexibility was measured by asking whether respondents were able to adjust their working hours to their childcare needs by, for example, starting later or finishing earlier. Respondents also provided information on the schedule flexibility of their partner. The answer categories varied from 1 (*Yes, I do this often, on average once a week*) to 4 (*No*). Three dummy variables were created that indicated whether none, one, or both parents within a dual-earner couple actively used schedule flexibility (0 = *no*, 1 = *yes*). Actively using schedule flexibility implied that parents adjusted their working hours at least once a month.

*Home-based telework.* To measure home-based telework, respondents were asked whether they or their partner were able to work from home. Answer categories varied from 1 (*Yes, I do this often, on average once a week*) to 4 (*No*). Again, three dummy variables were created that indicated whether none, one, or both parents actively worked from home (0 = *no*, 1 = *yes*). Actively working from home implied that parents did this at least once a month.

*Control variables.* We controlled for the couples' mean educational level (0 = *secondary education or lower*, 1 = *post-secondary education or higher*), the family's yearly household income, the age of the target child and the number of children in the household. Parents' likelihood of using formal childcare is expected to be higher if parents are more highly educated (Early & Burchinal, 2001) or have a higher income (Ehrle, Tout, & Adams, 2001). Furthermore, the likelihood of using any form of childcare is expected to be lower if children are older (Casper & Smith, 2004), whereas parents are expected to provide more parental childcare if they have more children (OECD Family Database, 2009). We also controlled for working overtime, to avoid accidentally capturing overwork instead of nonstandard work (0 = *no*, 1 = *yes, by at least one of the parents*) and for mothers' and fathers' actual weekly working hours.

### 3.4.3 Analytical strategy

Our analytical strategy consisted of three parts. First, couples' amount of provided parental childcare was analysed using an ordinary least squares (OLS) regression. In this analysis, we included the control variables, the dummy variables that represented couples' timing of work combinations and the dummy variables for schedule flexibility and home-based telework. Second, couples' likelihood of using formal and informal childcare was examined using multivariate logistic regression. This method of analysis entails more precision, compared to two separate logistic regression analyses, because it uses all information about both outcome variables and it takes into account the correlation between dependent variables (Lu & Yang, 2012). For this analysis, the same variables were included as in the examination of parental childcare. Third, additional analyses were performed to examine gender differences in parental work schedules for parental, formal and informal childcare.

## 3.5 Results

### 3.5.1 Descriptive statistics

Descriptive statistics are presented in Table 3.1. Dual-earner couples reported to provide parental childcare for just over 2.5 workdays per week, on average. Regarding nonparental childcare, Table 3.1 shows that the majority of the parents use formal and informal childcare. Almost half of the respondents are part of a dual-earner couple in which both parents work standard hours. Couples in which one of the parents works nonstandard hours are also common; couples with two parents who work during nonstandard hours are quite rare. Table 3.1 further indicates that in just over half of the couples, either one or both of the parents switch their working hours at least once a month. Parents work from home less frequently; less than half of the parents work at home at least once a month. Almost half of the couples reported working overtime on a weekly basis. The number of weekly working hours is indicative of the Dutch one-and-a-half earner model (Mills, Mencarini, Tanturri, & Begall, 2008), with mothers working part-time ( $M = 27.28$ ,  $SD = 8.04$ ) and fathers working full-time ( $M = 38.16$ ,  $SD = 4.79$ ).

**Table 3.1** Descriptive statistics for childcare, work schedules and control variables ( $N = 1,599$ )

Variables	$M$	$SD$	Range
Amount of provided parental childcare (in days per week)	2.62	1.24	0 – 5
Formal childcare use <sup>a</sup>	0.62		0 – 1
Informal childcare use <sup>b</sup>	0.67		0 – 1
Timing of work			
Standard/standard	0.45		0 – 1
Standard/nonstandard	0.40		0 – 1
Nonstandard/nonstandard	0.15		0 – 1
Schedule flexibility			
None of the parents	0.45		0 – 1
One of the parents	0.32		0 – 1
Both of the parents	0.23		0 – 1
Home-based telework			
None of the parents	0.60		0 – 1
One of the parents	0.28		0 – 1
Both of the parents	0.12		0 – 1
Couples' mean education <sup>c</sup>	0.39		0 – 1
Yearly household income (in 10,000 €)	8.94	4.34	0.41 – 44.86
Age of target child	3.08	2.02	0 – 6
Number of children	1.46	0.64	1 – 4
Weekly overtime work <sup>d</sup>	0.46		0 – 1
Actual weekly working hours			
Mothers	27.28	8.04	2 – 60
Fathers	38.16	4.79	10 – 60

Source: KiK'13. Note.  $SD$  is not reported for dichotomous variables. <sup>a</sup>Formal childcare use: 0 = no, 1 = yes. <sup>b</sup>Informal childcare use: 0 = no, 1 = yes. <sup>c</sup>Couples' mean education: 0 = secondary education or lower, 1 = post-secondary education or higher. <sup>d</sup>Weekly overtime work: 0 = no, 1 = yes, by at least one of the parents.

### 3.5.2 Explanatory analyses

The results of the OLS regression analysis for the amount of provided parental childcare are presented in the second column of Table 3.2. The results indicate that couples in which one parent works during nonstandard hours provide more parental childcare than couples in which both parents work a standard work schedule ( $B = 0.46, p < .001$ ). For couples in which both parents work nonstandard hours, the effect was even larger ( $B = 0.94, p < .001$ ). Alternating the reference category showed that couples with two parents who work during nonstandard hours provide significantly more parental childcare than couples in which one parent works nonstandard hours ( $B = 0.47, p < .001$ ). These findings were partially unforeseen because with our first hypothesis we expected that couples in which only one parent worked nonstandard hours would provide the highest levels of parental childcare. Table 3.2 further shows that schedule flexibility was not related to parental childcare, whereas the association with home-based telework was only marginally significant. Couples in which one of the parents works from home provide significantly more parental childcare than couples in which neither parent works from home ( $B = 0.13, p = .063$ ). This effect was somewhat larger for couples in which both parents work from home ( $B = 0.18, p = .075$ ). No significant differences were found between couples in which one or both parents work from home. These results partially confirm Hypothesis 2b, whereas we found no results that were consistent with Hypothesis 2a.

The results of the control variables show that couples provide less parental childcare if they have attained a higher level of education ( $B = -0.26, p < .001$ ) and if they have a higher yearly household income ( $B = -0.04, p < .001$ ). The work-related control variables proved to be of importance as well, because couples provide less parental childcare if they work overtime on a weekly basis ( $B = -0.19, p = .001$ ) and if mothers and fathers work more hours (respectively  $B = -0.05, p < .001$  and  $B = -0.03, p < .001$ ).

The results of the multivariate logistic regression analysis concerning formal and informal childcare are presented in the third and fourth column of Table 3.2. We would like to stress again that although the two types of care are analysed simultaneously, formal and informal childcare represent two separate binary variables that are not mutually exclusive. Concerning the likelihood of using formal childcare, Table 3.2 shows that couples in which one parent works nonstandard hours are significantly less likely to use formal childcare than couples who only work standard hours ( $OR = 0.83, p = .014$ ). This result indicates that so-called split-shift couples have a lower likelihood of using formal childcare compared to standard working couples. More specifically, the predicted probability of split-shift couples using formal childcare is 17 per cent lower than that of standard working couples. This negative association was stronger for couples in which both parents work nonstandard hours ( $OR = 0.71, p = .001$ ). The difference between couples in which one or both parents work nonstandard hours was not significant. These results are partially consistent with Hypothesis 3. No significant effects were found for schedule flexibility or home-based telework for predicting couples' likelihood of using formal childcare, indicating that we found no results that were consistent with Hypotheses 4a or 4b. The effects of the control variables show that couples' likelihood of using formal childcare is higher if they have attained a higher level of education ( $OR = 1.43, p < .001$ ), if they have a higher yearly household income ( $OR = 1.05, p < .001$ ) and if the mother works more hours ( $OR = 1.03, p < .001$ ). On the other

**Table 3.2** Summary of OLS and logistic regression analyses for variables that predict the amount of provided parental childcare and couples' likelihood of using formal and informal childcare (N = 1,599)

Variables	Parental childcare			Formal childcare			Informal childcare		
	B	SE B	$\beta$	B	SE B	OR	B	SE B	OR
Timing of work (ref. = standard/standard)									
Standard/nonstandard	0.46	0.06	.18***	-0.19	0.08	0.83*	-0.16	0.08	0.85*
Nonstandard/nonstandard	0.94	0.08	.27*** <sup>a</sup>	-0.34	0.10	0.71**	-0.24	0.10	0.79*
Schedule flexibility (ref. = none)									
One of the parents	-0.02	0.07	-0.01	-0.00	0.08	1.00	-0.04	0.08	0.96
Both of the parents	-0.01	0.08	-0.00	0.14	0.11	1.16	-0.12	0.10	0.88
Home-based telework (ref. = none)									
One of the parents	0.13	0.07	.05†	-0.11	0.09	0.90	0.06	0.09	1.06
Both of the parents	0.18	0.10	.05†	-0.18	0.13	0.83	-0.06	0.12	0.94
Couples' mean education <sup>b</sup>	-0.26	0.07	-0.10***	0.36	0.08	1.43***	-0.20	0.08	0.82*
Yearly household income (in 10,000 €)	-0.04	0.01	-0.12***	0.05	0.01	1.05***	-0.01	0.01	0.99
Age of target child	-0.02	0.02	-0.02	-0.05	0.02	0.95*	-0.15	0.02	0.86***
Number of children	0.06	0.06	.03	-0.02	0.07	0.98	0.15	0.07	1.16†
Weekly overtime work <sup>c</sup>	-0.19	0.06	-0.08**	0.08	0.08	1.08	0.07	0.07	1.07
Actual weekly working hours									
Mothers	-0.05	0.00	-0.32***	0.03	0.00	1.03***	0.00	0.00	1.00
Fathers	-0.03	0.01	-0.12***	0.01	0.01	1.01	0.00	0.01	1.00
Constant		5.26***			-0.90**			0.89**	
R <sup>2</sup>		.27							
$\chi^2$ (df)						259.82 (26)***			
% used formal childcare					62.16				
% used informal childcare								67.35	

Source: KiK'13. Note. OR = odds ratio. <sup>a</sup>p < .001 (compared to standard/nonstandard). <sup>b</sup>Couples' mean education: 0 = secondary education or lower, 1 = post-secondary education or higher. <sup>c</sup>Weekly overtime work: 0 = no, 1 = yes, by at least one of the parents. † p < .10. \* p < .05. \*\* p < .01. \*\*\* p < .001.



hand, having an older target child decreased the likelihood of using formal childcare ( $OR = 0.95$ ,  $p = .042$ ).

Finally, the fourth column of Table 3.2 presents the results concerning the likelihood of using informal childcare. The results indicate that couples in which one ( $OR = 0.85$ ,  $p = .042$ ) or both parents ( $OR = 0.79$ ,  $p = .021$ ) work nonstandard hours are significantly less likely to use informal childcare than couples with two parents who work during standard hours. This negative association was somewhat stronger for couples in which both parents work nonstandard hours. More specifically, the predicted probability of using informal childcare is respectively 15 and 21 per cent lower for split-shift couples and couples who work during nonstandard hours compared to couples who work during standard hours. There was no significant difference between couples in which one or both parents work nonstandard hours. These findings are in contrast with Hypothesis 5 because we expected couples in which both parents work standard hours to have the lowest likelihood of using informal childcare. Neither schedule flexibility nor home-based telework was significantly associated with the likelihood of using informal childcare. The results of the control variables indicate that the likelihood of using informal childcare is lower if couples have attained a higher level of education ( $OR = 0.82$ ,  $p = .016$ ) and if the target child is older ( $OR = 0.86$ ,  $p < .001$ ). Alternatively, having more children increased couples' likelihood of using informal childcare ( $OR = 0.15$ ,  $p = .050$ ).

### 3.5.3 Gender differences

In addition to the gender-neutral analyses, we performed additional analyses (not shown; available upon request) to examine possible gender differences in the effects of parental work schedules. First, concerning the amount of provided parental childcare, we found that couples in which only the mother works nonstandard hours provide significantly more parental childcare than couples in which only the father works nonstandard hours ( $B = 0.22$ ,  $p = .014$ ), which is consistent with our gender-specific expectations. Regarding schedule flexibility and home-based telework, we found no significant gender differences in the amount of provided parental childcare. This finding is in contrast with our gender-specific expectations because we expected mothers' working conditions to have a stronger association with parental childcare than those of fathers. Second, regarding the likelihood of using formal childcare, we found no gender differences. Third, the likelihood of using informal childcare was lower for couples in which only the mother had schedule flexibility than for couples in which this was only the case for fathers ( $OR = 0.80$ ,  $p = .077$ ). No further gender differences were found.

## 3.6 Discussion

This study aimed to provide more insight into how working parents arrange care for their children, by examining associations between couples' work schedules and childcare arrangements among dual-earner couples in the Netherlands. We improved upon prior research by employing a couple-level perspective and by considering both parental and nonparental childcare. We also tested whether the associations between parental work and childcare arrangements differed between mothers and fathers.

Previous research on the timing of parental work and childcare has mainly focused on the care that parents themselves provide (Carriero et al., 2009; Täht & Mills, 2012). We extended this line of research by considering nonparental care. For this type of care, the timing of parental work plays a central role as well; we found that working nonstandard hours decreased the likelihood of using both formal and informal childcare. Because the use of both types of nonparental childcare decreased, couples who work during nonstandard hours seem not less likely to use formal childcare due to a lack of availability (Kim & Fram, 2009). If this were true, the results would have shown an increase in the likelihood of using informal childcare. Contrary to previous studies (Han, 2004; Presser, 2003), which found that couples who work during evenings, nights or weekends relied heavily on informal childcare, we found that nonstandard work made couples less likely to use this care. This divergent finding may be due to our sample, which included many families with only one child, whereas Thomese and Liefbroer (2013) showed that the involvement of Dutch grandparents is higher if parents have more than one child. The specific context of the Dutch labour market, with the high prevalence of part-time work (EU Labour Force Survey, 2013), may also have resulted in different findings compared with previous studies. Even though we controlled for weekly working hours, the work schedules of Dutch parents are likely to be less restrictive due to the shorter working time.

We also replicated previous research in our examination of the associations between parental work and parental childcare, defined here as care that is provided by one parent while the other parent is at work. Our results show that nonstandard working hours increased the amount of provided parental childcare. Parental childcare was highest among couples in which both parents worked nonstandard hours, which is in contrast to Presser's (2003) notion about split-shift couples. In the Netherlands, however, different labour legislation and regulations exist (Täht & Mills, 2012), which may make Dutch nonstandard work more suitable for dividing care between two parents who work during nonstandard hours. Indeed, previous research has indicated that Dutch parents tend to de-synchronise their working hours, whereas parents from other countries tend to do the opposite (Carriero et al., 2009).

To obtain more insight into couples' childcare opportunities and constraints, we looked beyond the timing of the work and examined schedule flexibility and home-based telework. Our results show that home-based telework increased the amount of care parents provide themselves. This is in line with our expectations; working from home enables parents to better combine work and family demands because this type of work makes it possible to structure the day around children's schedules and provide more childcare (Osnowitz, 2005). This finding implies that it is not sufficient to focus on one dimension of parental work; work schedules should be examined using a broad perspective. In addition, a gender-neutral approach is not justified because our results show that couples in which only the mother worked nonstandard hours provided more parental childcare than couples in which only the father worked nonstandard hours. Additionally, couples in which only the mother has schedule flexibility were less likely to use informal childcare than were couples in which only the father has schedule flexibility.

Our findings are partially consistent with our theoretical framework. We applied an opportunities and constraints framework that incorporated multiple dimensions of parental work that were likely to affect parents' opportunities and constraints when arranging different types of childcare. Although not all dimensions of parental work were linked to childcare, our approach

indicates that if we want to understand parents' childcare arrangements we have to consider when parents work and how they organise their working day. Our results namely indicate that not only nonstandard working hours, but also home-based telework increases parents' opportunities to provide parental childcare. Moreover, the findings of the current study indicate that the opportunities and constraints are gender-specific, given that maternal work schedules offered more opportunities for parental care than paternal work schedules.

Although this study provided more insight into the childcare arrangements of Dutch dual earners, there is still considerable room for improvement. First, the data were self-reported and cross-sectional, which makes it difficult to rule out selection effects. Parents may choose to work a certain schedule because they want to minimise their use of nonparental childcare. Ideally, we would like to study how parents' work schedules change over the life course to ensure that we capture how their work is related to their childcare decisions. Second, our measure of nonstandard work was less detailed than in previous studies. For example, parents who work standard hours with one additional evening every week could, in our study, have been classified as working nonstandard hours, which may have blurred our results. Additionally, our measure of nonstandard work was not able to capture the actual overlap in couples' work schedules, although overlap is an important mechanism. Therefore, a more accurate measure that differentiates between nonstandard hours and days (Presser, 2003) and measures actual overlap (Lesnard, 2008) is desirable. Third, although this chapter focuses on dual-earner couples, the data were only collected from one of the parents within these couples. Although we expect respondents to be quite accurate about their partner's timing of work or working hours, they may be less aware of the schedule flexibility of their partner. A multi-actor approach could provide more insight into possible differences between partners.

In our attempt to deepen the understanding of how parents arrange care for their children, we focused on parental work schedules. We assumed that the level of overlap would be highest for two parents who work during standard hours, lower for two parents who work during nonstandard hours and lowest for split-shift couples. However, we are not aware of any empirical tests of this assumption. Lesnard (2008) takes an important step in this direction, but does not seem to include families in which both partners work during nonstandard hours. So far, a surprisingly limited number of studies examined this group of parents. Future research should therefore focus on measuring the level of overlap in the working hours of couples who work during nonstandard hours and compare this with other schedule combinations. Yet, other micro and macro factors may also affect parents' opportunities and constraints. Previous research has indicated that the supply of formal childcare affects parents' childcare choices (Liu, 2015). Aspects like the proximity or the opening hours of childcare institutions, or the quality of the caregivers, are therefore important factors to consider. Future research could take the supply of childcare into account and study whether parents with nonstandard schedules respond differently to this. Furthermore, parental norms may also be relevant, especially in the Netherlands where parents believe children should not spend too much time in formal childcare (Merens et al., 2012). Future research on the link between parental work and childcare should explore how parental norms affect this decision-making process. Another interesting venue for future research would be to focus on work-family policies. For example, policies on parental leave have been found to affect both parental work and the use of nonparental childcare (Saraceno, 2011).



Scholars may therefore want to examine how work-family policies affect parents' opportunities and constraints when arranging childcare. Lastly, future research could try to disentangle the relationship between childcare arrangements and parental well-being. Couples who provide a significant amount of parental childcare may, for instance, reduce their hours of sleep or their couple time (Wight, Raley, & Bianchi, 2008), which could negatively affect parental well-being. Thus, the decisions that parents make regarding their child's benefit may be harmful to themselves.

In conclusion, our study showed that parental nonstandard work enhances parental childcare, whereas work during evenings, nights and weekends decreases couples' likelihood of using nonparental childcare. Moreover, we showed that home-based telework increases parental childcare. By taking a couple-level approach and distinguishing between mothers and fathers, we showed that gender moderated the effects of work schedules on childcare use. If we consider our results from the perspective of child well-being, which is enhanced by parental care (e.g., Hsin, 2008; Wurtz, 2008), our results suggest that policy makers could capitalise on the positive effects of nonstandard work and home-based telework on parental care. Currently, Dutch interest groups defending the rights of workers mostly focus on the negative consequences of work during evenings, nights and weekends (e.g., "Alles over onregelmatig werk", 2015). Our study, in contrast, suggests that it could be an instrument to maximise parental care and could therefore also be considered as a possible resource. By also considering possible positive consequences for family life, policy makers can introduce a more balanced view towards nonstandard work. Dutch policies regarding home-based telework have recently been adapted, now enabling employees to request the right to work from home ("Thuiswerken wordt wettelijk recht", 2015). However, since employers are still able to deny this request, policy makers need to continue to make sure that home-based telework is actually used. For example, the national and local government could lead by example or inform employees and employers about the benefits. If these two work conditions are enhanced, policy makers may be able to help parents balance the coordination of everyday life and reduce feelings of conflict and time pressure.



# Chapter 4

## Work schedule combinations and mental health: Does using nonparental childcare matter?<sup>1</sup>

### **Abstract**

The increase in the proportion of employees who work during evenings, nights and weekends has led to an expansion of research on how so-called nonstandard work schedules may affect employees. Concerning parental well-being, studies have provided mixed findings. In an attempt to provide more insight into the association between work schedule combinations and parental mental health, this study examined the moderating role of nonparental childcare. Multiple-group structural equation modelling was used to compare the effects of parents' work schedules on mental health for parents who used nonparental childcare and for those who did not, among 574 Dutch dual-earner couples with children aged 0-12 years. Among parents who used nonparental childcare, mental health was better for fathers in split-shift couples, compared with fathers in standard working couples. Yet, both mothers and fathers in split-shift couples reported worse mental health when they did not use nonparental childcare, especially when only the father worked nonstandard hours. This result likely reflects the difficulties parents encounter when they lack the help of third parties, particularly when working nonstandard hours. Results further showed that nonstandard working hours not only affected parents' own mental health, but also that of their partner.

<sup>1</sup>This chapter is co-authored by Anne Roeters and Tanja van der Lippe and is currently under review. Melissa Verhoef is the first author. Verhoef wrote the main part of the manuscript and conducted the analyses. Roeters and Van der Lippe substantially contributed to the manuscript. The authors jointly developed the idea and design of the study. An earlier version of this chapter was presented at the International Association for Time Use Research (IATUR) conference (Turku, Finland, 2014).



## 4.1 Introduction

In recent years, scholars have become increasingly interested in the effects of paid work during evenings, nights and weekends (Bianchi & Milkie, 2010). Although work during so-called nonstandard hours has always existed (Kalleberg, 2000), recently, more sectors have begun to operate outside of traditional office hours (Täht, 2011). Current estimates indicate that in European countries approximately one-third of parents work during these hours (Presser, Gornick, & Parashar, 2008). For these reasons, nonstandard working hours have become a central issue in work-family research.

The current body of research on the consequences of nonstandard working hours on parental well-being has provided mixed findings. On the one hand, a substantial number of studies report health risks of working nonstandard hours, for both physical and mental employee health (Barnett, Gareis, & Brennan, 2008; Jamal, 2004; Press, Fagan, & Bernd, 2006). Nonstandard working hours have also been associated with marital instability (Perry-Jenkins, Goldberg, Pierce, & Sayer, 2007; Presser, 2003), indicating that the negative implications of nonstandard work extend beyond the employee. These negative consequences are often explained by referring to the physiological and social rhythms of society, which are orientated to a nine-to-five weekday schedule (Jamal, 2004). Because nonstandard workers are 'out of sync' with these rhythms (Täht, 2011), they experience more problems. On the other hand, several studies have shown lower levels of psychological distress and higher levels of life satisfaction among employees who work during nonstandard hours (e.g., Liu, Wang, Keesler, & Schneider, 2011). These scholars argue that nonstandard work schedules allow for a more flexible and economical distribution of child-rearing tasks, which enhances parental well-being. The study of Täht and Mills (2012) indeed reported more frequent parent-child interaction among nonstandard workers.

Considering the incidence of nonstandard working hours, we believe that it is crucial to gain more insight into the differential way in which nonstandard working hours affect parental mental health. One possible source for these differences may be the use of nonparental childcare, which many parents use to combine work with the care of their children (Craig & Powell, 2012; De Ruijter, Van der Lippe, & Raub, 2003; Verhoef, Roeters, & Van der Lippe, 2016). This can either be formal care, which is provided by professionals (Zinsser, 2001), or informal care, which is provided by relatives or friends (Duncan, Edwards, Reynolds, & Alldred, 2004). Previous studies have acknowledged the possible implications of parents' own caregiving when examining the link between parental work and mental health (e.g., Hsueh & Yoshikawa, 2007; Milkie, Bianchi, Mattingly, & Robinson, 2002), by explaining for instance that when fathers are less engaged in caregiving than they would like to be, they experience higher levels of stress. Although research has already shown how nonparental childcare may affect parents, for example, by offering support (Thomese & Liefbroer, 2013) or by evoking parental worry (Barnett & Gareis, 2006; Uttal, 2002), studies have not yet considered the role of nonparental childcare in the association between parental work and mental health. In this study, we argue that if parents arrange their childcare in a satisfactory way, the positive aspects of working nonstandard hours become more pronounced, whereas the negative aspects gain more weight if parents encounter problems in arranging nonparental childcare.

Taking into account gender differences in the interplay between work schedules, childcare and parental well-being may also explain some of the mixed findings of prior research, which tended to focus on one parent per family (Barnett et al., 2008; Liu et al., 2011). However, mothers have been shown to identify more with family than with work, compared with fathers (Beets, Schippers, & Te Velde, 2011). The use of nonparental childcare may therefore be more salient for mothers. If parents encounter problems with the care of their children, such problems may therefore be more detrimental to mothers' mental health. On top of that, prior research has indicated that the work schedules of mothers and fathers not only affect themselves, but also their partner (Gareis, Barnett, & Brennan, 2003). Therefore, not only gender differences, but also the interdependency between partners should be taken into account.

Taken together, this study investigates the possibility that the link between combinations of partners' work schedules and their mental health differs depending on how parents arrange care for their children. We contrast two groups of parents: those who use nonparental childcare and those who do not use nonparental childcare. To identify the possible differential impact on the mental health of mothers and fathers, we also examine gender differences. In our examination, we focus on Dutch dual-earner couples with children aged 0 to 12 years.

#### 4.1.1 The Dutch context

The Netherlands is known for its high part-time employment rates, which are reflected in the one-and-a-half earner model in which the man works full-time and the woman part-time (Mills, Mencarini, Tanturri, & Begall, 2008). Yet, in the Netherlands, both the percentage of dual-earner couples (OECD Family Database, 2012) and the prevalence of parental nonstandard work (Presser et al., 2008) are relatively high. This indicates a need for nonparental childcare and illustrates that evening, night and weekend work is an issue many Dutch families are dealing with.

