

**Family-work conflict and its implication for job  
performance in the Dutch health care sector**

*Master's thesis*

**Study:** Social Policy & Public Health

**Course:** Thesis Based on Existing Data (201800155)

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## Abstract

**Background:** Labor shortage among Dutch health care workers is a current issue, of which a main indicator is decreasing job performance. Existing research has proven that work characteristics are predictors of job performance, but family-work conflict as an indicator has scarcely been researched, especially among health care workers. This thesis therefore aims to explore the possibility of a causal relation between family-work conflict and health care workers' job performance.

**Methods:** By using data from the Longitudinal Internet studies for the Social Sciences [LISS] panel, health care workers were selected ( $N = 670$ ), and regression analyses were performed to examine a causal relation between family or job characteristics and job performance while controlling for health as a mediator.

**Results:** Family characteristics hardly predict job performance, except for care for children as an individual predictor. Job characteristics predict job performance, while health does not function as a mediator.

**Conclusions:** Additional research on the subject of family-work conflict in relation to job performance among health care workers is advocated. It is hereby proposed to involve behavioral and cognitive aspects as predictors. It is also recommended for research institutions to support interdisciplinary research on the subject to gain an integral view on the matter.

## Introduction

Currently, health care in the Netherlands is characterized by a severe shortage of health care workers. The Ministry of Health, Welfare and Sport [HWS] (2017, p. 9) indicates a total shortage of about 100,000 to 125,000 workers in the care and wellbeing sector by 2022. Parallel to the labor shortages in the health care sector, the Netherlands faces an aging population (Statistics Netherlands [CBS], 2017). Although mortality rates are falling and longevity is rising, the elderly increasingly face health problems and are in need of more care (Simpson & Pedigo, 2018). Consequently, the growing elderly population is creating pressure on the health care system, highlighting the importance of solving the problem of labor shortages in this sector. Moreover, the urge to solve this labor issue has intensified since the spread of COVID-19 has underlined the problem of labor shortages in the Dutch health care sector even more (Terpstra, 2020).

Decreasing job performance is mentioned as a main indicator of labor shortfall in the care and wellbeing sector (Van de Bosch & Giesen, 2017; Ministry of HWS, 2017). Pandey (2009) and Lee and Lee (2018) define job performance as the involvement of employees in an organization's functioning. In general, researchers state work characteristics, such as high workload and shift work, to be important factors in explaining decreasing job performance (Grzywacz et al., 2006; Lidwall et al., 2010; Ministry of HWS, 2017). However, Grzywacz et al. (2006), Cortese et al.

(2010), and DePasquale et al. (2016) introduce family-work conflict as a significant factor in the understanding of job performance in the care and wellbeing sector. Family-work conflict covers the interference of family care tasks, such as care for (grand)children or informal care for a spouse, with work (DePasquale et al., 2016). As the combination of work and family care tasks has become increasingly challenging over the years, family care tasks are mentioned as possible predictors of decreasing job performance (Cortese et al., 2010; DePasquale et al., 2016). This thesis therefore aims to broaden the scope of the understanding of decreasing job performance and its underlying causes in the care and wellbeing sector by exploring the possibility of a causal relation between family-work conflict and health care workers' job performance.

As Sirgy and Lee (2018) suggest that low family-work conflict leads to higher job performance, the importance of research on family-work conflict and its implication for job performance is underlined. As much is yet unclear about low family-work conflict as an indicator of health care workers' job performance, research on this subject will, foreseeably, provide new insights into predictors of job performance to academia. In doing so, the thesis will indirectly contribute to the knowledge of the labor shortage issue.

Furthermore, this thesis acknowledges the suggestion of DePasquale et al. (2016) about health care workers dealing with family care tasks being an understudied population. Parallel to this, few is known about the job performance of this particular target group. By focusing on health care workers in light of family-work conflict and job performance, this thesis attempts to offer more insights into the impact of family-work conflict on the job performance of the mentioned target audience. Thus, this thesis intends to fill part of the gap in knowledge about health care workers' job performance and its indicators, which comprises the scientific relevance of the proposed research.

