



**Universiteit Utrecht**

# **Satisfaction with Work-Family Balance, work arrangements and gender inequality**

**A demands and resources approach for Chilean workers**

Master Social Policy and Public Health  
Thesis on Existing Data SPPH (201800155)  
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## **Abstract**

Satisfaction with work-family balance (SWFB) is an important indicator of individuals' health and wellbeing. Nonetheless, research focusing on SWFB is lacking and literature concentrates on Anglo-saxon countries. Full-time workers have been overrepresented by the studies, despite part-time work arrangements have been an increasing strategy to cope with work and family responsibilities, especially for women. Applying Voydanoff's demands-resources theoretical approach, our research examines the predictors associated to SWFB in Chile and explores the moderator role of gender on the relationship between work arrangements and SWFB. Cross-sectional data was obtained from the Chilean National Time Use Survey (ENUT 2015). A subsample of 9,204 workers was utilized. Through multiple regression analyses, our results illustrate that most of the demands have a negative influence on SWFB, while almost all the resources included are positively linked to SWFB. Only family-related predictors showed mixed results. Further, work arrangements with longer working hours have lower SWFB, and gender was an influential moderator for full-time work arrangements, where women exhibit a significant lower level of SWFB than men. Marginal and substantial female part-time workers reveal higher levels of SWFB than their male counterpart, however, those effects are not significant. Our findings depict the prevalence of traditional gender roles in the Chilean society. Implications for further research and interventions are discussed, especially regarding the generation of policies questioning these traditional gender norms, and improving working conditions for part-time workers, which in turn could enhance SWFB for both men and women in Chile.

## Introduction

In a context of neoliberal economic globalization, many social changes have reshaped our societies, bringing about renewed attention to the challenge of balancing work and family and its gender implications (Beham, & Drobnič, 2010). Despite the growing body of research around work-family balance (WFB), few studies have examined specifically the *satisfaction* with this balance (e.g., Beham, & Drobnič, 2010; Matilla-Santander et al., 2019; McNamara et al., 2013). Satisfaction with work-family balance (SWFB) refers to “the overall level of contentment resulting from an assessment of how successfully one is handling the sum of demands emanating from work and family roles” (Valcour, 2007, p. 1513). It is an important indicator of individuals’ health and wellbeing (Lunau et al., 2014), and opens possibilities for employers to enhance workers’ WFB (Valcour, 2007), being highly topical to address the subject of SWFB.

The WFB literature frequently focuses on working hours, under the assumption that the number of hours people work could determine their ability to cope with work and family demands (Bäck-Wiklund et al., 2011). However, few studies have directly tested the impact of working hours on SWFB, being mostly based on full-time workers. Research addressing part-time employment remains underexplored, although it is an increasingly common strategy to balance work and family (Beham & Drobnič, 2010; Valcour, 2007). Beham et al. (2019) indicate that part-time workers report greater SWFB than full-time workers. Yet, certain disadvantages of part-time jobs negatively influence SWFB as well (Lenhart, 2016; Lyonette et al., 2010; Lyonette, 2015). Hence, it is still unclear in which direction working hours impact SWFB, being relevant to generate evidence addressing this literature gap.

Additionally, most of the literature has focused on developed Anglo-Saxon countries (Garavan et al., 2012; Idrovo & Bosch, 2014; Oishi et al., 2015). There is less research on WFB, and to the best of our knowledge, no research on SWFB coming from Latin American countries, which entails the omission of how specific sociocultural norms relate with SWFB (Haar et al., 2014; Karatepe, & Uludag, 2008). This is another research gap to be addressed.

Therefore, our study seeks to expand the existing literature by focusing on SWFB in Chile, a family-oriented country in which the traditional women’s role within the family is considered crucial for the social maintenance (Jiménez, Gómez, & Palomo-Vélez, 2017). Concordantly, 92% of Chilean women consider taking part-time jobs as the best way to balance work and family (Contreras, Hurtado, & Sara, 2012), despite almost half of female part-time workers are willing to work for more hours (Brega, Durán, & Sáez, 2015). This reveals the tensions that Chilean women face when participating in the labour market. Thus, this research will incorporate the gender dimension into the analysis.

Our study aims to identify the predictors associated with SWFB in Chile, utilizing Voydanoff's (2005) demands-resources theoretical approach. This approach poses that certain demands and resources are part of the work and family domains. Demands are psychological or structural claims (e.g., working hours), while resources concern psychological or structural assets (e.g., supervisor' support), both associated with specific role requirements and expectations (e.g., male breadwinner) that are embedded and impact on the work and family domains (Voydanoff, 2005).

Likewise, as remarked earlier, how part-time work affect SWFB remains under researched with mixed findings. Hence, the current research assesses how work arrangements (i.e., 'substantial' vs. 'marginal' part-time vs. full-time employment) affect SWFB. Additionally, we evaluate whether the impact of work arrangements on SWFB is moderated by gender considering the traditional gender norms in the Chilean society. As to examine these research objectives, we utilize existing data from the Chilean National Time Use Survey (ENUT).

Regarding the implications and relevance of our research, theoretically it will contribute to expand the currently scarce literature regarding SWFB. Moreover, it will address the relationship between work arrangements and SWFB incorporating gender as a moderator, which has not been tested in Chile previously. Also, it will utilize the demands-resources approach, a solid framework for understanding the predictors associated to SWFB (Voydanoff, 2005; Wayne et al., 2020). Besides, at a practical and societal level, our research will address a relevant topic for public health and social welfare (Lunau et al., 2014). Identifying the predictors that sustain SWFB in Chile will allow the development of policies and interventions based on evidence. Furthermore, since we analyse work arrangements and its gender implications, interventions could be oriented towards improving part-time working conditions, and advocate for questioning the traditional gender roles within the Chilean society.

## **Literature Review and Theoretical Framework**

### **Satisfaction with Work-Family Balance**

WFB designates the equilibrium between two primary spheres of life: the individual's 'work' (i.e., source of income); and the 'family' and care responsibilities (Kuschel, 2017). Voydanoff (2005) understands WFB as the assessment that work resources meet family demands, and family resources meet those of the work, such as the participation in both domains is effective. While Greenhaus and Allen (2006) define WFB as the degree an individual's effectiveness and satisfaction in work and family roles are compatible with their

life priorities. As different definitions utilize concepts of ‘effectiveness’ and ‘satisfaction’, the need to distinguish both has been suggested (Beham et al., 2019). Thus, our study addresses SWFB.

Valcour (2007) defines SWFB as an individuals’ appraisal that they have adequate fit and integration of resources across work and family roles, thereby resulting in positive feelings. The theoretical concept of SWFB has some peculiarities. First, it does not centre on the assumption that work, and family spheres are bound to conflict between each other. Second, it is a unitary construct that includes a cognitive and an affective component. The cognitive component refers to an appraisal of an individual’s ability to meet multiple work and family responsibilities. The affective component includes the emotional state resulting of that assessment (Valcour, 2007).

SWFB has been positively and negatively associated to different workplace, family, and personal factors (Beham et al., 2019; Wayne et al., 2020). Voydanoff’s (2005) demands-resources approach is appropriate to understand them, hence, this theoretical framework is further explained.

### **Demands-Resources Approach**

The demands-resources approach describes the individual’s assessment of the demands and resources of work and family domains, and how these elements are embedded and impact on each domain, being the theoretical framework of the current study. Demands are psychological or structural claims associated with role requirements to which individuals must respond by applying physical or mental effort. While resources are psychological or structural assets that could facilitate performance, reduce demands, or develop additional resources (Voydanoff, 2004, 2005).

The general assumption is that SWFB will be higher when people have enough resources to meet the demands in both the work and family spheres. Hence, gaps between demands and resources are likely to result in feelings of dissatisfaction with WFB (Szücs et al., 2011). Moreover, recent studies have broadened the scope towards understanding work, family, *and* personal-related predictors (e.g., Wayne et al., 2020). The personal domain could play an important role, although research has largely omitted it, mainly focusing on workplace antecedents. Thus, our research will expand those efforts by identifying the main demands and resources associated with SWFB in these three domains.

## ***Demands***

**Workplace demands.** Workplace predictors have received most of the attention by the literature (Wayne et al., 2020). Voydanoff (2005) distinguishes between time-based, and strain-based job demands. The former's rationale is that time spent on one domain limits the time available for participating on the other (Szücs et al., 2011). Working hours, commuting time, and nonstandard work schedules have been negatively associated to SWFB, since they decrease individuals' ability to settle between competing work and family demands (Gervais, & Millier, 2016; Watanabe, & Falci, 2016). Strain-based job demands are associated to a psychological process of spillover between domains, this is, the impacts of one sphere being experienced on the other (Schor, 1991). Role overload and work pressure may mitigate workers' ability to participate in non-work roles, decreasing SWFB. Similarly, job insecurity poses a threat to the worker's economic wellbeing, which negatively impacts on SWFB (Beham, & Drobnič, 2010; Szücs et al., 2011).

**Family demands.** Childcare responsibility has been found significant for SWFB in several studies (e.g., Reid & Quadagno, 2004; Valcour, 2007), while the number of children has been considered an additional obstacle to SWFB for women (Szücs et al., 2011). Time spent on housework, and care responsibilities for ill or elderly relatives have been recognized as important family demands as well (Szücs et al., 2011). Cohabiting with a partner has produced mixed findings. Partners' disagreements over household chores distribution can weaken partner support to achieve SWFB (Sadrul, 2016). Whereas living with an employed partner implies the financial relief attributed to dual earners family structures, increasing SWFB (Thorntwaite, 2004). Based on the unequal gender distribution of household and caregiving tasks in Chile –in average, women spend 5.89 hours to unpaid work while men spend 2.74 hours per day– (INE, 2016), we consider cohabiting with a partner as a demand.

**Personal demands.** There is a scarcity of research examining the personal domain (Wayne et al., 2020). Valcour (2007) has negatively related neuroticism to SWFB. Psychophysiological instabilities (e.g., anxiety, depression) seem to hinder individuals' ability to achieve work and non-work demands (Greenhaus et al., 2003; Haar et al., 2014). Likewise, stressful appraisals could occur when individuals perceive that the demands exceed their resources, thereby, endangering SWFB (Voydanoff, 2005).

## ***Resources***

**Workplace resources.** Supervisor' support has been found significant to foster SWFB, providing direct assistance and emotional support to employees (Russo, et al., 2018; Wayne et al., 2020). A supportive work-family culture in the workplace, formal work support and support from coworkers have also been

related with greater SWFB (Griggs et al., 2013; Thompson, & Prottas, 2005). Likewise, enriched job characteristics (e.g., meaningful work, autonomy) and job satisfaction, promote positive affect and motivation, boosting SWFB (Watanabe, & Falci, 2016; Wayne et al., 2020).

**Family resources.** Although little research examines the role of family factors in SWFB (Wayne et al., 2020), literature has identified the support from a partner<sup>1</sup> and other family members as resources that enhance workers’ ability to deal with work demands, increasing SWFB (Szücs et al., 2011). Having formal or informal domestic service has yielded mixed results (Szücs et al., 2011; Van Rijswijk et al., 2004). Similarly, a recent study has shown that hiring of childcare reduce SWFB, which could be related to an increased cultural pressure to participate more fully in parenting (Buchanan, Das, & McFarlane, 2020).

**Personal resources.** Resilience has been identified as a resource to foster SWFB (Wayne et al., 2020). Similarly, healthy behaviours (e.g., adequate exercise or sleep) are considered to expand physical, cognitive, and emotional resources to handle work and family demands (Voydanoff, 2005).

Table 1 summarises the main demands and resources identified by the literature.

**Table 1**

*Workplace, family and personal demands and resources associated to SWFB*

	<b>Workplace</b>	<b>Family</b>	<b>Personal</b>
<b>Demands</b>	Paid work hours Nonstandard work schedules Commuting time Role overload Work pressure Job insecurity	Caregiving (childcare, ill and/or elderly relatives) Number of children (specially for women) Time spent on household work Spouse/partner demands	Neuroticism Stress Depression Anxiety
<b>Resources</b>	Supervisor and coworker support Supportive work-family culture Meaningful work Autonomy Job satisfaction	Spouse/partner support Spouse/partner employment Housework help/service (formal or informal) Care for children service	Resilience Healthy behaviours

*Note.* Own elaboration based on literature review.

The demands-resources approach is a useful model to map out factors that could influence SWFB. The complications associated to work arrangements –linked to the workplace demand of working hours– and their gender implications, are further described.

<sup>1</sup> The literature has recognized living with a spouse/partner both a demand and a resource of the family sphere. When cohabiting with a partner associates with supportive behaviours and financial relief, it has been positively related to SWFB (Szücs et al., 2011; Thornthwaite, 2004). Anyhow, in the current research we allocate this predictor as a demand, as explained before.

## **Work Arrangements and Gender**

A series of work arrangements (e.g., home-based work, part-time work) have gained momentum lately as strategies to improve WFB (Duncan & Pettigrew, 2012). Our research focuses on the comparison between full-time, and part-time work arrangements. The latter refers to the reduction of working hours with respect to full-time schedules, with proportional salary diminution (Díaz, 2016).

Research addressing the relationship between part-time work arrangements and SWFB is scarce, while existing studies have produced mixed results, thus the influence of part-time work on SWFB is still not clear-cut (Oishi et al., 2015). Some studies indicate a positive association between part-time work and SWFB when referred to full-time employment (Beham et al., 2019; McNamara et al., 2013). The underlying rationale is the scarcity of time and energy, resources that may be used up through longer work hours, not being available to meet family-related demands (Szücs et al., 2011). However, part-time employment is characterized by a lack of acceptable labour conditions (Thorntwaite, 2004), and some studies indicate that its low-quality nature generate insecurities that also decrease SWFB and overall wellbeing (Lenhart, 2016; Lyonette et al., 2010; Montero, & Rau, 2015; Van Rijswijk et al., 2004).