Dutch parents have quite strong norms regarding nonparental childcare, especially formal childcare, which is care provided by professionals (Zinsser, 2001). Many Dutch parents believe that children should not spend several days a week in a childcare institution (Merens & Van den Brakel, 2014). This is reflected in Dutch childcare statistics, which show that although 45 per cent of Dutch parents with children under the age of three use formal childcare, the majority uses care for less than 30 hours per week (Coyette, Fiasse, Johansson, Montaigne, & Strandell, 2015). This pattern holds for children aged three and older, although for this group of children 88 per cent of parents report to use formal childcare. Because of the limited hours in formal childcare, many Dutch families also rely on informal childcare, the majority of which is provided by relatives and friends (Plantenga & Remery, 2009). Almost two out of three Dutch children aged zero to two are enrolled in informal childcare, which is the case for 59 per cent of children aged three years and older, albeit predominantly for less than 30 hours per week (Coyette et al., 2015). Research has also indicated that Dutch parents tend to de-synchronise their working hours, thereby maximising opportunities to provide parental childcare (Carriero, Ghysels, & Van Klaveren, 2009; Täht & Mills, 2012). Hence, there is considerable variation among Dutch dual-earner couples in whether and how they use nonparental childcare.

## 4.2 Theoretical considerations and prior research

To explain the extent to which parents' decision to use or not use nonparental childcare moderates the link between work schedule combinations and parental mental health, we draw upon insights from the conflict approach (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Greenhaus & Beutell, 1985). This approach states that work and family are two conflicting domains. We propose that the risk for conflict is lower if parents use nonparental childcare and higher if parent do not use this care. We do not distinguish between the type of formal care (i.e., formal or informal), because we believe both types of care can be considered as supportive in combining work and family.

Below we reflect on the combination of work and family, and the subsequent consequences for parental mental health, for different types of dual-earner couples. By differentiating between a scenario in which couples (1) use nonparental childcare and (2) do not use nonparental childcare, the relevance of nonparental childcare is outlined. Within each scenario, we compare three types of work schedule combinations. We first focus on couples in which both parents work standard hours, then turn to so-called 'split-shift' couples in which one parent works a standard schedule and the other parent works a nonstandard schedule (Presser, 2003, Täht & Mills, 2012) and end with couples in which both parents work a nonstandard schedule.

### 4.2.1 Couples who use nonparental childcare

In line with notions from the conflict approach, previous research has shown that couples with two standard work schedules have a large degree of overlap in their working hours (Lesnard, 2008), which makes it difficult for them to provide childcare during the day. Hence, these couples strongly rely on nonparental childcare. This reliance may have both negative and positive implications. On the one hand, parents may experience feelings of guilt and work-family conflict, because their working hours constrain their provision of parental childcare (Reynolds & Aletraris, 2007). Also, parents may question the quality of childcare (Barnett & Gareis, 2006; Uttal, 2002). On the other hand, the majority of nonparental childcare is provided during daytime hours (Koslowski, 2009; Plantenga & Remery, 2009), so it will be relatively easy to coordinate nonparental childcare and to find a childcare centre that meets the parents' needs.

Split-shift couples, in which one parent works outside of traditional office hours, differ from their standard working counterparts in their need for and access to nonparental childcare. Because the level of overlap between working hours is significantly lower within split-shift couples, this work schedule combination enables parents to provide more childcare themselves (Presser, 2003; Täht & Mills, 2012). For example, if one parent works during the day and the other works during the evening, parents are able to maximise parental caregiving. However, there is often still some overlap in split-shift couples' working hours, indicating a need for some nonparental childcare (Presser, 2003). Still, these couples can more often see their children, compared to standard working couples, implying higher levels of parental well-being (Buehler & O'Brien, 2011; Eggebeen & Knoester, 2001). This positive effect may be reinforced by their relatively low reliance on nonparental childcare, which will be rather easy to find. Namely, the

overlap in the working hours of split-shift couples is likely to be during the day, for example, when the parent who works during standard hours is finishing his/her working day and the parent who works during nonstandard hours is starting his/her evening shift. Hence, split-shift couples require nonparental childcare during daytime, when there is a sufficient supply of care (Koslowski, 2009; Plantenga & Remery, 2009). The coordination of nonparental childcare will therefore be relatively easy. Also, due to the low reliance of split-shift couples on nonparental childcare, parental concerns about nonparental caregivers will be minimal. The level of conflict between the work and family domains is therefore believed to be lower, and parental mental health better, among split-shift couples than among standard working couples.

Couples in which both parents work nonstandard hours are relatively uncommon (Han, 2004). The limited research on this group of parents indicates that they are able to provide more parental childcare than two parents who work during standard hours (Han, 2004). However, these parents still need nonparental childcare, because they are not likely to match their working hours completely (Barnes, Bryson, & Smith, 2006). For parents who work during nonstandard hours, the implications for mental health are likely to be predominantly negative. First, due to the nature of their working hours, these parents need nonparental childcare outside of office hours and prefer a flexible care arrangement (Kimmel & Powell, 2006), which may be difficult to find (Strazdins, Clements, Korda, Broom, & D'Souza, 2006). Second, parents who work during nonstandard hours may need to combine different care providers to cover their working hours (Han, 2004), which involves complicated coordination. Third, because of the difficulties in arranging nonparental childcare, parental worry about their children's well-being in nonparental childcare is likely to be considerably high. This is especially the case for parents with rotating working hours, who are likely to have less stable childcare arrangements. Thus, the detrimental effects that are predicted by the conflict approach are likely to dominate for couples with two parents who work during nonstandard hours, which is why we predict that these couples have the lowest levels of mental health.

#### **4.2.2 Couples who do not use nonparental childcare**

Some couples do not use nonparental childcare. Possible reasons are that formal childcare is too expensive (Portegijs, Cloin, & Merens, 2014) or that parents want to avoid such an arrangement (Han, 2004). Informal childcare may not always be a solution, because family members are not always available (Rutter & Evans, 2011). We expect the combination of work and family to be especially problematic for these parents, because they must arrange their working hours in such a way to avoid overlap as much as possible. Because of the high level of work and family commitments, parents' risk of role overload increases (Perry-Jenkins et al., 2007). Although these parents may use sibling care or child self-care, this is also not without problems. Sibling care and child self-care have namely been found to negatively affect children (Blau & Currie, 2006; Hsueh & Gennetian, 2011) and may leave parents with negative feelings about their childcare arrangements, relative to a supervised care arrangement (Goyette-Ewing, 2000). When sibling care or child self-care is not an option, for example, because children are too young, the situation becomes even more challenging for parents.



The possible negative consequences of foregoing nonparental childcare are expected to be the lowest among two parents who work during standard hours. This is because the level of conflict between work and family is likely to be limited for these families. The working hours of these couples require them to be away from home when both their children and partner are otherwise engaged, namely, at school and at work (e.g., Bianchi, 2000; Heymann & Earle, 2001). Although this match may not be perfect, because children may have to spend time in sibling care, self-care, or with friends after school, parents who work during standard hours can spend their evenings and weekends together with their families (Verhoef & Roeters, 2015; Zuzanek, 2006), which will benefit their well-being (Buehler & O'Brien, 2011; Eggebeen & Knoester, 2001).

For couples in which one or both parents work nonstandard hours, the possible negative consequences of foregoing nonparental childcare are likely to become more pronounced. This is because work during evenings and weekends cuts directly into the time at which children are available. This issue is particularly pertinent to couples with two nonstandard work schedules, because both parents are at work during the time that children are at home (Bianchi, 2000; Heymann & Earle, 2001). Although this is less of an issue for split-shift couples, these couples risk spending little spousal time. The low level of overlap in their working hours (Lesnard, 2008) implies that partners in split-shift couples are away from home at different moments. Therefore, for both schedule combinations, couples' working hours conflict with their opportunities for family time, which is likely to affect parental well-being negatively (Buehler & O'Brien, 2011; Eggebeen & Knoester, 2001). In other words, couples in which one or both parents work outside of traditional office hours will encounter different obstacles when foregoing nonparental childcare, which can be harmful for their mental health. For these couples, arguments from the conflict approach seem to be more dominant, compared to standard working couples.

Table 4.1 summarises our hypotheses on the interplay between work schedules, childcare and parental mental health for dual-earner couples with different work schedule combinations. In this table, we differentiate between couples who do and couples who do not use nonparental childcare. For the former group, we take into account the varying levels of complexity that parents with different work schedule combinations encounter when arranging childcare. For the latter group, we focus on the degree of difficulty that parents with different work schedule combinations experience when foregoing the use of nonparental childcare.

**Table 4.1** Expected associations between work schedule combinations and parental mental health, separately for couples who do and who do not use nonparental childcare

	Hypothesised association with parental mental health	
	Use of nonparental childcare	No use of nonparental childcare
Two standard work schedules	+	-
One standard and one nonstandard work schedule	++	--
Two nonstandard work schedules	-	--

### 4.2.3 Gender differences

Until this point, our argumentation has been gender neutral, but work-family research has pointed to the existence of gender differences in the extent to which both domains matter for

men and women. Despite the increase in women's labour force participation (Crompton, Lewis, & Lyonette) and men's involvement in the family (Wang & Bianchi, 2009), mothers still tend to identify more with family than with paid work, whereas the opposite is the case for fathers (Beets et al., 2011; Van der Meer, 2014). Because of these known gender differences, we expect that mothers will be more strongly affected by nonparental childcare use.

Childcare is an area that is dominated by mothers (Bianchi & Milkie, 2010), as mothers are often responsible for arranging this (Moon & Hoffman, 2008). This unequal division is also visible in time use research. For instance, the study of Craig (2006) demonstrates that time spent on child-related travel is much higher among mothers than among fathers, indicating that mothers are mainly transporting children to and from nonparental childcare. Mothers' greater responsibility for childcare can work out in different ways: if nonparental childcare can be arranged in a relatively uncomplicated manner, which we expect for split-shift couples and standard working couples, the hypothesised positive association with mental health is likely to be more positive for mothers than for fathers. Yet, hypothesised negative associations, such as in the case of two parents who work during nonstandard hours, are expected to be more negative for mothers than for fathers.

### 4.3 Data, operationalisation and methods

#### 4.3.1 Data

The data for this study were obtained from the nationally representative multi-actor Netherlands Kinship Panel Study (NKPS) (Dykstra et al., 2007). Wave 2 of this study involved obtaining detailed information on respondents' work schedules, childcare use and mental health. Respondents were randomly selected from a sample of individuals in private households and were interviewed face-to-face. Moreover, the respondents and, if applicable, their partners were asked to complete a questionnaire. The data collection occurred between September 2006 and June 2007. The response rate of Wave 2 of the NKPS was 79 per cent. A total of 6,091 main respondents participated in Wave 2.

The focus of this chapter is on dual-earner couples, which led to the exclusion of 3,661 respondents because of lack of employment of either the respondent ( $n = 2,513$ ) or his/her partner ( $n = 1,148$ ). Of this selection, 95.72 per cent of the main respondents and 60.12 per cent of the partners completed the questionnaire, which resulted in information on 1,457 dual-earning couples. Of these couples, 781 reported not having children under 13 living at home and were therefore excluded. We further restricted our sample to heterosexual partnerships, which led to the exclusion of another 11 couples. Finally, we excluded 91 couples who reported that either one or both partners work fewer than 12 hours per week. This method resulted in a final sample of 574 dual-earner couples.

#### 4.3.2 Measures

*Mental health.* Parents' mental health was measured using the five-item version of the Mental Health Inventory (MHI-5; Stewart, Hays, & Ware, 1988). This questionnaire focuses on

respondents' subjective general health during the four weeks prior to the data collection, thereby tapping into depression, anxiety and psychological well-being (e.g., "How often have you felt downhearted and miserable in the past four weeks?"). Answer categories varied from 1 (*All the time*) to 6 (*Never*). Two items were reversely coded to ensure that higher scores would be indicative of better mental health. The Cronbach's alpha was .806 for mothers and .794 for fathers.

*Work schedules.* Respondents were asked to report their actual working hours in the week prior to the data collection, by indicating their starting and finishing times separately for each day of that week. To classify these working hours, the standard majority definition was used (Presser, 2003; Täht & Mills, 2012). Hence, at least half of the hours worked in the week prior to the data collection must fall outside of the timeframe from 08:00 to 16:00 to be classified as nonstandard working hours. Respondents who worked the majority of their working hours between 8 a.m. and 4 p.m. were classified as working a standard schedule. Although we are aware that it is important to distinguish between nonstandard shifts and days (Presser, 2003), the low number of cases within the different types of shifts led us to collapse all shift types into one category of nonstandard work (see for example Mills & Täht, 2010, for a similar approach). This category thus includes persons who worked the majority of their hours during the evenings, nights or weekends.

*Nonparental childcare.* In the interview with the main respondent, four questions on nonparental childcare were included. These questions concerned the use of different types of nonparental childcare in the two weeks prior to the data collection (with "yes" or "no" as answer options). Respondents were asked about childcare by friends, relatives, childcare institutions and childminders. Of these four questions, we created a dummy variable for parents' use of nonparental childcare (0 = *no*, 1 = *yes*). Parents were classified as not using nonparental childcare if they responded "no" to all four questions; if they responded "yes" to one or more questions they were classified as using nonparental childcare.

*Control variables.* We controlled for several standard family characteristics in our analyses, namely the number of children living at home, the age of the youngest child, whether this child is a preschooler (0 = *no*, 1 = *yes*), the couple's highest level of education attained (in years) and whether they live in an urban area (0 = *no*, 1 = *yes*). Parents' probabilities of using nonparental childcare increase if they are better educated (Early & Burchinal, 2001), whereas parents are expected to provide more care themselves if they have more children (OECD Family Database, 2009). Furthermore, preschool children require plenty of sleep, making parent-child interaction more difficult. In addition, mother's and father's working time autonomy was included as control variable, measured on a scale from 1 (*No or barely any autonomy*) to 4 (*I determine my working hours or days myself*), together with parents' actual number of working hours. Having working time autonomy reduces the amount of conflict between work and family, whereas combining these two areas becomes more difficult when parents work more hours (Byron, 2005).

### 4.3.3 Analytical strategy

For analysing the interplay between parents' work schedule combination, childcare use and mental health, structural equation modelling (SEM) proved to be a useful analytical strategy (Kline, 2011). SEM enables us to estimate the effects on both parents' mental health simultaneously in one combined model, using mothers' and fathers' mental health as dependent variables. In addition, SEM makes it possible to include latent constructs in the model. By accounting for measurement errors in the observed variables for parental mental health, we can obtain a more accurate estimation of the hypothesised paths, compared with the results of standard regression analyses.

To test whether the relationship between work schedules and parental mental health differs between couples who do and do not use nonparental childcare, we estimated a multiple-group structural equation model. This method of analysis allows us to examine whether the associations between work schedules and parental mental health are significantly different for couples who do and for couples who do not use nonparental childcare. First, we specified a multiple-group model in which the associations between work schedules and parental mental health were estimated freely across the two groups. Second, we specified a model in which the associations between work schedules and parental mental health were constrained to be equal across the two groups. This implies that the associations between work schedules and parental mental health are assumed to be equal between couples who do and do not use nonparental childcare (i.e., there would be no moderating effect of nonparental childcare). Given that these two models are hierarchical, or nested, the chi-square difference test can be used to test which of these models fits the data better (Kline, 2011), and thus test whether or not nonparental childcare can be considered to be a moderator in the association between work schedules and parental mental health. Should the chi-square difference test favour the first model, moderation would be demonstrated, whereas this is not the case when the test favours the second model.

The fit of the final model was determined by using the  $\chi^2/df$  ratio, the comparative fit index (CFI) and the Root Mean Square Error of Approximation (RMSEA). Models are assumed to fit the data adequately when the  $\chi^2/df$  ratio is lower than 3, CFI is higher than .90 and RMSEA is lower than .08 (Byrne, 2010; Ullman, 2007).

## 4.4 Results

### 4.4.1 Descriptive statistics

Descriptive statistics are presented in Table 4.2. Although mothers' and fathers' levels of mental health are relatively high, these values are comparable to those observed in earlier studies (e.g., Hoeymans, Garssen, Westert, & Verhaak, 2004; Oomens, Geurts, & Scheepers, 2007). Comparing the division of work schedule combinations of our sample with international data reveals that our sample of parents who work nonstandard hours is somewhat elevated (Presser et al., 2008), although our data are comparable with recent data from the Netherlands (Netherlands Institute for Social Research & Statistics Netherlands, 2013). The majority of the couples

reported using nonparental childcare, which is consistent with previous research (Plantenga & Remery, 2009). The descriptive statistics further show that the couples had attained an average of 14.74 years of education ( $SD = 2.20$ ). This indicates that our sample is fairly highly educated relative to the general Dutch population aged 25 to 45, the age at which it is most likely to have children living at home (Statistics Netherlands, 2013). Mothers usually work part-time ( $M = 24.21$ ,  $SD = 7.68$ ), whereas fathers work nearly twice as many hours ( $M = 41.38$ ,  $SD = 8.57$ ), which is indicative of the Dutch one-and-a-half earner model (Mills et al., 2008).

**Table 4.2** Descriptive statistics for parental mental health, work schedules, nonparental childcare and control variables ( $N = 574$ )

Variables	<i>M</i>	<i>SD</i>	Range
Parental mental health			
Mothers	4.87	0.63	2 – 6
Fathers	4.96	0.62	2 – 6
Work schedule combinations			
Standard/standard	0.41		0 – 1
Mother nonstandard/father standard	0.25		0 – 1
Father nonstandard/mother standard	0.19		0 – 1
Nonstandard/nonstandard	0.15		0 – 1
Nonparental childcare use	0.80		0 – 1
Couples' highest level of education	14.74	2.20	8 – 20
Number of children	2.11	0.86	1 – 7
Age of youngest child	5.25	3.78	0 – 12
Youngest child is preschooler	0.39		0 – 1
Living in an urban area	0.68		0 – 1
Working time autonomy			
Mothers	2.29	0.95	1 – 4
Fathers	2.54	1.03	1 – 4
Actual working hours			
Mothers	24.21	7.68	12 – 60
Fathers	41.38	8.57	12 – 80

*Note.* *SD* is not reported for dichotomous variables.

#### 4.4.2 Explanatory analyses

We started our explanatory analyses by computing a chi-square difference test, to test whether the model with the more freely estimated parameters fits the data better than the model in which the associations between work schedules and parental mental health were fixed. The chi-square difference test applied to these nested models yielded a significant chi-square difference value ( $\Delta\chi^2(16) = 40.611$ ,  $p = .001$ ), indicating that the model with the more freely estimated associations fits the data better. This result indicates that the paths for couples who use nonparental childcare and couples who do not use nonparental childcare are significantly different, which is indicative of a moderating effect of nonparental childcare. We therefore proceeded in our examination with a multiple-group model.

In Table 4.3, the results of the multiple-group structural equation model are presented, separately for couples who do and do not use nonparental childcare. The overall model has a chi-

**Table 4.3** Summary of multiple-group SEM analysis for variables that predict parental mental health, separate for couples who use and not use nonparental childcare ( $N = 574$ )

Variables	Use of nonparental childcare ( $n = 457$ )						No use of nonparental childcare ( $n = 117$ )					
	Maternal mental health			Paternal mental health			Maternal mental health			Paternal mental health		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Work schedule combinations												
Standard/standard	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Mother nonstandard/father standard	0.10	0.16	.04	0.25	0.15	.10	-0.17	0.27	-0.07	0.17	0.29	.07
Father nonstandard/mother standard	0.20	0.17	.08	0.43	0.16	.17**	-0.78	0.34	-0.27*	-0.57	0.35	-0.20
Nonstandard/nonstandard	0.20	0.18	.07	0.05	0.17	.02	0.15	0.38	.05	-0.12	0.39	-0.03
Couples' highest level of education	0.04	0.03	.08	0.02	0.03	.05	0.02	0.04	.04	-0.01	0.05	-0.03
Number of children	-0.00	0.06	-.00	0.04	0.06	.03	-0.01	0.11	-.01	-0.09	0.11	-.08
Age of youngest child	-0.02	0.03	-.06	0.06	0.03	.20*	0.03	0.04	.08	-0.04	0.04	-.12
Youngest child is preschooler	-0.18	0.19	-.09	0.27	0.18	.13	-0.15	0.48	-.04	-0.94	0.51	-.25
Living in an urban area	-0.15	0.12	-.07	-0.12	0.11	-.05	0.06	0.21	.03	0.10	0.22	.04
Working time autonomy												
Mothers	-0.11	0.06	-.11*	-0.03	0.05	-.02	0.09	0.10	.08	0.02	0.11	.02
Fathers	-0.04	0.06	-.02	0.09	0.05	.09	-0.07	0.10	-.07	0.08	0.10	.08
Actual working hours												
Mothers	0.01	0.01	.06	0.02	0.01	.12*	0.02	0.01	.16	0.01	0.01	.04
Fathers	0.00	0.01	.02	0.01	0.01	.07	-0.02	0.01	-.12	-0.00	0.01	-.03

*Note.* ref. = reference category. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

square value of 505.043 with 370 degrees of freedom ( $p < .001$ ). A value of 1.37 for the  $\chi^2/df$  ratio, together with a CFI of .950 and a RMSEA of .025, illustrates good model fit. In order to take the interdependency between parents into account, the variables for maternal and paternal mental health were allowed to co-vary in this model. Among couples that use nonparental childcare, this correlation had a value of .230, among couples that do not use nonparental childcare this value was .227.

*Couples who use nonparental childcare.* The results in the left half of Table 4.3 reveal that work schedule combinations are positively associated with paternal mental health among couples who use nonparental childcare. Compared with couples with two parents who work during standard hours, fathers in split-shift couples in which the father works during nonstandard hours report higher levels of mental health ( $p = .007$ ). Alternating the reference category to split-shift couples in which the father works nonstandard hours further revealed significantly worse paternal mental health among couples in which both parents work nonstandard hours ( $B = -0.39$ ,  $SE B = 0.20$ ,  $\beta = -.14$ ,  $p = .049$ ). The control variables yielded few significant effects on parental mental health. For fathers, we found better mental health among those whose youngest child was older and those whose spouse worked more hours. For mothers, we found worse mental health with higher levels of working time autonomy.

These results indicate that, among couples who use nonparental childcare, nonstandard working hours can indeed be beneficial for mental health, but only for split-shift couples in which the father works nonstandard hours, which is partly consistent with our expectations. No significant effects were found for maternal mental health.

*Couples who do not use nonparental childcare.* The right half of Table 4.3 presents the results for couples who do not use nonparental childcare. Compared to two parents who work during standard hours, mothers in split-shift couples in which the father works nonstandard hours report worse mental health ( $p = .021$ ). Changing the reference category revealed that the gender of the parent who works during nonstandard hours is important for parents' mental health. Among split-shift couples in which the mother works nonstandard hours, results showed both better maternal mental health ( $B = 0.65$ ,  $SE B = 0.32$ ,  $\beta = .26$ ,  $p = .042$ ) and paternal mental health ( $B = 0.85$ ,  $SE B = 0.34$ ,  $\beta = .35$ ,  $p = .012$ ), compared to split-shift couples in which the father works nonstandard hours. In addition, better maternal mental health was reported among couples in which both parents work nonstandard hours ( $B = 1.06$ ,  $SE B = 0.38$ ,  $\beta = .29$ ,  $p = .006$ ). None of the effects of control variables reached significance.

These results indicate that, among couples who do not use nonparental childcare, nonstandard working hours are associated with worse maternal mental health, compared with couples consisting of two parents who work during standard hours, which is consistent with our expectations. For this group of parents, maternal nonstandard work was especially relevant, given that better maternal and paternal mental health was found among couples in which only the mother or both parents work nonstandard hours, compared to couples in which only the father works evening, night or weekend shifts.

### 4.4.3 Additional analyses

Some of our argumentation for the couples who use nonparental childcare is grounded in the assumption that the complexity of the coordination of nonparental childcare is important for parents' mental health. We therefore tested whether the number of nonparental childcare providers that parents use affects the association between work schedules and parents' mental health. We performed an additional multiple-group SEM analysis, thereby separating the group that uses nonparental childcare into couples who reported using one provider of childcare ( $n = 213$ ) and those who reported using two or more providers ( $n = 244$ ).

The results of this additional model are comparable to those of the group of parents who use nonparental childcare, although we found significant results only among parents who use only one provider of childcare. Similar to the overall finding, better paternal mental health was found among split-shift couples in which the father works nonstandard hours, compared with standard working couples. Different from the main analyses, worse paternal mental health was found not only among couples in which both parents work nonstandard hours, but also among couples in which only the mother worked nonstandard hours. This difference regarding the gender of the parent who works during nonstandard hours may be explained by the higher level of father-child interaction when fathers work nonstandard hours themselves (Han, 2004; Täht & Mills, 2012).

## 4.5 Discussion

The current study provides further insight into the association between work schedule combinations and parental mental health, by examining the role of nonparental childcare among dual-earner couples in the Netherlands. We added to existing literature not only by investigating the combination of work schedules of dual-earner couples, instead of only considering the work schedule of one parent per couple, but also by examining gender differences both in work schedules and in mental health. By estimating a multiple-group structural equation model, in which we distinguished between couples who use nonparental childcare and couples who do not use nonparental childcare, we demonstrated that the associations between work schedule combinations and mental health were significantly different between these two groups.

This study showed that part of the effects of parents' work schedules on their mental health was contingent upon their use of nonparental childcare. Fathers in split-shift couples reported higher levels of mental health than fathers in standard working couples, but only under the condition that they used nonparental childcare. For mothers, we found no such association. Among split-shift couples who did not use nonparental childcare, and thus coordinated all the care among themselves, we found the exact opposite: these fathers and mothers reported lower levels of mental health compared to couples with two parents who work during standard hours.

Possibly, fathers in split-shift couples who use nonparental childcare get the best of two worlds, because this configuration enables and prompts them to be involved with their children, whereas they are also able to share childcare demands with a third party. Prior research showed that fathers provide more childcare when the level of overlap in parents' working hours is lower, because this prompts fathers to step in (Han, 2004; Täht & Mills, 2012) and that fathers who are



more involved with their children report higher levels of well-being (Buehler & O'Brien, 2011; Eggebeen & Knoester, 2001). Thus, fathers in split-shift couples may report higher levels of mental health because their family demands are manageable and they have more opportunities to engage in activities with their children.