## **Definitions**

Many scholars often explain job performance as task performance, with both concepts frequently being described as "performance in a general sense" (Lee & Lee, 2018, p. 294). The overall assumption of job performance, defined as behavior of employees leading to certain outcomes that are consistent with the organizational goals (Pandey, 2009), strongly overlaps with the description of task performance, described as the support of "daily organizational functioning, which is usually in line with an organization's goals and can be considered part of someone's job description" (Gordon et al., 2015, p. 194). Consequently, job performance can be understood as a synonym of task performance in this thesis. Considering labor shortage, this thesis focuses on the amount of time involved in an organization's functioning and thus focuses on the quantity of work performed by workers in the care and wellbeing sector.

Furthermore, the definition of family-work conflict is closely related to the concept of work–life balance (Chang et al., 2010; Sirgy & Lee, 2018; Weale et al., 2020). Sirgy and Lee (2018), in their review on work–life balance, describe family-work conflict as a component of work-life balance. They distinguish between family-work enrichment and family-work conflict as the two major domains: combatting family-work conflict can be understood as the pursuing of “minimal conflict between social roles in work and nonwork life” (Sirgy & Lee, 2018, p. 229), whereas a satisfying engagement in work life and nonwork life defines family-work enrichment.

Furthermore, multiple scholars agree that family-work conflict is bidirectional (Chang et al., 2010; Sirgy & Lee, 2018; Weale et al., 2020): whereas family may interfere with work in a negative way, work can also cause a negative spillover to family and result in negative outcomes. The directional conflict from work to family is indicated as work-to-family interference (WFI), whereas family-to-work interference (FWI) describes the directional conflict from family to work (O’Driscoll et al., 2003; Chang et al., 2010). Additionally, Sirgy and Lee (2018) underline the importance of differentiating between the two as factors relating to WFI are not necessarily similar to factors relating to FWI.

Focusing on job performance in the health care sector and its contributing factors, this paper limits its scope to FWI since this has already been mentioned as a potential indirect cause of job performance, and work-related outcomes are key to job performance (Lidwall et al., 2010; Cortese et al., 2010).

### **Overview of previous research**

As stated before, job performance in the health care sector can be related to work characteristics, of which high workload and shift work are frequently reoccurring characteristics in literature. For example, several researchers have pointed out the contribution of excessive workload to low job performance, with excessive workload leading to reduced quality of care, low patient satisfaction, and patient safety concerns (Azam, 2017). Eventually, sickness leave and high staff turnover occur in the health care sector (Azam et al., 2017; Johnson et al., 2017; Montgomery et al., 2019). In addition, shift work is indicated as a potential cause of health problems among health care workers (Puttonen et al., 2010; Matheson et al., 2014). Puttonen et al. (2010) and Matheson et al. (2014) highlight the detrimental effects of shift work, including sleeping disorders, chronic fatigue, and cardiovascular diseases, on job performance. Digestive disturbances and cancer were also mentioned as potential effects, although a significant relation between shift work and these two health issues is still being questioned (Matheson et al., 2014). However, all these health issues are known to relate to (long term) sickness or working disability, and there is strong evidence that fatigue resulting from shift work leads to impairments in job performance (Dall’Ora et al., 2016).

Although clear evidence exists about work characteristics being indicators of job performance, Lidwall et al. (2010) and Sirgy and Lee (2018) point out that the assumption of job performance being influenced by job characteristics only is short-sighted. The authors reveal the importance of family characteristics as potential predictors of job performance and eventually burnout and sickness leave, making job performance subject to multiple parameters. Several authors relate excessive workload and shift work as well as decreased job satisfaction to FWI, yet existing literature is inconsistent about FWI and the direction of causal interactions with the forementioned indicators. For example, Puttonen et al. (2010) state the possibility of FWI being influenced by shift work, while Lidwall et al. (2010) explain shift work as being part of FWI. The lack of clarity about FWI and the direction of causal interactions stresses the intention to examine the causal relation between FWI and job performance.