Similarly, evidence is still mixed regarding longer work hours and SWFB. When compared to part-time jobs, most of the studies have shown a negative association between full-time employment and SWFB (Beham et al., 2019; McNamara et al., 2013). Nonetheless, some evidence indicates that longer work hours “could have a positive association with work-family balance satisfaction through an increase in skills and capabilities, psychological resources, and/or financial resources for meeting work and family demands” (Valcour, 2007, p. 1515). However, most of these studies have used professional and managerial samples.

Lately, scholars suggest classifying between different forms of part-time schedules, this is, ‘marginal’ (< 20 h per week) and ‘substantial’ (20-34 h per week) part-time work. This advocates for a more detailed understanding of part-time work arrangements and SWFB (van Breeschoten, & Evertsson, 2019). When making this distinction, some studies have revealed that marginal part-time workers show higher SWFB than substantial part-time workers (Beham et al., 2019).

Another important characteristic of part-time work is its gendered nature (Lyonette, 2015). As women continue to be primarily responsible for childcare and housework, they participate most in part-time work (Beham et al., 2019; Díaz, 2016). The associated costs for female part-time workers cannot be ignored: career progress, life-time earnings, and general economic wellbeing (Duncan, & Pettigrew, 2012). Unlike women, male participation in part-time jobs tends to be due to balance study time, or when difficulted to get a full-time employment (Beham et al., 2019).



These gender differences may influence men and women' SWFB (Beham et al., 2012). For instance, Reid and Quadagno (2004) have shown that SWFB is experienced in a gendered way: women feel more satisfied when they prioritize their family role; while men report less SWFB when they do not have personal time. Concordantly, Sandor (2011) have found women in marginal part-time work to have higher SWFB than male marginal part-time workers, while Beham et al. (2019) indicate male full-time workers to have higher SWFB than women working full-time. Nonetheless, other studies have not yielded any gender differences in SWFB for both marginal and substantial part-time workers (Beham et al., 2012).

Moreover, the social norms on the appropriate roles that men and women should play cannot be ignored, influencing their SWFB (Beham et al., 2019; Oishi et al., 2015). Studies in Western countries have revealed that in gender-egalitarian societies, part-time work is more conducive to SWFB than in countries with low gender equality (Beham et al., 2019). However, a study with collectivists East-Asian societies indicate that women participate in part-time work involuntarily, reporting greater SWFB because family demands are prioritized, since "caring for children and other family members is not a burden but a natural way of life" (Oishi et al., 2015, p. 8). These results could be applicable to a family-oriented country like Chile. Thus, we incorporate gender into our study since the literature has shown mixed results regarding its moderating role in SWFB.

## **Current Study**

This research aims to increase the knowledge regarding SWFB as outcome, considering it as a novel theoretical concept, poorly addressed by scholars (Valcour, 2007). Since most of the literature focuses on Anglo-Saxon countries (Oishi et al., 2015), our study seeks to address the dearth of knowledge about SWFB from different societies. Hence, we will focus on the case of Chile.

As part-time work arrangements is an increasing strategy to people's attempt to balance work and family (Beham et al., 2019; Díaz, 2016), generating more scientific evidence of the relationship between work arrangements and SWFB is needed. Since there is an overrepresentation of women in part-time work, and some studies indicate higher SWFB in lower working hours jobs (Beham et al., 2012; Beham et al., 2019), we will incorporate gender as a moderator of the relationship between work arrangements and SWFB, especially considering the traditional gender roles within the Chilean society (Díaz, 2016).

Thus, our study aims to answer two main research questions: (1) Which, and to what extent, resources and demands across the workplace, family, and personal domains influence SWFB in Chile?, and (2) To what extent are work arrangements related to SWFB in the Chilean context, and is this relation

moderated by gender? As we pursue to provide greater nuances to the problem, we will distinguish among full-time, substantial part-time, and marginal part-time work arrangements. Consequently, the following hypotheses are established:

- **H1:** Demands predictors are negatively related with SWFB (Beham et al., 2012; Szücs et al., 2011; Voydanoff, 2005).

Demand predictors include work arrangements and commuting time as workplace demands. Childcare responsibilities, time spent on housework, and cohabiting with a partner are family demands. Stress is a personal demand.

As we want to delve into the work arrangements demand, the following hypothesis is tested:

- **H1a:** Work arrangements with longer working hours have lower SWFB (Beham et al., 2019; McNamara et al., 2013).

Also, we aim to study resource predictors. Hence, our second hypothesis is:

- **H2:** Resource predictors are positively related with SWFB (Szücs et al., 2011; Voydanoff, 2005; Wayne et al., 2020).

Resource predictors include job satisfaction as a workplace resource. Family domain resources consider having formal or informal domestic service, the satisfaction with the housework tasks' division between partners, and the satisfaction with the childcare responsibilities' division between partners. Personal resources include having proper sleep and practicing physical activity.

Further, the third hypothesis incorporate the gender dimension into our exploration:

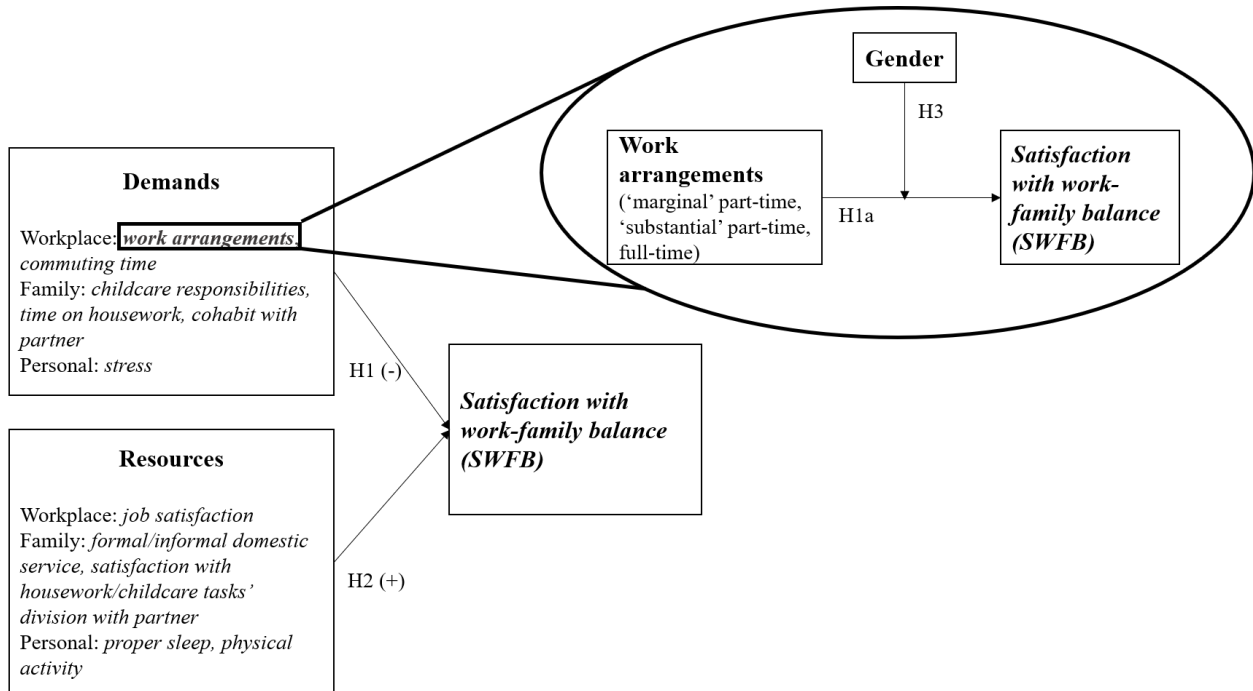
- **H3:** Gender moderates the impact that work arrangements have on SWFB (Beham et al., 2019; Oishi et al., 2015; Reid, & Quadagno, 2004).

Therefore, applying the demands-resources theoretical framework (Voydanoff, 2005), a selection of available items from the Chilean National Time Use Survey were identified as a workplace, family, or personal demand or resource. Although the literature has recognized a series of determinants for each sphere, our research only includes those predictors available in our secondary data.

Our conceptual model is depicted in Figure 1.

**Figure 1**

*Conceptual model of the relations assumed between demands, resources, work arrangements and gender, with SWFB*



## Methods

### Design and procedure

A quantitative cross-sectional study design is used, providing a 'snapshot' of the associations between predictors and SWFB at a specific point in time (Levin, 2006). The database utilized is the Chilean National Time Use Survey (ENUT). The objective of the ENUT was to gather information on the time use of the population aged 12 years and over, seeking to make visible the overall workload of the population. The sample consists of 10,706 households and 21,690 people, being representative at the regional level.

The data gathering process was carried out by trained survey teams, face to face, from September to December 2015. To encourage the participation of the selected households in the survey, a work of sensitization of the informants was carried out utilizing support materials such as letters and informative brochures.

## Participants and sampling

Initially, 21,690 participants were recruited by the ENUT. Considering our research objectives, participants must meet certain inclusion criteria (Setia, 2016). Therefore, we conducted a sample selection process, detailed in Table 2.

**Table 2**

*Sample selection process*

<b>Step</b>	<b>n<sub>i</sub></b>	<b>(dropped)</b>
<i>Starting sample</i>	21,690	
1. If age is between 18 and 65	16,454	(5,236)
2. If is employed	11,445	(5,009)
3. If income quintile is observed	11,445	(0)
4. If educational level is declared	11,437	(8)
5. If sex is declared	11,437	(0)
5. If dependent variable (SWFB) is observed	11,089	(348)
6. If predictors are observed and valid (commuting time, work arrangements, childcare responsibilities, time on housework, cohabit with partner, stress, job satisfaction, formal/informal domestic service, satisfaction with housework/childcare tasks' division with partner, proper sleep, physical activity)	9,204	(1,885)
<i>Final sample</i>	9,204	

*Note.* National Time Use Survey, Chile, 2015, own calculations.

Only people of working age (18-65 years old), with a paid job, and with available and valid scores on control and study variables were conserved. The final sample consists of 9,204 workers (4,815 men, 52.3%) whose mean age is 41,14 years old ( $SD= 12,51$  years). 80.4% of the participants have a full-time job (58% men), followed by 11.5% in substantial part-time jobs (69% women), and 8% in marginal part-time jobs, concentrated by women (73%).

## Measures

### *Predictor variables*

#### **Workplace demands.**

**Work arrangements.** The open question “¿How many hours a week do you work?” was used to measure work arrangements (only the values between 1 to 100 hours/week were considered). The item was recoded as dummy variables: marginal part-time work (1-19 h/week), substantial part-time work (20-34 h/week), and full-time work (>35 h/week). Marginal part-time work was the reference group.

***Commuting time.*** A recodification of four continuous variables informing the estimated hours of commuting time through open questions was performed. Commuting time during a weekday was the sum of items: “Commuting time to work on a weekday”, and “Commuting time back from work on a weekday”, while commuting time during a weekend day added items: “Commuting time to work on a weekend day”, and “Commuting time back from work on a weekend day”. Finally, we created one variable of commuting time, which measures the time spent on a weekday or weekend day for traveling to and back from work (depending on the workday informed by the respondent).

### **Family demands.**

***Childcare responsibilities.*** Since the survey asks the age of each person living within the household, we calculated the number of children up to 12 years old in each household, imputing the number of children to each worker. Hence, childcare responsibilities is operationalized as the number of children 12 years or younger living in the household.

***Time on housework.*** This predictor is operationalized as the continuous variable “Total time of unpaid domestic work for the own household in a typical day” (open question). The previous variable only records time for those who participate in unpaid domestic work, thus, to assess those who do not participate, we used item “Participation in unpaid domestic work for own household in a typical day” (dichotomous variable; 1=participation, 0=no participation), imputing 0 hours of unpaid domestic work to those who declared no participation.

***Cohabit with partner.*** This predictor was assessed with item “Do you currently live with your partner in this house?” (1=yes, 0=no).

### **Personal demands.**

***Stress.*** The item “In general, do you feel stressed?” was used to assess stress. Respondents answered to which degree they felt stressed (1=yes, always; 2=yes, sometimes; 3=no, never). It was recoded as a dichotomous variable (1=yes, 0=no).

### **Workplace resources.**

***Job satisfaction.*** Job satisfaction was measured utilising the question “How satisfied do you feel with your work” on a five-point Likert scale (1=totally unsatisfied, 5=totally satisfied).

### **Family resources.**

***Formal and/or informal domestic service.*** This predictor was measured by asking participants whether they had domestic service work or not during the past week, either formal (paid) or informal (unpaid), with two answer options (1=yes, 0=no).

***Satisfaction with housework tasks' division with partner.*** Measured utilizing the item “How satisfied are you with the way you and your partner divide up domestic work time?” (five-point Likert scale, 1=totally unsatisfied, 5=totally satisfied).

***Satisfaction with childcare tasks' division with partner.*** Measures were obtained using item “How satisfied are you with the way you and your partner divide up care of your children’s time?” (five-point Likert scale, 1=totally unsatisfied, 5=totally satisfied).