For split-shift couples who want or have to coordinate the care for children among themselves, the beneficial effects of fathers' increased involvement may be outweighed by the additional stress that comes with coordinating different schedules. This may result in role overload (Perry-Jenkins et al., 2007) and limit the time families or couples can spend together (Lesnard, 2008; Zuzanek, 2006). Even though it is sometimes suggested that some couples work nonstandard hours to avoid having to use nonparental childcare, our results suggest that working such hours with no outside help can be detrimental for parents' mental health.

Although we only found limited gender differences, fathers' mental health seems to be more responsive to the combination of work schedules and childcare than mothers' mental health. One possible explanation for this finding is that the differences between fathers in different work schedule combinations are more pronounced, compared to mothers. Research has indicated that if mothers are away during the evening or night, fathers have to become more engaged in practical childcare (Täht & Mills, 2012). Mothers, on the other hand, are often primary caregivers, which implies that mothers do the majority of work in the home, independent of couples' work schedule combination.

The findings of the present study are partially in line with our conflict-based theoretical approach. Although not all hypothesised paths were empirically supported, our findings indicate that foregoing the use of nonparental childcare when working evenings, nights or weekends pointed towards difficulties in combining work and family. Yet, work and family seemed more compatible (i.e., less work-family conflict) when parents who work during nonstandard hours used nonparental childcare. Work and family are therefore not per se conflicting: whether or not nonstandard working hours are a burden or a resource depends on the way parents arrange care for their children. With this insight, the present study provides a valuable addition to the current literature on nonstandard work schedules.

Despite the contribution of this study to the existing literature, some limitations need to be mentioned. First, the data were self-reported and cross-sectional, allowing us to study only associations and not the direction of effects. Parents may choose to work nonstandard hours because they are unsatisfied with their childcare arrangements. Even though the data used in this study are part of a longitudinal project, only the second wave contained information on the work schedules of both parents, childcare use and their mental health. Ideally, we would prefer to use longitudinal data to examine on this topic. Furthermore, because of the self-reported nature of the data, there is a risk of social desirable answers, especially concerning mental health. Second, it is possible that our measure of nonparental childcare use was not sufficiently specific, as this measure did not specifically ask about the use of nonparental childcare during working hours. It is therefore possible that parents who used the help of third parties did so not during their working hours, but during a visit to, for example, the cinema or a restaurant. Finally, although we are aware that preschool children require different care arrangements than school-aged children, our relatively small sample size prevented us from performing separate analyses for preschool

and school-aged children. By including a dummy variable for preschool children, we aimed to account for this problem to some extent.

Some strong points of this study are also worth mentioning. Because we employed a dual-earner perspective with data from both parents, we provided a more accurate reflection of how parental work affects family functioning, compared with studies examining only one parent per couple. Moreover, because data for both parents were available, reporting bias was minimised. Furthermore, we used an objective and clear measure of parents' work schedules (Presser, 2003; Täht & Mills, 2012), thereby eliminating misunderstanding about what entails nonstandard working hours if the respondents had categorised themselves.

In summary, the present study provides more insight into the link between work schedule combinations and parental mental health. Arguments on the detrimental effects of nonstandard work seem to be most applicable to split-shift couples who do not use nonparental childcare. In contrast, nonstandard working hours seem to benefit parents who do use nonparental childcare, especially if they use only one type of care. Both findings suggest that it is relevant to consider not only how partners share childcare among themselves, but also how third parties are involved in this. Exploring coordination issues would therefore be an interesting research area for future research. Ideally, this topic would be studied in a comparative perspective, taking into account the differential access to these third parties (e.g., Plantenga & Remery, 2009). Moreover, a cross-national study could examine whether our findings are still valid when other contexts are considered. The Netherlands is namely characterised by high levels of female part-time work. This may buffer the adverse effects of foregoing nonparental childcare, because combining work and family is easier when parents work fewer hours (Byron, 2005). It would also be interesting to examine the effects of work schedule combinations and nonparental childcare on children. Namely, the negative effects of foregoing nonparental childcare on parents may spill over to children, because of the intergenerational transmission of mental health (Powdthavee & Vignoles, 2008). Consciously not using, or limiting, the use of nonparental childcare may therefore be harmful for children. In addition, foregoing nonparental childcare implies that children lack early childhood education, which may harm child development (Dowsett, Huston, Imes, & Gennetian, 2008). Therefore, the decisions that parents make to satisfy their own preferences may actually be harmful for their children.

# Chapter 5

## The parent-caregiver relationship and child well-being in formal childcare<sup>1</sup>

### **Abstract**

Positive relationships between teachers and parents have been shown to benefit child well-being in middle childhood and adolescence. Yet, this relationship may already be relevant earlier in children's life. Given that many children regularly spend time in formal childcare, having a positive parent-caregiver relationship may be crucial to overcome potential problems. This study therefore examined the association between the parent-caregiver relationship and socioemotional child well-being in formal care, thereby looking at the extent to which the child is comfortable at the childcare setting. Furthermore, since work outside office hours has become more common in recent years, we paid special attention to parental nonstandard work and considered this as a potential moderator. Taking into account the specific challenges of these parents, we examined whether children of parents who work during nonstandard hours may benefit more from a positive parent-caregiver relationship. Our conceptual model starts from Bronfenbrenner's ecological systems theory, which we combine with theoretical considerations of Coleman and literature on parental nonstandard work. Dutch data from the 2012 'Families 24/7' survey were used, including 206 parents with children under the age of four. Results indicate that a more positive parent-caregiver relationship is related to higher levels of child well-being. We found no evidence for the moderating role of parental nonstandard work. We discuss possible implications of our findings, focusing on improving the parent-caregiver relationship involving both parents and caregivers.

<sup>1</sup>This chapter is co-authored by Anne Roeters and Tanja van der Lippe and is currently under review. Melissa Verhoef is the first author. Verhoef wrote the main part of the manuscript and conducted the analyses. Roeters and Van der Lippe substantially contributed to the manuscript. The authors jointly developed the idea and design of the study. An earlier version of this chapter was presented at the European Network for Social and Emotional Competence (ENSEC) conference (Lisbon, Portugal, 2015).



## 5.1 Introduction

Educational research has shown that a positive parent-teacher relationship is beneficial for children, starting from kindergarten up until high school (Froiland & Davison, 2014; Sheridan, Bovaird, Glover, Garbacz, Witte, & Kwon, 2012). It has been argued that such a relationship creates a climate for optimal learning and provides opportunities for a dialogue and problem solving between parents and teachers, which is beneficial for children (Clarke, Sheridan, & Woods, 2010). School, however, is not the first environment in which children spend a considerable amount of time. Children of working parents are nowadays frequently enrolled in formal childcare, which entails care provided by professionals (Zinsser, 2001). Formal childcare is common practice for one out of three children aged zero to two years and for four out of five children aged three to five years (OECD Family Database, 2015). This illustrates that apart from their home, the formal childcare institution constitutes a key context in the lives of many young children. It is therefore striking that the extent to which children may be affected by the relationship between the home and the childcare institution has only slightly been touched upon. Especially since early childhood is a critical developmental period (Erwin & Brown, 2003) and experiences during this period have been found to have long-lasting consequences for children, for example, on school progress or health (Campbell et al., 2014; Nores & Barnett, 2010). We therefore believe that the relationship between the home and the childcare institution is of vital importance for children's socioemotional well-being.

The parent-caregiver relationship may not be equally important for child well-being in all families. Studies have shown that work during evenings, nights or weekends (i.e., nonstandard working hours) negatively affects spousal relationship satisfaction (e.g., Perry-Jenkins, Goldberg, Pierce, & Sayer, 2007), and both parent and child well-being (e.g., Barnett, Gareis, & Brennan, 2008; Li et al., 2014). Within the childcare literature, parents who work nonstandard schedules have been understudied, although the few existing studies demonstrate that their care arrangements are likely to be less reliable, with an increased risk of care disruption (Usdansky & Wolf, 2008). Also, these parents more often need multiple childcare providers to make ends meet (Han, 2004). Examining parental nonstandard work is especially pertinent when considering that many children grow up with parents who work during evenings, nights or weekends (Presser, Gornick, & Parashar, 2008). We therefore contend that the relationship between the home and the childcare institution is of high concern in particular for the socioemotional well-being of children from parents who work during nonstandard hours. These children may therefore benefit more from a stronger connection between the home and the childcare setting than children of parents who work a standard weekday schedule.

Summarising, the aim of the present study is twofold. First, we examine the association between the parent-caregiver relationship and socioemotional child well-being in formal childcare. Second, we study the potential moderating effect of parental nonstandard work. The conceptual model used to examine these goals starts with the ecological systems theory of Bronfenbrenner (1979). This theory provides the opportunity to explain the significance of the parent-caregiver relationship for child well-being. Yet, because this theory does not specify the mechanisms underlying the association between the parent-caregiver relationship and child well-being, we additionally apply insights from Coleman (1990) on the importance of communication

in relationships. This allows us to illustrate not only why, but also how the parent-caregiver relationship matters for child well-being. Moreover, we use literature on parental nonstandard work to inform the difference between parents with standard and nonstandard work schedules. Our conceptual model therefore unites different fields of research.

In our examination, we employ Dutch data from working parents with children under the age of four. We define the parent-caregiver relationship in terms of communication between both parties (e.g., McGrath, 2007; Rentzou, 2011). This communication can be face-to-face, for example, when parents drop off of their child. Communication can also be, for example, via the phone or email. It is, therefore, not necessary that the child is physically present during parent-caregiver communication. We argue that the parent-caregiver relationship is better developed, or more positive, if the quality of communication is higher. The socioemotional well-being of the child is defined in terms of the extent to which the child feels at ease at the childcare setting. In our study, we acknowledge that the term caregiver encompasses more than just providing care (Harwood, Klopper, Osanyin, & Vanderlee, 2013).

## 5.2 Theoretical considerations and prior research

### 5.2.1 The parent-caregiver relationship in formal childcare

Educational scholars have argued that parents and teachers share the responsibility of educating and socialising children during middle childhood and adolescence (Adams & Christenson, 2000; Clarke et al., 2010). Communication between parents and teachers has been identified as a crucial factor in the formation of the parent-teacher relationship (Rimm-Kaufman & Pianta, 2005). Yet, parents' time constraints have been found to hamper their possibilities to communicate with their child's teacher (Hoover-Dempsey et al., 2005). Teachers also have indicated to encounter difficulties in finding opportunities to contact parents, due to their high workload (DePlanty, Coulter-Kern, & Duchane, 2007).

The shared task of educating and socialising children may already begin before middle childhood. Before the start of school, when many children spend time in formal childcare, parents and caregivers are already jointly involved in rearing children (Churchill, 2003). Formal childcare has been found to be positively associated with children's cognitive and social development (e.g., Bumgarner & Brooks-Gunn, 2015; Obradović, Portilla, & Boyce, 2012), which illustrates how the process of educating and socialising already happens early in children's life. So, the shared task of parents and caregivers starts already during the time children spend in formal childcare, which points to the significance of the parent-caregiver relationship in early childhood.

Relatively little is known about how infants and toddlers are affected by the parent-caregiver relationship. Existing studies do provide insight into the dimensions that underlie this relationship. Qualitative research has shown several reoccurring themes in the relationship between the home and the childcare setting, pointing to the significance of communication, but also support, agreement and bi-directionality (Lang, Tolberg, Schoppe-Sullivan, & Bonomi, 2016; McGrath, 2007; Reedy & McGrath, 2010). For instance, McGrath (2007) argues that frequent and open communication is the most important element for a positive parent-caregiver relationship. This emphasis on communication is echoed in quantitative research as well, with for

example Rentzou (2011) showing that when the communication between parents and caregivers is only superficial, it is hard to establish a positive relationship between both parties. So, existing studies highlight the importance of communication for establishing a positive parent-caregiver relationship, which is consistent with the focus of the present study.

### 5.2.2 The parent-caregiver relationship and socioemotional child well-being

Building on Bronfenbrenner's ecological systems theory (1979), the rationale behind the link between the parent-caregiver relationship and socioemotional child well-being can be outlined. According to this theory, there are multiple, overlapping systems that affect the development of individuals. Systems closest to the individual are called microsystems. During early childhood, when many children regularly spend time in formal childcare, the childcare setting becomes an important microsystem. Yet, this system is not isolated from the home environment, which makes up another microsystem. The interactions and relationships between persons within these different microsystems are regarded as the mesosystem. For example, parents talk with the caregiver when they pick up their child at the childcare setting, informing whether there were any peculiarities during this specific day. Even though this mesosystem is the daily reality for many parents, this level of interaction is often neglected in studies on childcare (Norris & Horm, 2016). The ecological systems theory, however, clearly elaborates that because of the interaction between microsystems, this mesosystem is likely to have a joint impact on the individual. Hence, children are likely to be affected by the interaction between their parents and the caregivers of the childcare setting. Yet, the ecological systems theory does not specify the mechanisms underlying the interaction between the microsystems.

A perspective that complements Bronfenbrenner's theory, and helps us to hypothesise how the parent-caregiver relationship may affect socioemotional well-being, can be found in the work of the sociologist Coleman (1990). He argues that the outcomes of a social relationship are most positive for both parties under the condition of mutual trust and communication. This is because mutual trust and communication help to align the expectations both parties have within a relationship. As a result, there will be agreement on norms and sanctions. This argument can be applied to the supervision of children. When the parent-caregiver relationship is characterised by mutual trust and communication, both parties are likely to agree on child-related norms and sanctions. Because of this agreement, parents and caregivers will be consistent in their behaviour towards the child. For example, they show consistent signals about which behaviour is appropriate for the child, which is likely to benefit the child.

There is evidence that supports Coleman's presumption that trust and communication, and subsequent alignment of expectations and agreement on norms and sanctions, is beneficial for children. For example, Churchill (2003) explains that receiving mixed signals on their behaviour can be a social and cognitive challenge for children. Also, Van IJzendoorn and colleagues (1998) argue that a lack of communication and discrepancies in the rearing attitudes of parents and caregivers may indicate that the child receives less optimal or even bad care. Furthermore, if parents are distrustful towards the child's caregiver, this may signal to the child that the caregiver is not competent. This could disrupt the bond between the child and the caregiver, which may negatively affect the child (Lang et al., 2016).

Combining the insights offered from the work of Bronfenbrenner (1979) and Coleman (1990), we propose that the relationship between parents and caregivers affects the socioemotional well-being of children in formal childcare. A more positive parent-caregiver relationship is likely to be beneficial for children, because the expected high-quality communication enhances supervision and problem solving. In contrast, a less positive parent-caregiver relationship may result in insufficient communication and possible neglect of potential problems. Accordingly, children may not be getting appropriate care, which is likely to harm child well-being.

### 5.2.3 Parental work during nonstandard hours as a potential moderator

Prior research has shown that parental work schedules matter in the context of formal childcare, because work during nonstandard hours creates specific opportunities and constraints when organising childcare (e.g., Bünning & Pollmann-Schult, 2016; Emlen, 2010; Liu, 2015; Verhoef, Roeters, & Van der Lippe, 2016). Building on this literature, this study examines whether nonstandard work moderates the association between the parent-caregiver relationship and socioemotional child well-being in formal childcare. Children who are raised in families in which one or both parents work during nonstandard hours have been found to display more emotional and behavioural problems (Gassman-Pines, 2011; Li et al., 2014; Strazdins, Clements, Korda, Broom, & D'Souza, 2006) than children of parents who work during standard hours. Furthermore, these children are likely to experience less stability in childcare compared to children of parents who work during standard hours (Han, 2004; Usdansky & Wolf, 2008). Lower levels of childcare stability have been found to be detrimental for child well-being (De Schipper, Van IJzendoorn, & Tavecchio, 2004; Morrissey, 2009). Given the specific challenges faced by children of parents who work during nonstandard hours, we believe that the parent-caregiver relationship may have a stronger effect on the well-being of these children.

From the perspective of the ecological systems theory, one can argue that children of parents who work during nonstandard hours experience difficulties in both the home and the childcare microsystem. Depending on how well-developed the parent-caregiver relationship is, this relationship may provide either more risks, or more benefits for the socioemotional well-being of children. A less positive parent-caregiver relationship is likely to be more harmful for the children of parents who work during nonstandard hours. In such a relationship, the mesosystem made up from the interactions and relationships between the home and the childcare microsystems does not function optimally. Communication between parents and caregivers is likely to be hampered, which makes it difficult to align expectations, norms and sanctions. Also, potential problems may not be properly addressed. Such a negative parent-caregiver relationship may therefore be more detrimental for the children of nonstandard parents.

In contrast, a more positive parent-caregiver relationship may have additional benefits for the children of parents who work during evenings, nights and weekends. In this situation, the mesosystem consisting of the home and the childcare microsystems is likely to be characterised by good communication. Thus, there exists a dialogue between parents and caregivers, which produces a positive and problem-solving climate that surrounds the child. Hence, the difficulties created by having a nonstandard work schedule may be counteracted, thereby improving the



well-being of these children. This illustrates how having a less positive parent-caregiver relationship may have a more negative effect on the socioemotional well-being of children of parents who work during nonstandard hours, with the opposite being true for a more positive parent-caregiver relationship, compared to children of parents who work a standard weekday schedule.

### 5.3 Research focus

The aim of the present study is twofold. First, we examine the extent to which the parent-caregiver relationship is associated with the socioemotional well-being of children in formal childcare in the Netherlands. We hypothesise that a more positive parent-caregiver relationship is related to higher levels of socioemotional child well-being. Second, we examine parental nonstandard work as a potential moderating factor, expecting that the association between the parent-caregiver relationship and child well-being is stronger for children of parents who work during nonstandard hours. We employ a newly developed measure for the parent-caregiver relationship that was developed based on insights from educational research.

We test our hypotheses among Dutch families with young children. In terms of child well-being, the Netherlands provides an instructive context, as Dutch child well-being is the highest among Western countries (UNICEF, 2013). An examination into factors related to child well-being in the Netherlands may therefore produce useful insights for other countries. Well-developed relationships between home and formal care could be one of the potential factors underlying the high well-being of Dutch children.

Formal childcare for preschool children in the Netherlands is available in two forms. Children aged zero to four years can be enrolled in daycare, which is either centre-based care or care provided by a childminder. Parents' share of the costs of this care depends on their income, but is also partly borne by the government and employers (Dutch Ministry of Social Affairs and Employment, 2015), which shows the societal support for daycare. The majority of parents who use formal childcare (80 per cent) prefer to use centre-based daycare (Portegijs, Cloin & Merels, 2014). For children aged two to four years, playgroups are also available, although the use of this type of care is limited to a few hours per day. Parents who use care provided in playgroups have to pay the costs of this type of care themselves. Recent figures show that about half of the Dutch children aged zero to two are cared for by a formal arrangement, whereas this is the case for almost 90 per cent of the children aged three to four years old (OECD Family Database, 2015). Hence, Dutch parents are actively engaged in formal childcare, making it highly meaningful to know more about their relationship with their child's professional caregivers. Although exact statistics are lacking, a limited share of Dutch formal childcare settings offers care outside office hours (Boogaard & Bollen, 2014; De Jong, 2013), which shows the formal care possibilities of parents who work during nonstandard hours.

In terms of parental work, Dutch parents are known for their one-and-a-half earner model, in which the father works full-time and the mother part-time (Mills, Mencarini, Tanturri, & Begall, 2008). Furthermore, one out of three Dutch parents reported to work nonstandard hours, placing the Netherlands among Western countries with the highest prevalence of parental

nonstandard work (Presser et al., 2008). This underlines why examining the specific challenges of work during evenings, nights or weekends matters especially in this country.

## 5.4 Data, operationalisation and methods

### 5.4.1 Data

To answer our research question, we used Dutch data from the 2012 ‘Families 24/7’ survey. This survey contains a broad range of questions on nonparental childcare, socioemotional child well-being and parental work. The original survey was prepared in English. Whenever possible, existing translations from national surveys were used; all other questions were translated into Dutch using back-translation.

Participants were approached via childcare organisations, unions and employers, which were invited by letter or email to promote the study. A total of 242 childcare organisations were selected randomly from a list of members of the Dutch childcare branch organisation, of which 40 childcare organisations (16.52%) agreed to participate in the study. Unions and employers were approached via convenience sampling. In order to gain insight into our sampling method, the survey contained a question on participants’ way of recruitment, revealing that a total of 87.32 per cent learned of the survey through a childcare institution. Because of the sampling method employed for the survey, we do not have a random sample of Dutch parents with young children.

Organisations that were willing to participate in the ‘Families 24/7’ project were provided with posters, newsletters and leaflets about the project, in order to promote the study among potential participants. In this material, parents with young children were invited to participate via a web survey, which took approximately 25 minutes to complete. Data collection took place between November 2012 and January 2013. Due to the procedures used to approach potential participants, we are not able to determine the response rate.

The total Dutch sample consisted of 373 parents with young children. Since the focus of this chapter is on care before children start school, 150 participants were excluded for having children that already attend school, which is from the age of four in the Netherlands. Another 14 participants were excluded because they reported that they did not use formal childcare. Lastly, we excluded three participants who had not responded to questions on parental nonstandard work. The final sample therefore consists of 206 participants. Participants with more than one child were asked to answer questions on childcare and child well-being with one specific child in mind (i.e., target child), which was identified as the child closest to age four.

The majority (86.89%) of our participants was female and had the Dutch nationality (94.17%). Participant’s age ranged from 22 to 48, with a mean of 34.00. Most participants had either one (51.94%) or two (39.81%) children. Over two-thirds of our sample (71.22%) finished at least post-secondary education. Comparing our sample with data from Statistics Netherlands (2015) revealed that our participants are more highly educated. Reports on participants’ individual earnings show a median income varying between €1,500 and €2,000 (approximately \$1,690 and \$2,250) per month after taxes. Since most of our participants are dual earners, the average household income is considerably high.

### 5.4.2 Measures

*Socioemotional child well-being.* Children's socioemotional well-being in formal childcare was measured by providing parents with a short version of the Leiden Inventory for the Child's Well-Being in Day Care (LICW-D; De Schipper et al., 2004). This scale consists of six items that tap into the extent to which the child feels comfortable at the childcare setting (e.g., "My child tends to avoid contacts with other children"). Answers vary from 1 (*this is never the case*) to 6 (*this is always the case*). Items were recoded to ensure that higher scores are indicative of higher well-being. The Cronbach's alpha of this scale is .710.

*Parent-caregiver relationship.* The bond between parents and caregivers was measured with a new scale that was developed for the 'Families 24/7' survey. This scale combines items from existing scales from educational research (Vickers & Minke, 1995; Summers, Hoffman, Marquis, Turnbull, & Nelson, 2005). Parents were asked to react to nine items about different aspects of communication with their child's caregiver (e.g., "The professional caregiver pays attention to what I have to say"). Answer categories ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The Cronbach's alpha of this scale is .843. More information on the parent-caregiver relationship scale is provided in Table 5.1.

*Parental nonstandard work.* Participants' work schedule was assessed with the question 'What is your working time pattern?'. There were several response categories (e.g., regular day work or shift work). We acknowledge that it is important to pay attention to the variation within nonstandard work schedules (Presser, 2003), such as evening or night shifts, but the low number of cases within the different types of shifts led us to collapse all shift types into one category of nonstandard work (see for example Mills & Täht, 2010, for a similar approach). Responses were therefore categorised into two groups: 0 = *standard work schedule* and 1 = *nonstandard work schedule* (including evening/night/morning work, irregular work, shift work and other work schedules). Participants were also asked about their partner's work schedule, using the same question. These two variables have been combined into one dummy variable (0 = *no nonstandard work schedules*, 1 = *one or more nonstandard work schedules*). The majority of parents who reported to work a nonstandard schedule was enrolled in shift work or worked irregular hours.

*Control variables.* Because higher educated parents are likely to be more involved in their child's upbringing (Von Otter & Stenberg, 2015) and are also believed to have better communication skills (Amato, Johnson, Booth, & Rogers, 2003), we included parental level of education in our analyses (0 = *secondary education or lower*, 1 = *post-secondary education or higher*). In addition, we controlled for the amount of time the child spends in formal childcare (in hours per day), the child's age and the child's birth order, as we expected parents to be more involved in the childcare setting if the child spends more time there, when the child is younger, or when the child is their first-born. Furthermore, previous research has shown that parenting behaviour may explain part of the association between the parent-caregiver relationship and child well-being (Zellman & Perlman, 2006). For example, parents who are more involved in their child's life may be more willing to build a strong relationship with their child's caregiver. We therefore control

for parents' mean score on a nine item parenting behaviour measure (Galinsky, 1999) (e.g., "Attending to the important events in your child's life") with answer categories ranging from 1 (*this is very challenging for me*) to 5 (*this is very easy for me*). By including this variable in our analyses, we aim to avoid a possible confounding effect of parenting in the association between the parent-caregiver relationship and child well-being. We also control for the type of formal care, as the presence of mixed-age groups is more likely among childminders and in playgroups (Leseman & De Winter, 2013), which enhances parents' possibility to bond with the child's caregiver over a longer period of time. Lastly, to avoid measuring the effect of childcare difficulties, instead of nonstandard work schedules, we control for whether or not parents encounter problems in arranging childcare (0 = *no*, 1 = *yes*).

### 5.4.3 Analytical strategy

Given the new nature of our parent-caregiver relationship measure, we first examined its factor structure using an exploratory factor analysis (EFA). Next, we employed a confirmatory factor analysis (CFA) using the results of the EFA. After this, we tested the associations between the parent-caregiver relationship and children's socioemotional well-being using structural equation modelling (SEM). This technique allowed us to include latent constructs in the model and accounted for measurement errors in the observed variables (Kline, 2011).