Additionally, although WFI is a general problem in all professions, a particular focus on health care workers is needed. Brand et al. (2017) highlight decreased job performance, higher levels of burnout, and absence due to long-term sickness among health care workers, compared to other professions, throughout the Western world.

### **Theoretical framework**

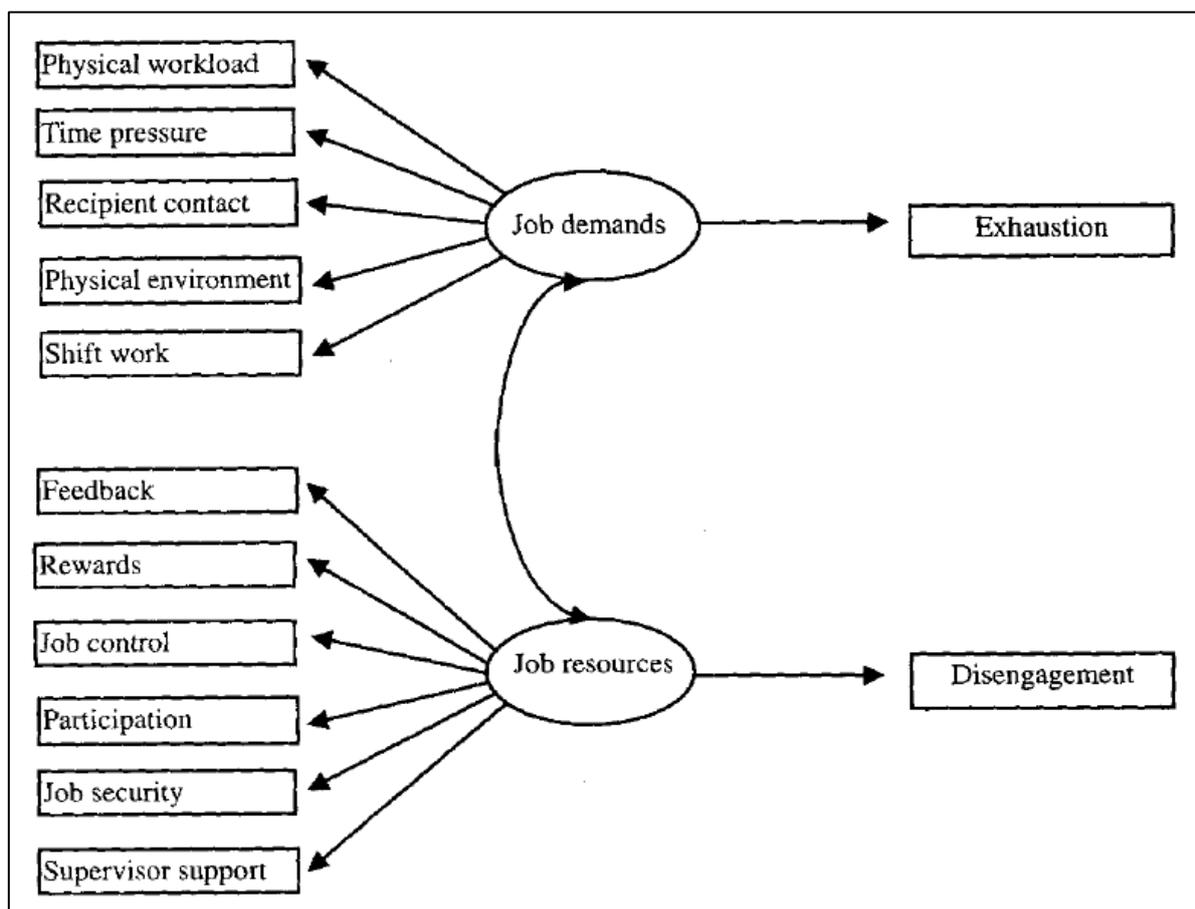
As indicated earlier, existing research has a strong focus on health and job performance in relation to work characteristics. Research on these subjects is often found as part of the domain of occupational health, which aims to study the relations between work characteristics and work outcomes, which define job performance through motivation and strain (Urtasun & Nuñez, 2018). A suitable approach toward FWI in relation to job performance concerns the job demands-resources (JD-R) model (see *Figure 1*), which is part of the domain of occupational health (Bakker & Demerouti, 2017). Demerouti et al. (2001) build their JD-R model upon the job demands-control (JD-C) model of Karasek (1979) and the effort-reward imbalance (E-RI) model of Siegrist (1996) who tried to shed light on the relation between work characteristics and work outcomes by researching the development of work-related fatigue. The JD-R model explains burnout by job demands and job resources, in which exhaustion and disengagement lead to burnout.

