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**DOI:**  
[10.1111/fare.12353](https://doi.org/10.1111/fare.12353)

**Document Version**  
Accepted author manuscript

[Link to publication record in Manchester Research Explorer](#)

**Citation for published version (APA):**  
Moilanen, S., Aunola, K., May, V., Sevón, E., & Laakso, M.-L. (2019). Nonstandard Work Hours and Single Versus Coupled Mothers' Work-to-Family Conflict. *Family Relations*. <https://doi.org/10.1111/fare.12353>

**Published in:**  
Family Relations

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Nonstandard Work Hours and Single Versus Coupled Mothers' Work-to-Family Conflict

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## Abstract

**Objective:** To compare single and coupled mothers' experiences of time-based work-to-family conflict (WFC) and work-to-family positive affective spillover (PAS) in the context of maternal nonstandard work hours.

**Background:** Despite having become one of the central topics of work–family research, studies examining the relationship of maternal work schedules and family roles have mainly focused on North American samples or dual-earner families. Although qualitative studies have highlighted the problems faced by European single mothers in relation to the combination of nonstandard work hours and family life, there are no quantitative or cross-national comparative studies on the association.

**Method:** Using a convenience sample derived from the Families 24/7 survey of Finnish, Dutch, and British mothers with children 12 years of age or younger ( $N = 1,106$ ), path analysis was carried out to assess the associations of single motherhood, nonstandard work hours, and their interaction with WFC and PAS, and to compare the associations between three countries.

**Results:** The positive association between the amount of nonstandard work hours and WFC was found to be stronger among single mothers than coupled mothers in all three countries. However, in Finland, both single and coupled mothers, and in the Netherlands and the United Kingdom, only single mothers, experienced higher WFC when the mother worked more during nonstandard hours. In all countries, single mothers experienced less PAS than coupled mothers.

**Conclusion:** Dutch and British single mothers who work nonstandard hours experience the combination of multiple roles particularly challenging compared to coupled mothers. In Finland, both single and coupled mothers report high levels of WFC when they work more nonstandard hours; hence, a greater amount of work during nonstandard hours is not an automatic indication of heightened challenges for single mothers alone.

**Implications:** When aiming to improve mothers' work–family reconciliation via social and workplace policies, it is important to understand the circumstances of single and coupled mothers in different cultural contexts.

*Keywords:* nonstandard work schedules, single mothers, work–family conflict, work–family spillover, working mothers

### Nonstandard Work Hours and Single Versus Coupled Mothers' Work-to-Family Conflict

The relationship of maternal work schedules and family life has become one of the central topics of work–family research (Bianchi & Milkie, 2010). Maternal working schedules characteristic of the 24/7 economy, particularly nonstandard work hours (i.e., evenings, nights and weekends; Presser, 2003), have been considered to have both negative (e.g., Tammelin, Malinen, Rönkä, & Verhoef, 2017) and positive (e.g., Murtorinne-Lahtinen, Moilanen, Tammelin, Rönkä, & Laakso, 2016) impacts on the combination of work and family life. Negative aspects include a temporal mismatch these work schedules have with daycare and school hours, as well as the impact nonstandard work schedules have on family routines, such as family meals and time spent together (Raymo, Park, Iwasawa, & Zhou, 2014). However, research has also indicated that nonstandard work hours can be beneficial in terms of facilitating family time and mother–child interaction when, for example, mothers can spend more time with their children during the daytime (e.g., Lleras, 2008; Murtorinne-Lahtinen et al., 2016; Roeters, Van der Lippe, Kluwer, & Raub, 2012).

Previous studies on the association between maternal working schedules and family life have generally focused either on North American samples (e.g., Ciabattari, 2007; Son & Bauer, 2010) or dual-earner families (e.g., Steiber, 2009; Tammelin et al., 2017), and the European studies (e.g., Alsarve, 2017; Roman, 2017) that look at this issue in single-mother families have been largely qualitative. Up to now, there has been no quantitative analysis of European single mothers' experiences of combining work during nonstandard hours and family life. Hence, the present study was designed to compare Finnish, Dutch, and British single and coupled mothers' experiences of time-based work-to-family conflict (Greenhaus & Beutell, 1985) and work-to-family positive affective spillover (Edwards & Rothbard, 2000) in the context of maternal nonstandard work hours. We expect the demands associated with nonstandard work hours to be particularly problematic for single mothers who manage the

roles associated with work and family without a resident partner. More interestingly, given that the work-to-family relationship varies across cultural contexts (e.g., Steiber, 2009; Van der Lippe, Jager, & Kops, 2006), we compare mothers' experiences in three European countries that differ in relation to, for example, maternal work-hour cultures (i.e., part- or full-time cultures) and family policies that influence the extent and type of support available to families to reconcile work and family life.

### **Literature Review**

#### **Maternal Nonstandard Work Hours in Europe**

Some scholars suggest that economic activity is increasingly taking place outside of traditional work hours (e.g., Rubery, Ward, Grimshaw, & Beynon, 2005); a phenomenon known as the 24/7 economy given around-the-clock availability of services and products (Presser, 2003) and that necessitates nonstandard work hours (i.e., evenings, nights, and weekends). The service and health sectors of the economy have relatively high rates of nonstandard work hours (Parent-Thirion, Fernández, Hurley, & Vermeulen, 2007; Presser, 2003), and both these sectors have female-dominated workforces. Nonstandard work hours have also become commonplace in occupations where overtime hours and work travel cause the working day to extend beyond standard daytime work hours (Moen, Lam, Ammons, & Kelly, 2013).

Specific to the three countries examined in the present study, the Netherlands stands out in terms of nonstandard work hours due to its strict opening hours, high levels of part-time work, and limited availability of round-the-clock services (Mills & Täht, 2010). Conversely, in the United Kingdom, an increasing number of services are available 24 hours per day, 7 days per week. Finland lies somewhere in-between after the deregulation of store opening hours in 2016. According to statistical information collected by the European Union (Eurostat, 2017), among female workers in the three countries, the figures for Saturday work

range from 24.9% in Finland to 31.3% in the Netherlands; Sunday work is slightly less common in all three countries. Finland stands out by having a higher rate of shift work among women (28.9%) compared with the Netherlands (14.1%) and the United Kingdom (17.7%), whereas evening work is highest among Dutch women (31.1%). Night work is the least common, with figures ranging from 4.6% in the United Kingdom to 7.8% in Finland. In sum, a considerable number of women, including mothers, are required to work during nonstandard hours in the three countries. The most notable difference in the nonstandard work patterns concerns women's shift work, which is most common in Finland.

Research on the relationship between nonstandard work hours and family form, conducted in the United States, has indicated that non-married women and single mothers are more likely to work nonstandard schedules compared with their married counterparts (Bureau of Labor Statistics, 2005; Presser, 2003). In the European context, comprehensive comparable data are lacking, but what research does exist indicates variation across European countries regarding the association of family form and working nonstandard hours. For example, nonstandard work hours are somewhat less common for mothers than other women in the Netherlands and the United Kingdom (Presser, Gornick, & Parashar, 2008), whereas in Finland mothers of young children, compared to other women, more commonly work during weekends (Miettinen & Rotkirch, 2012). To conclude, although the three countries regulate the 24/7 availability of services and products to varying degrees, the literature has identified nonstandard work hours to have become relatively common in a number of occupations, especially those in the service and health sectors employing women and mothers.