Our explanatory analyses consisted of two steps. First, an overall model was estimated to test our hypothesis that when the relationship between parents and caregivers is better developed, children's socioemotional well-being in formal care is higher. To build this model, we first estimated a measurement model for the variables that represented child well-being in formal care, after which we added the structural part of the model including the independent and control variables. Second, we estimated a multiple-group structural equation model to examine whether the association between the parent-caregiver relationship and child well-being is moderated by parental nonstandard work. The CFA and subsequent SEM analysis were estimated using Full Information Maximum Likelihood (FIML) to deal with the small amount of missing data. The fit of these models was reviewed by using the  $\chi^2/df$  ratio, the Comparative Fit Index (CFI) and the Root Mean Square Error of Approximation (RMSEA). Models are assumed to fit the data adequately when the  $\chi^2/df$  ratio is lower than 3, CFI is .90 or higher and RMSEA .08 or lower (Byrne, 2010; Ullman, 2007).

## 5.5 Results

### 5.5.1 Factor analyses

*Exploratory factor analysis.* Principle axis factoring was conducted on the nine items measuring the parent-caregiver relationship using direct oblimin rotation to permit correlation between factors (Field, 2009). The Kaiser-Meyer-Olkin statistic was .87, demonstrating that our sample size is adequate for the factor analysis. Bartlett's test of sphericity ( $\chi^2(36) = 503.230, p < .001$ ) was also indicative of sample adequacy. Using Kaiser's criterion of eigenvalues greater than 1, together

with the inspection of the scree plot pointed to a two-factor solution that accounted for 59.73 per cent of the total variance. The intercorrelation between the two factors was -0.63. Whereas the first factor is clearly child-focused, the second factor represents the parent-caregiver relationship on a more general level. Table 5.1 shows the pattern coefficients. All factor loadings are greater than 0.4, which is indicative of substantive importance (Stevens, 2002).

**Table 5.1** Summary of exploratory factor analysis for the parent-caregiver relationship ( $N = 206$ )

Item	Factor 1: child- focused	Factor 2: general
1. I discuss issues concerning my child's care, rearing, progress and education with the professional caregiver(s)	<b>.516</b>	-.004
2. When my child exhibits behavioural problems, I have to solve them without help from the professional caregiver(s) (reversed)	<b>.673</b>	.147
3. The professional caregiver(s) ask/s for my opinion and suggestions in educational and child-rearing issues concerning my child	<b>.456</b>	-.068
4. The professional caregiver(s) pay/s attention to what I have to say	<b>.640</b>	-.114
5. I respect the professional caregiver(s)	.075	<b>-.814</b>
6. The professional caregiver(s) respect/s me	-.036	<b>-.871</b>
7. I tell the professional caregiver(s) when I am concerned or worried about my child	<b>.516</b>	-.138
8. The professional caregiver(s) is/are honest, even when they have to tell me bad news	<b>.651</b>	-.208
9. I feel comfortable and welcomed in the childcare setting	.306	<b>-.549</b>
Eigenvalues	4.33	1.04
% of variance accounted for	48.12	11.52

*Note.* Factor loadings > .40 are in boldface.

*Confirmatory factor analysis.* Using the results of the EFA, we build a hierarchical two-factor model to perform the CFA. The fit statistics of this model ( $\chi^2(26) = 45.575, p = .010$ ) show adequate support, demonstrated by a  $\chi^2/df$  ratio of 1.75, a CFI value of .971 and a RMSEA value of .061. We contrasted this model with a one-factor model by examining the values of the Akaike Information Criterion (AIC). The AIC value of the two-factor model was 101.575; the AIC value of the one-factor model was 181.017. This illustrates that the two-factor model is preferred, as this model has the lowest AIC value (Kline, 2011). Given this result, combined with the favourable fit indexes of the two-factor model, we continued our SEM analyses with this model.

### 5.5.2 Descriptive statistics

In Table 5.2, descriptive statistics for our study variables are presented, separately for parents with standard and nonstandard work schedules. There is no significant difference in children's socioemotional well-being in formal childcare between the two groups; both groups of parents report relatively high scores. These high scores are comparable with previous research using the extended version of this measure (De Schipper et al., 2004). Parents are also relatively positive about the parent-caregiver relationship, for which there is also no significant difference between parents with standard and nonstandard work schedules. Descriptive statistics for the control variables show a significant difference on parenting behaviour, with parents who work during

**Table 5.2** Descriptive statistics for socioemotional child well-being, parent-caregiver relationship and control variables, separately for parents with standard and nonstandard work schedules ( $N = 206$ )

Variables	Standard work schedules ( $n = 114$ )			Nonstandard work schedules ( $n = 92$ )			Mean difference test
	Valid $N$	$M$ ( $SD$ )	Range	Valid $N$	$M$ ( $SD$ )	Range	
Socioemotional child well-being	114	4.95 (0.61)	3.33-6	92	5.05 (0.52)	3.33-6	<i>ns</i>
Parent-caregiver relationship	113	38.32 (3.95)	26-45	92	38.24 (4.37)	25-45	<i>ns</i>
Parenting behaviour	114	35.72 (4.35)	26-45	92	37.40 (5.11)	17-45	$p = .011$
Level of education	113		0-1	92		0-1	$p < .001$
Less than post-secondary education		0.18			0.42		
Post-secondary education or higher		0.82			0.58		
Time in formal childcare (in hours per day)	113	9.10 (1.86)	4-17	92	7.55 (2.18)	2.25-11.50	$p < .001$
Age child	114	1.96 (1.05)	0-3	92	1.80 (1.01)	0-3	<i>ns</i>
Birth order child	112	1.28 (0.63)	1-4	90	1.21 (0.49)	1-3	<i>ns</i>
Problems in arranging childcare	112		0-1	92		0-1	<i>ns</i>
No		0.95			0.92		
Yes		0.05			0.08		
Type of formal care	114		0-1	92		0-1	<i>ns</i>
Centre-based care		0.94			0.92		
Childminder or playgroup		0.06			0.08		

*Note.* SD is not reported for dichotomous variables.

nonstandard hours reporting higher scores ( $p = .011$ ). We also found a significant difference regarding parent's level of education, since the proportion of parents with post-secondary education or higher is significantly higher among parents with a standard work schedule ( $p < .001$ ). Furthermore, children of parents who work during standard hours spend significantly more hours in formal care than children of parents who work during evenings, nights and weekends ( $p < .001$ ). In both groups, children are on average just under two years old and most children are firstborns. Parents in both groups report limited problems in arranging childcare and mainly use centre-based care.

Table 5.3 presents the correlations among the study variables. Our dependent variable, socioemotional child well-being in formal childcare, was correlated positively with the parent-caregiver relationship ( $p < .001$ ), which is in line with our expectation. This correlation can be classified as medium in size (Cohen, 1988). Parental nonstandard work showed no significant correlation with either the parent-caregiver relationship or child well-being. The control variables showed no unexpected results. As expected, parents who reported better parenting behaviour also reported a better parent-caregiver relationship ( $p = .001$ ).

**Table 5.3** Correlations among socioemotional child well-being, parent-caregiver relationship, parental nonstandard work and control variables ( $N = 206$ )

	1	2	3	4	5	6	7	8	9	10
1. Socioemotional child well-being	1									
2. Parent-caregiver relationship	.36***	1								
3. Parental nonstandard work	.09	-.01	1							
4. Parenting behaviour	.09	.22**	.18*	1						
5. Level of education	-.13	-.07	-.27***	-.17*	1					
6. Time in formal childcare (hours per day)	.12	.08	-.36***	-.13	.16*	1				
7. Age child	-.19**	-.15*	-.08	-.20**	.09	.02	1			
8. Birth order child	-.06	.01	-.06	-.13	.00	-.01	.32***	1		
9. Problems in arranging childcare	-.09	-.16*	.07	-.09	-.07	.06	.09	.11	1	
10. Type of formal care	-.00	-.01	.03	.10	-.06	-.05	-.05	.09	.02	1

Note. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

### 5.5.3 Explanatory analyses

The fit indices of the measurement model representing child well-being in formal care indicate that this model fitted the data perfectly ( $\chi^2(7) = 5.983$ ,  $p = .542$ ;  $\chi^2/df = 0.86$ , CFI = 1.00, RMSEA = 0.00). We therefore continued to build the overall SEM model to test our first hypothesis. In Table 5.4, the results of the overall SEM model are presented ( $\chi^2(211) = 314.845$ ,  $p < .001$ ). This model seems to fit the data adequately, with a  $\chi^2/df$  ratio of 1.49, a CFI value of .902 and a RMSEA value of .049, although we acknowledge that the value of the CFI is borderline acceptable (Byrne, 2010). The results of this model show that the parent-caregiver relationship is positively associated with socioemotional child well-being in formal care ( $p < .001$ ). This result is in line with our expectation. We found no significant association between nonstandard work schedules and child well-being. Regarding the control variables, we found that

spending more hours in formal care is associated with higher well-being in formal care ( $p = .011$ ). Given that our child well-being measure taps into the extent to which the child feels comfortable at the childcare setting, this finding seems logical. In addition, children of parents with a higher level of education demonstrated higher well-being ( $p = .044$ ).

**Table 5.4** Summary of SEM analysis for variables that predict socioemotional child well-being in formal childcare ( $N = 206$ )

Variables	<i>B</i>	<i>SE B</i>	$\beta$
Parent-caregiver relationship	0.78	0.22	.39***
Parental nonstandard work	0.19	0.11	.14
Parenting behaviour	-0.00	0.01	-.02
Level of education	-0.24	0.12	-.16*
Time in formal childcare (in hours per day)	0.07	0.03	.21*
Age child	-0.07	0.05	-.10
Birth order child	0.01	0.10	.01
Problems in arranging childcare	-0.18	0.22	-.06
Type of formal care	-0.15	0.20	-.05

*Note.* \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

We continued our explanatory analyses by estimating a multiple-group SEM. With this model, we examined whether parental nonstandard work has a moderating effect on the association between the parent-caregiver relationship and child well-being. We therefore used parental nonstandard work as a grouping variable to divide our sample in families with standard work schedules ( $n = 114$ ) and families with nonstandard work schedules ( $n = 92$ ). We first checked for measurement invariance in our latent variables, the parent-caregiver relationship and child well-being, for which we compared a model in which all parameters were freely estimated with a model in which the factor loadings and intercepts of both the parent-caregiver and child well-being were constrained to be equal across the two groups of parents. This model yielded an insignificant chi-square difference value ( $\Delta\chi^2(26) = 24.897$ ,  $p = .525$ ), which points to the preference of the model with fewer parameters. Therefore, scalar invariance was established, indicating that parents with standard and nonstandard work schedules can be compared in the analyses.

Next, we constrained the path between the parent-caregiver relationship and child well-being to be equal across groups, to examine the possible moderating effect of nonstandard work schedules. Comparing this model with the model in which this path was estimated freely again yielded an insignificant chi-square difference value ( $\Delta\chi^2(1) = .229$ ,  $p = .633$ ), indicating that the model with fewer parameters is preferred. So, the path between the parent-caregiver relationship and socioemotional child well-being in formal care cannot be estimated freely across parents with a standard work schedule and parents with a nonstandard work schedule, which illustrates that parental work schedules do not moderate this association. This is in contrast with our expectations, as we expected the association between the parent-caregiver relationship and child well-being to be stronger among children of parents who work during nonstandard hours.



### 5.5.4 Additional analyses

We tested additional models to investigate whether the results differed when different age groups were considered. Some scholars have argued that being enrolled in formal care may affect younger children more strongly than older children. Philips and Adams (2001) stated that this may go in two directions: younger children may either experience enhanced learning or be at risk for adverse outcomes. This mixed picture is evident in the literature review of Melhuish and colleagues (2015) among children aged zero to three, although their review also points to a consistent beneficial effect for children aged three and older. Therefore, in addition to controlling for the age of the child, we decided to use the age-specific measures that were available in our survey to examine the relevance of the child's age in our sample.

We focused on age-specific well-being measures in two age groups. For children up to the age of three ( $n = 131$ ) we used the EAS Temperament Survey (Buss & Plomin, 1984), which taps into emotionality, activity and shyness of (very) young children. Children's levels of temperament have been found to be indicative of their well-being (Holder, 2012). For instance, high levels of emotionality, as measured by the EAS Temperament Survey, have been linked to lower levels of child well-being (Holder & Klassen, 2010). For children of three years old ( $n = 75$ ) we used the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997), which is widely used to measure child well-being (Goodman & Goodman, 2009). The SDQ consists of 25 items that measure prosocial behaviour and problem behaviour in five different subscales. However, Goodman, Lamping and Ploubidis (2010) stated that the subscales of the SDQ are less reliable in low-risk and general samples, which is the case with our study sample. For this reason, we used the broader internalising and externalising subscales of the SDQ. Both measures are of a more general nature than our main outcome measure, as they are not targeted specifically to the childcare setting. Parental responses were recoded in such a way to ensure that higher scores indicate higher well-being, to match the coding of our main outcome measure.

The results of the additional analyses showed no significant association between the parent-caregiver relationship and general child well-being, for either of the two age groups. We were therefore unable to replicate the results of our main model. Further inspection of the data did reveal a positive correlation ( $r = .38, p < .001$ ) between the EAS measure and our main outcome measure, and between the SDQ measure and our main outcome variable ( $r = .30, p = .009$ ). Both correlations can be considered as medium in size (Cohen, 1988). These findings seem to indicate that children who feel more comfortable at the childcare setting also show higher well-being in general (i.e., not specific to the childcare setting). The implications of a positive parent-caregiver relationship may therefore, indirectly, extend beyond the childcare setting.

## 5.6 Discussion

This study aimed to provide more insight into socioemotional child well-being in formal childcare, by examining the role of the parent-caregiver relationship. In addition, parental nonstandard work was considered as a possible moderator. We added to existing literature by applying insights from educational research to the examination of formal childcare and by tapping into the literature of nonstandard work schedules to address the specific challenges these

parents encounter. Although the examination of the parent-caregiver relationship is not new (e.g., Lang et al., 2016), childcare researchers have rarely examined how this relationship is related to child well-being in formal childcare. Our study provides first insights into this association, thereby using a newly developed measure to capture the parent-caregiver relationship.

In line with our expectation concerning the potential benefits of a positive parent-caregiver relationship, thereby focusing on the quality of communication, the results showed that a more positive bond between parents and caregivers was related to higher levels of children's socioemotional well-being in formal childcare. Moreover, this association proved to be strong in size. This illustrates how, as predicted from Bronfenbrenner's ecological systems theory (1979), the mesosystem consisting of interactions and relationships between the home environment and the childcare setting affects the well-being of children. By demonstrating that especially the communication between parents and caregivers matters for child well-being, the findings of the present study echo the presumption of Coleman (1990) on the relevance of communication in social relationships.

The importance of the parent-caregiver relationship as found in the present study is in line with the notion of Zellman and Perlman (2006) that even limited variation in communication between parents and providers of childcare is meaningful. They even go so far in writing that "all but the highest rating from parents may serve as a red flag" (p. 536). Taking into account the significance of early childhood as a developmental period (Erwin & Brown, 2003), the existence of a positive relationship between parents and caregivers becomes even more pressing. This is especially the case when considering the amount of time children spend in formal childcare. We can therefore conclude that the well-established finding from educational research on the benefits of a positive parent-teacher relationship is also applicable to formal childcare.

Our results further showed that, in contrast to our expectation, there was no moderating role of parental nonstandard work. Children of parents who work during evenings, nights and weekends did not benefit more from a positive parent-caregiver relationship than children of parents with a standard weekday schedule. The most likely explanation for this is that the assumption that children of parents with a nonstandard work schedule demonstrate lower levels of well-being (Gassman-Pines, 2011; Li et al., 2014; Strazdins et al., 2006) did not hold in our study. As explained by Täht (2011), the Netherlands is characterised by protective labour regulations, which safeguard the rights of employees who work during nonstandard hours. This may explain why the differences between parents with a standard schedule and parents with a nonstandard schedule are relatively small in our study. There also was low variation on our child well-being measure, which may be a country characteristic because the Netherlands is known for its high child well-being (UNICEF, 2013). Future research is therefore encouraged to study whether there is indeed no moderation of parental work, preferably in contexts with more variation in both nonstandard work and child well-being.

In our examination, we employed a newly developed measure to capture the parent-caregiver relationship. By using insights from educational research (Vickers & Minke, 1995; Summers et al., 2005), we empirically operationalised parents' viewpoints of their relationship with the caregiver of their child. Although this measure shows satisfactory internal consistencies, we encourage future research to replicate our findings. Future research is furthermore invited to study the association between the parent-caregiver relationship and child well-being in a

comparative perspective, especially when considering the direct style of communication that is common in the Netherlands (Van der Horst, 2001). This may have enhanced the parent-caregiver relationship, as our measure tapped into the extent to which both parties communicated with each other. It would therefore be interesting to examine the parent-caregiver relationship in other contexts, in which open and direct communication is less common.

Before considering the implications of the findings of the current study, some limitations need to be mentioned. First, we used a non-random sample of participants to answer our research question. Our participants were more highly educated and had a higher income compared to the general Dutch population, which may have affected our results. Research has shown that parents who are more highly educated invest more in their children (Von Otter & Stenberg, 2015), indicating that the parents in our sample may invest more resources in building a relationship with the child's caregiver. Taken together with the fact that higher educated parents are likely to have better communication skills (Amato et al., 2003), the findings of the current study may be overestimated.

Another limitation of the present study concerns the nature of the data used, which were self-reported and cross-sectional. Moreover, reports on the parent-caregiver relationship and child well-being were both provided by parents, which increases the risk for same source measurement error. It would therefore have been preferred if caregiver reports were also available, especially because our data does not specify about which caregiver parents report. Having data from both parents and caregivers makes it possible to match their reports. For both measures, there is also a risk for socially desirable answers, which may be visible in the high scores provided by parents. Furthermore, the cross-sectional nature of our data makes it hard to determine the direction of the relation between the parent-caregiver relationship and socioemotional child well-being. Parents and caregivers may need to improve their relationship because the child is not doing well at the childcare setting. However, parents reported relatively high levels of child well-being, which makes this reversed association not likely. Nonetheless, multi-informant longitudinal data to examine our research questions is preferable.

A final limitation of this study concerns our measure of the parent-caregiver relationship, which only focused on one dimension of this relationship, namely the communication between parents and caregivers. However, many more dimensions of this relationship may affect child well-being, such as responsiveness or warmth. We therefore invite future researchers to examine the parent-caregiver relationship in a broader manner. Also, no information was available on the length of the relationship between parents and caregivers in our dataset, which may affect how well-developed this relationship may be. We tried to account for this partly by controlling for the type of care, as this may affect whether children have the same caregiver across multiple years, but ideally we would have liked to have an actual measure describing how long parents have known the caregiver. Lastly, we were unable to include an objective measure of the quality of the childcare setting. However, the parent-caregiver relationship can be considered as an indicator of childcare quality, because higher-quality care programs are likely to have better relationships between parents and caregivers (Rentzou, 2011). For instance, these programs use several strategies to involve parents in the childcare setting. To gain more insight into the relative importance of the parent-caregiver relationship, compared to other indicators of childcare quality,

future researchers may want to place examination of the parent-caregiver relationship in a quality-oriented framework.

Notwithstanding these limitations, the current study adds to existing knowledge on socioemotional child well-being in formal childcare, by demonstrating the importance of a positive parent-caregiver relationship. Even though parental reports on the parent-caregiver relationship were already relatively positive, the study of Zellman and Perlman (2006) indicated that nothing but the highest ratings by parents are acceptable when considering the possible consequences for children. Therefore, both caregivers and parents should continue to invest in this relationship.

Several steps may be undertaken to strengthen the parent-caregiver relationship. First, although the education for childcare practitioners in the Netherlands partly focuses on communication between caregivers and parents, the primary focus is on the care for children (ROC, 2016). Educators should therefore pay more attention to why this communication matters for child well-being, thereby making the parent-caregiver relationship an element of the care for children. Second, the parent-caregiver relationship may have decreased in importance among childcare practitioners due to the multiple policy alterations and changing regulations in the last few years (Social and Economic Council of the Netherlands, 2016). Managers of childcare institutions should therefore offer training to their employees, to provide specific tools that practitioners can use in building a positive relationship with parents. Third, increasing parental knowledge on the importance of the parent-caregiver relationship may generate an incentive to invest more in this relationship. This is especially relevant when one considers that children are often quickly dropped off before work and picked up by parents who are in a rush to get home. The study of Perlman and Fletcher (2012) illustrates that parents spend on average only 63 seconds at their child's care institution during morning drop-off. To achieve increased parental awareness, the childcare setting may consider distributing information leaflets, in which the importance of communication for child well-being is underlined. Even in parents' and caregivers' busy lives, it is crucial to build bridges between the home and the childcare setting. Using such initiatives will hopefully get both childcare practitioners and parents actively involved in building a positive parent-caregiver relationship, by being aware of the potential benefits of such a relation for child well-being.

# Chapter 6

## Linking characteristics of formal childcare to child well-being: A comparative perspective<sup>1</sup>

### **Abstract**

Most research on formal childcare and children's outcomes has focused on single countries. We however contend that policy context may moderate the association between formal childcare and children's socioemotional well-being. We examined this by comparing the Netherlands, Finland and the UK; three countries that differ regarding family policies. Data from the comparative 'Families 24/7' survey were used, including 990 parents with children aged 0–12. Results indicated that, compared to the UK, longer hours in formal care were less beneficial in the Netherlands. Furthermore, spending time in formal care during nonstandard hours was more harmful for children in Finland compared to the UK. Lastly, receiving care from multiple caregivers was more disruptive for British children than for Dutch children. No differences were found between Finland and the Netherlands. We discuss the implications of our findings, especially concerning care during nonstandard hours.

<sup>1</sup>This chapter is co-authored by Anke Plagnol and Vanessa May and is currently under review. Melissa Verhoef is the first author. Verhoef wrote the main part of the manuscript and conducted the analyses. Plagnol and May substantially contributed to the manuscript. The authors jointly developed the idea and design of the study. An earlier version of this chapter was presented at the Work and Family Researchers Network (WFRN) conference (Washington, DC, United States, 2016).



## 6.1 Introduction

Family life has undergone significant changes in the past few decades. The formerly prominent male breadwinner model has weakened in many Western societies, as a large proportion of mothers have entered the labour market (Crompton, Lewis, & Lyonette, 2007). Given that mothers no longer stay at home by default to care for their children, the demand for formal childcare – i.e., care provided by professionals (Zinsser, 2001) – has increased, making the provision of formal care an integral part of contemporary welfare states (Mahon, 2002).

Even though the use of formal childcare is relatively common in Western countries, considerable country variation exists (OECD Family Database, 2015). Family policies are important in this case. For example, increases in childcare subsidies have been found to affect formal care enrolment positively (Greenberg, 2010). High levels of childcare subsidies have even been linked to lower child poverty and child mortality (Engster & Stensöta, 2011). Moreover, greater governmental investments in formal care and more stringent regulations regarding educational requirements for staff have been shown to increase the quality of formal care (Rigby, Ryan, & Brooks-Gunn, 2007). High-quality childcare has in turn been associated with better child outcomes (Broekhuizen, Mokrova, Burchinal, & Garrett-Peters, 2016), indicating that family policies matter not only for childcare enrolment, but also for child well-being. Whereas the existing literature does provide insight into country differences in the use of formal childcare (Kröger, 2010; Mamolo, Coppola, & Di Cesare, 2011; Verhoef, Tammelin, May, Rönkä, & Roeters, 2016), studies on formal childcare and child outcomes tend to focus on single countries. In the present study, we argue that the association between formal childcare characteristics and children's socioemotional well-being may depend on the country-specific context in which formal care is provided.

Prior research has demonstrated that enrolment in formal care is positively associated with children's cognitive development, reflected in improved cognitive and language skills over time (e.g., Votruba-Drzal, Coley, Koury, & Miller, 2013; Weiland & Yoshikawa, 2013). Moreover, the interactions that children have with peers and non-kin adults are thought to increase children's sociability (Howes, 2011). Socioemotional child outcomes are, however, generally less positive, illustrated by higher levels of behavioural problems (e.g., Magnuson, Ruhm, & Waldfogel, 2007; McCartney et al., 2010). This is especially troublesome, because early-life experiences in childcare have been shown to have long-lasting effects, for example, on school outcomes or health (Campbell et al., 2014; Nores & Barnett, 2010).

In an attempt to provide more insight into how children may be safeguarded from negative socioemotional outcomes, the present study examines whether the consequences of formal childcare on socioemotional child well-being differ between countries. Given the better child outcomes in high-quality care, we argue that children thrive more in countries in which family policies provide better support for parents and ensure high-quality childcare. To examine this, this chapter takes a comparative perspective by comparing children's outcomes in the Netherlands, Finland and the UK. Policy priorities in these countries are reflected in distinct family policies and regulations concerning formal care. Because of these differences, we argue that the extent to which formal childcare may affect children varies between these three countries. Our focus is on three characteristics of childcare that have been shown to affect

socioemotional child well-being: the amount of time children spend in formal care, the scheduling of the hours and the number of care arrangements. We cover several dimensions of well-being, including behavioural problems and positive behaviour.

## 6.2 Theoretical considerations and prior research

### 6.2.1 Formal childcare characteristics and socioemotional child well-being

Starting with the amount of time children spend in formal care, research has demonstrated that more hours in care are related to higher levels of externalising behaviour (Loeb, Bridges, Bassok, Fuller, & Rumberger, 2007), enduring even until age 15 (Vandell, Belsky, Burchinal, Steinberg, Vandergrift, & the NICHD, 2010), whereas there seems to be no association with internalising behaviour. Regarding prosocial behaviour, enrolment in formal care has been found to positively affect the sociability of children during both their time in formal care and later development (Abner, Gordon, Kaestner, & Korenman, 2013; Howes, 2011), implying that more time in formal care may positively affect children's social development.

Because the share of parents who work during evenings, nights and weekends (i.e., nonstandard hours) has expanded in Western societies (Bünning & Pollmann-Schult, 2016; Presser, 2003), it has become increasingly important to consider the scheduling of the hours that children spend in formal care. Yet, studies on this topic are scarce. The limited available research reveals that children who are in formal care overnight show delays in motor, intelligence and social development, compared to children who are in formal care only during the day or evening (Anne & Segal, 2003). Furthermore, formal care outside standard hours has been associated with decreased social competency and increased behavioural and emotional problems, compared to formal care during the 6am to 6pm timeframe (Boyd-Swan, 2015).

