Time strain among employed and self-employed women and men in Sweden

Emma Hagqvist1*, Susanna Toivanen2 and Stig Vinberg1
1Department of Health Sciences, Mid Sweden University, Östersund, Sweden; 2Centre for Health Equity Studies, Stockholm University, Stockholm, Sweden

Abstract
Dual-earner families are common in Sweden, and most women are involved in the labour market. It has been shown that employees and self-employed individuals perceive their working conditions differently: self-employed individuals are more likely to experience an imbalance between work and family, higher job demands, and the feeling that they must be “always on.” Thus, there may also be a difference between employees and self-employed individuals in terms of perceived time strain. Previous studies have identified differences in time-use patterns among men and women who are employed and self-employed. This study uses time-use data to examine potential gender differences among men and women who are self-employed and those who are employees with regard to time strain effects related to time spent on paid and unpaid work in Sweden. The results show that self-employed individuals, particularly self-employed women, report the highest levels of time strain. For self-employed women, an increase in the time spent on paid work reduces perceived time strain levels, whereas the opposite is true for employees and self-employed men. It is primarily individual and family factors, and not time use, that are related to time strain. The results provide evidence that gender differences in time strain are greater among self-employed individuals than among employees.

Keywords: Employees; gender; self-employed; Sweden; time strain

Sweden is often considered to be more gender equal than other countries, with a high number of dual-earner families. The employment rate among women and men in Sweden is relatively equal, mainly because of the presence of extensive family friendly policies, public child care, and antidiscrimination laws (Statistics Sweden, 2014). In recent decades, Swedish women have increased their time spent on paid work and reduced their time spent on unpaid work, which has resulted in a more gender-equalised division of work (Evertsson & Nermo, 2004; Hagqvist, Nordenmark, Perez, Trujillo Aleman, & Gillander Gadin, in press). Many people in contemporary Sweden struggle to combine work and family responsibilities (Grönlund

*Correspondence to: Emma Hagqvist, Department of Health Sciences, Mid Sweden University, SE-831 25 Östersund, Sweden. Email: Emma.Hagqvist@miun.se

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& Òun, 2010). Women still have the main responsibility of the family while they pursue a career; thus, their struggle is more pronounced (Lunau, Bambra, Eikemo, van der Wel, & Dragano, 2014). Despite the progression towards a more gender-equal division of labour in Sweden, women still perform a larger share of the unpaid work (e.g. household chores and taking care of children and the elderly) (Aliaga, 2006; Hagqvist, Nordenmark, et al., in press; Hagqvist, Toivanen, & Vinberg, in press). From a gender theoretical perspective, in work specialisation, where men perform the majority of the paid labour and women perform the unpaid labour, masculinity and femininity are shaped and reshaped (Connell, 2009). When women continue to carry out most of the housework and men do not contribute, gender relations remain static. In contexts where masculinity is closely related to breadwinning, labour is more traditionally divided between men and women in relation to contexts where gender equality is the norm (Evertsson & Nermo, 2004; Thébaud, 2010). Thus, there should be less of a need to express gender through work specialisation in Sweden.

Although most women and men in Sweden are employed, the proportion of self-employed individuals has remained constant at approximately 10% in recent decades, and only 3% of self-employed individuals are women (Toivanen, Mellner, & Vinberg, 2015). The self-employed form a highly heterogeneous occupational group; many self-employed individuals work alone, whereas others have employees (Fielden & Davidson, 2005). The reasons for becoming self-employed can vary. Some individuals may be pushed into self-employment for reasons related to economic restructuring or difficulty finding work that matches their skills. Other individuals may be drawn to self-employment for reasons such as greater independence, more opportunities for creative expression, the possibility of earning more money, and expectations of decreased stress (Fielden & Davidson, 2005). Men are more likely than women to cite work-related reasons for becoming self-employed (Carter, Gartner, Shaver, & Gatewood, 2003; Marler & Moen, 2005). Also, fathers are less likely than mothers to report that they chose self-employment because of family reasons (Hilbrecht & Lero, 2014). With regard to self-employed women, studies have stressed that work–family factors and opportunities to create a more balanced lifestyle are important factors that motivate women to become self-employed (Craig, Powell, & Cortis, 2012; Hughes, 2006; Marler & Moen, 2005). Women in particular hope that being self-employed will allow them to take care of their children and their home better, whereas work-related reasons motivate men to choose self-employment. In some international studies, the motivating factors are often thought to be gendered (Carter et al., 2003; Hilbrecht & Lero, 2014; Marler & Moen, 2005). No studies have examined motivating factors for self-employment among men and women in Sweden. However, Hilbrecht and Lero (2014) argued that motivating factors for choosing self-employment should be less gendered in gender-equal countries such as Sweden.