The JD-R model is based on the reciprocity of two factors that determine work outcomes (Demerouti et al., 2001) and describes job demands and job resources as key determinants of work outcomes. Demands are explained by Demerouti et al. (2001) as physical or mental effort, which can also be understood as physiological and psychological costs, leading to exhaustion (strain). Examples are workload, shift work, and time pressure. By contrast, job resources can be understood as health-protecting factors (motivation), “those physical, psychological, social or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands at the associated physiological and psychological costs; (c)

stimulate personal growth and development” (Demerouti et al., 2001, p. 501). In their model, Demerouti et al. (2001) distinguish between organizational resources (autonomy, developmental possibilities, and support from others) and internal resources (cognitive features and action patterns). High job resources are presumed to result in high job performance, and high levels of job demands are presumed to result in negative job performance. This thesis limits itself to the organizational demands and resources specified in the JD-R model. This is primarily due to the scope of this thesis, which does not comply with the full extent of the JD-R model. Second, the relevant factors previously mentioned, namely workload and shift work, can be distinctively classified among organizational aspects and thus fit the organizational approach.

**Figure 1.**

*Job demands-resources model of burnout*

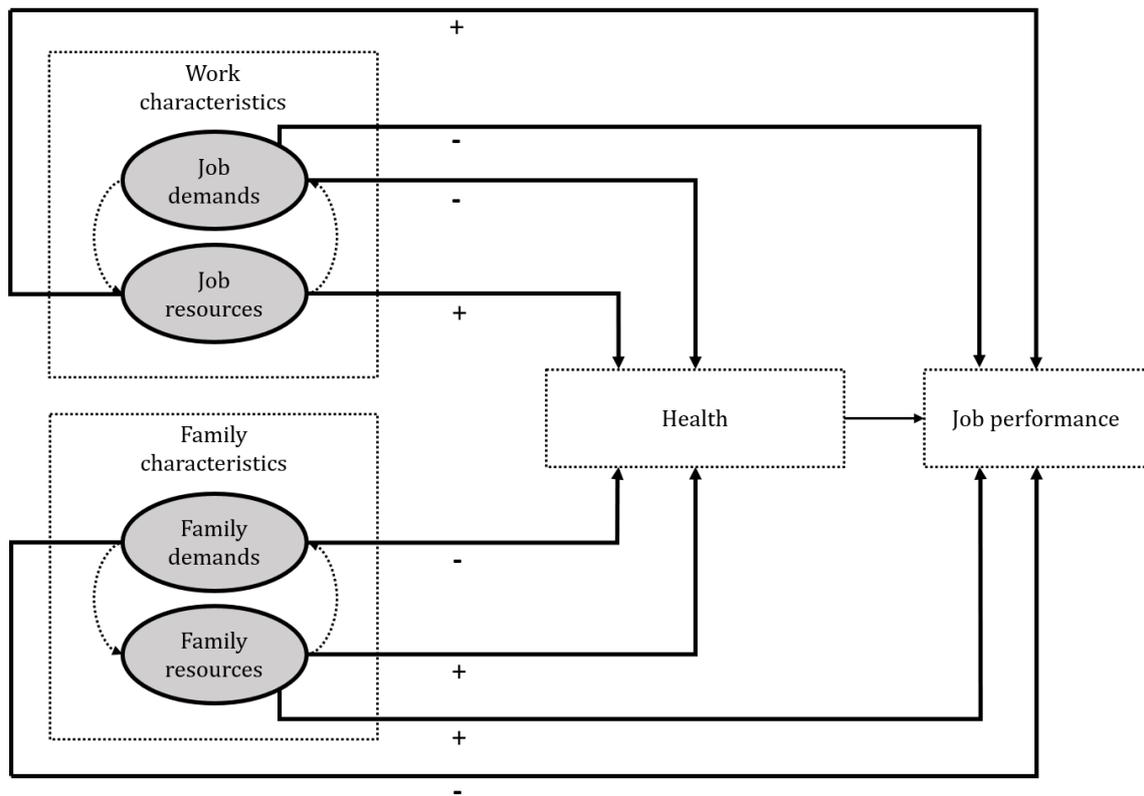


*Note: Model as drafted by Demerouti et al. (2001).*

Multiple researchers have stressed the importance of job demands in relation to resources in the context of work-life balance and thus FWI (Demerouti et al., 2012; Gisler et al., 2018). When combining FWI and the aforementioned indicators of job performance with the JD-R model, a new conceptual model arises (see *Figure 2*). Family characteristics can hereby, similar to job

characteristics, be divided into two subcategories, namely demands and resources (Demerouti et al., 2012), in which the influence of work and family characteristics on job performance can be understood as FWI. As existing research has repeatedly indicated the influence of work characteristics on job performance through health (issues), health functions as a mediating factor in explaining job performance by FWI.