### **Personal resources.**

***Proper sleep.*** The continuous variable “For how much time (did you sleep in typical day)?” (open question) was recoded as a dummy variable, considering the range between 6 to 12 hours per day as proper sleep (1=proper sleep, 0=not proper sleep).

***Physical activity.*** Measures were obtained using item “On a typical day, did you practice any sport or physical exercise?” (1=yes, 0=no).

### ***Moderator variable***

***Gender.*** Respondents’ gender was obtained utilizing the item “Could you tell me if the name of (...) corresponds to a man or a woman?”, coded as a dummy variable (0=man, 1=woman). It should be remarked that in the models where the moderating effect of gender is not the focus, this variable is included as a control.

### ***Outcome variable***

***Satisfaction with work-family balance (SWFB).*** SWFB was measured using item “How satisfied do you feel with the following aspects of your life: work-family balance?” (five-point Likert scale, 1=totally unsatisfied, 5=totally satisfied).

### ***Control variables***

Sociodemographic variables were controlled to account for any associations between variables that could be explained by confounders. Age, educational level, and socioeconomic status were included.

**Age.** Obtained with item “Age”, a continuous variable in which participants indicated their age in years. Our study had limited age range between 18 to 65 years old, since we only considered people of working age.

**Educational level.** Item “Educational level” was utilized and recoded into 5 options, according to the highest educational level completed (0=none, 1=primary education, 2=secondary education, 3=short-cycle tertiary education, 4=bachelor or equivalent, 5=master, doctoral or equivalent). Non-educational level completed was the reference group.

**Socioeconomic status.** Participants inform their household’s monetary income (open question). Thereafter, the ENUT researchers construct the variable “Income quintile”, indicating the income quintile to which the person belongs. Five quintiles are obtained: the first quintile (Q1) represents the portion of the poorest population; and up to the fifth quintile (Q5), representing the richest population.

### **Data analysis**

Since we want to assess the relationship between demands and resources as predictors, and SWFB as outcome, multiple regression analyses (MRA) are used in this research (Field, 2018). To analyse the influence of work arrangements and gender in SWFB, we assess the potential effect of the gender x work arrangement interaction on the dependent variable in a regression. All analyses were conducted using the statistical software Stata version 15. Considering that a regression model should meet several assumptions to allow generalization, they were verified before running the MRA, being all met (see Appendix A).

### **Ethics**

Surveys carried out by the National Institute of Statistics, including the ENUT, are regulated by Chilean Law N° 17.374. This regulation guarantees the confidentiality of the data, since any disclosure of information referred to the respondents is subject to measures guaranteed by law. Besides, the management of data collected by governmental institutions is accountability of the “Public Data Portal” website, which guarantees the anonymity and confidentiality of the databases available for public and free use, so the permission for further use and analysis is implied (details in Appendix B).

## Results

### Descriptives

Statistics descriptives are summarized in Table 3. The mean value of SWFB is 3.16 points ( $SD= 1.04$ ), meaning that in average, our respondents were neither satisfied nor unsatisfied with their work-family balance. The average age of our sample was 41.15 years ( $SD= 12.51$ ). 69% belonged to the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> socioeconomic quintile, and 47% had secondary education completed. There is a reasonably equitable gender distribution (52% were men, 4,814 participants).

Regarding the workplace demands, 80% of our respondents have a full-time job, 12% work substantial part-time, and 8% in a marginal part-time work arrangement. On average their commuting time is 1.06 hours ( $SD= 1.09$ ). When looking at family demands, on average, our sample has 0.72 children up to 12 years old ( $SD= 0.9$ ) and spend 2.54 hours ( $SD= 2.37$ ) on housework. 59% cohabit with a partner. As for the personal demand of stress, 76% of our sample reported to feeling stressed in general.

About resources, the workplace predictor of job satisfaction has an average of 3.61 points ( $SD= 0.93$ ). Within the family domain, 86% of the participants do not have formal neither informal domestic service. Satisfaction with the housework tasks' division between partners ( $M=3.58$ ,  $SD= 0.98$ ), and satisfaction with the childcare responsibilities' division between partners ( $M=3.72$ ,  $SD= 0.94$ ) are both moderately high. Regarding personal resources, 84% of our sample have proper sleep patterns, and 88% do not practice any physical activity.

An overview of the intercorrelation of the variables is presented in Table 4. Briefly, almost all the variables are significantly correlated with SWFB, hence, we controlled for age ( $r= 0.088$ ,  $p<0.001$ ), gender ( $r= -0.033$ ,  $p<0.01$ ), socioeconomic status ( $r= 0.013$ ,  $p<0.01$ ), and educational level ( $r= -0.073$ ,  $p<0.001$ ).



**Table 3***Summary Descriptive Statistics of Variables*

	Mean / Distribution	SD	Range
<b>Controls</b>			
Age <sup>a</sup>	41.15	12.51	18 - 65
Socioeconomical Status (ref: <i>1<sup>st</sup> Quintile</i> )	13%		
<i>2<sup>nd</sup> Quintile</i>	22%		
<i>3<sup>rd</sup> Quintile</i>	23%		
<i>4<sup>th</sup> Quintile</i>	24%		
<i>5<sup>th</sup> Quintile</i>	18%		
Educational level <sup>b</sup> (ref: <i>None</i> )	7%		
<i>Primary education</i>	20%		
<i>Secondary education</i>	47%		
<i>Short-cycle tertiary education</i>	10%		
<i>Bachelor or equivalent</i>	15%		
<i>Master, doctoral or equivalent</i>	1%		
Gender <sup>c</sup> (ref: Men)	52%		
Women	48%		
<b>Outcome Variable</b>			
SWFB <sup>d</sup>	3.16	1.04	1- 5
<b>Demands</b>			
Workplace Demands			
Work arrangements (ref: <i>Marginal part-time</i> )	8%		
<i>Substantial part-time</i>	12%		
<i>Full-time</i>	80%		
Commuting time <sup>e</sup>	1.06	1.09	0 - 18
Family Demands			
Childcare responsibilities <sup>f</sup>	0.72	0.90	0 - 8
Time on housework <sup>e</sup>	2.54	2.37	0 - 20
Cohabit with partner (ref: <i>No</i> )	41%		
<i>Yes</i>	59%		
Personal Demands			
Stress (ref: <i>No</i> )	24%		
<i>Yes</i>	76%		
<b>Resources</b>			
Workplace Resources			
Job satisfaction <sup>d</sup>	3.61	0.93	1- 5
Family Resources			
Formal and/or informal domestic service (ref: <i>No</i> )	86%		
<i>Yes</i>	14%		
Satisf. with housework tasks' division w/ partner <sup>d</sup>	3.58	0.98	1- 5
Satisf. with childcare tasks' division w/ partner <sup>d</sup>	3.72	0.94	1- 5
Personal Resources			
Proper sleep (ref: <i>No</i> )	16%		
<i>Yes</i>	84%		
Physical activity (ref: <i>No</i> )	88%		
<i>Yes</i>	12%		
<b>Observations</b>	<b>9204</b>		

Note. National Time Use Survey, Chile, 2015, own calculations.

<sup>a</sup>Age is measured in years. <sup>b</sup>Highest educational level completed by participants. <sup>c</sup>Gender is considered a control variable, except when testing our third hypothesis. <sup>d</sup>Variables measured in a 5-point Likert scale. <sup>e</sup>Variables measured in hours. <sup>f</sup>Indicated number of children up to 12 years old within the household.

**Table 4***Correlations of the study variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. SWFB	1																
2. Age	.088***	1															
3. Education	-.073***	-.169***	1														
4. SES	.013**	.068***	.443***	1													
5. Gender	-.033**	-.023*	.046***	-.053***	1												
6. Work arrangements	-.150***	.069***	.079***	.158***	-.215***	1											
7. Commuting time	-.097***	-.015	.015	.044***	-.087***	.097***	1										
8. Childcare responsibilities	-.066***	-.223***	-.006	-.338***	.046***	-.022*	-.003	1									
9. Time on housework	.013	.091***	.007	-.024*	.414***	-.202***	-.092***	.018	1								
10. Cohabit with partner	-.024*	.214***	-.014	.033**	-.157***	.099***	.009	.181***	.025*	1							
11. Stress	-.245***	-.035***	.009	-.045***	.147***	.010	.007	.044***	.093***	.025*	1						
12. Job satisfaction	.321***	.073***	.050***	.143***	-.022*	.059***	-.026*	-.037***	.004	.034**	-.160***	1					
13. For/inf. domestic serv.	-.015	-.019	.255***	.222***	.001	.008	-.007	.084***	.005	.043***	.005	.061***	1				
14. Satisf. household div. w/ partner	.041***	.209***	-.015	.045***	-.179***	.099***	.015	.145***	-.006	.918***	-.012	.067***	.039***	1			
15. Satisf. childcare div. w/ partner	.025*	.158***	-.015	-.067***	-.139***	.081***	.005	.292***	.011	.760***	.001	.054***	.049***	.751***	1		
16. Physical activity	.048***	-.097***	.112***	.081***	-.027**	-.040***	-.044***	-.025*	.045***	-.069***	-.045***	.029**	.038***	-.064***	-.052***	1	
17. Proper sleep	.097***	-.020	-.031**	-.019	.007	-.056***	-.101***	-.030**	-.019	.009	-.047***	.016	-.021*	.016	.004	.010	1

*Note.* National Time Use Survey, Chile, 2015, own calculations.\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## Main analysis

A multiple linear regression was calculated to test hypothesis 1, 1a and 2, examining the effect of demand and resources on SWFB. Results of the analyses are presented in Table 5. Model 0 only included control variables, explaining 1.22% of the variance of SWFB ( $R^2= 0.0126$ , adjusted  $R^2= 0.0122$ ;  $F(4, 9199)= 29.37$ ,  $p<0.001$ ). Age ( $\beta= 0.0062$ ,  $p<0.001$ ), and socioeconomic status ( $\beta= 0.0208$ ,  $p<0.05$ ) were positively and significantly related with SWFB. While educational level ( $\beta= -0.0649$ ,  $p<0.001$ ), and gender ( $\beta= -0.0554$ ,  $p<0.05$ ) showed a significant negative relationship with SWFB.

Model 1 incorporates controls together with demands (work arrangements, commuting time, childcare responsibilities, time spent on housework, cohabitation with a partner, and stress), and resources (job satisfaction, formal/informal domestic service, satisfaction with the division of household tasks and childcare responsibilities between partners, proper sleep, and physical activity). Altogether, Model 1 explains 20.45% of SWFB's variance, being the strongest model to predict SWFB ( $R^2= 0.2060$ , adjusted  $R^2= 0.2045$ ). In other words, demands and resources explain about 19.23% of the SWFB's variance in our sample –a major improvement when compared to the base Model 0. Moreover, Model 1 is significant ( $F(17, 9186)= 140.15$ ,  $p<0.001$ ). When performing likelihood-ratio test to compare Model 1 with Model 0, we observe a significant improvement in our final model ( $p<0.001$ , see Appendix C, Table 1).

The first hypothesis states that demands predictors are negatively associated with SWFB. The results indicate that all the demands incorporated in Model 1 were significantly and negatively related to SWFB (see Table 5), apart from time on housework. These results give substantial support to our first hypothesis, showing that except for one family domain predictor, all the demands included in our exploration are relevant when trying to explain Chilean workers' SWFB.

Among the workplace demands, work arrangements are the most relevant when it comes to elucidate what is important for SWFB. With reference to marginal part-time workers, full-time workers ( $\beta= -0.519$ ,  $p<0.001$ ) and substantial part-time workers ( $\beta= -0.197$ ,  $p<0.001$ ) have less SWFB. While commuting time, although with less relative importance, is significantly and negatively associated with SWFB ( $\beta= -0.064$ ,  $p<0.001$ ).

Regarding the family demands, cohabiting with a partner is the strongest demand negatively influencing SWFB in Chilean workers ( $\beta= -0.671$ ,  $p<0.001$ ). Similarly, childcare responsibilities have a significant negative effect on SWFB. Compared to workers without children, for every child under 12, workers' SWFB decrease ( $\beta= -0.041$ ,  $p<0.001$ ). Interestingly, time spent on housework shows a mild positive influence on SWFB, but such effect is not significant ( $\beta= 0.003$ , *n.s.*).

**Table 5***Multiple regression analysis of SWFB*

	Model 0		Model 1	
	Coef.	SD	Coef.	SD
<b>Demands</b>				
Work arrangement (ref.: Marginal part-time)				
Substantial part-time			-0.1970***	(0.0447)
Full-time			-0.5190***	(0.0372)
Commuting time			-0.0635***	(0.0090)
Childcare responsibilities			-0.0406**	(0.0127)
Time on housework			0.0033	(0.0046)
Cohabit with partner			-0.6710***	(0.0524)
Stress			-0.4210***	(0.0233)
<b>Resources</b>				
Job satisfaction			0.3230***	(0.0108)
Formal/informal domestic service			-0.0296	(0.0296)
Satis. partner's housework division			0.1490***	(0.0132)
Satis. partner's childcare division			0.0286***	(0.0081)
Proper sleep			0.1830***	(0.0265)
Physical activity			0.0994***	(0.0300)
<b>Controls</b>				
Age	0.0062***	(0.0008)	0.0049***	(0.0008)
Educational Level (ref: None)	-0.0649***	(0.0109)	-0.0504***	(0.0100)
Socioeconomic Status (ref: 1 <sup>st</sup> quintile)	0.0208*	(0.0093)	-0.0078	(0.0093)
Gender (ref: men)	-0.0554*	(0.0217)	-0.0684**	(0.0223)
Interception	3.004***	(0.0485)	2.670***	(0.0746)
adj. $R^2$	0.0122		0.2045	
Log lik.	-13378.7		-12375.8	
Prob > F	0.000		0.000	
N	9204		9204	

Note. National Time Use Survey, Chile, 2015, own calculations.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

The personal-level demand of stress is a relevant predictor of SWFB. Workers who reported feeling stressed have a significantly lower SWFB ( $\beta = -0.421$ ,  $p < 0.001$ ).