### **Time-Based Work-to-Family Conflict and Positive Affective Spillover**

Research on the relationship between work and family roles is extensive. The present paper is guided by Katz and Kahn's (1978) role theory, according to which roles are "specific forms of behavior associated with given positions" (p. 43). Furthermore, each role held by the

person develops from certain task requirements that follow the general role expectations, which denote the demands under which the person is required to act. It is now well established from a variety of studies that simultaneous engagement in multiple roles involving competing expectations can lead to role conflict (Katz & Kahn, 1978, p. 204; see Byron, 2005, for a review), but there is also evidence that the engagement in multiple roles can also result in gratification (see McNall, Nicklin, & Masuda, 2010, for a review).

The scarcity approach to multiple roles emphasizes the fixed nature of role resources (e.g., time), with which individuals attempt to fulfill their role requirements (Goode, 1960). In our study, we focus on one form of inter-role conflict between work and family roles (Katz & Kahn, 1978, p. 204), namely *time-based work-to-family conflict* (WFC) in which time devoted to work role requirements interfere with a mother's ability to fulfill her family role requirements (Greenhaus & Beutell, 1985). As a result of WFC, role strain is possible, which in this context refers to a mother's feelings of not having enough time for family activities or household responsibilities because of work (Goode, 1960). We specifically focus on time-based work-to-family conflict because this form of conflict is closely associated with nonstandard work schedules (Steiber, 2009; Tammelin et al., 2017). WFC is associated with lower levels of mother and child well-being by way of lower life satisfaction and elevated stress among mothers (Mauno, Kinnunen, & Rantanen, 2011), which can subsequently lead to negative mother-child interactions and poor behavioral outcomes for children (Pocock & Clarke, 2005).

As a critique to the naturalistic scarcity approach, more positive approaches have been developed to highlight the rewards, instead of mere strain, that result from engaging in multiple roles. For example, the expansionist approach, introduced by Marks (1977), proposed that simultaneous engagement in work and family roles may create role resources, instead of simply consuming them, which then allows resources to transfer between the two

roles. Hence, meeting the requirements of a role enhances role performance, which then results in rewards and gratification (Edwards & Rothbard, 2000). As a positive approach to the work-to-family relationship, in the present study we consider *work-to-family positive affective spillover* (PAS), which appears when the mother perceives that the positive mood and affect in her work role transfers to her family role and possibly results in better performance and positive mood and affect (e.g., satisfaction) in the family role (Edwards & Rothbard, 2000). PAS has positive outcomes for family members by, for example, increasing mothers' life satisfaction and reducing stress (Mauno et al., 2011), and enhancing mother–child interaction and overall family well-being (Wayne, Grzywacz, Carlson, & Kacmar, 2007).

**Experiences of WFC.** Research comparing single and coupled mothers' experiences of WFC has produced mixed results. Whereas, McManus, Korabik, Rosin, and Kelloway (2002) did not find differences between Canadian single and coupled mothers' reports of WFC, a study by Minnotte (2012), conducted in the United States, showed that single mothers experience higher levels of WFC than coupled mothers. Similarly, Baxter and Alexander (2008) found that, in isolation from other factors, Australian single mothers report more WFC than coupled mothers. Single mothers' high levels of WFC may result from having to solely and with limited resources manage responsibilities (Alsarve, 2017; Roman, 2017; Son & Bauer, 2010) that are shared by two individuals in couples. In the absence of a partner, single mothers' total workload—combining work, domestic, and childcare responsibilities—places heavy demands on their family life, particularly compared with two-parent families, as shown by previous studies from the three countries we examine in the present study (Bakker & Karsten, 2013; Kinnunen, Malinen, & Laitinen, 2009; Millar, 2008). Therefore, we hypothesize that single mothers experience higher WFC than coupled mothers (Hypothesis 1).



**Nonstandard work hours and WFC.** Previous findings suggest that nonstandard work hours are associated with higher WFC for coupled mothers in the European context (e.g., Tammelin et al., 2017) and for single mothers residing in Australia (Baxter & Alexander, 2008) and the United States (Ciabattari, 2007). In view of the scarcity approach to multiple roles (Goode, 1960), nonstandard work hours add time demands to the mother's work role. The sense of higher demand is not necessarily due to working more hours, but can instead result from nonstandard work hours taking place during family time, which is then perceived to decrease the time available for shared family activities. Hence, we expect a positive relationship between the amount of maternal nonstandard work hours and WFC for both single and coupled mothers (Hypothesis 2a).

Research has established a positive relationship between maternal nonstandard work hours and WFC for both single and coupled mothers, but to the best of our knowledge no detailed attempt has been made to compare variations in the strength of this relationship among mothers living in different family forms. Baxter and Alexander (2008) did investigate the issue and did not find differences between the experiences of single and coupled mothers, but they used rather broad measures for non-standard work hours (i.e., whether work was *sometimes* done on weekends and after 6 pm or overnight), which may have not captured the subtler details of the phenomenon. In coupled families, where mothers work during nonstandard hours, fathers are more likely to be involved in childcare compared to other families (La Valle, Arthur, Millward, Scott, & Clayden, 2002; Mills & Täht, 2010). Whereas so-called tag-team parenting as a childcare-related strategy can help to reduce coupled mothers' family workload and ensuring that the child receives parental care (see Mills & Täht, 2010; Murtorinne-Lahtinen et al., 2016), single mothers navigate work and family responsibilities without a resident partner. Indeed, qualitative studies conducted in Europe (e.g., Alsarve, 2017; Roman, 2017) suggest that nonstandard work hours create major

difficulties and pressures, particularly for single mothers in combining work and family life. Thus, we expect that the positive association between the amount of nonstandard work hours and WFC is stronger for single than coupled mothers because nonstandard work hours are unlikely to reduce single mothers' total family-related work load for which the mother is solely and with more limited resources responsible for, compared to families with two parents (Hypothesis 2b).

**Experiences of PAS.** To date there has been little comparative research on positive work-to-family reconciliation across different family forms (see Mauno et al., 2011, for an exception). In the present study, we focus on positive affect that the mother perceives transferring from her work role to her family role. We argue that because the total workload is heavier for single mothers than for coupled mothers, single mothers are less likely than coupled mothers to achieve and maintain a perception of a positive mood derived from work when engaged in family life. Therefore, we propose that single mothers experience less PAS than coupled mothers (Hypothesis 3).

**The impact of nonstandard work hours on PAS.** Despite the need for research on the experience of a positive work-to-family relationship in the context of maternal nonstandard work hours (Mauno, Kinnunen, Rantanen, & Mäkikangas, 2015), to our knowledge, no such research has been conducted that directly addresses this issue. We presume that because nonstandard work schedules have been associated with negative health outcomes for employees (e.g., Jamal, 2004), they may hinder or negatively influence the experience of PAS. In the present study, we examine (a) whether nonstandard work hours among single and coupled mothers is related to their experiences of PAS and (b) whether this association differs between single and coupled mothers. However, we form no hypothesis on these topics due to lack of prior research to inform expectations.