Time strain, which is defined as having too much to do and not enough time to accomplish work, has become a characteristic of working life in contemporary market societies (Allvin, Aronsson, Hagström, Johansson, & Lundberg, 2011).
Nevertheless, working, resting, and caring for children require time, and the use of time, like that of other resources, is socially shaped (Strazdins, Welsh, Korda, Broom, & Paolucci, 2015). In general, knowledge about differences in time use between self-employed individuals and employees is limited, particularly from a gender perspective (Brush, Carter, Gatewood, Greene, & Hart, 2006). No studies have been found that focus on perceptions of time strain or how strain is related to time use among women and men who are self-employed or employees. Based on analyses of time-use data, the aim of the present study is to examine potential gender differences among men and women who are self-employed and those who are employees with regard to time strain effects related to time spent on paid and unpaid work in Sweden. Specifically, the focus is on the following research questions:

1. How do perceived time strain and time use differ between men and women who are employees or self-employed?
2. What associations can be found between time strain and time use, family conditions, and individual conditions for men and women who are employees or self-employed?
3. What are the effects of increased time spent on paid and unpaid labour on the level of time strain for men and women who are employees or self-employed?

TIME STRAIN IN RELATION TO WORK-LIFE BALANCE

Self-employment has been discussed as a strategy for coping with the conflicting demands of work and family. This type of employment may reduce the imbalance between work and family life because it creates opportunities for flexible scheduling and enables one to work from home (Bunk, Dugan, D’Agostino, & Barnes-Farrell, 2012; Hilbrecht & Lero, 2014). However, a recent Swedish study indicated that self-employed men and women, especially those with employees, generally experience more conflict between work and family than do employees (Johansson Sevä & Öun, 2015). In general, this study did not find any substantial gender differences regarding the experience of conflict between work and family. However, among self-employed women without employees, an emphasis on family and lifestyle motives generally decreased the work–family conflict (Johansson Sevä & Öun, 2015).

Extensive research on work–life balance has indicated that it is challenging to balance the demands of work and home. Perceptions of an imbalance between work and family negatively affect the well-being of men and women to a greater extent than the actual time spent on paid and unpaid labour (Hagqvist, Gillander Gådin, & Nordenmark, 2012). This study focuses on perceptions of time strain. The concept of imbalance between work and family is not the same as the perception of time strain. However, the two concepts are somewhat similar with regard to feelings of not having enough time, and factors that affect levels of imbalance may also affect perceptions of time strain. As perceptions of time strain and imbalance may be viewed as related concepts and because the few studies on this subject have examined only issues of time strain, it is important to map the imbalance between work and family life among self-employed individuals and...
employees. In addition, studies have shown that work demands and job control often differ between self-employed individuals and employees. According to recent findings, self-employed women and men report better control over their working hours and increased ability to decide when to take time off with their children, but they also report difficulties leaving work (Hilbrecht & Lero, 2014). The current study is focused on Sweden, and it is notable that Swedish workers have more control over their working time relative to workers in other countries (Berg, Appelbaum, Bailey, & Kalleberg, 2004).

The aforementioned conditions warrant studies of how self-employed men and women perceive time strain compared with their employed counterparts and how time strain is related to paid and unpaid labour and leisure time.