Hypothesis 1a establishes that work arrangements with longer working hours have lower SWFB. When referred to marginal part-time workers (working 1-19 hours a week), full-time workers (working 35 or more hours a week) have a significantly lower SWFB ( $\beta = -0.519$ ,  $p < 0.001$ ). Substantial part-time workers (working 20-34 hours a week) also have a significantly lower SWFB in comparison with marginal part-time workers ( $\beta = -0.197$ ,  $p < 0.001$ ). Hereafter, the results provide confirmatory evidence to support our hypothesis, meaning that longer working hours increase the chances to have less SWFB for Chilean workers.

Our second hypothesis states that resource predictors are positively related with SWFB. Our results show that most of the resources have a positive and significant influence on SWFB, excluding the family

resource of having formal/informal domestic service, which is not significant. Therefore, hypothesis 2 is primarily supported.

The workplace resource of job satisfaction ( $\beta= 0.323, p<0.001$ ) was the strongest resource when explaining SWFB in Chilean workers. Regarding family resources, we find that only satisfaction with the housework tasks' division between partners ( $\beta= 0.149, p<0.001$ ), and satisfaction with the childcare responsibilities' division between partners ( $\beta= 0.029, p<0.001$ ) were positively and significantly associated to SWFB. Besides, having formal or informal domestic service was not a significant predictor of SWFB ( $\beta= -0.029, n.s.$ ).

Personal resources of proper sleep hours and practicing physical activity are positively and significantly related to SWFB. Those who reported sleeping between 6 and 12 hours per day –considered a proper sleep measure ( $\beta= 0.183, p<0.001$ ), and those who affirmed practicing any physical activity ( $\beta= 0.099, p<0.001$ ), have higher levels of SWFB on average.

Hypothesis 3 of our research indicates that gender moderates the impact that work arrangements have on SWFB. To assess this, we include an interaction effect in our new Model 2 ( $R^2= 0.2068$ , adjusted  $R^2= 0.2051$ ;  $F(19, 9184)= 126.01, p<0.001$ ), summarized in Table 6.

Analysing exclusively male workers, we observe that when referred to marginal part-time workers, full-time men have a significantly 0.38 points less of SWFB ( $\beta= -0.383, p<0.001$ ). Substantial part-time men also show a decrease in their SWFB when compared to marginal part-time male workers, however, this effect is not significant ( $\beta= -0.148, n.s.$ ). Thus, longer hours worked impact negatively in male workers' SWFB, having a statistically significant and negative effect for full-time workers when compared to marginal part-time workers (but this effect is not observed when comparing male substantial vs. male marginal part-time workers).

When addressing female workers, we observe that compared to marginal part-time workers, women in full-time jobs exhibit a significantly lower SWFB ( $\beta= -0.199, p<0.05$ ). Substantial part-time female workers also show less SWFB when compared to marginal part-time women, although this effect is not significant ( $\beta= -0.060, n.s.$ ). Hence, for women, the greater the number of hours worked, the lower their SWFB when they are full-time workers compared to marginal part-time workers (but this effect is not observed when comparing female substantial vs. female marginal part-time workers).

**Table 6***Interaction Effects between Gender and Work arrangements*

	Model	2	
		Coef.	SD
<b>Demands</b>			
Work arrangement (ref: Marginal part-time)			
Substantial part-time		<b>-0.148</b>	<b>(0.0829)</b>
Full-time		<b>-0.383***</b>	<b>(0.0675)</b>
Commuting time		-0.0632***	(0.00903)
Childcare responsibilities		-0.0422***	(0.0127)
Time on housework		0.00301	(0.00461)
Cohabit with partner		-0.679***	(0.0525)
Stress		-0.4210***	(0.0233)
<b>Resources</b>			
Job satisfaction		0.3220***	(0.0108)
Formal/informal domestic service		-0.0290	(0.0296)
Satis. partner's housework division		0.1510***	(0.0132)
Satis. partner's childcare division		0.0280***	(0.0081)
Proper sleep		0.1840***	(0.0265)
Physical activity		0.0991***	(0.0300)
<b>Interactions</b>			
Women (Ref: men)		<b>0.103</b>	<b>(0.0777)</b>
Work arrangement * women (ref.: Marginal part-time)			
Substantial part-time * women		<b>-0.0604</b>	<b>(0.0983)</b>
Full-time * women		<b>-0.199*</b>	<b>(0.0800)</b>
<b>Controls</b>			
Age		0.00488***	(0.000852)
Educational Level (ref: None)		-0.0496***	(0.0100)
Socioeconomic Status (ref.: 1 <sup>st</sup> quintile)		-0.00751	(0.00931)
Interception		2.553***	(0.0908)
adj. $R^2$		0.2051	
Log lik.		-12371.0	
Prob > F		0.000	
$N$		9204	

Note. National Time Use Survey, Chile, 2015, own calculations.

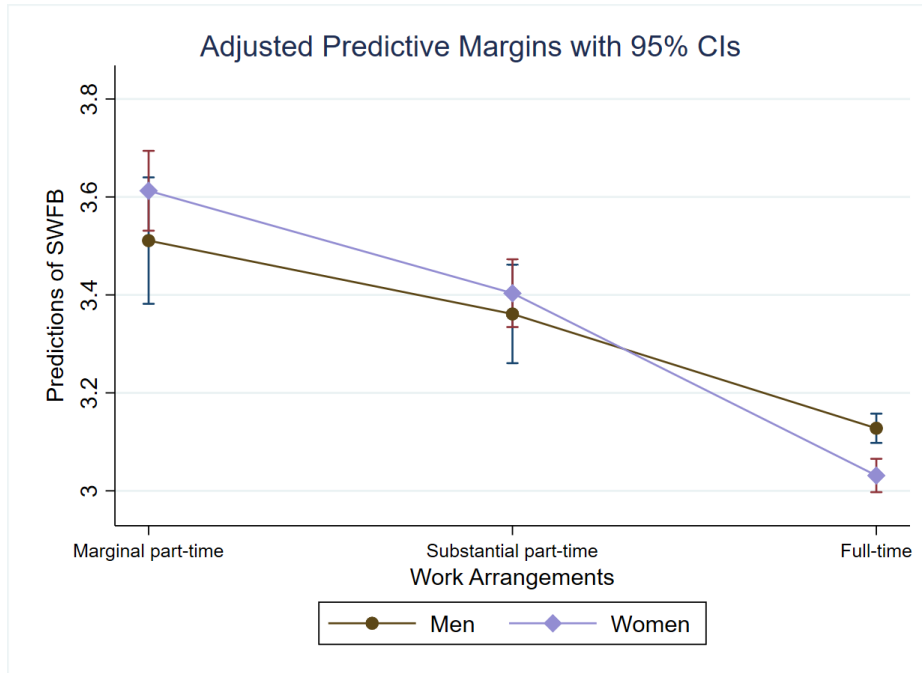
\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Furthermore, we present Figure 2 as a graphical way to understand the moderator role of gender. The predictive margins reflect the gender effect on SWFB according to the different work arrangements, while averaging the remaining predictors. We observe that women are more likely to have a higher predicted SWFB when working fewer hours, and the inverse occurs with men. Nonetheless, the predicted SWFB rate decreases for both men and women when working hours increase.

For marginal part-time workers, women show a higher predicted SWFB (3.61 points) when compared with men (3.51 points), differing by 0.103 points. Similarly, even if the difference is subtle, women in substantial part-time jobs are more likely to have higher SWFB rates (3.40 points) than their male colleagues (3.36 points). For full-time workers, the predicted SWFB rates are overturned. Male full-

**Figure 2**

*Predictive margins of work arrangements and gender on SWFB*



*Note.* National Time Use Survey, Chile, 2015, own calculations.

time workers reveal a greater predicted SWFB (3.13 points) in comparison with female full-time workers (3.03 points). Furthermore, the only statistically significant difference between men and women is found in full-time work arrangements ( $\beta = -0.096, p < 0.05$ ).

These results give supportive evidence for our third hypothesis, indicating that gender has a moderating role on the impact that work arrangements have on SWFB. Thus, female workers in work arrangements with less working hours show a higher SWFB when compared to their male counterpart in the same work arrangement, but this effect is only observed for full-time work arrangements (Further details about the net effect of gender, Appendix D; and about predictive margins, Appendix E).

### **Additional Analysis**

As a methodological decision, we included the variable “work arrangements” as a workplace demand in our original exploration. However, we also had the continuous variable “working hours”, which informed of the number of hours worked by the respondents. Thus, in this section we analyse the effect of utilising working hours instead of work arrangements in our regression model. For this, we run a regression with

Model 3, which included controls, the same demands as Model 1 (working hours replacing work arrangements), and the same resources as in Model 1 (see Table 5). Model 3 explained 21.13% of SWFB's variance ( $R^2 = 0.2127$ , adjusted  $R^2 = 0.2113$ ;  $F(16, 9187) = 155.10$ ,  $p < 0.001$ ).

Briefly, we observe that working hours has a significant and negative effect on SWFB ( $\beta = -0.012$ ,  $p < 0.001$ ), which is consistent with the effect found in Model 1 for work arrangements. Moreover, the results of Model 3 are congruent with the previous analysis of Model 1 (i.e., all significant predictors remained significant), which shows the robustness of our predictive models of SWFB in Chile. Further details about the additional regression analysis is included in Appendix F, Table 1.



## Discussion

In this research, we applied Voydanoff's (2005) theoretical framework to identify the demands and resources across the workplace, family and personal domains that could possibly influence SWFB in Chile. Also, we particularly assessed the relationship of work arrangements and SWFB, examining the moderator role of gender in that relationship. Our major findings are summarized below.

First, workplace demand of work arrangements depicted that as work hours increased, SWFB decreased; being this effect particularly strong for full-time workers. Similarly, commuting time had a negative impact on SWFB, although its influence was not as remarked as work arrangements. Our results are consistent with several studies (Gervais, & Millier, 2016; Reid, & Quadagno, 2004; Szücs et al., 2011; Watanabe, & Falci, 2016), and support Voydanoff's (2005) classification of time-based demands, since the time spent on one domain limits the time available for participating in the other, decreasing SWFB.

Concerning the family-related demands, we obtained mixed results. First, cohabiting with a partner was negatively associated to SWFB. Although the literature has shown varying effects for this predictor, our findings are consistent with Sadrul's (2016) evidence, as cohabiting with a partner could have a negative impact on SWFB specially when it comes to assessments of unsupportive partners' behaviours. Furthermore, childcare responsibilities was a significant family demand, decreasing SWFB of Chilean workers, being coherent with previous studies (Reid & Quadagno, 2004; Valcour, 2007). Interestingly, time spent on housework was the only demand that did not have a significant influence on SWFB in our examination. One potential explanation could be related with the traditional gender norms in family-oriented societies, considering that domestic tasks are "not a burden but a natural way of life" (Oishi et al., 2015, p. 8). This assumption could be influencing the assessment of SWFB in our participants. However, further research testing this justification is needed.

A remarkable founding of our research refers to the personal demand of stress. Our results indicate that feeling stressed would mean a drop of almost half point in the predicted SWFB. Moreover, paid work (37%) and economic problems (15%) are the main sources of stress for our sample, which could be understood as demands related to the nature of the Chilean labour market, characterized for excessively long working hours and low wages<sup>2</sup> (Durán, & Kremerman, 2019). Considering the dearth of literature that incorporates individual-level predictors (Wayne et al., 2020), our research is a contribution to expand the understanding of SWFB. Moreover, our results support Voydanoff's (2005) argument, since stress could endanger SWFB when individuals' feel overwhelmed by demands compared to their available resources.

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<sup>2</sup> 50% of Chilean workers earn less than \$400,000 monthly (around €428).

Regarding the resource predictors included in our exploration, most of them had a significantly positive influence on SWFB. Analogous to what occurred with the demands, workplace and personal resources significantly and positively influenced Chilean workers' SWFB, while family-related resources displayed mixed results. Workplace predictor of job satisfaction was the strongest resource when explaining SWFB in Chilean workers, having a positive effect in our outcome. Concordant with previous studies, job satisfaction promotes positive affect and motivation, increasing SWFB (Watanabe, & Falci, 2016). Similar results were obtained with personal resources of proper sleep, and physical activity. Consistent with previous findings, healthy behaviours would expand physical, cognitive, and emotional resources, fostering SWFB as well (Voydanoff, 2005). Again, this is a remarkable contribution since personal-level predictors have been largely omitted by the SWFB literature (Wayne et al., 2020).

Comparable to family-related demands, family resources also showed mixed results in our study. Satisfaction with the housework chores and childcare responsibilities' division between partners, were positively and significantly associated to SWFB. This is consistent with preceding studies, indicating that the agreement over the distribution of these kind of tasks reflects partner' support, which raises SWFB levels (Sadrul, 2016; Szücs et al., 2011; Voydanoff, 2005). Nonetheless, having formal or informal domestic service was not significant in our study. Despite the literature has described it as an important resource, its effect is still unclear (Van Rijswijk et al., 2004; Szücs et al., 2011), and our study gives evidence of it as a non-influential predictor of SWFB for Chilean workers.