### **Mothers' Experiences in Different Cultural Contexts**

Cultural contexts are likely to affect mothers' experiences of the work-to-family relationship. The three countries under study differ, for example, in relation to family and workplace policies as well as work-hour culture. These in turn affect how mothers are able to allocate time between work and family roles. Simultaneous time demands in the spheres of work and family linked to high WFC can be buffered with adequate support from the government, the workplace, and the family (Abendroth & den Dulk, 2011). However, the availability of such support varies across countries: Family policies in Finland promote maternal full-time work by, for example, ensuring comprehensive publicly-provided and -funded childcare services that are also available during nonstandard hours (Rönkä, Turja, Malinen, Tammelin, & Kekkonen, 2017), whereas in the Netherlands and the United Kingdom, there are wider gaps in the formal childcare provision, especially during nonstandard hours (Plantenga & Remery, 2009). Hence, Dutch and British families may be more likely than Finnish families to use informal childcare provided by extended family members (Verhoef, Tammelin, May, Rönkä, & Roeters, 2015). Although one may assume that comprehensive public provision of child care and an egalitarian gender culture help to protect mothers from WFC, Steiber (2009) found that women in countries with a good childcare infrastructure are also likely to experience WFC. Perhaps in countries like Finland, with good public childcare provision, mothers are less likely to receive family support, which buffers against WFC (Abendroth & den Dulk, 2011). Furthermore, Abendroth and den Dulk (2011) found that support received in the workplace (e.g., job control, emotional support offered by supervisors) located in the service sector, which can help reduce WFC, was low in Finland and the United Kingdom, but high in the Netherlands.

Other comparative studies (Strandh & Nordenmark, 2006; Van der Lippe et al., 2006) have suggested that country-specific work culture or working conditions are perhaps more

important than family policy (e.g., provision of child care) in influencing mothers' experiences of WFC across Europe. For example, in the Netherlands and the United Kingdom, mothers frequently work part time, which can be used as a coping strategy to adapt mothers' labor market participation around family demands (Strandh & Nordenmark, 2006) to accommodate their primary roles as caregivers. Indeed, part-time work has been shown to have lower WFC than full-time work among Dutch and British mothers (Roeters & Craig, 2014). In Finland, the lack of part-time employment options for many women means that mothers of young children often must choose between exiting the paid labor force or working full time (Janus, 2013). The Finnish family leave system together with the home care allowance enables mothers to care for their children under 3 years of age at home (see Repo, 2010), whereas the comprehensive and subsidized childcare provision encourages mothers to work full time. It is consequently less common for Finnish mothers to use part-time work as a facilitative strategy in work–family reconciliation (and reducing WFC) compared with mothers in the other two countries (Janus, 2013). Overall, the country-specific social policies, work-hour culture, and working conditions in the three countries offer families divergent opportunities to combine work and family roles, which can impact mothers' experiences of WFC and PAS differently.

### **The Present Study**

In the present study, we explore whether maternal nonstandard work hours are related to Finnish, Dutch, and British mothers' experiences of WFC and PAS, and whether these relationships are different for single mothers and coupled mothers across the three countries. Our research questions and related hypotheses based on the prior findings discussed above are as follows:

RQ1: To what extent do single mothers experience WFC compared with coupled mothers? We hypothesize (H1) that single mothers experience more WFC than coupled mothers.

RQ2: Are maternal nonstandard work hours related to mothers' experiences of WFC, and is this association different among single mothers than among coupled mothers? We predict that (H2a) mothers who work more nonstandard hours will experience higher levels of WFC. We further presume that (H2b) the positive association between the amount of nonstandard work hours and WFC is stronger among single mothers than among coupled mothers.

RQ3: To what extent do single mothers experience PAS compared with coupled mothers? We expect that (H3) single mothers experience lower levels of PAS than coupled mothers.

RQ4: Are maternal nonstandard work hours related to mothers' experiences of PAS, and is this association different among single mothers than among coupled mothers?

RQ5: Do the aforementioned associations differ among the three countries? We have not formed hypothesis with regard to country differences due to the complexity of the various country-specific aspects that possibly relate to the combination of mothers' work and family roles.

In the analysis, we controlled for work and family characteristics because prior research suggests that these affect work–family reconciliation. Long weekly work hours, irregular work hours (Tammelin et al., 2017), greater job pressure (Steiber, 2009), and fixed starting and finishing times (Baxter & Alexander, 2008) are associated with higher WFC. Greater PAS is expected to be related to job pressure and greater job satisfaction given that studies have reported that mothers with both low and high workload experience negative spillover to maternal mood (Gassman-Pines, 2013) and that job satisfaction is positively

associated with positive affect at home (Ilies, Wilson, & Wagner, 2009). In terms of family characteristics, having more than one child (Steiber, 2009), older children (Baxter & Alexander, 2008), lower level of education, and a poorer financial situation (Ciabattari, 2007) are associated with higher WFC. Finally, problems with childcare arrangements are likely to be positively associated with WFC (Baxter & Alexander, 2008; Son & Bauer, 2010).

## **Method**

### **Participants**

The data for the present study originate from the Families 24/7 cross-national web-based survey collected between November 2012 and January 2013 from Finnish, Dutch and British parents ( $N = 1,294$ ; 1,067 women, 227 men) of children under 13 years of age. The research project was designed in response to the need for European comparative data on everyday family life and family well-being in the context of a 24/7 economy. Voluntary survey participants were recruited first by asking childcare organizations, labor unions, and employers to promote the study to their members or employees. In Finland, study participants were also recruited via day-and-night care centers. Hence, Finnish respondents who work nonstandard hours are overrepresented in the data set. Due to the low number of single parents in the data set ( $n = 113$ ), another wave of recruitment was conducted between April and June 2013, during which the study was advertised on websites of organizations aimed exclusively at single-parent families in the three countries. This garnered a booster sample of 192 additional survey responses. Together the main and booster samples contained a total of 1,486 participants. For the present study, fathers, unemployed mothers, and mothers on study or parental leave from their places of employment ( $n = 380$ ) were excluded from the sample, leaving a total sample of 1,106 ( $n = 411$  Finnish, 338 Dutch, & 357 British) (self-)employed mothers.

Table 1 provides descriptive information about the sample and Cronbach alpha internal reliability coefficients of the measures. The statistically significant differences between countries were as follows: Compared to British and Finnish mothers, Dutch mothers worked fewer hours per week, were less likely to have irregular work hours, had lower job pressure and higher job satisfaction, younger children, and a better financial situation. Dutch respondents also reported the least childcare-related challenges, whereas the British reported the most challenges with childcare arrangements, perhaps because they also were least likely to have fixed starting and finishing times at work (Finnish mothers were the most likely).

In terms of highest educational qualification, the variable was dichotomized (i.e., non-tertiary and tertiary) for our analysis to make it comparable across countries. The percentage of respondents whose highest level of education attained was non-tertiary (high school) was 51.7% in Finland compared to 27.5% in the Netherlands and 19.2% in the United Kingdom; Dutch and British mothers were more likely to have attained a tertiary (college) education (see Table 1).

Table 1 further shows that there were nearly four times more coupled mothers ( $n = 878$ ; 79.4%) than single mothers ( $n = 228$ ; 20.6%) in our dataset. The proportion of single mothers was greater in the Finnish subsample compared with the Dutch and British subsamples. Dutch mothers reported lower levels of both WFC and PAS compared to their Finnish and British counterparts. Nonstandard work hours was more common among the Finnish mothers than among Dutch and British mothers.