Research shows that long or irregular working hours, working unsocial hours, demands at work, psychosocial work environments, and feelings of stress regarding housework influence perceptions of imbalances between work and family (Bunk et al., 2012; Chung, 2011; Fagan & Walthery, 2011; Fahlén, 2014; Grönlund, 2007; McGinnity & Calvert, 2009). European studies have shown that self-employed individuals more often experience a high level of job control, high job demands, a larger workload, and less balance between work and family life compared with employees (Nordenmark, Vinberg, & Strandh, 2012; Samuelsson, Houkes, Verdonk, & Hammarström, 2012; Stephan & Roesler, 2010). In interviews, self-employed fathers and mothers from Canada described feeling that they had control over which hours they worked and that they were able to take time off when their children needed them (Hilbrecht & Lero, 2014). This finding was confirmed by Nordenmark et al. (2012), who stated that because self-employed individuals have greater job control, they are better able to distribute their time than employees. At the same time, Canadian parents reported that they were “always on,” constantly developing their companies, marketing, seeking new opportunities, or worrying about income (Hilbrecht & Lero, 2014). Given the high levels of job control and high job demands that characterise self-employment, one could argue that self-employment provides prototypes of “active jobs” (Stephan & Roesler, 2010). Studies of the influence of high job control on the balance between work and family life have shown varying results. Some studies have reported that increased levels of control improve the balance between work and family life, whereas others have noted that a high level of control at work has negative effects on the balance between work and family life (Fagan & Walthey, 2011; Nordenmark et al., 2012). The latter finding can be explained by the fact that a high level of control and flexibility at work might require individuals to be accessible at all times (Hilbrecht & Lero, 2014; Nordenmark et al., 2012). The benefits that one gains by choosing self-employment as opposed to organisational employment may be outweighed by costs that can affect one’s ability to balance work and family responsibility (Bunk et al., 2012).

Although we found few studies that focused on perceptions of time strain among the self-employed and employees, it can be anticipated that the time men and women spend on paid and unpaid labour is important, as shown in studies of
the imbalance between work and family life. Work has been and remains highly gendered. Generally, compared with women, men tend to perform more paid labour, and compared with men, women tend to perform more unpaid labour in the home (Aliaga, 2006; Bianchi & Milkie, 2010). On average, women spend 33.9 hours performing paid labour each week, whereas men spend 40.6 hours each week (Eurofound, 2014). However, the total weekly working time for women, including paid and unpaid labour, reaches 64 hours compared with 53.4 hours for men, indicating that women spend more time on unpaid labour. In Sweden, which is often considered a gender-equal country with extensive anti-discrimination laws and gender-equal family friendly policies, women still perform most of the unpaid labour and child care (Harryson, 2013). In a forthcoming study by the authors that investigates gendered time use among self-employed individuals and employees, the trends indicate that self-employed men and women distribute time differently than men and women who are employees (Hagqvist, Toivanen, et al., in press).

The fact that men and women have different levels of job control and different job demands, distribute their time differently, and present different total work time patterns suggests that there may be gender differences in the experience of time strain. Generally, investigations of the differences in time strain between men and women have not considered employment conditions, as demonstrated by several studies (e.g. Bianchi, Milkie, Sayer, & Robinson, 2000; Gershuny & Sullivan, 2003; Hook, 2010). Furthermore, few studies have investigated time strain among employees and self-employed men and women in a gender-equal country. Therefore, more studies based on representative samples of self-employed men and women with relevant comparison groups and relevant time-use data are needed in gender-equal countries (Craig et al., 2012).

DATA AND METHODS

In this study, time-use data collected by Statistics Sweden (2012) were used. The data were collected in 2010 and 2011 and included a sample of 7,366 randomly selected individuals ranging in age from 15 to 84 years. The response rate was 41%. The respondents answered background questions during telephone interviews and entered data in their time diaries for 24 hours by themselves. The sample in this study included men and women who were working full or part time. They ranged in age from 18 to 65 years and were either married or cohabiting. In total, there were 1,480 individuals (47% men), of which 1,349 were employees (45% men) and 131 were self-employed individuals (70% men). The categorisation of “employee” versus “self-employed” in this study was based on the participants’ responses to questions about their labour conditions (e.g. employed, self-employed, unemployed, retired, or on sick leave) on the questionnaire. Therefore, the group of self-employed participants consisted of both people who employed others (i.e. employers) and those with no employees (i.e. own-account workers or sole traders). Weekday data were used to capture the daily behaviour patterns related to paid and unpaid labour among self-employed individuals and employees, which significantly improved the models. Weights were applied to ensure that the sample
was representative of the population. Weights were calculated taking selection design, missing objects, and representation from all participating groups into consideration. Statistics Sweden performed the calculation of the weights (Statistics Sweden, 2012).

**VARIABLES**

*Time strain* combines responses to the following questions: “How often do you feel that you have too much to do?” and “Do you have the time to do the things you would like to do?” The possible answers were “often,” “sometimes,” “seldom,” or “never.” The time strain variable ranged from 0 (representing no time strain) to 6 (representing a high level of time strain) with Cronbach’s alpha at 0.638. The variable is somewhat skewed, with most respondents reporting feelings of time strain.