All in all, our results support mainly the proposed hypotheses of demands having a negative, and resources having a positive impact in SWFB for Chilean workers. Workplace and personal domain predictors determine to a large extent SWFB, although our results support partially the proposed hypotheses for family-related demands and resources. Specifically, predictors related with housework tasks failed to have statistically significant effects on the SWFB for Chilean workers. One potential explanation relates with the characteristics of family-oriented societies, since household chores could be considered a natural obligation (Oishi et al., 2015), nor being pondered as an important element to affect SWFB levels. It could also be associated with SWFB being experienced in a gendered way; thus, women feel more satisfied when prioritizing their family role (Reid, & Quadagno, 2004). However, further research addressing these elements in detail is needed.

Regarding our second research question, the relationship between work arrangements and SWFB, and the moderator role of gender in that relationship is further discussed. First, when referred to marginal part-time workers, we observed that full-time and substantial part-time workers had a significantly lower SWFB, being this difference higher as work hours increased. Considering that existing literature addressing the linkage between working hours and SWFB has produced varied results, our study contributes to the

rationale that shorter working hours have a positive influence on SWFB. Since time and energy are considered finite resources, longer work hours imply the exhaustion of these resources for meeting other demands (Reid, & Quadagno, 2004; Valcour, 2007; Voydanoff, 2004).

When assessing the moderator role of gender in the relationship between work arrangements and SWFB, we only observed a significant gender difference in full-time jobs, where female workers had lower SWFB than their male counterpart, being consistent with previous studies (Beham et al., 2012; Beham et al., 2019). Our results depicted that women in substantial and marginal part-time work had higher SWFB when respectively compared to men, although these effects were not significant. These findings support Sandor (2011) and Beham et al. (2019) studies, since female marginal part-time workers showed higher SWFB than men.

Despite the evidence of certain disadvantaging conditions of part-time jobs (Lenhart, 2016; Lyonette et al., 2010), our findings suggest that the reduction of working hours provides employees with better resources to cope with work and non-work tasks, leading to higher SWFB. For women, having fewer working hours is especially important. Moreover, our results reveal the prevalence of traditional gender roles (male breadwinner, female caregiver). Consequently, women tend to reduce their working hours as family-related obligations are socially allocated on them (Beham et al., 2019; Díaz, 2016; Duncan, & Pettigrew, 2012; Lyonette, 2015). This is also reflected on the overrepresentation of women in marginal and substantial part-time jobs in our sample (above 70% each). This could indicate that traditional gender roles and division of labour seem to prevail in the Chilean society.

### **Limitations and Strengths**

Different limitations of our study must be acknowledged. First, in theoretical terms, Voydanoff's framework must be strengthened, specifically when incorporating family-related demands and resources that did not have the theoretical predicted influence on SWFB for Chilean workers. Similarly, some studies have suggested to analyse demands and resources not only within, but also across domains to achieve a better understanding of SWFB (Watanabe, & Falci, 2016; Wayne et al., 2020).

From a methodological point of view, our analysis drew on cross-sectional data, which prevented us from identifying potential causality between predictors and SWFB. The use of secondary data is yet another important limitation. Since it was not oriented to answer specifically our research questions, much of the data did not have the desired depth to generate a richer knowledge regarding SWFB. For instance, the recodification of working hours as work arrangements prevented us to recognize the low-quality nature

of most part-time jobs (Van Rijswijk et al., 2004). It also limited our study to reveal the motivations behind gender for choosing across different work arrangements. Measures utilized by the ENUT were also problematic. For instance, the SWFB assessment did not allow us to distinguish between its cognitive and affective components (Valcour, 2007). Similarly, it was impossible to differentiate among gender identities (e.g., non-binary participants) or different family structures (e.g., same-gender couples), so the interpretations could also be biased.

As for the strengths, it is an innovative study focusing on SWFB in Chile, contributing to expand the research on the subject beyond Anglo-saxon societies. Moreover, the ENUT is a representative instrument of the Chilean population, which allowed us to assess SWFB with different industry sectors' workers, expanding the focus of previous studies mostly using professional samples. Likewise, we included personal domain predictors, which has been largely omitted by previous research (Wayne et al., 2020) despite the important role they displayed. Further, we distinguished between different types of part-time work arrangements, as recently suggested by scholars (van Breeschoten, & Evertsson, 2019).

### **Implications and Future Directions**

Some implications arisen from our study. Considering that SWFB is an important indicator of health and wellbeing, firstly, our findings can inform the interventions of public health institutions, especially considering the importance that individual factors have on SWFB, for instance, promoting healthy behaviours or preventing stress through educational campaigns. Likewise, organizations can design interventions tackling workplace domain factors, for instance, enhancing job satisfaction. Further, since our findings reveal the prevalence of traditional gender roles within the Chilean society, public policies must be oriented to improve the Chilean labour market conditions, and to strengthen WFB policies aimed to challenge traditional gender roles.

Regarding future directions, we suggest elaborating a more complex theoretical framework to incorporate interactions among demands and resources. Special attention should be displayed on family-related predictors since our findings indicated mixed results within that domain. Similarly, considering the importance that personal demands and resources had on Chilean workers' SWFB, further studies should consider them as relevant predictors to understand SWFB.

Moreover, we advocate for the use of mixed methods to explore SWFB, since incorporating qualitative information would generate deeper interpretations regarding the motivations for pursuing specific work arrangements, as well as to delve into the meanings built around SWFB. For instance,

international literature incorporates the differentiation between voluntary and involuntary part-time work (Yerkes, & Visser, 2006), which could have enriched our research. Hence, further research may also want to strengthen the operationalization of part-time work arrangements for a more complete understanding of the SWFB in Chile. Additionally, future studies should include the role displayed by existing public policies in Chile to analyse SWFB, since they could potentially influence Chilean workers' decisions regarding their working hours. Likewise, it becomes relevant to generate comparative studies between societies that share certain characteristics, to elucidate how SWFB is linked and shaped to cultural patterns within and across societies.

## **Conclusion**

In summary, our research provides novel knowledge regarding SWFB, a theoretical concept not addressed in Chile previously. Applying Voydannoff's (2005) demands-resources theoretical approach, we observed that SWFB is influenced by several workplace, family, and personal predictors. Almost all the demands included in our exploration showed a negative influence on SWFB, being work arrangements, cohabiting with a partner, and stress the three most influential predictors in decreasing SWFB. Conversely, most of the resources had a positive effect on SWFB, where job satisfaction, proper sleep, and the satisfaction with the housework tasks' division between partners showed the biggest positive influence on SWFB for Chilean workers. Particularly, for the family-related predictors our results were less straightforward, which could be related to the family-oriented characteristics of the Chilean society.

Regarding work arrangements, our study gives evidence that as the working day is longer, there are more chances to have less SWFB. Furthermore, gender moderated work arrangements, in which having fewer working hours is especially important for women in full-time work arrangements.

Therefore, our research provides helpful evidence for the design of policies and interventions to question, educate and advocate for gender equality, and that aim to improve the working conditions of part-time workers. Having a more complete understanding of SWFB in Chile allows us to enhance it, especially considering its positive repercussions for the health and overall wellbeing of Chilean workers.

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## Appendix A. Testing of the multiple regression assumptions

### 1. Dependent variable is measured on a continuous scale (interval)

SWFB is measured in a five-point Likert scale (1=totally unsatisfied; 5=totally satisfied), hence, the measurement of the dependent variable criteria is met.

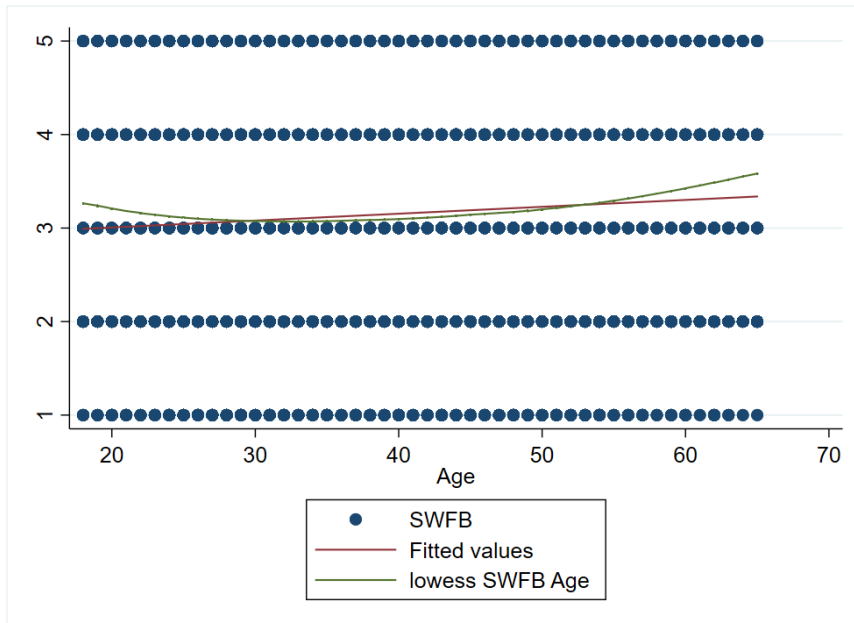
### 2. Observations are independent of each other

Since the ENUT provides cross-sectional data (no longitudinal data, no nested groups), the outcomes of each person in the data set is independent of any other person in the data set.

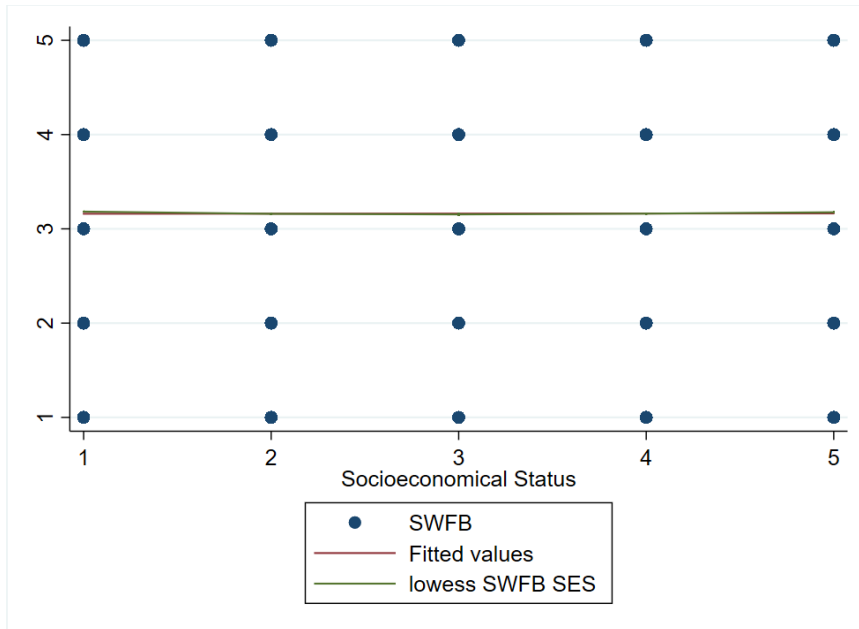
### 3. Linearity

We assessed the linearity supposition between each independent variable and SWFB using a scatterplot of observed versus predicted values.