### Measures and Variables

**Time-based work-to-family conflict.** WFC was measured using a subscale developed by Carlson, Kacmar, and Williams (2000) involving three items (e.g., “I have to miss family activities due to the amount of time I must spend on work responsibilities”). Response options for each item ranged from *strongly disagree* (scored as 1) to *strongly agree*

(5), and a mean score was calculated for the three items (see Table 1 for Cronbach's alphas).

The scale has been shown to have good discriminant validity, internal consistency, and factorial invariance across samples (Carlson et al., 2000; see also Tammelin et al., 2017).

**Work-to-family positive affective spillover.** Mothers' perceptions of the transfer of positive mood from work role to family role (PAS) were measured with four items (e.g., "Being in a positive mood at work helps me to be in a positive mood at home") developed by Hanson, Hammer, and Colton (2006). Response options for each item ranged from *strongly disagree* (1) to *strongly agree* (5), and a mean score was calculated for the four items (see Table 1 for Cronbach's alphas).

**Nonstandard work hours.** Two sets of questions were used to measure the amount of nonstandard work hours the respondents had in their main job (adapted from the European Working Conditions Survey, 2010). First, respondents were asked to answer the three questions: "How many times a month do you work (a) in the evening, (b) at night, (c) early in the morning, for at least two hours?" Response options ranged from *none* (1) to *more than twice* (4). Second, respondents were asked separately whether they worked Saturdays and Sundays, with dichotomous *no* (1) or *yes* (2) response options for each. A mean score for nonstandard work hours was calculated by standardizing each of these five items and calculating the mean of the standardized values (see Table 1 for Cronbach's alphas).

**Single motherhood.** Single motherhood (0 = "coupled mother," 1 = "single mother") was based on participants' reports of their marital and cohabitation status. Coupled mothers reported being either married or cohabiting; single mothers were not living with a resident partner, were either separated, divorced, widowed, or single and reported living all or almost all the time with at least one of their children under 13 years of age. In addition, six mothers who reported being in a relationship with a partner who did not live together with the mother and the child(ren) and was not the biological father of the child, and who "never" or "rarely"



received support in raising children from their current partner, were considered to be single mothers in practice.

**Control variables.** Work-related controls included weekly work hours, irregular work times (i.e., regular work schedule changes; 0 = “no,” 1 = “yes”), fixed starting and finishing times (0 = “no,” 1 = “yes”), job satisfaction ranging from *very dissatisfied* (1) to *very satisfied* (4), and job pressure (i.e., working at high speed and to tight deadlines) ranging from *never* (1) to *all of the time* (7). The analysis further included the following family-related controls: number of children under 18 years of age living in the home, age of child in years (i.e., the age of the child closest to 4 years of age), mothers’ education level (0 = “non-tertiary,” 1 = “tertiary”), and the respondent’s evaluation of the family’s financial situation ranging from *the worst* (0) to *the best* (10). In addition, childcare-related challenges were measured with three items. First, respondents were asked whether they experienced problems with childcare arrangements (1 = “no,” 2 = “yes”). Second, they were asked to estimate the ease with which they could make unanticipated childcare arrangements, with response options ranging from *very easy* (1) to *very difficult* (5). Third, mothers’ overall satisfaction with childcare arrangements (i.e., “What do you think of the care arrangements of your child when you are working?”) was measured, with response options ranging from *I am satisfied, this is going well* (1) to *I am dissatisfied, this is not going well* (5). A mean score for childcare-related challenges was calculated by standardizing the three variables and calculating the mean of these variables (see Table 1 for Cronbach’s alphas).

### **Analytic Strategy**

Missing data for all study variables ranged from 0.1% for the number of children to 6.6% for fixed starting and finishing times at work. When comparing the independent study variables to test for differences between participants with complete data (98.3%) and those with incomplete data (1.7%) in the two dependent variables, the two groups did not

statistically differ in relation to family form ( $\chi^2(1) = 3.11, p = .078$ ). The participants with missing values on the *nonstandard work hours* variable also had missing values in the two dependent variables (WFC and PAS). Because the results of Little's MCAR test (Little, 1988) for missing data revealed that the data were not missing completely at random ( $\chi^2(43) = 74.76, p = .002$ ), we assumed the data were missing at random and thus used the standard missing-at-random (MAR) approach (Muthén & Muthén, 1998–2013).

To answer the research questions, we conducted a path analysis. In the tested model, which included both dependent variables, paths from nonstandard work hours, single motherhood, and the interaction term of the two to WFC and PAS were estimated after controlling for the effects of work-related and family-related control variables on these dependent variables. Statistically significant interaction effects were interpreted using regions of significance analyses to better understand the structure of the relation (Aiken & West, 1991; Preacher, Curran, & Bauer, 2006). Specifically, given that a statistically significant interaction effect is merely an indication of an overall difference in the slopes of the regression lines, the regions of significance analyses were used to identify the region(s) of the nonstandard work hour variable where the two regression lines would statistically differ (Aiken & West, 1991). To investigate whether the relations of nonstandard work hours, single motherhood, and their interaction on WFC and PAS were identical in each of the three countries, a multi-sample procedure was used in model testing. The model testing was started by fixing the tested paths to be equal across the three countries then evaluating the fit of the model. If the model did not fit with the data, modification indices were used to diagnose the differences in estimated paths across the countries. Paths from control variables to dependent variables were allowed to be freely estimated in each country. Indicators of a good-fitting model included a non-significant test value, a comparative fit index (CFI) and Tucker–Lewis

index (TLI) greater than .95, and a root mean square error of approximation (RMSEA) lower than .06 (Muthén & Muthén, 1998–2010).

The models were estimated using Mplus statistical software (Version 7; Muthén & Muthén, 1998–2013). Using the missing data method with the path models allowed us to include all of the observations in the data set to estimate the parameters in the models. Because some of the variables were initially skewed, the parameters of the models were estimated using the MLR estimator because it corrects the standard errors to be robust in the case of non-normality (Muthén & Muthén, 1998–2010). The correlations of the variables used in the analysis are shown in Table 2.

The fit of the initial model was  $\chi^2(20) = 105.77, p < .001$ ; CFI = .76, TLI = .02, RMSEA = .11. Inspection of the modification indices suggested that model fit could be improved by estimating the paths from nonstandard work hours and single motherhood to WFC, as well as correlations between nonstandard work hours, single motherhood, and their interaction term separately for Finnish mothers and others (see Table 3). After these specifications, the model fit the data well,  $\chi^2(15) = 8.02, p = .923$ ; CFI > .99; TLI = 1.11; RMSEA < .01.

## Results

The results presented in Table 3 show that in the Dutch and British subsamples, single mothers experienced more WFC than coupled mothers. In Finland, however, single mothers experienced less WFC than their coupled counterparts.

In Finland, but not in the other two countries, there was a positive association between the amount of nonstandard work hours and WFC. Namely, mothers who worked more during nonstandard hours experienced more WFC than mothers who worked less during nonstandard hours. Comparing single and coupled mothers, for all three countries there was a statistically significant interaction effect between nonstandard work hours and single motherhood in

relation to WFC after accounting for the main effects of the control variables, nonstandard work hours, and single motherhood. To interpret the statistically significant ( $p < .05$ ; one-tailed test) interaction effects, simple slopes of the nonstandard work hours variable in the prediction of WFC were calculated and visualized separately for single mothers and coupled mothers. In these analyses, statistical significance for the simple slopes among single mothers and coupled mothers, as well as regions of significance (Preacher et al., 2006), were calculated. Figure 1 depicts these interaction effects graphically and separately for each of the three countries. The result indicates that in all three countries, the positive association between the amount of maternal nonstandard work hours and WFC was stronger among single mothers than among coupled mothers.