The number of care arrangements – a measure of variability within formal childcare that we also adopt in our study – has been found to be associated with more externalising and internalising problems and less prosocial behaviour, in particular among girls and children under the age of three (Morrissey, 2009). In addition, a study by Claessens and Chen (2013) shows higher levels of externalising problems and lower prosocial behaviour among children under the age of five enrolled in multiple care arrangements.

### 6.2.2 Embedding formal childcare characteristics in the policy context

The link between the characteristics of formal childcare and children's socioemotional well-being can be explained with the help of Bronfenbrenner's ecological systems theory (1979). This theory supposes that individuals develop in an environment that consists of multiple, overlapping systems. Systems closest to the individual are called microsystems, in which individuals can readily engage in face-to-face interactions. Examples of such systems are the family, childcare setting or peer group. Given that many children spend time in formal childcare during childhood, the formal childcare setting in which they are enrolled makes up an important microsystem in their lives. As explained by Bronfenbrenner (1979), activities and interconnectedness within the microsystem constitute building blocks for the way in which the microsystem affects the



individual. When problems occur with these building blocks, individuals are likely to be negatively affected. Such reasoning explains why formal care characteristics are associated with children's socioemotional well-being. For instance, when children spend time in formal care during nonstandard hours, there are likely fewer children present, which makes it difficult for these children to interact with peers. This poses problems for interconnectedness. Children may even feel isolated, because they have to sleep in an environment that is not their house while their peers go home in the evening. Consequently, the lower level of interconnectedness may result in lower socioemotional well-being.

Microsystems are embedded in several other systems, of which the macrosystem is the broadest, overarching system (Bronfenbrenner, 1979). The macrosystem includes the values, policies and customs of an extended social structure. Through social policy, resources can be provided that enable the processes in the lower-level systems to work as effectively as possible (Bronfenbrenner & Ceci, 1994). Regarding childcare, this applies to the specific family policy context in which childcare settings are embedded. Policies that are aimed at providing high-quality care are, therefore, expected to improve the processes occurring in the childcare settings.

Studies that test interactions between micro- and macrosystems related to formal childcare are, however, scarce. The studies cited above, on the different characteristics of formal childcare, all focus on a single country and do therefore not allow an analysis of how the policy context (i.e., macrosystem) may moderate the association between formal childcare (i.e., microsystem) and children's well-being. A cross-national perspective, as presented in the current study, may provide insight into the relevance of the country-specific context in which formal childcare is provided. In our analysis, we focus on three European countries with different family policies, and therefore different formal childcare systems, which we will now discuss in detail.

### 6.2.3 Formal childcare options and policies across the three countries

*The Netherlands.* Whereas previously the Dutch state generally refrained from intervening in family life, this changed when formal childcare came to be viewed as a way to increase female employment, which led to large increases in the budget for childcare (Van Hooren & Becker, 2012). Dutch parents can choose from four types of formal childcare, which are partly dependent on the age of the child. For preschoolers, parents can either choose centre-based daycare, a playgroup, or a childminder, whereas the choice for school-aged children is between centre-based out-of-school care or care by a childminder (Dutch Government, 2014). Although most services used to operate during standard working hours (8am to 6pm) on weekdays only (EACEA, 2009), in the past few years the childcare sector has recognised parents' demands for childcare outside office hours, making extended and 24-7 centre-based childcare available (De Jong, 2013). Childminders also offer evening and weekend care to some extent, whereas the supply of night care is limited (Boogaard & Bollen, 2014). Formal childcare services are targeted at working parents, as childcare benefits are provided only to them (Social and Economic Council of the Netherlands, 2016). Dutch formal childcare is therefore first and foremost a labour market instrument. The costs of Dutch formal childcare are divided between working parents, the government (i.e., childcare benefits) and employers, where the governmental share is dependent on working parents' income, ranging from 23.8 to 93 per cent of the costs (Social and Economic

Council of the Netherlands, 2016). On average, Dutch parents spend almost one-fifth of their net income on childcare (OECD Family Database, 2016).

Recent statistics indicate that 56 per cent of Dutch children under the age of three are enrolled in formal care, whereas this is the case for 92 per cent of Dutch children between three and five years (OECD Family Database, 2015). Regulations exist to safeguard the quality of care that children receive, focusing on pedagogical aspects, such as developing social competence and offering emotional security. Despite existing regulations, there have been concerns about the quality of formal childcare in the Netherlands (Fukkink, Gevers Deynoot-Schaub, Helmerhorst, Bollen, & Riksen-Walraven, 2013). However, the Netherlands seems to be doing fairly well from an international perspective, as the country is ranked seventh on the quality dimension of the 2012 Starting Well Index of the Economist Intelligence Unit (EIU). This index compared 45 countries on several quality indicators, such as the child-staff ratio, curriculum guidelines and education requirements for staff (EIU, 2012). For instance, child-staff ratios range from 4:1 to 10:1 in the Netherlands (De Hond, Remery, Tissing, & Zeeman, 2012) and formal childcare staff should hold at least an upper secondary education degree (Dutch Child Care Act, 2016).

*Finland.* The provision of childcare in Finland is based on the principle of shared responsibility for the care and welfare of all children (Lamb & Ahnert, 2006), so this is targeted not only at children of working parents. The Day Care Act of 1973 granted children over the age of three the universal right to formal childcare, a right that in 1996 was extended to all children under school age (Alila, 2015). The aims of this legislation were manifold, including the reconciliation of work and family and the provision of early education, but formal childcare was also seen as a family and social policy tool. Parents can choose between private and municipal childcare; the latter option is by far the most popular, with over 90 per cent of children in municipal childcare, which is available in the form of childcare centres and family daycare (Alila, 2015). At age six, most children go on to attend a year of preschool. The opening hours of childcare centres vary from 'normal' hours (7am to 5pm) to extended hours and 24-7 childcare in day-and-night care centres. Formal care provision for school-aged children consists of before- and after-school activities organised by the municipality between 7am to 5pm (Finlex, 2016). Childcare fees are heavily subsidised by the government, with the exact fee that parents pay dependent on their income and the number of children attending municipal childcare (Finnish Ministry of Education and Culture, 2016). Finnish parents spend about 17 per cent of their net income on childcare (OECD Family Database, 2016).

With 28 per cent of Finnish children aged under three being enrolled in formal childcare, enrolment rates are relatively low. This is due to the popularity of the home care leave (Morgan & Zippel, 2003). Enrolment rates are significantly higher for children aged over three, at 74 per cent (OECD Family Database, 2015). Approximately 7 per cent of children enrolled in formal childcare attend a day-and-night care centre (Säkkinen, 2014). The quality of the care that Finnish children receive has been evaluated as being high, especially concerning emotional and instructional support provided by caregivers (Pakarinen et al., 2010). This high quality of care is reflected in the Starting Well Index, as Finland is ranked first on the quality dimension (EIU, 2012). Child-staff ratios range from 4:1 to 7:1 and childcare centre staff must have at least an

upper secondary-level qualification, and one in three of the staff at a childcare centre must have a university degree in education or social services (Alila, 2015).

*United Kingdom.* Childcare in the UK has traditionally been viewed as a private or individual concern. However, the country has moved from this point of view, now embracing the state's role in ensuring access to high quality care, accompanied by major investments (British Department for Education, 2013; Wincott, 2006). Still, formal childcare is mostly offered by private providers in the form of day nurseries, childminders, nannies and au pairs (NCT, 2016). These childcare providers offer care for children ranging from young babies up to age 5. Children's centres, which are under the control of local authorities, are also available, but usually not for children under two and often only part-time. In addition, all children are eligible for 15 hours of free childcare after their third birthday. Childcare services in the UK are usually only open during standard working hours (8am to 5:30pm). Nurseries that provide extended or even 24 hour care do exist, although this is limited to specific locations, such as near hospitals or airports (Formby, Tang, & Yeandle, 2004). Most parents in the UK receive only modest financial help to pay for formal care, in the form of tax credits or childcare vouchers. Some children from low-income households receive a number of free formal childcare hours after their second birthday. The costs for childcare in the UK are higher than in other European countries, taking up over one-third of parents' net income (OECD Family Database, 2016).

Enrolment statistics illustrate that 34 per cent of British children aged two and under are enrolled in formal childcare. For children aged three to five years, enrolment rates are much higher: 94 per cent of this age group are enrolled in formal childcare. The quality of the care that British children receive is relatively high, as the UK is ranked third on the Starting Well Index (EIU, 2012), indicating that the UK takes the middle position between the Netherlands and Finland. However, there have been worries about the quality of the British formal care system, especially in poorer areas (Lloyd & Penn, 2010). Child-staff ratios range from 3:1 to 8:1, although 13:1 is allowed if the children are cared for by a qualified teacher (British Department for Education, 2013). Educational requirements for staff prescribe that at least half of the staff at a childcare setting have to hold a lower secondary qualification and the provision has to be managed by someone with a relevant upper secondary qualification (Nutbrown, 2012).

### 6.3 Research focus

The above description of formal childcare systems in the Netherlands, Finland and the UK illustrates that there are marked differences between these countries. Based on Bronfenbrenner's (1979) ecological systems theory, we contend that such differences may affect the extent to which formal care characteristics are associated with children's socioemotional well-being. We argue that country-specific regulations for childcare settings matter for children's socioemotional well-being and that children thrive more in countries with regulations that ensure high-quality childcare. Given that the Finnish childcare system is ranked highest in terms of the quality of care, followed by the UK and then the Netherlands, we hypothesise that *spending more hours in formal childcare will be most positive for the socioemotional well-being of Finnish children, slightly less positive for British children, and least positive for Dutch children (H1).*

In addition, we expect that variability in formal care providers, as measured by the number of care arrangements, is less detrimental to children's outcomes in countries with more favourable childcare conditions. With respect to the three countries in our study, we therefore hypothesise that *increases in the number of caregivers will be least harmful for children's socioemotional well-being in Finland, followed by the UK, and most harmful in the Netherlands* (H2).

Furthermore, in Finland governmental regulations specifically address care during nonstandard hours, which is not the case in the Netherlands and the UK. However, in the Netherlands the supply of these services seems to be more common than in the UK, which may lead to better quality care during nonstandard hours due to increased options for parents and potential sharing of best practice between childcare settings. We therefore expect that *spending time in formal care during nonstandard hours will be least disruptive for children's socioemotional well-being in Finland, somewhat more disruptive in the Netherlands, and most disruptive in the UK* (H3).

Some studies have identified that formal care seems to affect younger children more strongly than older children. For instance, Morrissey (2009) found more behavioural problems and less prosocial behaviour among children aged below three. Yet, Philips and Adams (2001) argue that younger children may not only be at increased risk for adverse outcomes, but also experience enhanced learning. A recent literature review on the effects of formal care on child development also points in this direction, given the mixed findings among the group of children aged zero to three (Melhuish et al., 2015). Although it remains debatable in which direction younger children are affected more strongly by formal childcare than older children, existing studies are clear in demonstrating that the association between formal care and child well-being is not similar across age groups. Therefore, in this study we differentiate between two age groups: children between zero and two years old and children aged three and older.

## 6.4 Data, operationalisation and methods

### 6.4.1 Data

This chapter utilises data from the Families 24/7 survey, a comparative survey of Dutch, Finnish and British working parents with children aged 0 to 12, which includes extensive information on the childcare arrangements of working parents, as well as multiple indicators for child well-being. In all three countries, childcare organisations, unions and employers were approached, via letter or email, with the request to promote the study. Cooperating institutions were provided with posters, newsletters and leaflets about the study, which they could distribute among their costumers, members or employees. Only the Dutch childcare settings were selected randomly; all other institutions were recruited via convenience sampling. As day-and-night childcare organisations are more common in Finland than in the Netherlands and the UK, Finnish parents who use formal care during nonstandard hours are likely to be overrepresented.

The survey contained questions about the respondent, the respondent's partner and a so-called target child, which refers to the child closest to age four. For example, if a respondent had a child aged seven and a child aged three, the respondent was asked to reply to a specific set of questions with the three-year-old in mind. All questions were first prepared in English; translation into Dutch or Finnish occurred via the use of existing national surveys or via back-translation.

Data were collected via a web survey between November 2012 and January 2013. Because of our sampling method, we were not able to determine the response rate.

A total of 1,294 parents completed the questionnaire. For this study, the total sample size was restricted in three ways. First, we excluded families without income from employment ( $n = 11$ ). Second, we excluded 281 respondents who reported not having used formal childcare in the week prior to the survey. Third, we excluded respondents who indicated living less than half of the time with the target child ( $n = 12$ ). Our final sample consists of 990 respondents, including 318 Dutch, 359 Finnish and 313 British respondents. The majority of the sample comprised women (84.44%) and either had one (38.02%) or two (48.03%) children. The age of the respondents varied from 22 to 54 ( $M = 36.25$ ,  $SD = 5.62$ ). In terms of educational background, almost three-fourth (73.58%) of the Dutch sample had completed tertiary education, which was the case for 43.02 per cent of the Finnish sample and 82.32 per cent of the British sample. For Finland, this is in line with the average parental education, whereas the Dutch and British parents in our sample are higher educated than the general population with children (OECD, 2016).

### 6.4.2 Measures

*Children's socioemotional well-being.* We examined children's socioemotional well-being in two age groups. First, for children aged three or older, we used the parent report version of the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997). This questionnaire contains 25 items, ranging from 1 (*not true*) to 3 (*certainly true*). Although the SDQ encompasses five different subscales, research has indicated that these subscales are less reliable in low-risk and general samples (Goodman, Lamping, & Ploubidis, 2010). We therefore use the broader internalising (e.g., "My child gets picked on or bullied by other children") and externalising (e.g., "My child often gets really angry and has temper tantrums") subscales to tap into children's difficulties, with higher scores being indicative of lower socioemotional well-being. Cronbach's alpha of the internalising subscale was .673 in the Netherlands, .638 in Finland and .681 in the UK, and respectively .792, .804 and .789 for the externalising subscale. In addition, we use the prosocial subscale (e.g., "My child is helpful if someone is hurt, upset or feeling ill") to cover children's positive development; higher scores are indicative of higher socioemotional well-being. Cronbach's alpha equals .652 in the Netherlands, .690 in Finland and .687 in the UK.

Second, for children aged zero to two the EAS Temperament Survey (Buss & Plomin, 1984) was used. Parents were presented with 15 items, with answer categories varying from 1 (*not characteristic/typical of my child*) to 5 (*very characteristic/typical of my child*). The items encompass three subscales, namely emotionality (e.g., "My child reacts intensely when upset"), activity (e.g., "My child is always on the go") and shyness (e.g., "My child takes a long time to warm up to strangers"). For all subscales, higher scores are indicative of lower well-being. Cronbach's alpha of the emotionality subscale was .735 in the Netherlands, .710 in Finland and .843 in the UK. For activity, these values were .648, .697 and .832, and for shyness .738, .784 and .760, respectively.

*Formal childcare characteristics.* Three different formal childcare characteristics were examined. First, respondents were asked about the number of hours the target child spent in formal care in the month preceding the survey. Second, respondents were asked in separate questions how many

times the target child was in formal care overnight, during early mornings (5am – 7am) and during evenings (6pm – 10pm) during the last month. Because of low variation, these separate questions were combined into one dummy variable indicating whether respondents used formal childcare during nonstandard hours (1 = *yes*, 0 = *no*). Third, respondents were asked about the number of different formal care providers they used in the week prior to the survey.

*Control variables.* Several child and family background factors were included in our study to take into account that use of formal childcare varies between different groups of parents (Abner et al., 2013) and to minimise the confounding effects of family and child characteristics (Jaffee, Van Hulle, & Rodgers, 2011). This is why, in addition to the respondent's gender, we control for the family's financial situation as children of parents with more income are more likely to be enrolled in high-quality childcare (Akgündüz & Plantenga, 2014). Given known gender differences in problem behaviour (Doey, Coplan, & Kingsbur, 2014; Klein, Otto, Fuchs, Zenger, & Klitzing, 2013), we also control for the target child's gender as well as their age (in years) and whether they live with both biological parents, as these factors have been related to behaviour problems (Van Zeijl et al., 2006; Waldfogel, Craigie, & Brooks-Gunn, 2010). Lastly, we include whether the respondent indicated having problems with arranging childcare, as this may affect family functioning (Usdansky & Wolf, 2008) and therefore child well-being.

### 6.4.3 Analytical strategy

Descriptive statistics were calculated for all variables included in the analyses, separately per country, after which mean difference tests were executed to examine country differences. Next, children's socioemotional well-being was predicted using two separate sets of multivariate hierarchical OLS regression models, one for the SDQ subscales for children aged three and over, and one for the EAS subscales for younger children. For both age groups, our first model includes only formal care characteristics. Background factors were added in the second model, and country dummies in the third model. In subsequent models, interactions between formal care characteristics and country were entered separately per formal care characteristic, including the amount of time in care, the scheduling of the hours and the number of care arrangements.

## 6.5 Results

### 6.5.1 Descriptive statistics

Descriptive statistics are presented in Table 6.1, which shows that Finnish parents reported higher levels of externalising behaviour for their target child compared to Dutch parents. Concerning prosocial behaviour, higher levels are reported in the Netherlands and in the UK compared to Finland. The EAS measure also reveals country differences, with Finnish parents reporting higher levels of emotionality compared to British and Dutch parents. British parents, on the other hand, report higher shyness levels than their Dutch and Finnish counterparts. The dependent variables thus show considerable country differences.

Even though our sample was restricted to parents of children in formal childcare, the

**Table 6.1** Descriptive statistics for child well-being, formal childcare and control variables ( $N = 990$ )

Variables	The Netherlands ( $n = 318$ )		Finland ( $n = 359$ )		United Kingdom ( $n = 313$ )		Mean difference test
	$M$ ( $SD$ )	Range	$M$ ( $SD$ )	Range	$M$ ( $SD$ )	Range	
SDQ - Internalising problem behaviour	2.58 (2.57)	0-14	2.72 (2.38)	0-12	2.88 (2.64)	0-14	<i>ns</i>
SDQ - Externalising problem behaviour	4.22 (3.44)	0-17	5.61 (3.47)	0-20	4.98 (3.59)	0-17	FI > NL***
SDQ - Prosocial behaviour	8.06 (1.78)	3-10	7.48 (1.85)	2-10	8.13 (1.73)	4-10	NL & UK > FI***
EAS - Emotionality	10.75 (3.04)	5-25	13.11 (3.50)	7-24	11.53 (3.81)	5-25	FI > NL & UK***
EAS - Activity	9.24 (2.36)	5-15	9.54 (2.82)	5-18	9.26 (3.36)	5-22	<i>ns</i>
EAS - Shyness	10.63 (3.11)	5-19	10.34 (3.06)	5-18	11.97 (3.40)	5-23	UK > NL & FI**
Monthly hours in formal care	58.79 (41.15)	3-250	104.41 (51.49)	4-246	74.29 (54.71)	2-294	FI > UK > NL***
Formal care during nonstandard hours (1 = <i>yes</i> )	0.12	0-1	0.50	0-1	0.05	0-1	FI > NL > UK***
# formal care providers	1.13 (0.36)	1-3	1.31 (0.54)	1-4	1.31 (0.53)	1-3	FI & UK > NL***
Family's financial situation	6.36 (1.91)	0-10	5.45 (2.15)	0-10	5.38 (2.15)	0-10	NL > FI & UK***
Gender respondent (1 = <i>female</i> )	0.86		0.82		0.85		<i>ns</i>
Gender child (1 = <i>girl</i> )	0.55	0-1	0.53	0-1	0.47	0-1	<i>ns</i>
Age child (in years)	3.16 (2.32)	0-12	4.13 (1.88)	1-12	4.22 (2.92)	0-12	FI & UK > NL***
Child lives with both biological parents (1 = <i>yes</i> )	0.92	0-1	0.79	0-1	0.89	0-1	NL & UK > FI***
Problems with arranging childcare (1 = <i>yes</i> )	0.07	0-1	0.30	0-1	0.47	0-1	UK > FI > NL***

*Note.* SD is not reported for dichotomous variables. SDQ = Strengths and Difficulties Questionnaire; EAS = Emotionality Activity Shyness. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

descriptive statistics show considerable country differences in the extent that formal care is being used. Finnish parents utilise formal care for the most hours per month, followed by the UK, with Dutch parents reporting the least use of formal care. Moreover, Finnish parents use childcare during nonstandard hours more frequently than Dutch parents do, whereas this is relatively uncommon in the British sample. Closer examination of the data reveals that in Finland and in the Netherlands this includes a mixture of overnight, early morning and evening care, whereas in the UK this only consists of early morning and evening care. Furthermore, parents in the UK and Finland use a higher number of different formal care providers than Dutch parents. The three samples further show differences regarding the family's financial situation, the age of the target child, the likelihood of living together with the other biological parent of the target child and the extent to which parents encounter childcare problems.

### 6.5.2 Explanatory analyses

In Table 6.2, the results of the multivariate analyses are presented for children aged three and older, relating different characteristics of formal childcare to internalising, externalising and prosocial behaviour. Model 1, which includes the formal care characteristics but not the background factors, shows that across all three countries, spending time in formal care during nonstandard hours is associated with more internalising behaviour ( $\beta = .10, p = .030$ ). Furthermore, spending more time in formal care on a monthly basis is significantly associated with more externalising behaviour (Model 1,  $\beta = .11, p = .013$ ). When background factors are included in the model, only the association between longer monthly hours and externalising behaviour remains significant (Model 2,  $\beta = .12, p = .011$ ). This association, however, becomes insignificant when the country dummies are included in Model 3, in which Finland constitutes the reference category. Inclusion of these country dummies furthermore reveals that Finnish children only differ significantly from Dutch and British children on prosocial behaviour: parents in the Netherlands ( $\beta = .17, p = .003$ ) and the UK ( $\beta = .19, p = .001$ ) report higher levels of prosocial behaviour than parents in Finland. Changing the reference category to the UK revealed no differences between the Netherlands and the UK. The results for the background factors are in line with prior literature, indicating that children from better financial backgrounds display less internalising and externalising behaviour, and more prosocial behaviour. Moreover, girls display both less externalising and more prosocial behaviour, whereas older children show more internalising and prosocial behaviour.

Table 6.3 presents the results of the models after adding interaction terms between the formal care characteristics and country dummies. Results revealed no significant differences between Finland and the Netherlands or the UK regarding internalising problem behaviour. Changing the reference category to the UK, however, revealed that the effect of spending longer monthly hours in formal care differs between the UK and the Netherlands. Spending more time in formal care is associated with more internalising behaviour in the Netherlands compared to the UK ( $B = 0.01, SE B = 0.01, \beta = .11, p = .044$ ), which is partly in line with our first hypothesis. No other significant interactions were found, also not for externalising or prosocial behaviour.

Table 6.4 presents the results of the multivariate analyses for children aged up to three years old, concerning the association between formal childcare and levels of emotionality, activity



**Table 6.2** Summary of multivariate OLS regression analyses for variables that predict internalising, externalising and prosocial behaviour in children aged 3 to 12 ( $N = 684$ )

	Model 1		Model 2		Model 3	
	Internalising behaviour	Externalising behaviour	Internalising behaviour	Externalising behaviour	Internalising behaviour	Externalising behaviour
Monthly hours in formal care	-0.00 (0.00)	0.01 (0.00)*	-0.00 (0.00)	0.01 (0.00)*	0.00 (0.00)	0.01 (0.00)
Formal care during nonstandard hours	0.57 (0.26)*	0.51 (0.37)	0.35 (0.26)	0.28 (0.36)	0.46 (0.28)	0.09 (0.40)
# formal care providers	-0.17 (0.20)	0.22 (0.28)	-0.29 (0.20)	0.11 (0.28)	-0.30 (0.20)	0.06 (0.28)
Family's financial situation			-0.27 (0.05)***	-0.28 (0.07)***	-0.26 (0.05)***	-0.27 (0.07)***
Gender respondent			0.37 (0.28)	0.18 (0.39)	0.37 (0.28)	0.19 (0.39)
Gender child			-0.24 (0.21)	-0.79 (0.29)**	-0.22 (0.21)	-0.81 (0.29)**
Age child			0.15 (0.06)*	-0.02 (0.08)	0.15 (0.06)*	-0.03 (0.08)
Child lives with both biological parents			-0.37 (0.32)	0.16 (0.45)	-0.39 (0.32)	0.19 (0.45)
Problems with arranging childcare			-0.25 (0.23)	0.54 (0.32)	-0.33 (0.24)	0.44 (0.34)
Country <sup>a</sup> – NL					0.03 (0.30)	-0.71 (0.42)
Country <sup>a</sup> – UK					0.33 (0.29)	-0.34 (0.41)
Constant	3.07 (0.32)***	4.07 (0.45)***	7.79 (0.23)***	5.85 (0.91)***	6.07 (0.47)***	6.40 (0.97)***
R <sup>2</sup>	.01	.02	.07	.06	.07	.06

Note. <sup>a</sup>Reference = Finland. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .