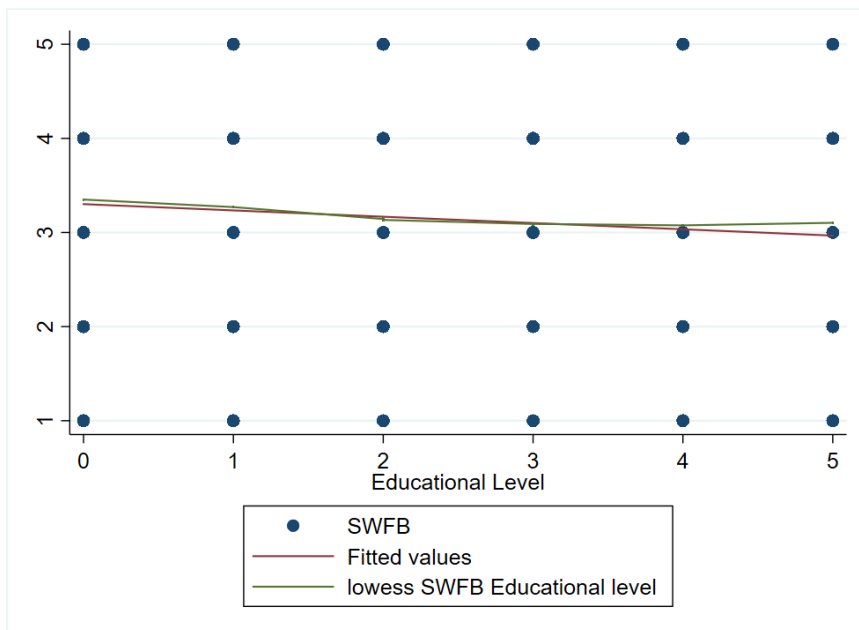
Control: Age



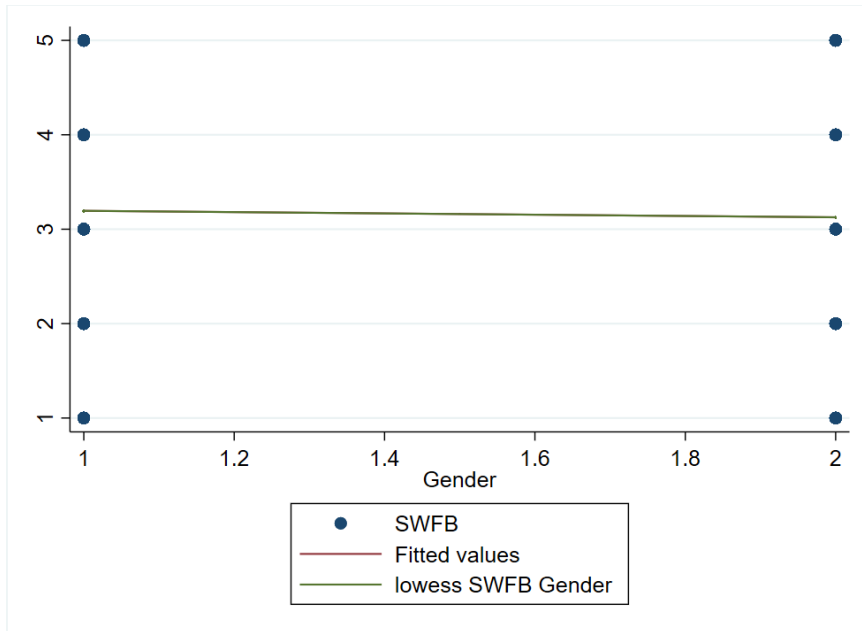
### Control: Socioeconomical Status



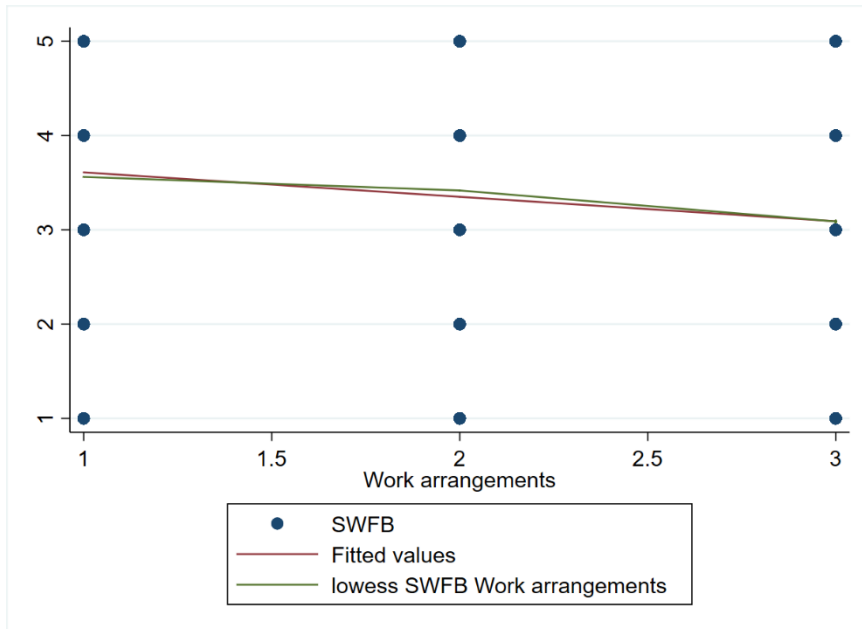
### Control: Educational Level



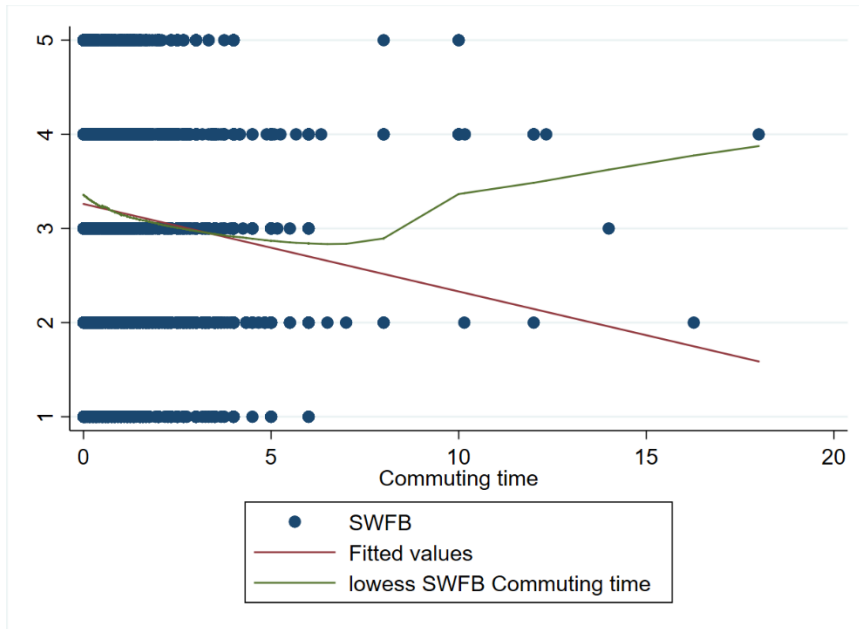
Control/Moderator: Gender



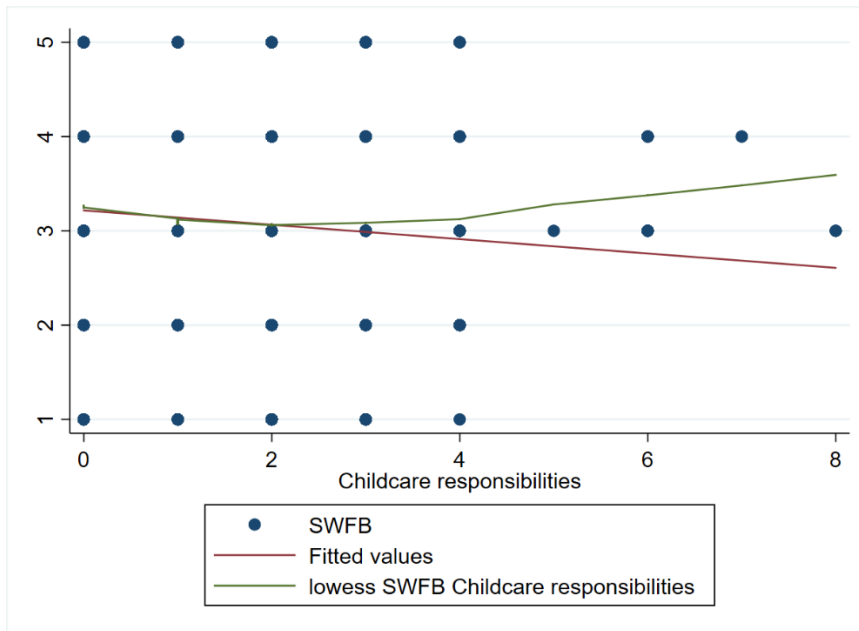
Workplace demand: Work arrangements



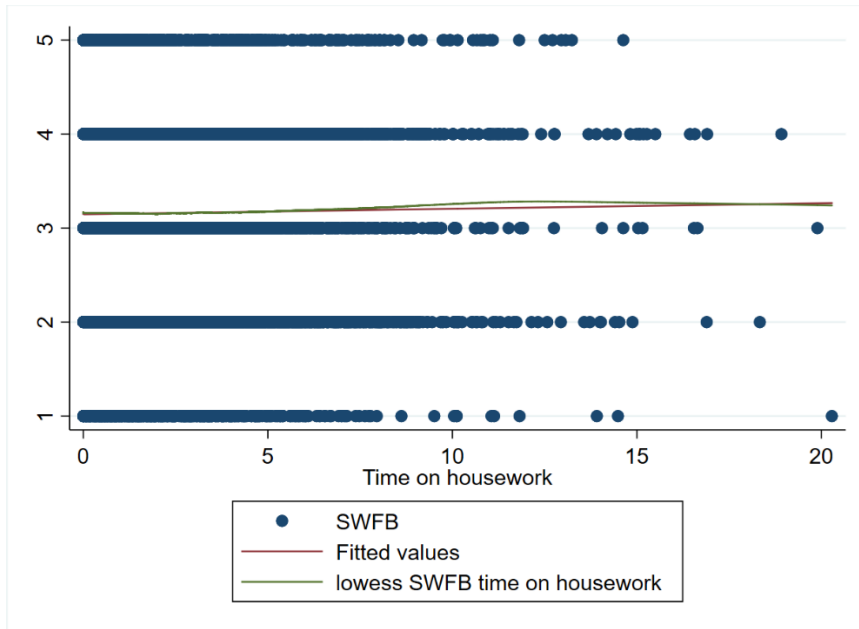
Workplace demand: Commuting Time



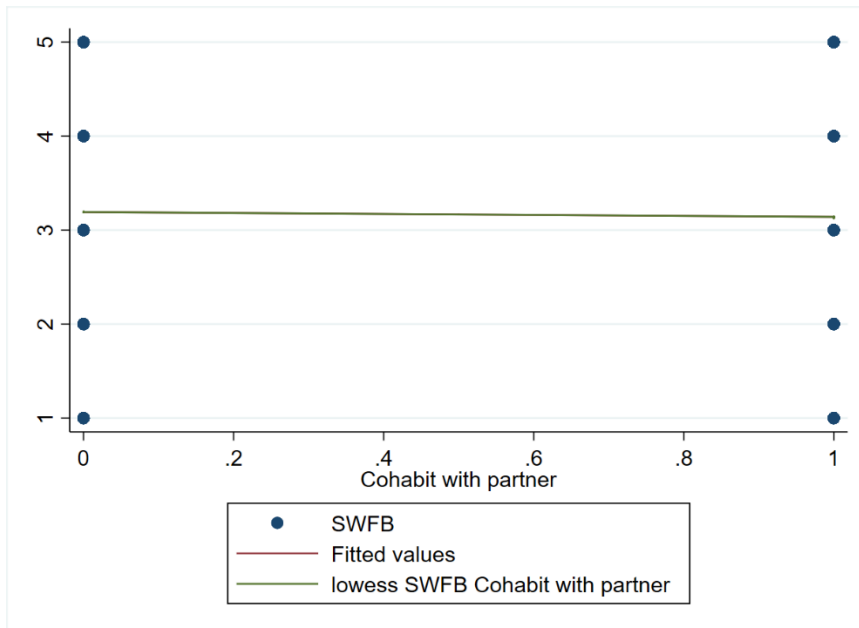
Family demand: Childcare responsibilities