The regions of significance analyses (see Figure 1) further showed that in Finland, the region of significance (RoS) ranged from 0.28 to 4.90. Thus, the simple slopes among single and coupled mothers were statistically different from each other outside this region: for values of nonstandard work hours less than 0.28 *SD* or greater than 4.90 *SD*, the positive association of nonstandard work hours with WFC was statistically stronger among single mothers than among coupled mothers. For values between 0.28 *SD* and 4.90 *SD*, the association of nonstandard work hours with WFC was statistically indistinguishable between single and coupled mothers. This result indicates that when the amount of nonstandard work hours is near the mean or lower, it is more strongly related with WFC among single than among coupled mothers, whereas when the amount of nonstandard work hours is high (between 0.28 *SD* and 4.90 *SD*), the impacts are statistically indistinguishable between single and coupled mothers. Among the Dutch and British subsamples, the RoS ranged from  $-5.21$  to  $-0.19$ , which indicates that when the amount of nonstandard work hours was near the mean or higher (over  $-0.19$  *SD*), the positive association of nonstandard work hours with WFC was statistically stronger among single than among coupled mothers. The analyses further showed

that among Finnish respondents, 48% of the single mothers and 42% of all mothers had scores within the area where the regression lines differed; the same was true for 51% and 41% of Dutch mothers, and 53% and 47% of British mothers, respectively. This indicates that a reasonable percentage of the subsamples (41%–47%) fell into the regions of significance.

Across the three countries, single mothers experienced less PAS than coupled mothers. However, neither nonstandard work hours nor the interaction of nonstandard work hours and single motherhood were statistically associated with PAS in any of the three countries.

Statistical associations between the dependent variables and control variables revealed that in the Netherlands and the United Kingdom, the amount of weekly work hours was positively associated with WFC. In Finland, again, higher weekly work hours were related to lower PAS. Irregular working hours related to higher WFC in the Finnish and British subsamples. For Dutch and British respondents, greater job pressure was associated with higher WFC. In all three countries, higher perceived job satisfaction was related to lower WFC. Number of children was positively associated with WFC in Finland and PAS in the Netherlands. For British respondents, higher child age was associated with lower WFC. In the Finnish subsample, higher education was related to higher PAS. Better financial situation associated with lower WFC for the Dutch and British respondents. Finally, in all countries, the perception of having more childcare-related challenges related to higher WFC.

### **Discussion**

This study has contributed to the growing area of work–family research (see Bianchi & Milkie, 2010) by examining the impact of nonstandard work hours on time-based work-to-family conflict and work-to-family positive affective spillover experienced by an understudied group, namely European single mothers, and by comparing their experiences to those of coupled mothers. Consistent with the first research question, our results showed that

in the Netherlands and the United Kingdom, single mothers tended to report higher levels of WFC than did coupled mothers (H1). This indicates that single mothers, more than coupled mothers, perceive that the time they devote to their work role makes it difficult to fulfill the requirements of their family role (Greenhaus & Beutell, 1985). Millar (2008) argued that tensions between time for work and care are likely for single mothers in the United Kingdom, who struggle to meet their financial needs with anything less than full-time work. In addition, sustaining maternal employment requires great efforts from the whole family, for example, when having to accept reduced family time (Millar, 2008).

In the Netherlands, mothers identify themselves primarily as caregivers (Bakker & Karsten, 2013). Given that Dutch single mothers are more likely than their coupled counterparts to be employed full time (see Moilanen, May, Räikkönen, Sevón, & Laakso, 2016), the conflict between single mothers' preferred roles as caregivers and their duties as breadwinners may be the cause of high WFC. Our finding ran contrary to our expectation that Finnish single mothers would similarly experience higher WFC than coupled mothers (see Kinnunen et al., 2009) as we discovered that single mothers actually reported lower levels of WFC than their coupled counterparts. As mentioned above, most Finnish mothers have the option of staying at home or working full time, but part-time work is rarely available (Janus, 2013). Full-time maternal work is supported by the comprehensive childcare provision, which is also available during nonstandard hours (Rönkä et al., 2017). Nevertheless, mothers may still hold traditional views of mothers as caregivers. Indeed, such a view is encouraged by family-centered thinking in Finland that emphasizes the superiority of maternal care in ensuring child well-being in the first years of a child's life (Repo, 2010). In this context, some coupled mothers, especially those who can rely on the father as the main economic provider in the family, might be unsure about their reasons for engaging in paid work, the requirements of which they perceive to be interfering with their family responsibilities.

Single mothers, however, are often the sole providers for their children and therefore do not have the luxury of weighing the pluses and minuses of exiting the paid workforce, and may therefore rationalize working as a financial must with no other options. Furthermore, if the children living in two-parent families are spending time with the father at home, coupled mothers may be particularly aware of the family time they are missing out on because of work (see Baxter & Alexander, 2008). Further research is needed to more fully understand why Finnish coupled mothers experience higher levels of WFC than single mothers.

The principal and novel finding of our study relates to the second research question, concerning whether mothers' nonstandard work hours are related to their experiences of WFC, and especially whether this association is different for single versus coupled mothers. First, our results showed a positive association between nonstandard work hours and WFC for both single and coupled mothers in Finland, but only for single mothers in the Netherlands and the United Kingdom (H2a). The Finnish result is consistent with our hypothesis. Mothers who work nonstandard hours may feel that there is not enough time for both family activities and household responsibilities. This sense may be heightened by the fact that they work during evenings and weekends; that is, at times when families typically engage in shared activities (Daly, 2001). We suspect that the absence of a meaningful relationship between nonstandard work hours and WFC among coupled mothers in the Netherlands and United Kingdom might be explained by the type of nonstandard work and the reasons for why coupled mothers in the three countries work these hours. Put simply, service-sector shift work is common among employed women in Finland (Eurostat, 2017). This was visible in our data as well, as, in contrast to Dutch and British coupled mothers, Finnish coupled mothers were more likely to work in two or three shifts than in other working time patterns (results not shown). These positions provide employees relatively low levels of control over when and where to work (Abendroth & den Dulk, 2011) and create

difficulties for them to balance work and family commitments (Parent-Thirion et al., 2007). In contrast, nonstandard work hours in the Netherlands and United Kingdom might have more commonly been voluntarily in pursuit of one's career ambitions, and as family needs permitted. Indeed, mothers who work nonstandard hours in these two countries often choose to do so voluntarily as a means to adapt their work hours around family responsibilities (Mills & Täht, 2010; Strandh & Nordenmark, 2006). However, we can only speculate that these contextual differences existed across the subsamples; future studies should tease out differences in WFC according to *why* mothers work nonstandard hours.

Second, in line with our original assumption (H2b), the positive association between the amount of nonstandard work hours and WFC was stronger for single mothers than for coupled mothers in all three countries (see Figure 1). This suggests that single mothers who work more nonstandard hours perceive more strongly than their coupled counterparts that work time interferes with their family roles, responsibilities, and desires. Because work during nonstandard hours often takes place during family leisure time (i.e., evenings and weekends), the more a mother works during nonstandard hours, the more difficult it may be for her to arrange family activities such as shared family meals (see also Raymo et al., 2014).