**Table 6.3** Summary of multivariate OLS regression analyses for variables that predict internalising, externalising and prosocial behaviour, including interaction terms between formal childcare and country ( $N = 684$ )

	Internalising behaviour	Externalising behaviour	Prosocial behaviour
	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>
<i>Model 4</i>			
Monthly hours in formal care	0.00 (0.00)	0.01 (0.00)	0.00 (0.00)
Country <sup>a</sup> – NL	0.07 (0.31)	-0.73 (0.44)	0.67 (0.23)**
Country <sup>a</sup> – UK	0.26 (0.29)	-0.25 (0.41)	0.71 (0.21)**
Monthly hours * NL	0.01 (0.01) <sup>b</sup>	-0.01 (0.01)	0.00 (0.00)
Monthly hours * UK	-0.00 (0.01)	0.00 (0.01)	-0.00 (0.00)
Constant	4.01 (0.71)***	6.38 (1.00)***	5.45 (0.51)***
<i>Model 5</i>			
Formal care during nonstandard hours	0.60 (0.34)	0.61 (0.47)	0.19 (0.14)
Country <sup>a</sup> – NL	0.11 (0.33)	-0.44 (0.46)	0.63 (0.25)**
Country <sup>a</sup> – UK	0.42 (0.31)	-0.04 (0.43)	0.71 (0.22)**
Care during nonstandard hours * NL	-0.29 (0.74)	-1.45 (1.04)	0.12 (0.53)
Care during nonstandard hours * UK	-0.79 (0.91)	-2.15 (1.28)	-0.02 (0.65)
Constant	3.94 (0.70)***	6.07 (0.99)***	5.49 (0.51)***
<i>Model 6</i>			
# of formal care providers	0.00 (0.29)	0.25 (0.41)	0.20 (0.21)
Country <sup>a</sup> – NL	0.79 (0.75)	-0.23 (1.06)	0.77 (0.54)
Country <sup>a</sup> – UK	1.10 (0.67)	0.14 (0.96)	0.70 (0.49)
# of formal care providers * NL	-0.60 (0.56)	-0.39 (0.79)	-0.10 (0.40)
# of formal care providers * UK	-0.56 (0.43)	-0.34 (0.61)	0.01 (0.31)
Constant	3.64 (0.74)***	6.16 (1.05)***	5.46 (0.53)***

*Note.* <sup>a</sup>Reference = Finland; <sup>b</sup> $p < .05$  (compared to UK). This table presents results of the effects of interaction terms between formal childcare and country dummies on internalising, externalising and prosocial behaviour. In addition to the variables presented in the table, the same set as independent and control variables was entered as in Table 6.2. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

and shyness. When only the formal care characteristics are included, in Model 1, results show that increases in the number of care providers are associated with higher emotionality ( $\beta = .15$ ,  $p = .011$ ). None of the formal care characteristics were significantly associated with activity or shyness. After adding background factors in Model 2, the association between the number of care providers and emotionality remains significant ( $\beta = .12$ ,  $p = .047$ ). However, this is no longer the case once country dummies are included in the analyses in Model 3. This model does reveal, however, that Dutch parents report lower levels of emotionality than Finnish parents ( $\beta = -.21$ ,  $p = .023$ ). Furthermore, British children show higher levels of shyness compared to Finnish children ( $\beta = .28$ ,  $p = .003$ ). No significant country differences were found for children's activity levels. Changing the reference category to the UK revealed no additional country differences. Results of the background factors are in line with prior literature cited above, indicating that girls show higher levels of shyness and that younger children show more emotionality and shyness.

Next, we included interaction terms between formal care characteristics and country dummies. Model 5 in Table 6.5 reveals that children who are in formal care during nonstandard

**Table 6.4** Summary of multivariate OLS regression analyses for variables that predict emotionality, activity and shyness in children aged 0 to 2 ( $N = 306$ )

	Model 1			Model 2			Model 3		
	Emotionality	Activity	Shyness	Emotionality	Activity	Shyness	Emotionality	Activity	Shyness
	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )
Monthly hours in formal care	0.01 (0.01)	0.01 (0.00)	0.00 (0.00)	0.00 (0.01)	0.01 (0.00)	0.00 (0.00)	0.00 (0.01)	0.01 (0.00)	0.00 (0.01)
Formal care during nonstandard hours	0.81 (0.56)	0.22 (0.44)	-0.66 (0.52)	0.66 (0.57)	0.44 (0.45)	-0.50 (0.53)	0.05 (0.64)	0.39 (0.51)	0.27 (0.58)
# formal care providers	1.63 (0.63)*	-0.08 (0.50)	0.28 (0.59)	1.26 (0.63)*	-0.07 (0.51)	0.15 (0.59)	1.10 (0.63)	-0.06 (0.51)	0.24 (0.58)
Family's financial situation				-0.12 (0.11)	0.13 (0.09)	-0.01 (0.10)	-0.12 (0.12)	0.12 (0.09)	0.04 (0.11)
Gender respondent				-0.34 (0.72)	-0.16 (0.58)	-0.61 (0.67)	-0.38 (0.72)	-0.15 (0.58)	-0.58 (0.66)
Gender child				0.24 (0.44)	0.39 (0.35)	0.97 (0.41)*	0.25 (0.44)	0.37 (0.35)	1.04 (0.40)*
Age child				0.89 (0.33)**	0.26 (0.26)	0.55 (0.30)	0.72 (0.34)*	0.29 (0.27)	0.62 (0.31)*
Child lives with both biological parents				-1.17 (0.83)	0.60 (0.66)	0.29 (0.77)	-1.10 (0.84)	0.64 (0.67)	0.08 (0.77)
Problems with arranging childcare				0.85 (0.55)	0.80 (0.44)	1.00 (0.51)	0.81 (0.58)	0.90 (0.46)	0.68 (0.53)
Country <sup>a</sup> – NL							-1.56 (0.68)*	0.14 (0.55)	1.00 (0.63)
Country <sup>a</sup> – UK							-1.42 (0.72)	-0.17 (0.58)	1.97 (0.67)**
Constant	9.00 (0.83)***	8.94 (0.65)***	10.45 (0.76)***	10.20 (1.70)***	6.87 (1.35)***	9.38 (1.57)***	12.05 (1.86)***	6.79 (1.50)***	7.88 (1.71)***
R <sup>2</sup>	.03	.01	.01	.06	.04	.06	.07	.04	.09

*Note.* <sup>a</sup>Reference = Finland; <sup>b</sup> $p < .05$  (compared to UK). \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

hours in the UK show lower emotionality levels than their Finnish counterparts ( $\beta = -.16, p = .015$ ). This is in contrast with our third hypothesis. No significant interaction terms were found for children's activity levels. With respect to shyness, no differences were found between Finland and the Netherlands or the UK. Changing the reference category to the UK revealed that Dutch children who receive care from more care providers show lower shyness levels than British children ( $\beta = -.62, p = .009$ ), which partly contradicts our third hypothesis.

**Table 6.5** Summary of multivariate OLS regression analyses for variables that predict emotionality, activity and shyness, with interaction terms between formal childcare and country ( $N = 306$ )

	Emotionality	Activity	Shyness
	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>
<i>Model 4</i>			
Monthly hours in formal care	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Country <sup>a</sup> – NL	-1.55 (0.79)	0.38 (0.64)	1.08 (0.73)
Country <sup>a</sup> – UK	-1.29 (0.77)	-0.09 (0.62)	2.05 (0.71)**
Monthly hours * NL	0.01 (0.01)	-0.01 (0.01)	-0.00 (0.01)
Monthly hours * UK	-0.01 (0.01)	-0.00 (0.01)	-0.00 (0.01)
Constant	11.83 (2.08)***	6.37 (1.67)***	7.63 (1.92)***
<i>Model 5</i>			
Formal care during nonstandard hours	1.45 (1.02)	-0.74 (0.82)	0.61 (0.94)
Country <sup>a</sup> – NL	-0.67 (0.86)	-0.58 (0.70)	1.26 (0.80)
Country <sup>a</sup> – UK	-0.50 (0.86)	-0.87 (0.69)	2.10 (0.79)**
Care during nonstandard hours * NL	-1.67 (1.32)	1.56 (1.07)	-0.89 (1.22)
Care during nonstandard hours * UK	-5.66 (2.30)*	3.27 (1.86)	1.50 (2.13)
Constant	10.76 (1.94)***	7.73 (1.57)***	7.79 (1.80)***
<i>Model 6</i>			
# of formal care providers	1.41 (1.20)	-0.33 (0.97)	0.03 (1.09)
Country <sup>a</sup> – NL	-0.53 (1.97)	0.48 (1.58)	2.42 (1.79)
Country <sup>a</sup> – UK	-1.54 (2.06)	-1.59 (1.66)	-0.51 (1.87)
# of formal care providers * NL	-0.91 (1.58)	-0.35 (1.27)	-1.35 (1.44) <sup>b</sup>
# of formal care providers * UK	0.15 (1.62)	1.25 (1.30)	2.22 (1.47)
Constant	11.67 (2.25)***	7.13 (1.80)***	8.14 (2.04)***

*Note.* <sup>a</sup>Reference = Finland; <sup>b</sup> $p < .01$  (compared to UK). This table presents results of the effects of interaction terms between formal childcare and country dummies on emotionality, activity and shyness. In addition to the variables presented in the table, the same set as independent and control variables was entered as in Table 6.4. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

## 6.6 Discussion

Because changes in maternal employment patterns have prompted parents to reconsider their childcare arrangements, the use of formal childcare has expanded rapidly in Western countries. We extended prior research on the association between formal childcare and children's socioemotional well-being by comparing countries that differ regarding family policies. More specifically, we examined whether children's socioemotional well-being was differently affected

by the number of monthly hours in formal care, use of formal care during nonstandard hours and the number of different care providers depending on the country context. We hypothesised that formal childcare is associated with better child well-being outcomes in countries in which policies are targeted towards high-quality care. Findings indicate that there are indeed differences in the socioemotional well-being of Dutch, Finnish and British children, and that these differences were partly related to country differences in formal care characteristics.

Before discussing the findings in more detail, some caution is warranted regarding the strength of our findings. As the analyses involved testing a large number of associations, including the interactions, the likelihood for a Type I error increased (Šimundić, 2013). In other words, the probability of finding an interaction that is in reality spurious may have been elevated. This should be kept in mind when interpreting the three main findings that are discussed below.

First, in line with our expectations, longer monthly hours in formal care were less beneficial for Dutch children than for British children, given the stronger association with internalising behaviour in the Netherlands than in the UK. The lower-quality care in the Netherlands, as indicated by the Starting Well Index (EIU, 2012), may explain some of these differences, but social norms concerning formal childcare may also matter. Although formal childcare is becoming increasingly accepted in the UK (Fagan & Norman, 2012), it is still viewed with some suspicion in the Netherlands (Merens & Van den Brakel, 2014). Perhaps the normative context in which our respondents lived influenced how they evaluated their children's behaviour, with Dutch parents being more worried about the effects of formal childcare and thus more likely to report internalising behaviour (cf. Duncan and Edwards (2003) on the 'moral rationalities' that parents use to make decisions about childcare and to evaluate these).

Second, Finnish children who spent time in formal care during nonstandard hours showed higher levels of emotionality compared to British children, which was contrary to our expectations. However, further inspection of the data revealed that whereas British children mainly spent early mornings or evenings in formal care during nonstandard hours, Finnish children spent more nights in formal care. This finding is in line with previous research on care during nonstandard hours (Anme & Segal, 2003; Boyd-Swan, 2015) and may point to the disruptive consequences of overnight care. However, it could also indicate that parents who leave their children in overnight care may be more inclined to make note of any problematic behaviour because they are primed to do so in the context of heated public debates held in Finland concerning the effects of overnight care on children. The potential negative consequences of night shifts have also been discussed widely in societal debate (e.g., Williams, 2016), which may further invoke negative feelings among parents working night shifts towards their childcare arrangements. Therefore, these parents may more readily notice and attribute a pattern to their child's negative behaviour than parents who use childcare during regular hours.

Third, having more care providers was more strongly related to shyness levels among British children than among Dutch children. This finding was in contrast to our expectations, as we hypothesised that increases in the number of caregivers would be most harmful for Dutch children. Yet, our study revealed that British children are confronted with more caregivers than Dutch children. Scholars have argued that experiencing multiple care arrangements makes it hard for children to build relationships with their caregivers and peers (Claessens & Chen, 2013; Morrissey, 2009), which hampers children's social skills. This may explain why British children,

who, on average, experience higher instability in formal care, show higher shyness levels than Dutch children. In contrast, higher shyness among British children may also be a country characteristic, as British people are often portrayed as being very reserved (Harley, 2003).

Despite the valuable contribution of this study of applying a comparative approach to examine the association between formal care characteristics and child well-being, some limitations need to be mentioned. First, the respondents of our web survey were not randomly selected; therefore, our sample may not be representative of the populations in the countries under study. Also, Finnish nonstandard workers were overrepresented, which may at least partly explain the differences we found between countries. However, as comparative studies on this subject are scarce, we believe we have taken an important first step in providing insight into how the characteristics of formal childcare may affect children differently depending on the country context. We encourage researchers to continue this line of research, especially when a randomly selected cross-country dataset should become available. Second, the data used were self-reported, which brings along the risk of socially desirable answers, especially on a sensitive topic like children's socioemotional well-being. However, both the SDQ and the EAS have shown good inter-rater agreement when comparing parents and teachers (Gasman et al., 2002; Stone, Otten, Engels, Vermulst, & Janssens, 2010), which points to the validity of parents' reports. Lastly, we assume that country effects are related to family policy differences. However, because we did not measure these policies directly we cannot draw definite conclusions on this topic. Examining this topic with a larger set of countries, which would allow for inclusion of country-level factors, is therefore desirable (Yu, 2015).

The childcare sector is dynamic, which is visible in recent changes in this sector in the countries under study (British Department for Education, 2013; Finlex, 2015; Social and Economic Council of the Netherlands, 2016). One aspect of formal care that gains limited emphasis within these policy discussions seems to be care during nonstandard hours, although this applies to a lesser extent to Finland. Nonetheless, given the findings of prior research, combined with the results of the current study, we believe that more attention should be paid to how care during nonstandard hours may affect children, especially in light of continuing increases in nonstandard work schedules (Bünning & Pollmann-Schult, 2016; Presser, 2003). Providing high-quality formal care during nonstandard hours will not only benefit children, but also parents themselves, as they will more easily be able to reconcile work and family obligations.

In sum, our study demonstrated that in all three countries, formal childcare was associated with children's socioemotional well-being, but our findings also showed country differences in this association. This demonstrates the benefit of taking a comparative perspective in this line of research and we therefore encourage researchers to continue on this path by extending research into formal childcare to include countries that offer less support to parents in combining work and family. Even though the Netherlands, Finland and the UK differ in their family policies, these countries can all be considered as supportive in combining work and family. Therefore, it would be interesting to examine how the countries under study compare with countries with less supportive family policies (see, for example, Korpi, 2000). Special attention should be paid to care during nonstandard hours. Given the increasing prevalence of nonstandard work, the issue of overnight care – how to provide this and deliver high-quality care – is likely to become a pressing issue for parents and policymakers alike.

# Chapter 7

Conclusion and discussion





## 7.1 Summary of research findings

This dissertation started from the notion that arranging care for children can be challenging for working parents. In particular, many parents no longer work a nine-to-five weekday schedule: recent years have witnessed increases in work during nonstandard hours, as well as flexible work arrangements (Bünning & Pollmann-Schultz, 2016; Kelliher & Anderson, 2010; Liu, Wang, Keesler, & Schneider, 2011; Peters, Den Dulk, & Van der Lippe, 2009). Although empirical research has provided insight into the link between work schedules and parents' own care provision, many questions remain unanswered. These include not only how parental work schedules affect parents' opportunities and constraints to use nonparental childcare, but also how work schedules and childcare arrangements affect the well-being of parents and children. This dissertation therefore focused on the associations between work schedules, childcare arrangements and well-being. More specifically, I examined how modern-day job characteristics are related to childcare arrangements and to what extent the combination of parental work and childcare arrangements affects the well-being of parents and children. The main findings of the five empirical chapters of this dissertation are outlined below.

### 7.1.1 Cross-country differences in the association between parental work and the use of nonparental childcare

The recent increase in the proportion of employees who work outside traditional office hours has prompted scholars to examine how such work schedules affect family life, by examining outcomes such as the spousal relationship and parent-child interaction (Liu et al., 2011; Täht & Mills, 2012). Less is known about how nonstandard work schedules affect parents' use of nonparental childcare, an issue that many working parents confront on a daily basis. Therefore, *Chapter 2* examined the association between parental work schedules and nonparental childcare use. Extending previous research, this chapter examined how the type of work schedule, the number of working hours and changes in work schedules affect not only the type of nonparental childcare parents use, but also the variability and length of care arrangements. Moreover, this chapter added to the literature by examining whether the associations between parental work and childcare use differ between Finland, the Netherlands and the United Kingdom.

The results of this chapter indicated that work during evenings, nights and weekends decreased parents' likelihood of using formal childcare, compared to relying on parental care solely. This negative association was stronger in the Netherlands than in Finland. It is possible that parents who work during nonstandard hours consciously use their work schedules to maximise their own caregiving (Presser, 2003), which could explain their lower likelihood of using formal care. Alternatively, this result may be explained by a lack of services that offer formal childcare during nonstandard hours (Strazdins, Clements, Korda, Broom, & D'Souza, 2006). Hence, work during nonstandard hours could be a matter of choice or of necessity, but these explanations are difficult to disentangle. The additional analyses of this chapter did provide some insight herein, by demonstrating that nonstandard work schedules were not related to a larger amount of parental care, which points to the latter explanation. However, these analyses concerned only one parent in a dual-earner couple. Nonetheless, a lack of formal childcare

services may explain why the negative association was stronger in the Netherlands than in Finland, given that the supply of services that offer formal care outside of office hours is higher in Finland.

This chapter also demonstrated that working more hours was related to an increased likelihood of using formal childcare, compared to solely using parental care. This association was weaker in the Netherlands and the UK than in Finland; in the Netherlands, the association even became negative. Therefore, Dutch parents are less likely to use formal childcare when they work more hours. This finding may be indicative of the strong normative climate that surrounds the use of formal care in the Netherlands, in which formal childcare use seems to be accepted only for a few days a week (Merens & Van den Brakel, 2014). In the UK, however, the use of formal childcare is becoming increasingly accepted (Fagan & Norman, 2012), which may make formal childcare use more likely for British parents who work more hours.

Lastly, this chapter showed that regular changes in work schedules are related to a greater decrease in the likelihood of using informal childcare in the UK than in Finland. Furthermore, the results showed more variability in informal childcare in the UK compared with Finland, whereas we found no differences between Finland and the Netherlands, or any significant results for the time spent in childcare. This first finding demonstrates that regularly changing work schedules make it difficult for British parents to organise informal childcare. Although informal childcare is perceived as more flexible (Bakker & Karsten, 2013), the availability and flexibility of informal care remain limited. For example, informal caregivers could be employed themselves (Chaudry, 2004). The use of informal childcare is less common in Finland than in the UK, which may explain why the association between changing work schedules and the likelihood of using informal care is weaker among Finnish parents. The larger degree of variability in informal care in the UK is illustrative of the heavy reliance of British parents on informal caregivers (Plantenga & Remery, 2009), indicating that parents in the UK use both more informal care and a larger number of different informal care providers.

### **7.1.2 Couples' work schedule combinations and the likelihood of using parental, formal and informal childcare**

Although knowledge on how parental work schedules are related to their childcare arrangements is growing, prior research tended to focus on one parent in the family: the mother (Han, 2004; Presser, 2003). In *Chapter 3*, I argued that the opportunities and constraints that dual-earning parents face when arranging childcare depend on both parents' work schedules. Three dimensions of work schedules were included: the timing of work (i.e., having a standard or nonstandard schedule), schedule flexibility and home-based telework. I hypothesised how different combinations of these dimensions are related to not only parents' own care provision, but also their use of formal and informal childcare. For instance, the likelihood of using formal childcare was hypothesised to be lowest among parents who both work a nonstandard schedule. Moreover, I examined gender differences in the extent to which work schedules were associated with childcare arrangements. Previous research has demonstrated that mothers are more motivated than fathers to use work-related resources for the benefit of the family (Bielby, 1992);

therefore, the associations between parental work and childcare were expected to be more pronounced for mothers than for fathers.

First, this chapter showed that couples in which one or both parents worked nonstandard hours were less likely to use both formal and informal childcare. The lower likelihood of using informal childcare is particularly interesting, given that prior research found that parents who work during nonstandard hours often rely on informal caregivers (Han, 2004; Presser, 2003). This finding may be related to the sample used in this chapter, which consisted of many families with only one child; in contrast, grandparental involvement is higher in families with more children (Thomese & Liefbroer, 2013). Second, parents who work during nonstandard hours provided more parental childcare than did those working standard hours. This result is in line with the finding of Carriero and colleagues (2013) that Dutch parents tend to de-synchronise their working hours, which may be due to the existence of strong norms on childcare use in the Dutch society (Merens & Van den Brakel, 2014). This second finding is, however, in contrast to the additional analyses of *Chapter 2*. Yet, the current chapter incorporated the work schedules of both partners, which most likely provides a more accurate reflection of the association between nonstandard work and parental caregiving. This is because the work schedules of both parents define the childcare-related opportunities and constraints that parents face. Third, couples in which one or both parents worked from home did provide more parental care, but no associations were found with formal or informal care. Therefore, although prior research demonstrated that parents consider different types of childcare simultaneously (Leslie, Ettenson, & Cumsille, 2000), it appears that factors that are related to one type of care are not necessarily related to other types of care. This result even more strongly underlines the complexity of the link between parental work and childcare. The ability to determine one's own working hours was not related to parental, formal or informal childcare.

Examination of gender differences revealed more parental caregiving in couples in which only the mother worked evenings, nights and weekends than in couples in which only the father worked such a schedule. This result likely occurred because mothers are more motivated to use work-related resources for the benefit of the family (Bielby, 1992) and because mothers feel more responsible for managing family time (Craig & Powell, 2011). Mothers therefore appear more likely than fathers to use nonparental work schedules to increase their caregiving. Second, couples in which the mother had schedule flexibility had a lower likelihood of using informal childcare than couples in which the father had schedule flexibility, but no association with parental or formal childcare was found.

### **7.1.3 Nonparental childcare: Addressing a crucial factor for the mental health of parents who work during nonstandard hours**

From *Chapter 4* onwards, the focus of this dissertation shifted to how parental work and childcare are related to the well-being of parents and children. Concerning parents, prior research has provided mixed findings on the association between nonstandard work schedules and well-being (e.g., Barnett, Gareis, & Brennan, 2008; Jamal, 2004; Liu et al., 2011). In *Chapter 4*, I argue how the use of nonparental childcare may be a possible source of this heterogeneity. By building on arguments of the conflict approach (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005;

Greenhaus & Beutell, 1985), I hypothesised that using nonparental childcare could lower the conflict between work and family, especially among split-shift couples. As in *Chapter 3*, the work schedules of both partners within dual-earning couples were considered using a couple-level approach. By doing so, this chapter considered the interdependency between partners, which has been demonstrated by prior research (Gareis, Barnett, & Brennan, 2003). Moreover, this approach enabled the examination of gender differences.

Among parents who used nonparental childcare, the results of this chapter showed that the mental health of fathers was better for split-shift couples in which only the father worked nonstandard hours than for couples who worked standard hours. This result illustrates that nonstandard work schedules can indeed be beneficial for parents, as the study of Liu and colleagues (2011) demonstrated, but that the use of nonparental childcare and the question of who works the nonstandard schedule are both relevant. This result may be explained by the greater involvement in caregiving and more parent-child time among fathers who work nonstandard hours (Han, 2004; Täht & Mills, 2012). This configuration enables fathers to be involved with their children, which has been positively linked to parental well-being (Buehler & O'Brien, 2001; Eggebeen & Knoester, 2001). Moreover, because of the use of nonparental childcare, childcare tasks are not overly demanding, given that they are shared with a third party. This chapter also demonstrated worse mental health among fathers when both parents worked nonstandard hours. For these couples, the benefits of increased father-child interaction for mental health may be outweighed by difficulties with arranging childcare, which are commonly found among these couples (Han, 2004; Strazdins et al., 2006).

Among parents who did not use nonparental childcare, mothers were at greater disadvantage in split-shift couples in which the father worked nonstandard hours than in couples in which both partners worked standard hours. When mothers worked nonstandard hours themselves, maternal mental health was higher both in split-shift couples and in couples in which both parents worked nonstandard hours. The lower levels of maternal mental health in the first configuration may be explained by a combination of both role overload, resulting from high work and family commitments (Perry-Jenkins, Goldberg, Pierce, & Sayer, 2007), and little family and couple time (Lesnard, 2008). Mothers who work nonstandard hours are likely to have more opportunities for maternal caregiving (Han, 2004), which may explain their better mental health. The findings additionally demonstrated that, among couples who did not use nonparental care, the mental health of fathers was better among split-shift couples in which the mother worked nonstandard hours than in split-shift couples in which the father worked nonstandard hours. Combining nonstandard working hours with increased caregiving demands appears to take a toll on the mental health of these fathers.

Overall, paternal mental health was more responsive to different work schedule combinations than maternal mental health was. Whereas mothers are often still children's primary caregivers (Umehura, Jacobvitz, Messina, & Hazen, 2013), fathers' engagement in caregiving varies more depending on their own and their partner's work schedules (Täht & Mills, 2012). Therefore, the differences between fathers in different schedule combinations are likely to be greater, which may explain why this chapter presented more results for fathers' mental health. Taken together, the results in this chapter demonstrate that when examining how nonstandard work schedules affect parents, one should consider not only parents' nonparental childcare use,

but also differences between mothers and fathers, both in work schedules and in well-being consequences.

#### **7.1.4 The relevance of the parent-caregiver relationship for child well-being in formal childcare**

The fifth chapter of this dissertation investigated the extent to which the parent-caregiver relationship is associated with the socioemotional well-being of children in formal childcare. By applying insights from educational research to younger children and building on the work of Bronfenbrenner (1979), Coleman (1990), and the literature on nonstandard work schedules, this chapter presented a conceptual framework that explained how a positive parent-caregiver relationship is likely to be beneficial for child well-being. Furthermore, it was hypothesised that because of the specific challenges that parents who work during nonstandard hours face, children whose parents work nonstandard hours may benefit more from a positive parent-caregiver relationship. By employing a new parent-caregiver relationship measure, developed by using insights from educational research, this chapter contributes to existing research on the consequences of formal childcare for children.

After establishing adequate support for the new instrument that measured the parent-caregiver relationship, the results of this chapter suggested that the bond between parents and caregivers indeed affects child well-being, given the positive association between the parent-caregiver relationship and children's socioemotional well-being in formal childcare. This result is quite remarkable, given that parents' reports on the parent-caregiver relationship were fairly positive and showed limited variation. However, Zellman and Perlman (2006) noted that even limited variation in communication between parents and caregivers is meaningful. Moreover, this result shows that the insights obtained from educational research are also applicable to children who have not yet started school.

No support was found for the hypothesis that the association between the parent-caregiver relationship and child well-being was stronger among children whose parents worked nonstandard hours. Moreover, no differences were found between the well-being of children whose parents worked standard hours and that of children whose parents worked nonstandard hours. This result is not consistent with prior research that has often demonstrated how children whose parents work nonstandard hours encounter more difficulties, resulting in lower well-being (Gassman-Pines, 2011; Li et al., 2014, Strazdins et al., 2006). The differences between parents who work standard hours and those who work nonstandard hours may be minimised by the protective labour regulations that exist in the Netherlands (Täht, 2011), indicating that the rights of Dutch employees who work nonstandard hours may be better protected than those in other countries.