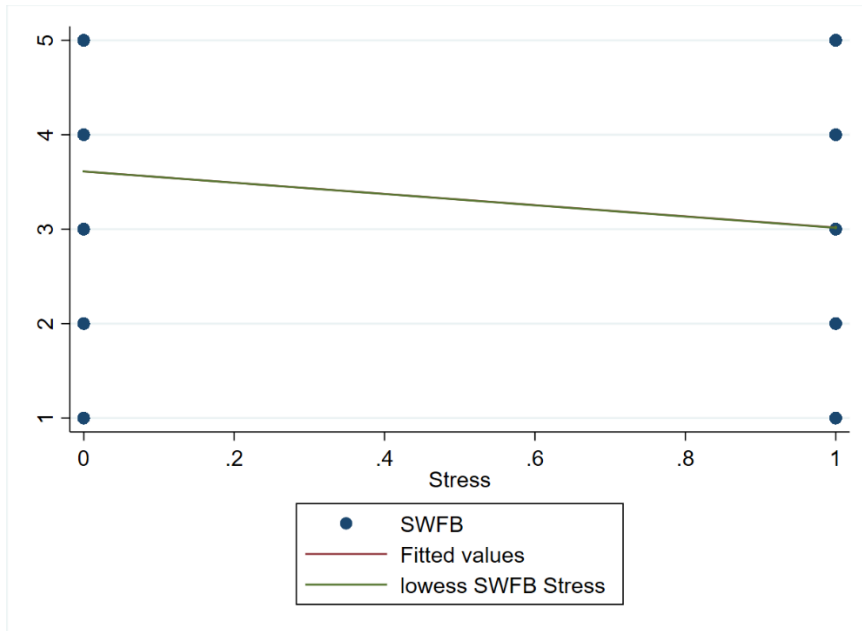
Family demand: Time on Housework



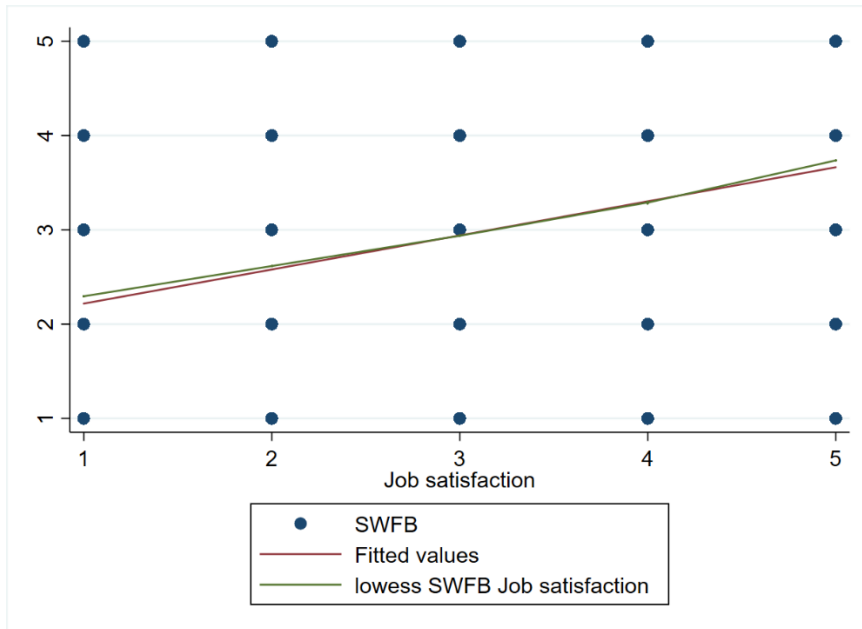
Family demand: Cohabit with partner



Personal demand: Stress

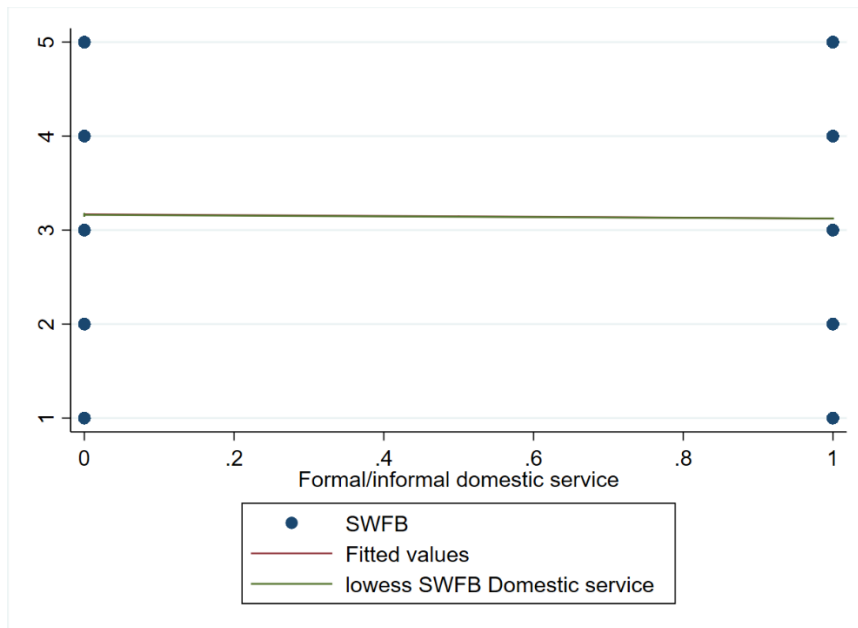


Workplace resource: Job satisfaction

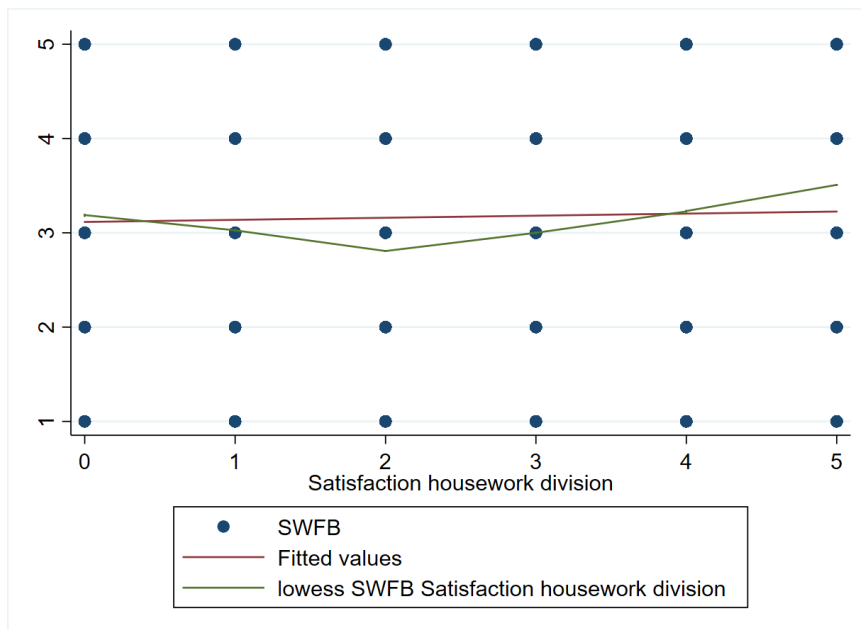




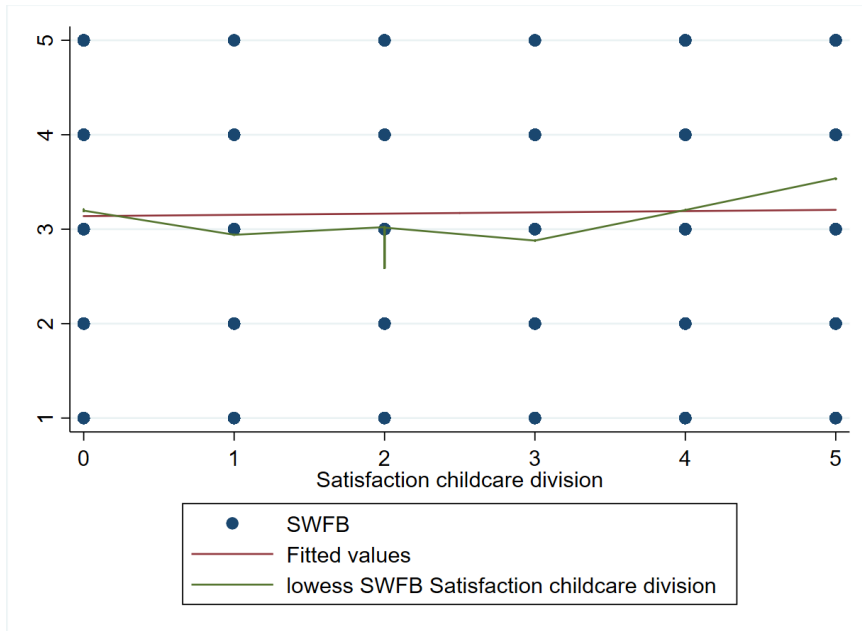
Family resource: Having formal/informal domestic service



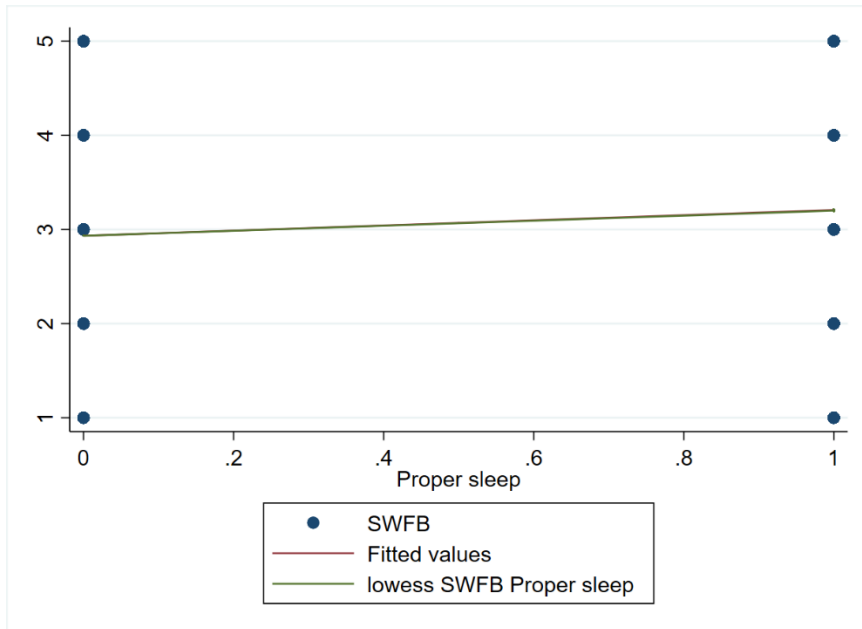
Family resource: Satisfaction with household tasks' division with partner



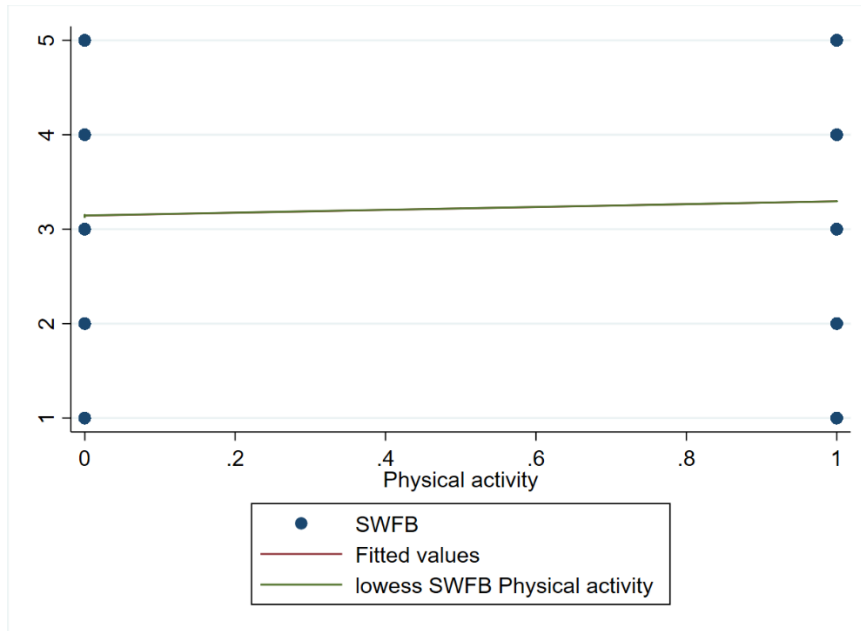
Family resource: Satisfaction with childcare responsibilities' division with partner



Personal resource: Proper sleep



Personal resource: Physical activity



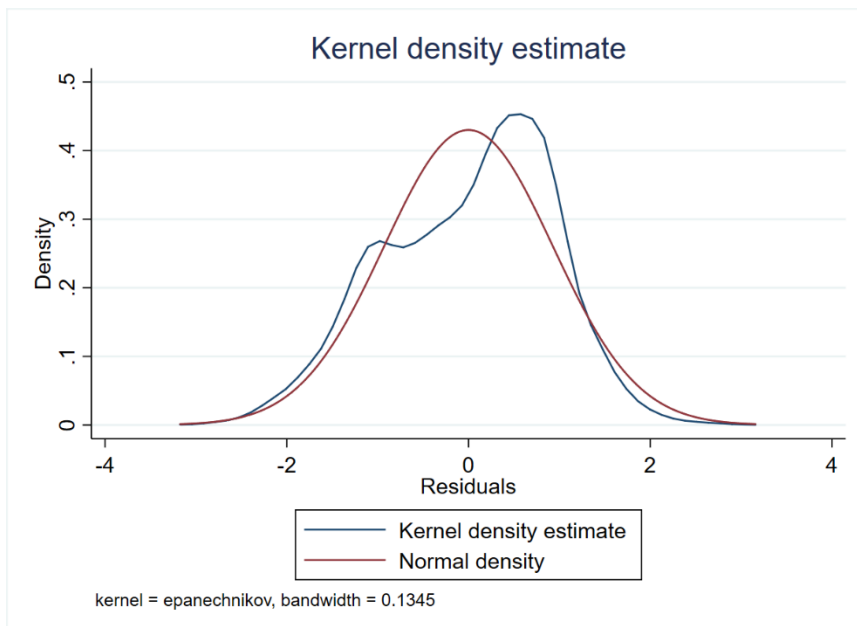
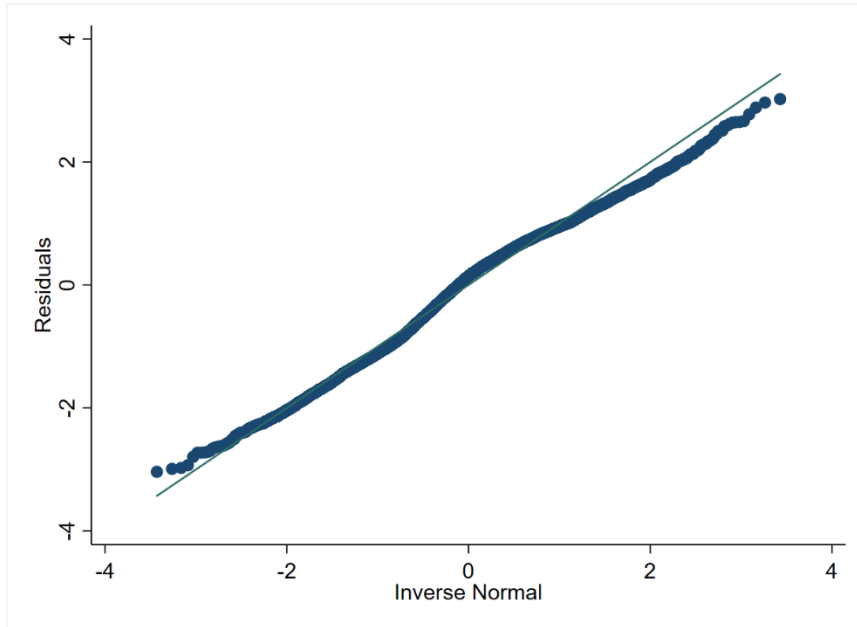
**4. Not multicollinearity**

All VIF values are lower than 10, hence, there is no multicollinearity in our model.