The regions of significance analyses revealed some important differences across countries. In the Netherlands and United Kingdom, single and coupled mothers differed in their experiences of WFC only among those with a relatively high amount of nonstandard work hours, whereas in Finland these differences were observed only among those with a relatively low amount of nonstandard work hours. In the Dutch and British subsamples, nonstandard work hours were linked to high levels of WFC only among single mothers, whereas the relationship between nonstandard work hours and WFC was nearly nonexistent for coupled mothers. This finding indicates that single mothers in these two countries are more vulnerable to the negative impact of nonstandard work hours than coupled mothers.



This is an expected outcome, because research has indicated that when the coupled mother works during nonstandard hours, the father is likely to engage in childcare (La Valle et al., 2002; Mills & Täht, 2010), which can ease the mother's family workload (see Murtorinne-Lahtinen et al., 2016). However, nonstandard work hours are unlikely to decrease single mothers' total workload given that they are solely responsible for their households. As a result, single mothers may perceive that they do not have enough time for family activities and household tasks because of work during nonstandard hours.

Interestingly, in Finland, we found that when the amount of nonstandard work hours was low, the positive association between nonstandard work hours and WFC was statistically stronger for single mothers than coupled mothers. This finding suggests that, whereas coupled mothers, overall, experienced higher level of WFC than single mothers, occasionally working during nonstandard hours seemed to have a more severe impact on single mothers' experiences of WFC compared to coupled mothers. It may be that these occasional nonstandard work hours are non-contracted (e.g., unpredictable overtime work) which do not entitle single-mother families a place in a day-and-night care center and may therefore result in difficulties in combining work times with family responsibilities. In these instances, the slightest of help from a resident partner may become important in buffering the effect of nonstandard work hours on WFC for coupled mothers. Single mothers, again, are solely responsible for both work and family without a resident partner, which can complicate the reconciliation of work and family responsibilities when the mother works only some nonstandard hours.

Another unanticipated finding was that when the amount of nonstandard work was lower than the mean, coupled mothers in Finland experienced higher levels of WFC than single mothers. It is difficult to explain this result, but it might be related to cultural expectations toward mothers' caregiving roles, as discussed above. It is also possible that

coupled mothers with nonstandard work hours have particularly high expectations of their partner's role within the family. Findings from earlier studies show that when a mother works during nonstandard hours, the father is actively engaged in childcare (La Valle et al., 2002; Mills & Täht, 2010; Murtorinne-Lahtinen et al., 2016). Therefore, it may be that mothers who work fewer nonstandard hours have partners who are less helpful in the family, which results in the mother having to take primary responsibility for the family, which in turn leads to high WFC. In contrast, single mothers may be either more accustomed to managing both work and family roles on their own, or simply lack expectations of a partner helping, and might therefore have a different experience than coupled mothers with regard to fulfilling family roles.

The third and fourth research questions focused on single and coupled mothers' experiences of PAS and the association of nonstandard work hours with PAS among them. The results demonstrated that across the three countries single mothers experienced less PAS than their coupled counterparts, as we expected would be the case (H3). This indicates that, compared with coupled mothers, single mothers are less likely to perceive that the positive affect (e.g., moods) they experience in their work roles would transfer to their family roles (see Edwards & Rothbard, 2000). One explanation for the result might be that the positive affect single mothers gain from work is not strong enough to be perceived to transfer to the home sphere given their heavy work load as parents with sole day-to-day responsibility for the family. Further research, however, is needed to investigate the possible antecedents of PAS in coupled- and single-mother families. The results further showed that nonstandard work hours were not associated with PAS. This result suggests that mothers' perceptions of the relationship between nonstandard work hours and PAS may depend more on other factors than the particular work hours. These kinds of factors could include, for example,

experiencing one's work as meaningful, as could be the case in health occupations that are characterized by nonstandard work hours.

### **Implications for Practice and Policy**

Considering previous findings on the possible negative consequences of WFC on family well-being (e.g., Mauno et al., 2011; Pocock & Clarke, 2005), the results of the present study highlight the importance of understanding the circumstances of single and coupled mothers in different cultural contexts when paying attention to social and workplace policies. In the Netherlands and the United Kingdom, policies could be aimed to reduce single mothers' WFC in particular. Part-time work is readily available in these two countries, which assists families in combining work and family responsibilities and encouraging their caregiving roles because parents can adapt their work hours around family duties (Mills & Täht, 2010; Strandh & Nordenmark, 2006). However, single-mother families in both countries tend to have fewer financial resources than two-parent families. Family-friendly policies could make part-time work more affordable for sole earners by, for example, offering wage supplements, tax credits, or public subsidies for child care (which is especially needed in the United Kingdom) to ensure the sustainability of part-time paid employment for parents of young children and help single mothers satisfy the simultaneous demands of work and family.

In Finland, the comprehensive formal childcare provision facilitates the reconciliation of work and family life while supporting maternal full-time work. It may be that access to day-and-night care helps particularly helps single mothers who work during nonstandard hours to reconcile work with family responsibilities, as single-mother families have been shown to form the major clientele of day-and-night care (Rönkä et al., 2017). According to our findings, however, Finland differed from the other two countries in that both coupled and single mothers experienced higher WFC when the amount of nonstandard work hours was

high. Based on this, we recommend that workplace policies be directed at facilitating the combination of work and family roles in both family forms. In the workplace, job control as well as emotional support received from the supervisor should be promoted as a means to relieve mothers' experiences of WFC (Abendroth & den Dulk, 2011). In Finland, where shift work is common (Eurostat, 2017) and the degree of job control is low in the service sector (Abendroth & den Dulk, 2011), mothers could benefit from having more control over when and where they complete their work responsibilities, as well as being able to openly discuss WFC issues with their supervisor. Being able to work reduced hours—if the pay is good enough to support a family—could enable mothers who wish to do so to invest more time in their caregiving roles, especially when the children are young. Although the emphasis here is on workplace policies, the role of the state in implementing workplace support is important because, in addition to supporting parents, doing so “can sensitize employers to the topic of work–life balance and encourage them to offer support” as well (Abendroth & den Dulk, 2011, p. 247).

### **Limitations and Future Directions**

It is important to interpret our findings in light of the study's key limitations. First, the results are based on a convenience sample that was collected using a web-based questionnaire directed at parents who worked nonstandard hours. Although the sample was collected using similar recruitment strategies in the three countries in an attempt to elicit comparable samples, the subsamples differed from each other in some characteristics. For example, highly educated Dutch and British mothers were overrepresented in our sample. Therefore, on the one hand, our findings may not be generalizable to less educated Dutch and British mothers, and on the other, the Dutch and British subsamples differ from the Finnish subsample in this regard. Although education level was controlled for in the analysis, this may not have completely accounted for the differences between the subsamples.

Furthermore, due to day-and-night care centers being one of the avenues for recruiting our Finnish participants, (a) mothers who work nonstandard hours but whose children are not cared for in day-and-night care centers may be underrepresented, and (b) those coupled mothers in families where both parents work nonstandard hours might be overrepresented (this is because two-parent families where only one parent works nonstandard hours are not entitled to a place in a day-and-night care center). Consequently, it is important to bear in mind the possible selection bias in the results. In future studies, investigators should identify whether the associations found in the present study hold true with randomized samples and more comparable group compositions.