**Figure 2.**  
*Conceptual model*



### Research question and hypotheses

The main question of this thesis is as follows: *To what extent does FWI influence the job performance of Dutch health care workers?* By answering this question, more insights into the indirect indicators of the social issue of labor shortage in the health care sector can be gained. Moreover, this contributes to filling the scientific knowledge gap about health care workers dealing with family care tasks (DePasquale et al., 2016).

Corresponding hypotheses are built on the concepts of family characteristics, work characteristics, health, and job performance. As the JD-R model assumes that high levels of job resources lead to high levels of job performance (Demerouti et al., 2001), the same assumption is made for family resources in relation to job performance. The first hypothesis is therefore as

follows: *H<sub>1</sub>: High levels of family resources influence job performance in a positive way through the mediating role of high levels of health.* Moreover, based on the assumption of the JD-R model that high levels of job demands lead to low levels of job performance (Demerouti et al., 2001), the second hypothesis concerns the following: *H<sub>2</sub>: High levels of family demands influence job performance in a negative way through the mediating role of low levels of health.* Additionally, the hypotheses about work characteristics and their influence on job performance are as follows: *H<sub>3</sub>: Through the mediating role of high levels of health, high levels of job resources influence job performance in a positive way* and *H<sub>4</sub>: Through the mediating role of low levels of health, high levels of job demands influence job performance in a negative way.*

## **Methods**

To answer the main question of this thesis, quantitative methods were applied using survey research. As this thesis seeks to research the existence of a relation between FWI and job performance, quantitative methods, which enable statistical analyses, are viewed as appropriate research methods.