**Independent variables**

*Gender and occupational status* were merged into one variable with four groups: men who are employees (Men E), self-employed men (Men SE), women who are employees (Women E), and self-employed women (Women SE). The Men E group was set as the baseline, and the other groups were compared with that group. The remaining independent variables were grouped into three categories: time use, family, and individual conditions.

**Time use**

Time use was measured using diary entries detailing how the respondents spent their time (using 150 different activity codes) within a 24-hour period and was reported as minutes per day but is presented as hours per day. In this study, activities representing the different types of labour (unpaid and paid) were added and summarised. *Unpaid labour* comprises the hours spent on routine tasks performed in the home. It is a continuous variable that includes the number of hours per day the respondents spent performing housework such as cooking, washing dishes, doing laundry, cleaning, shopping for groceries, and performing other errands. Hours of unpaid labour ranged from 0 to 24 hours per day. *Paid labour* includes the amount of time that the respondents reported spending on paid labour and ranged from 0 to 21 hours per day. Only respondents who reported that they were currently working were included in this study; however, some individuals reported that they spent 0 hours on paid labour, which could be a result of shift work. *Leisure* consists of the time spent on activities such as exercise, resting, going to a movie or a play, meeting friends, talking on the telephone, watching TV, or reading, and ranged from 0 to 14 hours.

**Family conditions**

*Partner’s work* indicates the respondents’ estimates of the amount of time each week that their partner devotes to paid labour. Compared with non-parents, the time use of parents of young children has been shown to be more affected than that of parents of older children (Dribe & Stanford, 2009). Hence, the presence of *children younger than 12* are grouped into four categories: those with no children (baseline), and those with one, two, or three or more children.
Individual conditions

In addition to the time diary entries, respondents were asked to estimate their time spent performing paid labour each week. It has been shown that estimations and time-use diary data can differ substantially (Coltrane, 2000). In studies where respondents were asked to estimate labour time, both men and women tended to overestimate their contribution (Niemi, 1993; Shelton & John, 1996). The reasons for the differences in the two types of time reports are not fully understood. It is possible that individuals do not remember the time they spent on paid work, and some evidence shows that this may depend on socioeconomic position or on the interpretation of what “paid labour” is (Niemi, 1993). Another factor may be the respondents’ perceptions of workloads. Those who have a high workload might also overestimate their time spent on paid labour. The estimation of work hours per week is therefore also included as an individual factor. The respondents were asked about their monthly income before taxes, including bonuses, tips, on-call bonuses, or extra pay for working inconvenient hours. Income was categorised as low, medium, or high, and medium income was the baseline. The respondents’ education levels were classified according to the Swedish school system. The lowest level of education was the first 9 years of school, which are obligatory; 12 years of school meant finishing upper secondary school or the equivalent of the Swedish gymnasium, which served as a baseline; and more than 12 years of schooling indicated university studies. Finally, the respondents’ age was included.

STATISTICAL ANALYSIS

Descriptive analyses were used to show the distribution of variables among the four groups of men and women who were either self-employed or employees. ANOVA test were performed to reveal significant between-group differences in the mean values. As a second step in the analysis, correlations were performed to check for multicollinearity. Linear regression analysis with a 95% confidence interval was performed to compare the risk of time strain among self-employed and employed men and women. Male employees served as the comparison group. Regression was modelled using the mixed command to enable the use of both categorical and continuous variables, and beta values are presented. The data were added in four steps in four models. First, groups were entered, and then time use was added. Family factors were then added, and finally, individual conditions were added. Log likelihood (−2 LL) values are presented to show each model’s fit. To further depict the relationship between paid and unpaid labour and time strain across groups, two additional models were computed with interaction variables. Statistical analyses were performed using the IBM Statistical Package for the Social Sciences (SPSS) version 21.