Second, these cross-sectional data cannot provide insight concerning the direction or causal relationships of the associations between the study variables or the further-reaching influences of nonstandard work hours on WFC. It is possible, for example, that high WFC increases the likelihood of union dissolution, that is, becoming a single mother, and not vice versa. Therefore, future research is needed to examine these associations across time.

Third, there are at least two important limitations posed by the measures used in the analysis. First, the variable measuring nonstandard work hours may have underestimated the impact of nonstandard work hours because the response scale was limited. However, instead of using a dichotomous variable that distinguishes between those working either standard or nonstandard hours, which has been criticized for not being relevant to the actual lives of many working mothers (see Dunifon, Kalil, Crosby, Su, & DeLeire, 2013), the use of a continuous variable measuring the amount of nonstandard work hours enabled us to capture the experiences of those working standard schedules with additional non-contracted nonstandard hours. Furthermore, the variable focuses on the amount of nonstandard work hours, including multiple types of nonstandard schedules that are likely to lead to higher WFC. Hence, we encourage researchers to consider focusing on specific types of nonstandard

work schedules and their associations with WFC. The second important limitation of our measures is that more research is needed to identify the antecedents of PAS, because the variables included in the present analysis had no meaningful association with PAS. Perhaps, for example, individual personality or the quality of workplace and family relationships are associated with mothers' experiences of PAS. Finally, for some scales with three or more items, the Cronbach alphas were quite low ( $< .70$ ). Low alphas were found particularly among the Dutch respondents, which somewhat limits our confidence in the validity of the results.

Finally, some effect sizes were small. Hence, future studies are needed to unravel other possible factors that have a larger impact on WFC. Similarly, we encourage future studies that are able to provide a better understanding of how aspects not addressed in our analysis, for example, job control or cultural mothering expectations, affect mothers' WFC.

### **Conclusion**

The findings of the present study enhance understanding of how European single mothers perceive the combination of work and family roles within the context of nonstandard work hours. Our results suggest that in the Netherlands and United Kingdom, single mothers find it harder than coupled mothers to fulfill family requirements because of the time they devote to their work roles when the amount of maternal nonstandard work is high. In Finland, this time-based conflict was not only experienced by single mothers, but also by coupled mothers, which shows that more nonstandard work hours does not always indicate more difficulties for single mothers than for coupled mothers. However, it should also be noted that in Finland, both coupled and single mothers experienced rather high levels of WFC compared with their Dutch and British counterparts, when the amount of nonstandard work hours was high. Moreover, we explored the positive relationship between mothers' work and family roles, and compared single versus coupled mothers' experiences of this. Our findings indicate

that single mothers across the three countries perceived less positive affect transferring from work to family than did coupled mothers, suggesting that future studies should focus on the factors enhancing positive work-to-family relationships so that strategies can be developed that would allow single mothers to strengthen the positive relationship between multiple roles.

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Table 1  
*Descriptive Statistics and Tests for Differences Across Countries (N = 1,106)*

Variables	Items	Range	Finland (n = 411)			The Netherlands (n = 338)			The United Kingdom (n = 357)			F / H / $\chi^2$	Post hoc
			M / %	SD	$\alpha$	M / %	SD	$\alpha$	M / %	SD	$\alpha$		
Control variables													
Weekly working hours		0–74	36.21	9.21		29.65	8.50		34.61	10.92		$F(2, 1069) = 44.06^{***}$	FIN, UK > NL
Irregular working times: yes (%)			36.7			15.5			37.7			$\chi^2(2) = 49.65^{***}$	UK, FIN > NL
Fixed starting and finishing times: yes (%)			67.4			57.7			45.4			$\chi^2(2) = 35.04^{***}$	FIN > NL > UK
Job pressure	2	1–7	4.58	1.43	.74	4.00	1.41	.72	4.63	1.40	.75	$F(2, 1081) = 21.26^{***}$	UK, FIN > NL
Job satisfaction <sup>b</sup>		1–4	2.98	0.70		3.19	0.58		3.05	0.71		$H(2) = 16.34^{***}$	NL > UK, FIN
Number of children in the household <sup>b</sup>		1–6	1.77	0.81		1.83	0.87		1.73	0.72		$H(2) = 0.93$	
Age of the child		0–12	4.84	2.63		4.03	3.13		4.71	3.20		$F(2, 1103) = 7.61^{**}$	FIN, UK > NL
Education level: tertiary education (%)			45.8			72.2			80.8			$\chi^2(2) = 113.04^{***}$	UK, NL > FIN
Financial situation		0–10	5.21	2.25		6.27	1.98		5.23	2.21		$F(2, 1099) = 27.39^{***}$	NL > UK, FIN
Childcare-related challenges	3	-1.16–2.16 <sup>a</sup>	0.05	0.81	.67	-0.28	0.59	.55	0.20	0.80	.63	$F(2, 1101) = 37.55^{***}$	UK > FIN > NL
Independent variables													
Single mothers (%)			31.4			14.8			13.7			$\chi^2(2) = 46.50^{***}$	FIN > NL, UK
Nonstandard working	5	-0.98–1.55 <sup>a</sup>	0.29	0.75	.79	-0.21	0.72	.83	-0.14	0.70	.80	$F(2, 1084) = 51.94^{***}$	FIN > UK, NL
Dependent variables													
WFC	3	1–5	2.88	0.99	.80	2.53	0.75	.65	2.94	0.95	.79	$F(2, 1084) = 20.58^{***}$	UK, FIN > NL
PAS <sup>b</sup>	4	1–5	4.01	0.70	.87	3.84	0.62	.81	3.97	0.66	.89	$H(2) = 18.74^{***}$	FIN, UK > NL

Note. WFC = time-based work-to-family conflict. PAS = positive affective spillover. ASR = adjusted standardized residuals for the chi square test.

<sup>a</sup>Empirical range. <sup>b</sup>Kruskal–Wallis test was computed for the non-normally distributed continuous variables. Post hoc analyses were carried out for the statistically significant ANOVA F tests using Bonferroni for groups with equal variances and Dunnett's T3 for groups with unequal variances.

\*\* $p < .01$ . \*\*\* $p < .001$ .



Table 2  
*Intercorrelations for Predictor, Outcome, and Control Variables (N = 1,106)*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Weekly working hours	–												
2. Irregular working times <sup>a, b</sup>	.23***	–											
3. Fixed starting and finishing times <sup>a, c</sup>	-.08**	-.18***	–										
4. Job pressure	.25***	.18***	-.08**	–									
5. Job satisfaction <sup>a</sup>	-.02	-.09**	-.02	-.22***	–								
6. Number of children in the household <sup>a</sup>	-.04	-.02	-.05	-.04	.06	–							
7. Age of the child	.10**	.08**	-.05	.07*	.03	.22***	–						
8. Educational level <sup>a, d</sup>	.04	-.01	-.22***	-.03	.03	-.00	-.04	–					
9. Financial situation	-.05	-.16***	-.06	-.13***	.17***	-.00	-.10**	.24***	–				
10. Childcare-related challenges	.12***	.14***	-.08**	.20***	-.27***	-.01	.14***	.06*	-.28***	–			
11. Nonstandard working	.25***	.26***	.02	.12***	-.11***	.01	.02	-.16***	-.08**	.13***	–		
12. Single motherhood <sup>a, e</sup>	.09**	.09**	.01	.08**	-.06*	-.14***	.28***	-.09**	-.26***	.18***	.07*	–	
13. Time-based work-to-family conflict	.27***	.22***	-.04	.28***	-.27***	.03	.05	-.04	-.27***	.33***	.27***	.09**	–
14. Positive affective spillover <sup>a</sup>	.04	.11***	-.07*	.04	.05	.05	.05	.01	-.04	.05	.04	.01	.09**

*Note.* <sup>a</sup>Spearman correlation coefficients are reported for categorical variables and non-normally distributed continuous variables. <sup>b</sup>Irregular working times: 0 = *no*, 1 = *yes*. <sup>c</sup>Fixed starting and finishing times at work: 0 = *no*, 1 = *yes*. <sup>d</sup>Education level: 0 = *non-tertiary*, 1 = *tertiary*. <sup>e</sup>Single motherhood: 0 = *coupled mother*, 1 = *single mother*.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$  (one-tailed).