### **Sampling and recruitment**

As this thesis uses existing data from the LISS panel, administered by CentERdata (Tilburg University, the Netherlands), sampling has been performed by CentERdata. In association with CBS, CentERdata has performed a traditional probability-based sampling using Dutch population registers to recruit participants. Traditional means were also applied to approach potential participants by way of an invitation letter followed by a telephone call or a personal visit (LISSdata, n.d.). As a result, the LISS panel covers about 5,000 Dutch households, of which one of the household members (being 16 years and over) was asked to complete several online questionnaire surveys in 2019 (LISSdata, n.d.). For this thesis, the data from the LISS panel has been reduced to the data from participants who work or have worked in the health care and welfare sector as the thesis focuses on health care workers. This reduction has resulted in a target group size of  $N = 670$ . An overview of the main characteristics of the respondents is provided in Table 1. The table presents that over three-quarter of the respondents are female. A major part of the respondents are also within the working-age, most of which are part of the elderly working-age group (45–64 years). Furthermore, more than three-quarter of the respondents have completed tertiary school, indicating that the respondents are mainly characterized by higher education. The latter outcomes may be distorted, though, as the indication is based on a small number of valid cases.

Concluding, CentERdata ensures the data being used for this thesis is representative of the Dutch population, though the elderly (65 years and over) are probably underrepresented due to

the online features of the LISSdata panel questionnaire (Knoef & De Vos, 2009). As this thesis mainly focuses on the working population (64 years and under), the underrepresentation did not appear as a hindering factor in the representativeness of the thesis results.

**Table 1.**

*Respondent Features*

Variable		N	(%)
<i>Gender</i>	Male	101	(18.2)
	Female	453	(81.8)
	Total	554	(100.0)
<i>Age</i>	17 years and younger	3	(0.5)
	18 – 24 years	25	(4.5)
	25 – 34 years	122	(22.0)
	35 – 44 years	92	(16.6)
	45 – 54 years	115	(20.8)
	55 – 64 years	162	(29.2)
	65 years and older	35	(6.3)
	Total	554	(100.0)
<i>Education</i>	None	0	(0.0)
	Elementary school	0	(0.0)
	Middle school (vmbo, vbo, mavo)	0	(0.0)
	Secondary school (havo, vwo, MBO)	4	(20.0)
	Tertiary school (hbo, wo, post-academic)	16	(80.0)
	Total	20	(100.0)

**Data collection**

Existing data from the LISS panel, specifically data from the LISS core studies “Work and Schooling Wave 12,” “Health Wave 12,” and “Family and Household Wave 12,” has been used to answer the main question. All mentioned surveys mainly consisted of multiple-choice questions, apart from questions that required a numeric answer (such as *age* and *working hours*).

The study variable *target group* can be defined as workers in the care and wellbeing sector and has been measured as such. Subsequently, information about the *demographics*, namely gender, age, and education, has been gathered as contextual information (for a full overview of the variables, questions, and answering options used for this thesis, see Appendix I). Following, the study variable *family resources* has been measured by five questions, covering support from the partner, father, and mother in tending to the children. As the subject of tending to the children was not captured in one question concerning the partner, three questions about this subject have been brought back to one component, resembling the question asked about the father and mother concerning tending to the children. The operationalization of family resources is based on Demerouti et al.’s (2012) statement about resources entailing social support in caring tasks. Furthermore, *family demands* have been operationalized in light of the care tasks for direct family members to keep the research feasible. This was performed by using six questions focused on care for children, grandchildren, parents, and grandparents. Two questions about care for

grandparents and two questions about care for parents have been brought back to two components, resembling the question asked about care for children and grandchildren.

The study variable *job resources* has been measured by six questions about autonomy at work, developmental opportunities, social support at work, appreciation (for work that is performed), career prospects, and salary. This approach is based on the explanation of job resources that is provided by Demerouti et al. (2001) in their JD-R model of burnout. The same goes for *job demands*, of which the five question items are focused on the amount of physical effort, concentration, irregular hours, working at your own pace, and mental effort.

Furthermore, this thesis confines itself to one question about the general health of respondents due to its scope. Lastly, *job performance* has been measured by questioning the amount of working hours per week as this approach is in line with the focus of this thesis on the quantitative interpretation of job performance.