#### **7.1.5 The role of the country context in the association between formal childcare characteristics and child well-being**

In *Chapter 6*, the scope of the dissertation shifted back to the comparative perspective by investigating how different characteristics of formal childcare are associated with children's

socioemotional well-being in the Netherlands, Finland and the United Kingdom. Whereas prior research was mainly restricted to single countries, this chapter examined the extent to which the country context moderated the association between characteristics of formal care and child well-being. Three characteristics were included: the amount of time children spend in formal care, the scheduling of hours and the number of formal care providers. The focus on the Netherlands, Finland and the UK enabled a comparison of countries that differ regarding family policies. Two age groups were distinguished: children two years old and under and children aged three and older. For the former group, levels of emotionality, activity and shyness were examined; for the latter group, the focus was on internalising, externalising and prosocial behaviour.

The results of this chapter showed that first spending longer hours in formal childcare is related to children's internalising problem behaviour differently in the Netherlands compared to the UK; this positive association was found to be stronger among Dutch children. Although childcare used to be viewed as a private or individual concern in the UK, the country has become committed to delivering high-quality care in recent years (British Department for Education, 2013). The UK is even ranked third on the Starting Well Index (EIU, 2012), which ranks 45 countries on the quality of formal care. Although the Netherlands is still placed seventh on the Starting Well Index, a relatively high position, small differences in the quality of formal childcare may explain why longer hours in care are more harmful for children in the Netherlands. However, Dutch parents may also be more worried about how long hours in formal childcare affect children, given the existence of strong norms on formal care in the Dutch society (Merens & Van den Brakel, 2014), which may make Dutch parents more sensitive to reporting possible problem behaviour among their children.

Second, spending time in formal care during nonstandard hours was found to be more harmful for Finnish children than for British children, as indicated by greater displays of emotionality. This result was striking, given that care during evenings, nights and weekends is specifically addressed in governmental regulations in Finland but not in the UK. Further inspection of the data revealed that Finnish children spend more nights in formal care, while care during nonstandard hours involved only early mornings and evenings in the UK. In particular, overnight care has been linked to worse child outcomes (Anme & Segal, 2003; Boyd-Swan, 2015). However, this result may also indicate that parents who use overnight care are more inclined to notice problematic behaviour, because of the heated societal debate that surrounds night shift work (Williams, 2016).

Lastly, receiving care from multiple caregivers was related to higher shyness levels among British children than among Dutch children. Although this result was somewhat surprising, given that the UK was ranked higher than the Netherlands in terms of childcare quality, this chapter showed that British children, on average, receive care from more caregivers than Dutch children do. Prior research has linked the use of multiple care arrangements to negative child outcomes (Claessens & Chen, 2013; Morrissey, 2009), arguing that such care multiplicity hampers children's social development as a result of difficulties in the formation of relationships with peers and caregivers. It could also be the case, however, that British children are shyer in general, given the reserved nature of British people (Harley, 2003).

## 7.2 General conclusions

This dissertation showed that work during evenings, nights and weekends is not necessarily harmful for families, thereby positioning nonstandard work schedules in a more positive light relative to most of the scientific and public views on this matter. Many studies have assumed that such work schedules are problematic, especially in regard to arranging childcare, because parents with a nonstandard work schedule are unable to use common childcare services (Presser, 2003; Strazdins et al., 2006). However, the current research demonstrated that parents who work during nonstandard hours have different childcare arrangements than do those working standard hours, which are not automatically problematic. This is because parents who work during evenings, nights and weekends are able to provide more parental childcare. By working nonstandard schedules, parents can maximise the amount of time that at least one parent is not working, thus increasing opportunities to care for their children themselves. The relatively high educational level of the parents under study does warrant caution in interpreting this conclusion: Dutch parents who work during nonstandard hours appear to be in a more favourable position than parents with a similar schedule in other countries, such as the United States (Täht, 2011). The generalisability of this conclusion is therefore limited.

Although parents who work during nonstandard hours provide more parental care, this dissertation also demonstrated that nonparental childcare contributes to the well-being of these parents. This finding builds on a growing body of literature that studied how parental well-being is affected by work during evenings, nights and weekends. Existing studies have, however, provided mixed findings, linking nonstandard work schedules to both lower physical and mental health (Barnett et al., 2008; Press, Fagan, & Bernd, 2006), but also to higher life satisfaction (Liu et al., 2011). The current study showed that the use of nonparental childcare plays an important role here. Among couples who used nonparental childcare, the mental health of fathers who worked nonstandard hours was higher than that of fathers who worked standard hours. This is likely because fathers who work during nonstandard hours are more engaged with their children (Han, 2004; Täht & Mills, 2012), and caregiving responsibilities are not overly demanding because of the use of nonparental childcare. Not using nonparental care was found to be more harmful for mothers in couples who worked nonstandard hours than for mothers in couples who worked standard work schedules. This is probably due to role overload (Perry-Jenkins et al., 2007) and lack of family and couple time (Lesnard, 2008). Moreover, by showing how combinations of work schedules are associated with parents' mental health, this dissertation demonstrated the interdependency between partners. Parents are affected not only by their own work schedule, but also by their partner's schedule, which replicates prior research (Gareis et al., 2003).

Furthermore, this research informed the ongoing societal and scientific debate on the consequences of formal childcare for children (Tavecchio, 2015; Wente, 2015), by introducing the parent-caregiver relationship as a new dimension of formal care. The benefits of a positive parent-teacher relationship for children are well-established in educational research (Froiland & Davison, 2014; Sheridan, Bovaird, Glover, Garbacz, Witte, & Kwon, 2012), but research on this relationship before children start school was lacking. This dissertation showed that children in formal care had higher well-being when their parents had a more positive relationship with their caregiver. A more positive parent-caregiver relationship was measured in terms of higher-quality

communication between both parties. Such communication entails, for example, that parents are able to express their opinions on child-rearing issues, or that caregivers are honest in their approach with parents and work with parents if children exhibit behavioural difficulties. Such interactions between parents and caregivers are thought to enhance the supervision of children and improve problem solving. In contrast, insufficient communication between both parties may lead to negligence of potential problems, which could ultimately harm the development of the child. Thus, the relationship between the home and the childcare setting is of vital importance for children's well-being, and both parents and formal caregivers should invest in this relationship. Parental work schedules did not affect the association between the parent-caregiver relationship and child well-being, as no differences were found between children of parents who work standard hours and children whose parents work nonstandard hours.

Lastly, this dissertation demonstrated that contextualisation is needed when examining associations between work schedules, childcare arrangements and well-being. For instance, parents who work during nonstandard hours in the Netherlands were less likely to use formal childcare than those in Finland. This may be because Finnish parents have more opportunities to use formal childcare outside of office hours (Plantenga & Remery, 2009), whereas Dutch parents may feel more constrained to use this type of care because of existing norms (Merens & Van den Brakel, 2014). The same line of argumentation applies to the link between the characteristics of formal childcare and child well-being. The current research revealed that Dutch children showed more internalising problem behaviour when they spent longer hours in formal care than British children did. This may be explained in part by the higher evaluation of the quality of formal care in the United Kingdom (EIU, 2012), but the hesitance of Dutch parents to use formal care may also make them more prone to notice children's negative behaviour. Therefore, to understand how the country context affects associations between work schedules, childcare arrangements and well-being, knowledge on both family policies and societal norms on childcare use is needed.

### 7.3 Strengths and limitations

One of the key strengths of this dissertation is that both parents were considered when examining how working parents arrange care for their children and how this affects their well-being. When examining childcare arrangements, prior research tended to focus on mothers (see Liu, 2015, for a review). In this dissertation, I have argued that the need for childcare results from the combination of the work schedules of both partners, and therefore provided a more accurate reflection of the opportunities and constraints that parents encounter when arranging childcare. By applying such a couple-level perspective, the current research demonstrated that nonstandard work schedules are not harmful by definition: specific work schedule combinations offer parents the opportunity to increase their caregiving time. Moreover, this dissertation incorporated valuable insights of prior studies that mothers tend to identify more with family than with paid work (Beets, Schippers, & Te Velde, 2011) and are more often responsible for managing the home environment (Craig & Powell, 2011). By applying this to parental work schedules, I found that the provision of parental childcare was higher in couples in which only the mother worked nonstandard hours than in couples in which only the father worked such hours. Therefore, I



contribute to the literature not only by applying a couple-level perspective, but also by demonstrating that a gender-neutral approach is not justified.

In the data that are used in this dissertation, one parent reported on both his or her own work schedule and that of his or her partner. Actual couple data, in which both parents report on their own work schedules, were available only for the research question of Chapter 4. The absence of couple data in the other chapters could have reduced the reliability of the results, as parents may not be completely aware of the working hours of their partner. Future research may therefore take the next step in this line of research by employing actual couple data to examine how work schedule combinations affect childcare arrangements.

A second key strength of this dissertation was the introduction of the parent-caregiver relationship in the examination of the consequences of formal childcare on children: this factor has rarely been included in studies on children before they start school. By combining insights from Bronfenbrenner (1979), Coleman (1990) and the literature on nonstandard work (Gassman-Pines, 2011; Li et al., 2014; Strazdins et al., 2006), I explained both how a positive parent-caregiver relationship is likely to be beneficial for children in formal childcare and why such a relationship may be more important for children of parents who work a nonstandard schedule. Although nonstandard work did not make a difference, a positive bond between parents and caregivers was positively related to child well-being, thereby providing more insight into the conditions under which formal childcare is likely to be beneficial for children.

Because prior research has demonstrated that the parent-caregiver relationship encompasses multiple dimensions (Lang, Tolberg, Schoppe-Sullivan, & Bonomi, 2016; McGrath, 2007; Reedy & McGrath, 2010), this dissertation may be limited in focusing solely on communication as a single dimension of this relationship. Although communication between the two parties is considered an important element of the parent-caregiver relationship (McGrath, 2007; Rentzou, 2011), which provides support for the focus of this dissertation, future research is encouraged to approach the parent-caregiver relationship from a broader perspective. In addition, the data used to examine the association between the parent-caregiver relationship and child well-being were collected among parents only. Given that the use of nonparental childcare can be accompanied by feelings of guilt (Reynolds & Aletraris, 2007), parents may be more willing to report positively on their child's behaviour. To gain more insight into the reliability of parents' reports on their child's well-being in formal care, future research is encouraged to make use of caregivers' reports on this subject.

A final key strength of this dissertation is the use of a cross-national perspective, by comparing the Netherlands, Finland and the United Kingdom. Prior studies on childcare arrangements typically focus on one country, making it difficult to ascertain whether the results or policy implications of these studies can be generalised to other countries. By comparing three countries with different family policies, this dissertation contributed to the literature by examining how the country context relates to not only the extent to which work schedules affect childcare use, but also the association between characteristics of formal childcare and child well-being. The advantage of focusing on a limited number of countries is that each country can be described in detail, by paying special attention to differences in cultural, political or social context.

The downside of using a small country sample, however, is that one can only address how the country context moderates individual-level predictors but not directly test the effects of, for

example, family policies (Yu, 2015). Nation-level differences in policies or social norms, two factors that are relevant in the context of this dissertation, are therefore not specifically modelled. Examining this topic with a larger set of countries, allowing for the inclusion of country-level factors, is therefore desirable. Moreover, although this dissertation took some important first steps regarding comparative childcare research, some caution with respect to the generalisability of the results to other national contexts is still warranted. For instance, although the countries under study differ in their family policies, all countries can be considered as being supportive in combining work and family. The results of this dissertation are therefore not likely to be generalisable to countries with less supportive family policies. Future studies are therefore encouraged to include more countries when examining the interplay between work schedules, childcare and well-being and to expand this examination to countries that are less supportive in combining work and family.

A final limitation that must be mentioned is that the data used in this dissertation are cross-sectional, indicating that the direction of the expected relations could not be tested. Regarding childcare arrangements, scholars have argued that the most logical direction is from parental work to childcare. For instance, Kim and Fram (2009) argued that parental work is the primary reason for the use of nonparental childcare, and parents make childcare decisions within the constraints of their employment. Moreover, Liu (2015) illustrated how work schedules affect the type of childcare that parents select. Nonetheless, it is also possible that parents make decisions on their work schedule because of their childcare preferences (Presser, 2003). Yet, throughout this dissertation, parents' reasons for working evenings, nights and weekends could not be determined. To my knowledge, the study of Han (2004) is currently the only study that employed longitudinal data to examine this matter. The results of this study show that it is almost as likely for changes in work schedules to precede changes in care arrangements as the reverse situation. Yet, this study incorporated only the work schedules of mothers, which may explain the lack of clarity regarding the direction of the effect. Drawing on longitudinal data and following mothers and fathers would allow future studies to provide more insight into whether the direction from parental work to childcare arrangements is indeed the most accurate direction of this relation. The same argumentation applies to the potential consequences for parents and children, for which I followed the theoretical considerations of previous research in stating that parental work affects parental well-being (Barnett et al., 2008; Liu et al., 2011) and that characteristics of formal childcare affect child well-being (Loeb, Bridges, Bassok, Fuller, & Rumberger, 2007; Morrissey, 2009), rather than the reverse. Nonetheless, reverse causality remains possible, and this line of research should thus be extended with longitudinal data.

## **7.4 Practical implications**

The findings of this dissertation have several practical implications that can guide policy makers and childcare practitioners. In recent years, the Dutch government has aimed to support the combination of work and family by stimulating flexibility for employees. Such efforts are visible, for example, in the government's attention to the New World of Work (Bijlsma, Janssen, De Koning, & Schlechter, 2011), an initiative that enables employees to utilise schedule flexibility and telework. This would allow employees to provide more parental childcare, thereby making work

and family more compatible (Koenen, Vieira & Verhue, 2010). This dissertation demonstrated that work during nonstandard hours also allows parents to provide more childcare themselves, thus illustrating how nonstandard working hours can be viewed as a possible resource for parents. Hence, the combination of work and family can be achieved not only by employee flexibility, but also by specific work hours. However, work during evenings, nights and weekends is still often viewed in a negative light (Alles over onregelmatig werk, 2015; Williams, 2016). By paying attention to the possible positive consequences of nonstandard work schedules, policy makers can not only offer a more nuanced view of this type of work, but also expand their approach to supporting the combination of work and family.

Furthermore, this dissertation demonstrated that the use of nonparental childcare contributes to the mental health of parents who work during nonstandard hours. Although the provision of formal care services that operate during nonstandard hours seems to be increasing (Boogaard & Bollen, 2014; De Jong, 2013), the increase in nonstandard work schedules has been far more substantial. Policy makers who seek to advocate work during nonstandard hours should also argue for an increase in the provision of care outside of traditional office hours.

Policy makers should also be aware of the different ways in which the combination of nonstandard work schedules and nonparental childcare use affects mothers and fathers, because the findings of this dissertation illustrate that such a combination is positive especially for fathers. Considering that gender (in)equality is a focal point on the political agenda in the Netherlands (Dutch Government, 2016), the gender differences that are present in the interplay between work schedules, childcare and parental well-being should not be overlooked.

Given this dissertation's finding that a positive parent-caregiver relationship is beneficial for child well-being in formal childcare, the development of this relationship should be strengthened. Admittedly, reports on the parent-caregiver relationship were already fairly positive, but research has indicated that all but the highest ratings on communication between parents and providers of childcare warrant attention (Zellman & Perlman, 2006). This relationship can be strengthened in several ways. First, increased attention for the parent-caregiver relationship should begin early during the education of childcare practitioners. In the Netherlands, upper secondary education for the childcare sector is focused primarily on the provision of care for children, although some knowledge on communication with parents is included (ROC, 2016). Educators should capitalise more on the relevance of this communication in terms of child well-being. The Dutch childcare sector could even consider raising the educational requirements for childcare practitioners. For instance, in Finland, the country with the highest rated childcare quality (EIU, 2012), one-third of the childcare staff must have a university degree in education or social services (Alila, 2015). Second, managers in the childcare sector should consider offering training to their employees to enhance the parent-caregiver relationship. Because of all the policy alterations and changing regulations in the last few years (British Department for Education, 2013; Finlex, 2015; Social and Economic Council of the Netherlands, 2016), this relationship may have lost its importance among childcare practitioners. Trainings are likely to be helpful in promoting the extent to which communication with parents affects child well-being. Lastly, childcare practitioners can make parents more aware of the parent-caregiver relationship by distributing for example information leaflets. Research has shown that parents spend only 63 seconds on average at their child's care institution during morning drop-off (Perlman & Fletcher,

2012); therefore, developing a positive parent-caregiver relationship can be challenging. If parents are more aware of how their communication with the child's caregiver may benefit their child's well-being, they may be more willing to invest more time in developing this relationship.

## 7.5 Final conclusion

This dissertation has provided insight into how parental work schedules are related to childcare arrangements and how the combination of work and childcare affects the well-being of parents and children. I showed that when parents work during evenings, nights and weekends the opportunities to care for their children themselves increased, whereas these working hours decreased their likelihood of using formal and informal childcare. Although parents who worked during nonstandard hours were less likely to use these types of care, using nonparental childcare was beneficial for the mental health of fathers in particular. In contrast, foregoing the use of nonparental childcare was especially harmful for the mental health of mothers in couples who worked during nonstandard hours. This dissertation has also informed the debate on how formal childcare affects children by demonstrating that a more positive relationship between parents and caregivers was beneficial for children's socioemotional well-being. This relationship was equally important for children whose parents worked standard hours and for those whose parents worked nonstandard hours. Finally, the interplay among work schedules, childcare and well-being does not exist in a vacuum. Because of the degree of embeddedness of nonstandard work varies between countries, with the highest degree observed in Finland, followed by the Netherlands and the UK, respectively, opportunities for arranging childcare during nonstandard hours also vary accordingly.

Nederlandse samenvatting  
(Summary in Dutch)



Steeds meer vrouwen kiezen er na de geboorte van kinderen voor om te blijven werken. Daarom moeten ouders van nu opvang voor hun kinderen regelen. Ouders kunnen hierbij kiezen uit formele opvang, die wordt verzorgd door beroepskrachten (Zinsser, 2001), en informele opvang, die wordt verzorgd door familieleden of vrienden (Duncan, Edwards, Reynolds, & Alldred, 2004). Het regelen van kinderopvang kan echter een uitdaging zijn voor werkende ouders. Dit blijkt uit verschillende krantenartikelen, bijvoorbeeld uit het artikel van Nelleke Koops (2015) in het *NRC Handelsblad*, waarin zij de ervaringen van ouders bij het regelen van de kinderopvang als een gepuzzel omschreef. Ook schreef professor Bevelander (2016) in *de Volkskrant* dat het problematisch is voor werkende moeders dat de formele kinderopvang duur is en beperkt in openingstijden. Hoewel informele kinderopvang flexibeler is, kan het regelen hiervan ook ingewikkeld zijn, bijvoorbeeld omdat familieleden of vrienden zelf ook moeten werken (Chaudry, 2004). Hier komt nog bij dat niet iedereen positief staat tegenover kinderopvang, zeker voor jonge kinderen (Merens & Van den Brakel, 2014), wat het regelen van de juiste kinderopvang nog lastiger kan maken voor ouders.

Voor sommige ouders is kinderopvang makkelijker te regelen dan voor andere ouders. Hierbij zijn de baankenmerken van werkende ouders belangrijk. Zo werkt een stijgend aantal werknemers buiten kantoortijden, oftewel tijdens de avond, nacht of het weekend (Bünning & Pollmann-Schult, 2016; Liu, Wang, Keesler, & Schneider, 2011). Zulke werktijden kunnen het extra lastig maken voor ouders om formele kinderopvang te regelen, bijvoorbeeld vanwege de beperkte openingstijden. Verder heeft de toename van flexibiliteit ervoor gezorgd dat de manier van werken is veranderd (Kelliher & Anderson, 2010; Peters, Den Dulk, & Van der Lippe, 2009). Zo kunnen werknemers bijvoorbeeld hun werktijden (deels) zelf bepalen of thuiswerken. De flexibiliteit van de kinderopvangsector is echter beperkt (Cloin, Schols, Van den Broek, & Koutamanis, 2010), waardoor het problematisch kan zijn voor ouders met flexibele werktijden om kinderopvang te regelen. Hoewel eerder onderzoek heeft laten zien hoe dergelijke baankenmerken samenhangen met hoe ouders zelf voor hun kinderen zorgen (Carriero, Ghysels, & Van Klaveren, 2009; Täht & Mills, 2012), blijft het onduidelijk hoe werk buiten kantoortijden, flexibele werktijden en thuiswerken samenhangen met de mogelijkheden en beperkingen die ouders tegenkomen als zij de opvang van hun kinderen uitbesteden aan derde partijen.

Omdat het regelen van kinderopvang een dagelijkse bezigheid is voor veel families, kan de manier waarop ouders dit doen zowel ouders als kinderen beïnvloeden. Wat kinderen betreft is er een publiekelijk en wetenschappelijk debat gaande (Sociaal en Cultureel Planbureau, 2016; Tavecchio, 2015; Wentse, 2015). In dit debat noemen de voorstanders van formele kinderopvang de positieve effecten op de cognitieve ontwikkeling van kinderen (bijv. Votruba-Drzal, Coley, Koury, Miller, 2013; Weiland & Yoshikawa, 2013), terwijl de tegenstanders waarschuwen voor een toename in probleemgedrag (bijv. Belsky, Burchinal, McCartney, Vandell, Clarke-Stewart, & Owen, 2007; Loeb, Bridges, Bassok, Fuller, & Rumberger, 2007). Wat ouders betreft is er weinig eerder onderzoek gedaan. Hoewel kinderopvang vanuit een beleidsperspectief wordt gezien als een bron van steun (Hegewisch & Gornick, 2011), kan het regelen van kinderopvang stressvol zijn voor ouders, helemaal als zij meerdere kinderen hebben die naar verschillende vormen van opvang gaan (Belle, 2006).

Hoewel eerder onderzoek al wat licht heeft geworpen op hoe het werk van ouders, kinderopvang en het welzijn van ouders en kinderen samenhangen, blijven er meerdere vragen

onbeantwoord. Dit komt onder andere doordat eerder onderzoek zich voornamelijk heeft gericht op moeders (Han, 2004; Presser, 2003), terwijl de behoefte aan kinderopvang bepaald wordt door de werkschema's van beide ouders. Ook weten we niet goed hoe de baankenmerken van ouders samenhangen met hun gebruik van formele en informele kinderopvang, omdat eerder onderzoek zich heeft beperkt tot de zorg die ouders zelf aan hun kinderen geven. Er is dus een focus nodig op zowel de kinderopvang die ouders zelf verzorgen, als het gebruik van formele en informele kinderopvang. Deze vormen van kinderopvang worden in dit proefschrift gezamenlijk met de term kinderopvangarrangement aangeduid. Verder bestaat er nog onduidelijkheid over hoe de manier waarop werkende ouders kinderopvang regelen ouders en kinderen beïnvloedt. De centrale onderzoeksvraag van dit proefschrift is daarom: *In hoeverre zijn bedendaagse baankenmerken gerelateerd aan kinderopvangarrangementen en in welke mate hangt de combinatie van het werk van ouders en kinderopvangarrangementen samen met het welzijn van ouders en kinderen?*

In de vijf empirische hoofdstukken van dit proefschrift heb ik verschillende onderdelen van deze hoofdvraag onderzocht. Hieronder volgt een samenvatting van deze hoofdstukken, waarin ik de theorie en de belangrijkste bevindingen van deze hoofdstukken beschrijf. Vervolgens zal ik enkele algemene conclusies trekken, waarbij ik ook aandacht zal besteden aan de beperkingen van dit proefschrift en enkele suggesties zal geven voor vervolgonderzoek.

### **Werkschema's en kinderopvang in Finland, Nederland en het Verenigd Koninkrijk**

De toename van het aantal werknemers dat buiten kantoortijden werkt heeft gezorgd voor een toename van studies die de gevolgen hiervan voor het familieleven onderzoeken, voor bijvoorbeeld de relatiekwaliteit tussen ouders of de interactie tussen ouders en kinderen (Liu et al., 2011; Täht & Mills, 2012). Er bestaat echter weinig onderzoek over de gevolgen van werk buiten kantoortijden voor de manier waarop ouders de opvang van hun kinderen regelen. Het eerste empirische hoofdstuk, hoofdstuk 2, draaide daarom om de samenhang tussen de werkschema's van ouders en hun gebruik van kinderopvang. Ik heb dit onderzocht in drie landen die verschillen in hun beleid en normen wat betreft betaald werk en kinderopvang, namelijk Finland, Nederland en het Verenigd Koninkrijk (León, 2005; Mandel & Semyonov, 2006).

Er zijn een aantal studies die kijken naar kinderopvang vanuit een landenvergelijkend perspectief, maar deze studies richten zich enkel op verschillen in het gebruik van formele opvang (bijv. Kröger, 2010; Mamolo, Coppola, & Di Cesare, 2011). In hoofdstuk 2 heb ik echter zowel formele als informele kinderopvang bestudeerd. Ook heb ik in dit hoofdstuk gekeken naar verschillen in het aantal soorten opvang dat ouders gebruikt en de uren die kinderen hier op een gemiddelde werkdag doorbrengen. Ik heb drie verschillende typen verwachtingen geformuleerd. Het eerste type verwachtingen draaide om de samenhang tussen werkschema's en kinderopvang. Hiervoor keek ik naar het type werkschema van ouders (binnen of buiten kantoortijden), het aantal werkuren en de mate waarin het werkschema veranderde. Zo verwachtte ik dat ouders die buiten kantoortijden werken minder gebruik zouden maken van formele kinderopvang, vanwege het gebrek aan opvangmogelijkheden tijdens deze uren (Presser, 2003). Het tweede type verwachtingen draaide om de verschillen tussen landen, waarbij ik bijvoorbeeld verwachtte dat Britse kinderen de meeste uren in informele opvang doorbrengen, omdat formele opvang in het Verenigd Koninkrijk duur en complex is (Fagan & Norman, 2012). Het derde type verwachtingen draaide om de combinatie van baankenmerken en landverschillen. In tegenstelling



tot Nederland en het Verenigd Koninkrijk kent Finland een groot aantal kinderopvangcentra dat dag en nacht open is (Plantenga & Remery, 2009). Daarom verwachtte ik bijvoorbeeld dat de samenhang tussen werk buiten kantoortijden en het gebruik van formele opvang het zwakst was in Finland.