Table 3  
*Unstandardized estimates (B), Standardized estimates (β), and p Values for the Tested Model (N = 1,106)*

Parameter Estimate	Time-based work-to-family conflict (WFC)									Positive affective spillover (PAS)								
	Finland (n = 411, R <sup>2</sup> = .32)			The Netherlands (n = 338, R <sup>2</sup> = .26)			The United Kingdom (n = 357, R <sup>2</sup> = .35)			Finland (n = 411, R <sup>2</sup> = .04)			The Netherlands (n = 338, R <sup>2</sup> = .05)			The United Kingdom (n = 357, R <sup>2</sup> = .03)		
	B	β	p	B	β	p	B	β	p	B	β	p	B	β	p	B	β	p
<b>Independent variables</b>																		
Single motherhood	-0.24	-.12	.007	0.24	.11	.011	0.24	.09	.010	-0.11	-.07	.034	-0.11	-.06	.033	-0.11	-.06*	.036
Nonstandard work hours	0.32	.24	< .001	0.03	.03	.246	0.03	.02	.247	-0.00	-.00	.468	-0.00	-.00	.468	-0.00	-.00	.468
Nonstandard work hours × single motherhood	0.20	.09	.006	0.20	.07	.006	0.20	.06	.007	0.02	.01	.406	0.02	.01	.406	0.02	.01	.406
<b>Control variables</b>																		
Weekly work hours	0.00	.01	.397	0.02	.22	< .001	0.03	.29	< .001	-0.01	-.11	.015	0.01	.10	.057	0.00	.01	.442
Irregular work hours	0.25	.12	.006	-0.14	-.07	.078	0.24	.12	.006	0.08	.05	.177	0.14	.08	.064	0.11	.08	.089
Fixed start and finish times	-0.13	-.06	.094	0.05	.03	.247	0.08	.04	.166	-0.10	-.07	.116	-0.09	-.07	.102	-0.02	-.01	.403
Job pressure	0.04	.06	.112	0.05	.09	.033	0.10	.15	.001	-0.01	-.01	.469	-0.01	-.03	.309	0.04	.09	.053
Job satisfaction	-0.34	-.24	< .001	-0.16	-.12	.007	-0.19	-.14	.001	0.08	.08	.125	0.07	.06	.152	0.02	.02	.369
Number of children	0.12	.09	.012	0.02	.03	.307	0.02	.02	.361	-0.06	-.07	.121	0.07	.09	.049	0.06	.07	.108
Age of the target child	0.02	.06	.083	0.01	.05	.158	-0.05	-.18	< .001	0.02	.08	.053	-0.00	-.01	.418	0.01	.03	.307
Education level	-0.00	-.00	.480	0.03	.02	.348	0.04	.02	.369	0.16	.11	.011	0.06	.04	.248	-0.05	-.03	.283
Financial situation	-0.03	-.08	.055	-0.05	-.13	.009	-0.09	-.21	< .001	-0.00	-.00	.481	-0.03	-.08	.124	-0.01	-.02	.397
Childcare-related challenges	0.22	.18	< .001	0.29	.22	< .001	0.14	.12	.005	0.04	.04	.232	0.07	.07	.157	0.01	.01	.452

Note.  $\chi^2(15) = 8.02, p = .923$ ; CFI = 1.00; TLI = 1.11; RMSEA = .00.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$  (one tailed).

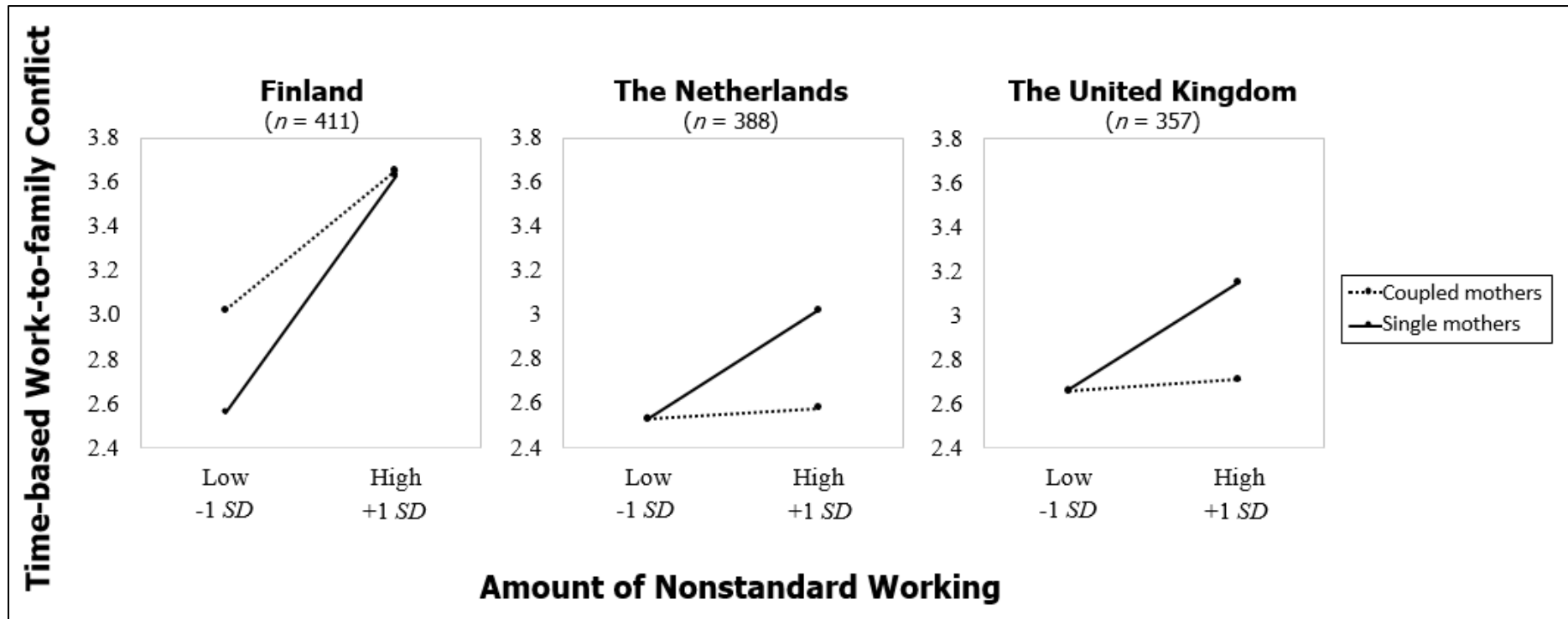


Figure 1. Interaction effect of nonstandard work hours and single motherhood on time-based work-to-family conflict.