RESULTS

Table I shows the mean values for time strain, time use, and individual and family variables. Self-employed women report the highest mean level of time strain (4.99), and self-employed men (4.54) have the second-highest level. Employees
report lower levels of time strain: women have a score of 4.24, and men have a score of 3.98. Similar to previous data (Aliaga, 2006; Bianchi & Milkie, 2010), on average, the women participating in this study spent more time on unpaid labour and less time on paid labour per day compared with the men. Self-employed women report the highest number of hours spent on unpaid labour (2.29 hours), and self-employed men report the least amount of time on unpaid labour (0.97 hours). Conversely, self-employed women report the lowest average amount of time spent on paid labour (4.94 hours), whereas self-employed men report the highest number of hours spent on paid labour (8.46 hours). Men and women who are employees report similar numbers of paid labour hours (6.13 versus 6.72 hours). The amount of time spent on leisure activities per day is greatest among self-employed women (3.41 hours) compared with the other groups, and self-employed men report the lowest amount of leisure time per day (2.85 hours).

Partners’ work hours are often overestimated or underestimated (Niemi, 1993). However, this variable indicates whether the partner is working and approximately how many hours the partner works. Table I shows that women estimate their partner’s work time to be more than 40 hours per week, whereas men report that their partners work fewer than 40 hours per week. This result aligns with the number of hours that men and women self-report spending on paid labour each week. As with estimations of a partner’s amount of paid labour time, studies indicate that respondents
easily overestimate or underestimate their own work hours (Niemi, 1993). These results demonstrate that the estimated time spent on paid labour each week does not follow the same pattern as the daily time-use paid labour data. Notably, the estimation of self-employed women is greater than their reported time use. Furthermore, the survey reports indicate that self-employed men and women are somewhat older, have fewer children younger than 12 years of age living at home, and have lower incomes compared with employees.

The ANOVA results presented in Table I show that all groups significantly differ from each other with respect to all included variables except for the variables children and education.

In Table II, model 1 shows that compared with men who are employees, all other groups have higher levels of time strain. Self-employed individuals, particularly self-employed women, report higher levels of time strain compared with employees. When the time-use variables are added in model 2, the association with the perception of time strain increases somewhat for women, but it decreases for self-employed men. In fact, the results indicate that more time spent on unpaid labour does not cause men and women to feel that they do not have enough time; in fact, the opposite is true, and the more housework that is performed, the less time strain is perceived. However, the time strain questions are framed in such a manner that may focus more on a general lack of time, which could be connected to paid labour to a greater extent. Paid labour, however, is only weakly associated with time strain, and the results show that more time spent working reduces perceptions of time strain. When family conditions are controlled for in model 3, the level of perceived time strain decreases across the groups. When individual conditions are added in model 4, the level of perceived time strain among self-employed men is reduced even further and becomes lower than that for employed men, indicating that family and, primarily, individual factors have important effects on the perceived level of time strain among self-employed men. For women (both self-employed and employees), family and individual factors offered no such protective mechanism. The number of children younger than 12 years living at home is a strong contributor to the perception of time strain. Additionally, having a low income and a low education level are strongly associated with the perception of time strain compared with having a medium income and finishing upper secondary schooling. The log likelihood values indicate that the addition of family and individual variables greatly improves the model fit, which confirms that time-use variables alone do not explain the level of time strain; there are other life issues involved.

Because Table I shows that time use differs considerably between the four groups, further analysis of the relationship between paid and unpaid labour and time strain is needed. In Table III, two separate sets of interaction variables were computed with men who are employees as the referent, first between paid labour and the groups, and second between unpaid labour and the groups. Model 1 shows that when time spent on paid labour increases for self-employed men and women who are employees, perceptions of time strain increase, whereas for self-employed women, more time spent on paid labour decreases perceptions of time
strain. In model 2, the results show that women who spend more time on unpaid labour experience less time strain; this is especially true for self-employed women. For self-employed men, more time spent on unpaid labour increases perceptions of time strain.

**DISCUSSION AND CONCLUSION**

The results show that self-employed individuals perceive higher levels of time strain than employees. This is particularly true for self-employed women, who reported the highest level of time strain. Although we cannot comment on the respondents’ motivating factors for choosing self-employment or their work demands, time-use data show that self-employed Swedish individuals adhere to a more gendered division of labour compared with employees, with men serving as breadwinners and women serving as homemakers (Hagqvist, Toivanen, et al., in press). The results of this study show that self-employed women reported the lowest average period of time spent on paid labour and the highest average period of time spent on unpaid labour relative to the other

Table II. Multiple linear regression analysis of time strain, reported as beta-coefficients with *P*-values.