Om deze verwachtingen te toetsen heb ik gebruik gemaakt van nieuwe data die mede speciaal voor dit proefschrift zijn verzameld. De ‘Families 24/7’ dataset bevat gegevens over Finse, Nederlandse en Britse ouders met kinderen tussen de 0 en 12 jaar oud. De resultaten van dit hoofdstuk lieten ten eerste zien dat werk buiten kantoortijden inderdaad samenhangt met een kleinere kans om formele kinderopvang te gebruiken. Deze samenhang was sterker in Nederland dan in Finland. Hoewel dit kan komen door een gebrek aan formele opvang buiten kantoortijden (Strazdins, Clements, Korda, Broom, & D’Souza, 2006), kan het ook zijn dat ouders bewust kiezen voor werk buiten kantoortijden, omdat dit hen in staat stelt om zelf voor de kinderen te zorgen (Presser, 2003). Ten tweede bleken ouders een grotere kans te hebben om formele kinderopvang te gebruiken als zij meer uren werkten. Deze samenhang was zwakker in Nederland en het Verenigd Koninkrijk dan in Finland. Een mogelijke verklaring hiervoor is dat het gebruik van formele opvang minder geaccepteerd is in de eerste twee landen (Fagan & Norman, 2012; Merens & Van den Brakel, 2014). Ten derde hadden Britse ouders met een werkschema dat regelmatig veranderde een kleinere kans om informele opvang te gebruiken dan Finse ouders. Hoewel informele opvang flexibeler is (Bakker & Karsten, 2013), is deze flexibiliteit niet onbegrensd, bijvoorbeeld omdat grootouders of vrienden zelf moeten werken (Chaudry, 2004). Dit kan verklaren dat een werkschema dat regelmatig verandert het lastig maakt om informele opvang te regelen. Doordat Finse ouders minder gebruik maken van informele kinderopvang dan Britse ouders, was de samenhang tussen de mate waarin het werkschema verandert en het gebruik van informele opvang waarschijnlijk zwakker in Finland.

### **Tweeverdieners en kinderopvangarrangementen**

Eerder onderzoek naar de samenhang tussen de werkschema’s van ouders en hun kinderopvangarrangementen heeft zich vaak gericht op één ouder binnen de familie: de moeder (Han, 2004; Presser, 2003). In hoofdstuk 3 heb ik echter beargumenteerd dat de mogelijkheden en beperkingen die ouders tegenkomen bij het regelen van de opvang van hun kinderen afhangt van de werkschema’s van beide ouders. Dit hoofdstuk richtte zich daarom op tweeverdieners en vergeleek ouders met verschillende combinaties van werkschema’s. Hierbij lag de nadruk op de tijd waarop ouders werken (binnen of buiten kantoortijden), de mogelijkheid tot flexibele werktijden en de mogelijkheid tot thuiswerken. Dit hoofdstuk bouwde verder voort op eerder onderzoek door onderscheid te maken tussen mannen en vrouwen. Ook heb ik in dit hoofdstuk alle vormen van kinderopvang die ouders kunnen gebruiken onderzocht, waar eerder onderzoek zich vooral richtte op de zorg die ouders zelf aan hun kinderen geven (Carriero et al., 2009; Täht & Mills, 2012). Omdat ouders verschillende vormen van opvang tegelijkertijd beschouwen (Leslie et al., 2000), heb ik zowel de zorg die zij zelf aan hun kinderen geven, als hun gebruik van formele en informele opvang bestudeerd.

Om verwachtingen te formuleren over de manier waarop ouders de zorg voor hun kinderen regelen, heb ik in hoofdstuk 3 een overzicht gemaakt van de verschillende mogelijkheden en beperkingen die ouders met verschillende werkschemacombinaties

tegenkomen. Ik verwachtte bijvoorbeeld dat de mate waarin tweeverdieners zelf voor hun kinderen zorgen het hoogst zou zijn als één van beide ouders buiten kantoortijden werkt, omdat deze combinatie van werkschema's weinig overlap in werkuren heeft (Lesnard, 2008). Wat betreft het gebruik van formele opvang verwachtte ik onder andere dat dit het hoogst zou zijn onder ouders die de mogelijkheid hebben tot flexibele werktijden of thuiswerken, omdat deze baankenners ouders in staat stellen om hun werkverplichtingen aan te passen aan het schema van de kinderen (Byron, 2005; Osnowitz, 2005). Omdat ouders die beide buiten kantoortijden werken flexibele opvang nodig hebben tijdens de avonden en nachten (Kimmel & Powell, 2006), verwachtte ik verder dat deze koppels het meest gebruik maken van informele opvang. Als laatste verwachtte ik dat de werkschema's van moeders sterker zouden samenhangen met kinderopvangarrangementen dan die van vaders, omdat moeders vaker verantwoordelijk zijn voor het regelen van het familieleven (Craig & Powell, 2011).

In hoofdstuk 3 heb ik gebruik gemaakt van recente Nederlandse data van het 'Krimp in Kinderopvang' project, die zijn verzameld door het Sociaal Cultureel Planbureau en het Centraal Bureau voor de Statistiek. Deze data bevatten gegevens over zowel ouders van wie het eerste kind recentelijk is geboren, als ouders van wie het eerste kind recentelijk vier jaar is geworden. De resultaten van dit hoofdstuk lieten zien dat koppels waarin één of beide ouders buiten kantoortijden werkten zowel minder formele als informele kinderopvang gebruikten. Ook zorgden deze koppels meer zelf voor hun kinderen, vergeleken met koppels waarin beide ouders binnen kantoortijden werkten. Het lagere gebruik van informele opvang was verrassend, aangezien dit in tegenstelling is tot bevindingen van eerder onderzoek uit het buitenland (Han, 2004; Presser, 2003). Verder lieten de resultaten zien dat ouders die thuiswerkten meer zelf voor hun kinderen kunnen zorgen, terwijl er geen bewijs werd gevonden voor de mogelijkheid tot flexibele werktijden. Tot slot bleken er, zoals verwacht, inderdaad verschillen te zijn tussen mannen en vrouwen: koppels waarin de moeder buiten kantoortijden werkte zorgden meer zelf voor hun kinderen dan koppels waarin de vader buiten kantoortijden werkte.

### **Werkschema's en mentaal welzijn: Maakt het gebruik van kinderopvang een verschil?**

Vanaf hoofdstuk 4 werd in dit proefschrift gekeken naar hoe de combinatie van werkschema's en kinderopvangarrangementen samenhangt met het welzijn van ouders en kinderen. In hoofdstuk 4 lag de nadruk op ouders. Eerder onderzoek heeft een onduidelijk beeld gegeven over de invloed van werk buiten kantoortijden op het welzijn van ouders. Aan de ene kant zijn er studies die laten zien hoe dit werk leidt tot slechter lichamelijk en mentaal welzijn (Barnett, Gareis, & Brennan, 2008; Jamal, 2004; Press, Fagan, & Bernd, 2006) en huwelijksproblemen (Perry-Jenkins, Goldberg, Pierce, & Sayer, 2007; Presser, 2003). Aan de andere kant zijn er ook geluiden dat werk buiten kantoortijden voor minder psychologische problemen en meer tevredenheid zorgt (bijv. Liu et al., 2011). In dit hoofdstuk legde ik uit hoe het gebruik van kinderopvang hier een verklaring voor kan zijn. Verder kende dit hoofdstuk, net als hoofdstuk 3, een focus op tweeverdieners. Hierdoor kon ik niet alleen man-vrouw verschillen onderzoeken, maar ook bestuderen in hoeverre ouders beïnvloed worden door het werkschema van hun partner (Gareis, Barnett, & Brennan, 2003).

Het regelen van kinderopvang zal naar verwachting relatief gemakkelijk gaan voor koppels waarin één van beide ouders buiten kantoortijden werkt. Dit komt doordat zowel eerder

onderzoek als de resultaten van hoofdstuk twee laten zien dat ouders die buiten kantoortijden werken meer zelf voor hun kinderen kunnen zorgen (Presser, 2003; Täht & Mills, 2012). Omdat deze ouders weinig behoefte hebben aan kinderopvang, verwachtte ik dat het mentale welzijn van deze koppels het hoogst zou zijn. Voor ouders die beide binnen kantoortijden werken verwachtte ik dat zij zich meer schuldig zouden voelen over het gebruik van opvang en meer zouden piekeren over de kwaliteit hiervan (Barnett & Gareis, 2006; Reynolds & Aletraris, 2007; Uttal, 2002), vanwege hun hogere gebruik van kinderopvang, met een lager mentaal welzijn als gevolg. Ouders die beide buiten kantoortijden werken komen naar verwachting de meeste problemen tegen met het regelen van kinderopvang (Strazdins et al., 2006), waardoor ik voorspelde dat hun welzijn het laagst zou zijn.

Er zijn ook ouders die geen kinderopvang gebruiken, bijvoorbeeld omdat ze dit niet willen of geen geschikte opvang kunnen vinden (Han, 2004; Rutter & Evans, 2011). Omdat dit betekent dat deze ouders de zorg voor kinderen niet met anderen kunnen delen en deze zorg moeten combineren met werkverplichtingen, kan dit schadelijk zijn voor het welzijn van ouders (Perry-Jenkins et al., 2003). Ik verwachtte dat deze negatieve effecten voor het mentale welzijn beperkt zouden zijn onder ouders die beide binnen kantoortijden werken, omdat zij hun avonden en weekenden met het gezin kunnen doorbrengen (Verhoef & Roeters, 2015; Zuzanek, 2006). Koppels waarin één of beide ouders buiten kantoortijden werken kunnen dit echter niet (Bianchi, 2000; Heymann & Earle, 2001; Lesnard, 2008), waardoor zij naar verwachting het laagste mentale welzijn zouden hebben. Als laatste verwachtte ik dat moeders sterker beïnvloedt zouden worden door het gebruik van kinderopvang, aangezien zij vaak verantwoordelijk zijn hiervoor (Craig, 2006; Moon & Hoffman, 2008).

Voor dit hoofdstuk heb ik gebruikt gemaakt van data van de NKPS, een project over familiebanden in Nederland dat onder andere gegevens bevat over ouders met kinderen tussen de 0 en 12 jaar. Uit de resultaten bleek dat, wanneer ouders kinderopvang gebruikten, het welzijn van vaders hoger was wanneer alleen zijzelf buiten kantoortijden werkten, vergeleken met koppels waarin beide ouders binnen kantoortijden werkten. Dit komt waarschijnlijk omdat deze vaders meer betrokken zijn bij de zorg van hun kinderen (Han, 2004; Täht & Mills, 2012), maar dat deze verantwoordelijkheid niet te hoog is vanwege het gebruik van opvang. Voor ouders die geen opvang gebruikten bleek het welzijn van moeders juist het laagst te zijn in koppels waarin alleen de vader buiten kantoortijden werkte. Als moeders zelf buiten kantoortijden werkten, was hun welzijn hoger, wat verklaard kan worden door de grotere mogelijkheden die deze moeders hebben om tijd met hun kinderen door te brengen (Han, 2004). Dit hoofdstuk laat daarom zien dat de samenhang tussen werkschema's en mentaal welzijn verschilt tussen mannen en vrouwen.

### **Het belang van de relatie tussen ouders en kinderopvangmedewerkers voor het welzijn van kinderen**

Hoofdstuk 5 draaide om de vraag of de relatie tussen ouders en medewerkers van de kinderopvang positief samenhangt met het welzijn van kinderen. Hoewel eerder onderzoek heeft aangetoond dat een positieve relatie tussen ouders en leerkrachten gunstig is voor kinderen (Froiland & Davison, 2014; Sheridan, Bovaird, Glover, Garbacz, Witte, & Kwon, 2012), is deze samenhang niet onderzocht voor jongere kinderen. Verder is in dit hoofdstuk onderzocht of de

relatie tussen ouders en kinderopvangmedewerkers van groter belang is voor kinderen van ouders die buiten kantoortijden werken.

Door gebruik te maken van het ecologische systeemmodel van Bronfenbrenner (1979) heb ik beargumenteerd waarom de relatie tussen ouders en kinderopvangmedewerkers van belang is voor het welzijn van kinderen. Jonge kinderen brengen namelijk zowel thuis als op de kinderopvang veel tijd door, waardoor de verbinding tussen deze twee contexten belangrijk is. Door inzichten van Coleman (1990) te gebruiken over het belang van afstemming en communicatie in sociale relaties, heb ik uitgelegd dat ik verwacht dat betere communicatie tussen ouders en medewerkers van de kinderopvang kan leiden tot hoger welzijn van kinderen. Vervolgens heb ik gebruik gemaakt van literatuur over werk buiten kantoortijden om te beargumenteren dat het belang van deze relatie kan verschillen afhankelijk van het werkschema van ouders. Kinderen van ouders die buiten kantoortijden werken hebben namelijk vaak een lager welzijn dan kinderen van ouders die binnen kantoortijden werken (Gassman-Pines, 2011; Li et al., 2014; Strazdins et al., 2006). Naar verwachting zal een positieve relatie tussen ouders en kinderopvangmedewerkers daarom vooral belangrijk zijn voor kinderen van ouders die buiten kantoortijden werken.

Voor hoofdstuk 5 heb ik, net als in hoofdstuk 2, gebruik gemaakt van data van het 'Families 24/7' project, hoewel ik in dit hoofdstuk alleen de Nederlandse data heb gebruikt. De resultaten bevestigden de verwachting dat de relatie tussen ouders en medewerkers van de kinderopvang positief samenhangt met het welzijn van kinderen. Ik kon echter geen bewijs vinden voor de verwachting dat deze relatie vooral van belang is voor kinderen van ouders die buiten kantoortijden werken. Dit kan worden verklaard doordat de aanname dat het welzijn van kinderen wiens ouders buiten kantoortijden werken lager was dan het welzijn van kinderen wiens ouders binnen kantoortijden werken niet opging in dit hoofdstuk. Doordat in Nederland de rechten van werknemers die buiten kantoortijden werken beter beschermd zijn dan in andere landen (Täht, 2011), is het mogelijk dat de verschillen tussen ouders die binnen en buiten kantoortijden werken in Nederland beperkt zijn.

### **Kenmerken van kinderopvang en het welzijn van kinderen: Een landenvergelijkend perspectief**

Het laatste empirische hoofdstuk, hoofdstuk 6, keek wederom naar het welzijn van kinderen, maar dit keer in een landenvergelijkend perspectief. Eerder onderzoek over de samenhang tussen formele kinderopvang en gevolgen voor kinderen heeft zich beperkt tot afzonderlijke landen. In dit hoofdstuk leg ik echter uit dat de samenhang tussen kenmerken van formele kinderopvang en het welzijn van kinderen kan verschillen tussen landen. Hierbij zijn verschillen in familie- en kinderopvangbeleid van belang, aangezien dit de kwaliteit van de formele kinderopvang kan beïnvloeden (Rigby, Ryan, & Brooks-Gunn, 2007). Opvang van hogere kwaliteit hangt namelijk samen met betere uitkomsten voor kinderen (Broekhuizen, Mokrova, Burchinal, & Garrett-Peters, 2016). Daarom vergeleek ik in dit hoofdstuk Nederland met Finland en het Verenigd Koninkrijk: drie landen met uiteenlopend familie- en kinderopvangbeleid. Ik heb hierbij drie kenmerken onderzocht, namelijk de hoeveelheid tijd die kinderen maandelijks doorbrengen in de formele opvang, wanneer op de dag (overdag of 's avonds/'s nachts) zij dit doen en naar hoeveel verschillende soorten formele opvang kinderen gaan.

In dit hoofdstuk heb ik uitgelegd op welke manier het beleid van een land de kwaliteit van de kinderopvang kan beïnvloeden. Denk hierbij bijvoorbeeld aan wetten over het aantal kinderen dat een medewerker van de kinderopvang mag opvangen, of de opleiding die medewerkers voltooid moeten hebben. Verschillen tussen landen in de eisen hiervoor kunnen uiteindelijk leiden in verschillen in de kwaliteit van de opvang die kinderen krijgen (EIU, 2012), waarbij Finland het hoogst beoordeeld wordt. De kwaliteit van de formele opvang in het Verenigd Koninkrijk is iets lager, gevolgd door Nederland, hoewel alle drie landen in de top 10 staan wat betreft kwaliteit van de formele opvang (EIU, 2012). Deze verschillen in kwaliteit heb ik meegenomen in het formuleren van verwachtingen over de samenhang met het welzijn van kinderen. Zo verwachtte ik bijvoorbeeld dat meer uren in formele opvang het minst schadelijk zouden zijn in Finland, iets schadelijker in het Verenigd Koninkrijk en het meest schadelijk in Nederland.

Om mijn verwachtingen te toetsen heb ik wederom data gebruikt van het ‘Families 24/7’ project. De resultaten van dit hoofdstuk suggereren dat, zoals verwacht, meer uren in formele opvang schadelijker zijn in Nederland dan in het Verenigd Koninkrijk. Verder was het welzijn van Finse kinderen die ’s avonds of ’s nachts in de opvang verbleven lager dan dat van Britse kinderen. Hoewel dit in eerste instantie onverwacht was, bleken Finse kinderen vaker ’s nachts in de opvang te verblijven dan Britse kinderen. Eerder onderzoek heeft laten zien dat met name opvang tijdens de nacht schadelijk is voor kinderen (Anme & Segal, 2003; Boyd-Swan, 2015), wat kan verklaren waarom het welzijn van Finse kinderen lager was. Tot slot waren Britse kinderen die naar verschillende soorten formele opvang gingen slechter af dan Nederlandse kinderen. Dit was eveneens onverwacht, omdat de Britse opvang kwalitatief beter zou zijn dan de Nederlandse opvang (EIU, 2012). Britse kinderen gingen gemiddeld wel naar meer verschillende soorten formele opvang dan Nederlandse kinderen, wat dit verschil zou kunnen verklaren.

### **Conclusie en discussie**

Door in mijn proefschrift te laten zien dat werk buiten kantoortijden niet per se schadelijk is voor families, kan ik dit type werkschema in een positiever daglicht zetten. Zowel eerder onderzoek als de heersende publieke opinie benoemt namelijk vooral de negatieve kanten van werk buiten kantoortijden. Zo wordt het namelijk als problematisch gezien dat ouders met dit type werkschema bijvoorbeeld geen gebruik kunnen maken van formele opvang (Presser, 2003; Strazdins et al., 2006). Mijn onderzoek laat echter de mogelijkheden zien die werk buiten kantoortijden ouders biedt: zij kunnen namelijk zelf meer voor hun kinderen zorgen. Toch is de kinderopvang ook voor deze ouders een belangrijk ondersteuningsmiddel en het gebruik hiervan hangt samen met het welzijn van ouders. De combinatie van werk buiten kantoortijden met het gebruik van kinderopvang bleek namelijk vooral positief voor het welzijn van vaders. Mijn onderzoek laat echter ook zien dat werken tijdens de avond, nacht of het weekend zonder het gebruik van kinderopvang schadelijk kan zijn voor moeders. Naast dat het relevant bleek om het welzijn van ouders te onderzoeken, vond ik ook een samenhang tussen formele opvang en uitkomsten voor kinderen: hun welzijn is namelijk hoger als hun ouders een betere relatie hebben met de medewerkers van de kinderopvang. Tot slot bleek de landencontext mede bepalend te zijn voor de samenhang tussen werkschema’s, kinderopvang en welzijn. Zo vond ik dat Nederlandse ouders die buiten kantoortijden werken minder geneigd zijn om formele opvang te gebruiken dan

Finse ouders. Ook hadden Nederlandse kinderen een lager welzijn als ze langer in formele opvang verbleven dan Britse kinderen. Om dergelijke bevindingen te kunnen verklaren, zijn verschillen tussen landen in zowel beleid als in sociale normen van belang.

Een beperking van dit proefschrift is dat de bevindingen gebaseerd zijn op cross-sectionele data, die verzameld zijn op één tijdstip, waardoor ik niet kan bepalen of werkschema's een causaal effect hebben op kinderopvangarrangementen of dat ouders bepaalde voorkeuren hebben voor de opvang van hun kinderen en zij hun werk hierop aanpassen. Vervolgonderzoek zou daarom longitudinale data, met gegevens over verschillende tijdstippen, kunnen gebruiken om zo te achterhalen welke beslissing ouders eerst maken. Ook heb ik slechts in één hoofdstuk gebruik kunnen maken van data met gegevens van beide ouders, in de overige hoofdstukken heeft één van de ouders informatie verstrekt over beide ouders. Dit kan mogelijk de betrouwbaarheid en validiteit van de bevindingen beperken. Toekomstige studies zouden daarom meer gebruik kunnen maken van zogenaamde koppeldata, om zo de betrouwbaarheid van de bevindingen van dit proefschrift te toetsen. Verder heb ik bij het onderzoeken van de relatie tussen ouders en kinderopvang medewerkers mij beperkt tot slechts één dimensie van deze relatie, namelijk communicatie, terwijl deze relatie meerdere dimensies kent (Lang, Tolberg, Schoppe-Sullivan, & Bonomi, 2016; McGrath, 2007; Reedy & McGrath, 2010). Onderzoek dat de relatie tussen ouders en kinderopvangmedewerkers in een breder perspectief plaatst is daarom gewenst. Bovendien heb ik slechts drie landen vergeleken, waardoor het niet mogelijk was om te toetsen wat het directe effect was van verschillen in familie- of kinderopvangbeleid (Yu, 2015). Vervolgonderzoek zou de verbanden tussen werkschema's, kinderopvang en het welzijn van ouders en kinderen daarom in een groter aantal landen kunnen onderzoeken.

Op basis van dit proefschrift kan worden geconcludeerd dat hedendaagse baankenmerken zowel samenhangen met de zorg die ouders zelf aan hun kinderen geven als met hun gebruik van formele en informele opvang. Vooral werk buiten kantoortijden bleek hierbij een grote rol te spelen, omdat dit ouders meer mogelijkheden biedt om zelf voor hun kinderen te zorgen. Kinderopvang is echter alsnog belangrijk voor het welzijn van ouders die buiten kantoortijden werken, want dit bleek samen te hangen met het welzijn van ouders. Zo was werken buiten kantoortijden zonder het gebruik van kinderopvang met name schadelijk voor moeders. Wat kinderen betreft is het van belang dat ouders een goede relatie hebben met medewerkers van de kinderopvang, dit hangt namelijk samen met betere uitkomsten voor kinderen. Tot slot toonde dit proefschrift aan dat de context van belang is wanneer gekeken wordt naar verbanden tussen werkschema's, kinderopvang en welzijn, door verschillen aan te tonen tussen Finland, Nederland en het Verenigd Koninkrijk.

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I spend most of my time at the Sociology Department at Utrecht University, where I met many people who supported me throughout the years. Simon, you have been a true friend, who was always available for questions or advice. Discussing our papers together challenged me; thank

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*Vedete, un rapporto d'amore è come un'isola, bisogna accettarlo per quello che è, qui, ora, con i suoi confini. Un'isola circondata dal mare, interrotta dal mare, visitata e abbandonata in continuazione dal flusso delle maree.*

Melissa Verhoef-van Dorp  
Utrecht, February 2017

# Curriculum vitae





Melissa Verhoef was born in Zwolle, the Netherlands, on September 29, 1990. In 2010, she obtained her bachelor's degree in Sociology (cum laude) at Utrecht University. She continued with the research master Development and Socialisation in Childhood and Adolescence at the same university, from which she graduated in 2012. In this year, Melissa started as a junior researcher on the international 'Families 24/7' project at the department of Sociology at Utrecht University, which was financed by the Academy of Finland. She collaborated with international partners from Finland (JAMK University of Applied Sciences, University of Jyväskylä) and the United Kingdom (University of Manchester) to develop the project's questionnaire. She also coordinated the Dutch part of the data collection. In 2013, she joined the Finnish project team at JAMK University of Applied Sciences in Jyväskylä, Finland, to work on empirical papers based on the project data. Her responsibilities also included the data preparation and cleaning of the 'Families 24/7' dataset. During this time, Melissa wrote a comparative paper, together with other project members, which eventually became the first empirical chapter of her dissertation.

In September 2013, Melissa started working as a PhD candidate at the Interuniversity Centre for Social Theory and Methodology (ICS) at the department of Sociology at Utrecht University, under the supervision of Anne Roeters and Tanja van der Lippe. In 2014, she was selected to join the Hendrik Müller Summer Seminar of the Royal Netherlands Academy of Arts and Sciences (KNAW). In 2016, she was a visiting scholar at the Morgan Centre for the Study of Relationships and Personal Life of the University of Manchester and at City University London. During this visit, Melissa wrote a paper together with Anke Plagnol and Vanessa May.



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Arranging care for children can be challenging for working parents, especially when parents do not work a nine-to-five weekday schedule. This dissertation examines to what extent modern-day job characteristics, such as work during nonstandard hours or being able to work from home, can facilitate or hinder parents' childcare arrangements. How do these job characteristics affect parents' own provision of care, or their use of formal and informal childcare? And what are the implications for the well-being of parents and children?

The five empirical chapters of this dissertation reveal that the timing of work was especially relevant for parents' childcare arrangements. Parents who worked during evenings, nights and weekends had more opportunities to care for their children themselves, whereas these working hours decreased parents' likelihood of using formal and informal childcare. Although parents who worked during nonstandard hours were less likely to use these types of care, nonparental childcare contributes to the well-being of these parents, especially for fathers. This dissertation also provides more insight into the impact of formal childcare on children, by demonstrating that a more positive relationship between parents and caregivers was beneficial for children's socioemotional well-being. By contrasting the Netherlands with Finland and the United Kingdom, this dissertation demonstrates that contextualisation is needed when examining associations between work schedules, childcare arrangements and well-being.

Melissa Verhoef (1990) obtained her Bachelor's degree in Sociology and Research Master's degree in Development and Socialisation in Childhood and Adolescence at Utrecht University. She conducted the present study at the Interuniversity Centre for Social Science Theory and Methodology (ICS) at Utrecht University.