Variable	VIF	1/VIF
Age	1.21	0.825531
Education	1.38	0.722407
Socioeconomical Level	1.58	0.632841
Gender	1.32	0.755930
Work arrangement (Ref: marginal part-time)		
Substantial part-time	2.16	0.462052
Full-time	2.33	0.429601
Commuting time	1.03	0.969079
Childcare responsibilities	1.40	0.716453
Time on housework	1.27	0.786771
Cohabit with partner	7.09	0.141084
Stress	1.07	0.938203
Job satisfaction	1.06	0.939923
Having formal/informal domestic service	1.12	0.896113
Satisfaction housework tasks' division	6.88	0.145375
Satisfaction childcare tasks' division	2.69	0.371584
Proper sleep	1.02	0.980111
Physical activity	1.04	0.962412
Mean VIF	2.10	

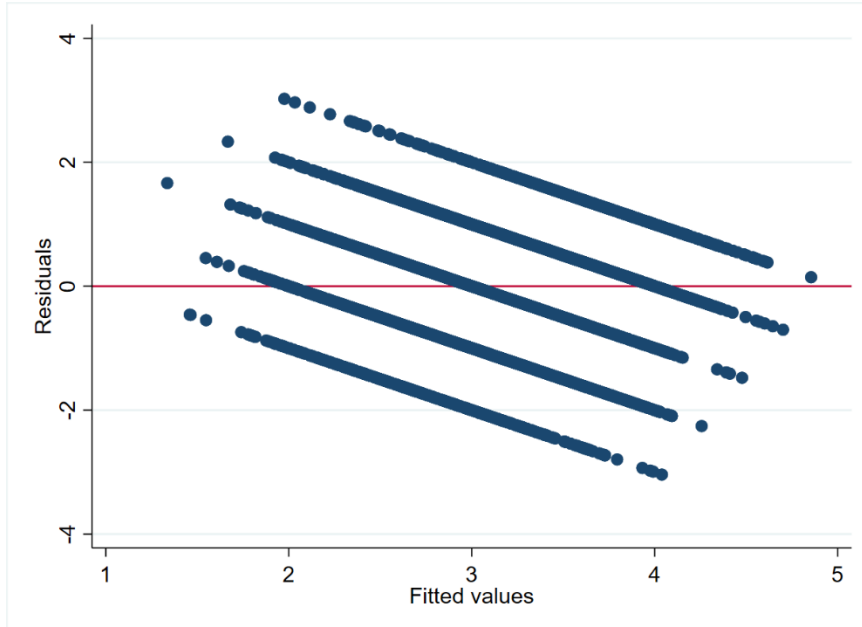
## 5. Normality of the residuals

To diagnose the normality of the residuals we conducted a “normal probability plot” (normal P-P plot), finding they adjust well to the line. Further, we plotted the results of the Kernel density estimate finding the residuals are almost normally distributed.



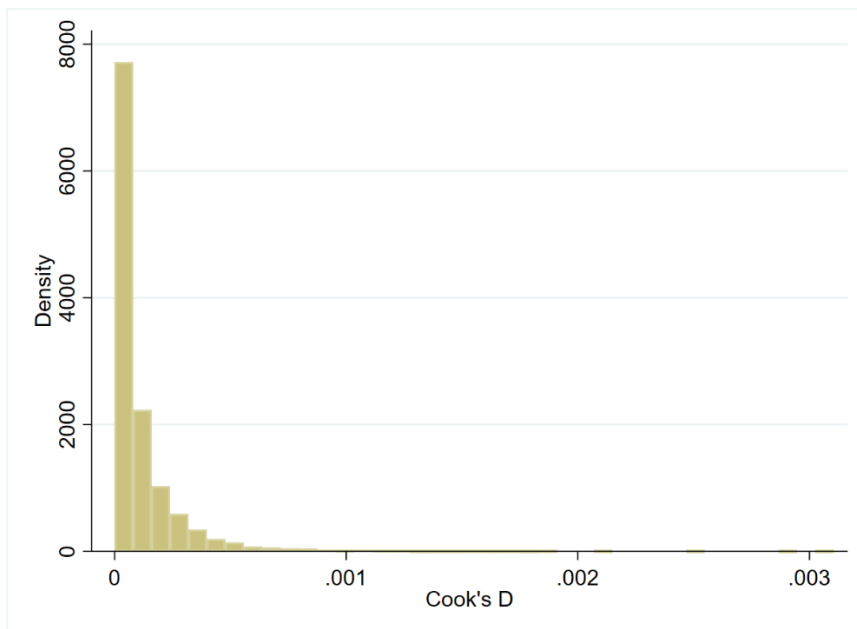
## 6. Homoscedasticity

To diagnose homoscedasticity, we conducted a graphical assessment, plotting the standardized residuals against the predicted values, showing a constant spread of the residuals.



## 7. Outliers

Outliers were checked using Cook's Distance, no values were  $>1$ .



## Appendix B. Ethics Assessment Form

<p><b>1. Provide a short summary of the background and research question/s.</b></p>
<p>Background:</p> <p>In a context of neoliberal economic globalization, many social changes have reshaped our societies. Working conditions, schedules and spaces have blurred the boundaries of work, while the social rhythm of the western societies remains largely unchanged. Additionally, family structures and traditional gender roles within the families have been renegotiated, especially because women have increasingly entered the labour market. Therefore, the successful combination between work and family life have brought about renewed attention to the challenge of balancing work and family and its gender implications (Beham, &amp; Drobnič, 2010). Moreover, the satisfaction with work-family balance (SWFB) is a theoretical construct underexplored, referring to “the overall level of contentment resulting from an assessment of how successfully one is handling the sum of demands emanating from work and family roles” (Valcour, 2007, p. 1513).</p> <p>Part-time work has become an increasingly common strategy to deal with the work and family responsibilities. In addition, part-time workers report less work-family conflict and greater satisfaction with their work-family balance (Beham et al., 2019). However, despite it could be an attractive option to participate in the labour market, part-time work is highly gendered: it is mainly women who reduce their working hours to balance their work and caring responsibilities, especially after childbirth (Chung &amp; Van der Lippe, 2018; Lyonette, 2015).</p> <p>Nevertheless, most of the existing research investigates developed and anglophone countries (Oishi, Chan, Wang &amp; Kim, 2014). To contribute to broader the phenomena, this research will focus on the Chilean case. The Chilean society is characterized as a family-oriented country, in which the traditional women’s role within the family is considered very important for the maintenance of social order (Jiménez, Gómez &amp; Palomo-Vélez, 2017). This is reflected in some figures, for instance, of total employment across Organization for Economic Cooperation and Development (OECD) countries, part-time employment accounted for (on average) 17.8% in Chile, being the female rates almost double than the male participation at 2018 (24.8% vs 12.9%, respectively) (OECD, 2020). Likewise, 92% of women in Chile agree with the idea of women taking part-time jobs as the best way to make work and family compatible (Contreras, Hurtado &amp; Sara, 2012).</p> <p>Research Question:</p> <p>Therefore, the proposed master’s thesis aims to identify the predictors associated with SWFB in Chile utilizing the demands-resources theoretical approach (Voydanoff, 2005), and to stablish the relationship between work arrangements and SWFB, considering whether gender have an effect or not in this relationship.</p>
<p><b>2. Provide a short description of the intended research population/s.</b></p>
<p>To address the research question described above, the research population will be workers above 18 years old from Chile. Their data will be collected from an existing survey: The Time Use National Survey (Encuesta Nacional de Uso del Tiempo, ENUT) from 2015.</p>
<p><b>3. Provide a short description of the proposed research design and method/s.</b></p>

This study will follow a quantitative approach and utilize secondary data, specifically, the ENUT 2015. To address the research objective, a quantitative cross-sectional study design will be used, as it provides a ‘snapshot’ of the associations between predictors and the outcome of interest at a specific point in time (Levin, 2006). Considering that the relationship between demands, resources and SWFB will be analysed, participants must meet certain inclusion criteria (Setia, 2016). Thus, those respondents who indicate they are active at work and are over 18 years old will be selected.

**4. Provide a short description of the recruitment strategy/ies:**

**a. How will potential participants be identified?**

**b. How will potential participants be approached for participation in the research?**

For the original recruitment of the ENUT 2015, the target population were all persons 12 years of age or older belonging to the urban area of all regions of Chile, specifically, those who lived in the main municipalities that accumulate 85% of the total national population. The data gathering was carried out by survey teams (interviewers and supervisors), face to face, from September to December 2015.

To encourage the participation of the selected households in the survey, a work of sensitization of the informants was carried out by trained survey teams (interviewers and supervisors) of each region of Chile. This was made through the communication of two central elements: trust in the National Institute of Statistics, and in the relevance of the survey and the research topics. Additionally, support materials were generated such as letters for the selected households and informative leaflets undertaking the characteristics of the survey, their objectives and scope.

**5. Provide a short description of any risks involved in the research for participants. Also describe what measures will be taken to limit the risks for participants?**

The main risks that could affect the participants relates with the difficulties to guarantee anonymity and confidentiality, especially when considering the massive application of the survey. This also relates with the risk of generating biases or discriminatory practices by the interviewers to the target population. All this should be avoided, especially through training that sensitizes and guarantees that these ethical risks are going to be reduced as much as possible.

**6. Provide a short description of how informed consent will be obtained:**

**a. How will potential participants be informed about the aims and requirements of the research?**

**b. How will consent for participation in the research be obtained and recorded?**

Because there was no accurate information on the use (or not) of informed consent during the data collection, an online question was sent to the citizen attention portal of the National Statistics Institute, which was answered during January 2020. This response confirms that no informed consents were used, but as stated in the methodological document of the survey, the work of guaranteeing anonymity and informing the respondents was based on the training of field personnel. Moreover, the ENUT 2015, as well as all the data collected by the National Institute of Statistics, is regulated by Chilean Law N° 17.374, which safeguards those who provide information to the Institute, guaranteeing confidentiality of the data for what is called the “statistical secrecy” (secreto estadístico). Any disclosure of the information is subject to law punishments.

However, the non-use of informed consents should be considered as an aspect to improve for future measurements.

**7. Provide a short description of how the privacy of participants will be protected and how the confidentiality of information obtained will be ensured.**

As mentioned before, all the data collected by the National Institute of Statistics is regulated by Chilean Law N° 17.374, which safeguards those who provide information to the Institute, guaranteeing confidentiality of the data for what is called the “statistical secrecy” (secreto estadístico). Any disclosure of the information is subject to law punishments.

To ensure and protect the confidentiality, the National Institute of Statistics generated a continuous training plan, transmitting the importance of this information through different materials, such as a manual of field work.

**8. Provide a short description of who will have access to the data, where and how data will be stored during and after the process of data collection and when and how data will be destroyed.**

The legal support entails the National Institute of Statistics to generate the official statistics of Chile, therefore, all the data gathered is of public access. It is currently available on the government’s website “Public Data Portal” which guarantees the anonymity and confidentiality of the databases available so the permission for further use and analysis is implied.

**Appendix C. Likelihood-ratio tests**

**Table 1.**

*Multiple Linear Regression Likelihood-ratio test for Model 0 and Model 1*

Likelihood-ratio test (Assumption: m0 nested in m1)	
LR chi2(13) = 2005.79	Prob > chi2 = 0.000

*Note.* National Time Use Survey, Chile, 2015, own calculations.

**Appendix D. Calculations of Interaction Effects Work arrangements \* Woman**

Women effect	Interaction effect		Net effect of Gender
0.103	Woman*Marginal part-time	0	0.103
0.103	Woman*Substantial part-time	-0.0604	0.0426
0.103	Woman*Full-time	-0.199*	-0.096*

*Note.* National Time Use Survey, Chile, 2015, own calculations

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Appendix E. Predictive margins for SWFB, interaction effect of gender and work arrangements**

	Margin	Std. Err.	t	P> t	[95% Conf. Interval]	
Men*marginal part-time	3.510742	.0657863	53.37	0.000	3.381786	3.639698
Women*Marginal part-time	3.613393	.0415137	87.04	0.000	3.532017	3.694769
Men*substantial part-time	3.362443	.0512531	65.60	0.000	3.261975	3.46291
Women*substantial part-time	3.404665	.0352779	96.51	0.000	3.335512	3.473817
Men*full-time	3.127359	.0152258	205.40	0.000	3.097514	3.157205
Women*full-time	3.031250	.0173226	174.99	0.000	2.997294	3.065206

*Note.* Predictive margins with the rest of predictors (independent variables and controls) at their means. National Time Use Survey, Chile, 2015, own calculations



## Appendix F.

**Table 1**

*Additional Multiple regression analysis of SWFB (working hours)*

Model	0		3	
	Coef.	SD	Coef.	SD
<b>Demands</b>				
Working hours			-0.0119***	(0.000647)
Commuting time			-0.0700***	(0.00897)
Childcare responsibilities			-0.0397**	(0.0126)
Time on housework			0.00417	(0.00457)
Cohabit with partner			-0.656***	(0.0522)
Stress			-0.420***	(0.0232)
<b>Resources</b>				
Job satisfaction			0.324***	(0.0107)
Formal/informal domestic service			-0.0250	(0.0295)
Satis. partner's housework division			0.145***	(0.0132)
Satis. partner's childcare division			0.0285***	(0.00803)
Proper sleep			0.159***	(0.0265)
Physical activity			0.0964**	(0.0299)
<b>Controls</b>				
Age	0.00616***	(0.00089)	0.00524***	(0.00085)
Educational Level (ref: None)	-0.0649***	(0.0109)	-0.0608***	(0.00997)
Socioeconomic Status (ref: 1 <sup>st</sup> quintile)	0.0208*	(0.00936)	-0.00829	(0.00926)
Gender (ref: men)	-0.0554*	(0.0217)	-0.0904***	(0.0223)
Interception	3.004***	(0.0485)	2.788***	(0.0732)
adj. $R^2$	0.0122		0.2113	
Log lik.	-13378.7		-12336.7	
Prob > F	0.000		0.000	
N	9204		9204	

*Note.* National Time Use Survey, Chile, 2015, own calculations.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$