|                      | Model 1 | Model 2 | Model 3 | Model 4 |
|----------------------|---------|---------|---------|---------|
| Intercept            | 3.983***| 4.738***| 3.763***| 1.752***|
| Men E                | 0       | 0       | 0       | 0       |
| Men SE               | 0.558***| 0.518***| 0.269***| -0.150***|
| Women E              | 0.259***| 0.305***| 0.208***| 0.336***|
| Women SE             | 1.010***| 1.080***| 0.930***| 0.905***|
| Time use             |         |         |         |         |
| Paid labour          |         |         |         |         |
| Unpaid labour        | -0.039***| -0.023***| -0.021***|
| Leisure              | -0.099***| -0.042***| -0.032***|
| Family conditions    |         |         |         |         |
| Partners’ work hours |         |         | 0.015***| 0.015***|
| 0 children           |         |         | 0       | 0       |
| 1 child              |         |         | 0.230***| 0.133***|
| 2 children           |         |         | 0.790***| 0.759***|
| 3–4 children         |         |         | 1.532***| 1.605***|
| Individual conditions|         |         |         |         |
| Work hours/week      |         |         | 0.047***|         |
| Age                  |         |         | -0.005***|         |
| Lowest income        |         |         | 0.137***|         |
| Medium income        |         |         | 0       |         |
| Highest income       |         |         | 0.008* |         |
| Education <12 years  |         |         | 0.414***|         |
| Education 12 years   |         |         | 0       |         |
| Education >12 years  |         |         | 0.234***|         |
| −2 LL                | 4094999.722 | 4066364.227 | 2928567.564 | 2432094.184 |
The regression analysis shows that self-employed women tend to differ compared with employees and self-employed men. When self-employed women spend more time on both paid and unpaid labour, their time strain decreases. The reasons for this result are likely to be multifaceted and will require more research. However, four factors explaining why more time spent on both paid and unpaid labour decreases perceptions of time strain among self-employed women in Sweden have been identified. First, previous research has shown that many women business leaders identify the challenges of balancing work and family and the resulting inter-role conflicts as their most pressing problems (Harte, 1996). Second, the short period of time that self-employed women spend performing paid labour and the long period of time that they spend performing unpaid labour may induce the sense that they are unable to perform either type of work properly. When the time spent performing paid labour is increased, women will have more time to perform their job; thus, the feeling of stress related to not having enough time to perform their job will decrease. Third, Niemi (1993) showed that errors may occur when individuals’ understanding of time-use activities differ. For instance, the estimated time spent at work and the actual time spent on paid labour differed greatly among self-employed women. It is possible that self-employed Swedish women's definition of gainful labour differs from the definition used by employees and that their paid and unpaid labour overlap. Finally, if Swedish women, like Canadians (Hilbrecht & Lero, 2014), tend to use self-employment as a way to ease home-related demands, this may explain why self-employed Swedish women perceive lower levels of time strain when their time spent on unpaid labour increases. In one survey question used in this study, the respondents were asked what they would do if they had more free time. Compared with the employed women, the self-employed women were more likely to report that if they had more time, they would spend it performing unpaid labour (11% of self-employed women compared with 4.8% of employed women). In contrast, only 3% of self-employed men and 10% of male employees say they would perform more unpaid labour if they had more time. Another interesting finding is that compared with women, men were more likely to report that if they had more time, they would spend it with family (men SE 27%, men E 26%, Women SE

**Table III. Multiple linear regression analysis of time strain, reported as beta-coefficients with P-values**

|                      | Model 1     | Model 2     |
|----------------------|-------------|-------------|
| Intercept            | 1.951***    | 1.678***    |
| Men E                | 0           | 0           |
| Men SE               | −0.801***   | −0.152***   |
| Women E              | −0.189***   | 0.439***    |
| Women SE             | 2.341***    | 1.200***    |
| Men E, paid labour   | 0           | 0           |
| Men SE, paid labour  | 0.076***    |             |
| Women E, paid labour | 0.076***    |             |
| Women SE, paid labour| −0.146***   |             |
| Men E, unpaid labour | 0           |             |
| Men SE, unpaid labour| 0.057***    |             |
| Women E, unpaid labour| −0.062***  |             |
| Women SE, unpaid     | −0.228***   |             |

Men E = men who are employees, Men SE = self-employed men, Women E = women who are employees, Women SE = self-employed women.

***Significant at the 0.001 level.

Interaction variables with paid and unpaid labour and groups. Both models are controlled for family and individual conditions.
7%, and women (E 14%). These figures support our reasoning above.

Although Sweden is considered a gender-equal country, the Swedish labour market is gender segregated, with women primarily employed in municipal workplaces with lower status, higher workloads, and lower salaries (Elwer, Aléx, & Hammarström, 2010; Statistics Sweden, 2014). Data from Statistics Sweden (2014) confirm that the pattern is similar among self-employed individuals. Self-employed women are more often involved in personal and cultural services, whereas self-employed men primarily have roles in manufacturing, construction, and agricultural businesses (Toivanen et al., 2015). Work-related gender segregation might give men and women different opportunities and cause different strains that also influence the level of time strain. Winter, Roos, Rahkonen, Martikainen, and Lahelma (2006) have found that the work sector seems to have an important effect on the relationship between work-family life imbalance and poor well-being, indicating that it might also have an important effect on perceptions of time strain. The work sector is not included in this study, but future studies should be performed to investigate the impact of the sector on time strain among men and women who are employees and those who are self-employed.

The results show that time-use variables seem to have limited effects on perceptions of time strain. Instead, family and individual conditions seem to be more strongly related to a risk of perceiving time strain. These findings are supported by the fact that the model fit improves significantly when these variables are added. Low income and a low level of education tend to be related to increased perceptions of time strain. The level of education seems to be similar across the four groups, but income differs, with self-employed individuals reporting lower incomes than their employed counterparts. This finding is in agreement with research showing that self-employed individuals perceive their jobs as being more stressful and mentally straining because they work longer hours, have less free time and have more responsibility for their own jobs and incomes as well as those of their employees, in many cases (Andersson, 2008; Stephan & Roesler, 2010).

In summary, to our knowledge, this is the first study examining gender differences among self-employed individuals and employees in terms of the time strain related to paid and unpaid labour. Therefore, this study adds important knowledge about self-employed individuals and employees. These findings indicate that there are differences in perceptions of time strain between self-employed individuals and employees. Furthermore, the results indicate that even in a gender-equal country such as Sweden, the motivating factors for choosing self-employment might still be gendered. Compared with men, women seem more likely to enter self-employment to balance work and family, which is similar to the employment patterns observed in traditional countries (Craig et al., 2012). This results in differences in the relationship between paid and unpaid labour and perceptions of time strain.

Limitations

The time-use data only allowed us to select individuals who reported that they were self-employed. The sizes of their companies are unknown. It is also unclear
whether they have employees, and if so, how many, which has been shown to be of importance (Johansson Sevå & Öun, 2015). Furthermore, it is not known whether the businesses are home-based. Studies have shown that the business location is an important factor in the perception of work-family balance (Loscocco & Smith-Hunter, 2004).

Because the data are cross-sectional, causal relationships cannot be investigated. Furthermore, the number of individuals in each group differs, and the self-employed represent a smaller percentage of the total sample. However, the distributions among groups are similar to those of other studies and also to the population in general, and there is no reason to believe that the results are affected. Additionally, weights have been applied to reduce errors that might occur because of the low number of participants in the self-employed group. Despite this weighting, there is always the risk that compared with the employee group, the self-employed group is more sensitive to within-group differences because of the low number of participants. With this in mind, an analysis has been carried out to reduce any errors resulting from outliers.

**IMPLICATIONS**

The findings of this study have important practical implications for self-employed men and women. For example, individuals who are thinking about leaving organisational employment in favour of self-employment with the aim of being better able to manage work-life issues should be advised about the different types of time demands and the effects these factors have on perceptions of time strain. Training programmes should address this issue by helping new and prospective self-employed individuals realistically address how much time they need to dedicate to their businesses and identify strategies for managing this potential area of conflict. Additionally, it is important to improve the prerequisites for self-employed women because they experience a high level of time strain, and their leisure time and income levels positively contribute to their perceptions of time strain. The results identify differences among self-employed men and women, both with regard to time use and time strain and to the relationship between the two. For policymakers, it is important to consider the differences between self-employed men and women identified in this study and to provide measures for removing barriers to female entrepreneurship. To inform policymaking, self-employment and motivating factors that cause Swedish individuals to enter self-employment should be further discussed and studied in terms of gender.

**CONFLICT OF INTEREST AND FUNDING**

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