### **Data analysis**

IBM SPSS Statistics 25 [SPSS] software was used to test the causal relation between family and job characteristics (X) and working hours (Y) via simultaneous multiple regression analyses [MRAs] (for a Syntax of the performed tests: see Appendix II). Before carrying out the analyses in question, a preliminary analysis was performed to determine whether the assumptions of normality, linearity, homoscedasticity, and multicollinearity were met. Normality was controlled by means of a histogram and a normal probability plot. Linearity and homoscedasticity were controlled by scatter plots, and multicollinearity was checked by using the variance inflation factor [VIF]. All assumptions were met, with  $VIF < 5$ .

Subsequently, the program was used to perform descriptive statistics of all variables to provide an overview of the main characteristics of the variables. After that, an MRA, using the enter method (which was used for all performed regressions in this research) was carried out to test whether all presumed predictors of working hours fit into a model. As it turned out to be a matter of a perfect fit, additional tests were performed. An MRA was carried out to examine whether family characteristics, apart from job characteristics, predict working hours to test Hypotheses 1 and 2. Due to the small size of the valid cases with  $N < 30$  and thus the extremely low reliability of the model, two other MRAs were performed: one to research a possible causal relation between family resources (X) and working hours (Y; Hypothesis 1) and one to examine the possible predicting nature of family demands toward working hours (Hypothesis 2). As neither of the models were significant, MRAs were carried out separately for every element of family characteristics to allow the researcher to make substantive statements about family characteristics in relation to job performance. Demographics, apart from education (because of the small  $N$ , see

Table 1), were controlled for, and missing cases were excluded pairwise (as for any other regression performed).

After that, an MRA was executed to test the assumption of job characteristics as predictors of working hours (Hypotheses 3 and 4). An MRA was also performed to find out whether job characteristics predict health. This analysis was followed by a linear regression analysis [LRA] to determine the causal relation between health and working hours.

## Results

This thesis aimed to find out whether there is a causal relation between family characteristics (X) and working hours (Y), taking into account job characteristics as other predictors and health as a mediator (M). To test the corresponding hypotheses, the regular significance level of  $p \leq 0.05$  was applied to establish whether statistical relationships were significant.

Table 2 presents an overview of the characteristics of the main variables. About family resources, the table indicates that, on average, respondents are more active in tending to the children compared to their partners. Furthermore, respondents receive, on average, no help or help once or twice from their parents in tending to the children. As regards family demands, the mean of caring for a child is relatively high compared to other family demands. Caring for a parent seems to happen less than often. In addition, few of the respondents seem to be taking care of a grandparent or grandchild.

**Table 2.**

*Variable Features*

Variable		N	Min.	Max.	Mean	Std. Dev.
<i>Family resources</i>	Support partner	118	1	5	2,53	0.735
	Support father	139	1	3	1,64	0.771
	Support mother	188	1	3	1,73	0.849
<i>Family demands</i>	Care for grandparent	114	0	1	0.03	0.161
	Care for parent	114	0	1	0.32	0.250
	Care for child	544	0	1	0.66	0.475
	Care for grandchild	544	0	1	0.13	0.339
<i>Job resources</i>	Autonomy	567	1	4	2.04	0.728
	Developmental opport.	567	1	4	2.90	0.668
	Social support	567	1	4	2.89	0.653
	Appreciation	567	1	4	2.82	0.666
	Career prospect	519	1	4	2.55	0.777
<i>Job demands</i>	Salary	567	1	4	2.60	0.733
	Physical effort	567	1	3	1.86	0.758
	Concentration	567	1	3	2.56	0.605
	Irregular hours	567	1	3	1.92	0.876
	Working at own pace	567	1	3	2.43	0.639
	Mental effort	567	1	3	2.58	0.592
<i>Working hours</i>		605	0	70	25.22	13.137
<i>General health</i>		528	1	5	3,21	0.758

Concerning job resources, the table indicates that, on average, respondents are close to agreement when it comes to experiencing autonomy, having developmental opportunities, receiving social support at work, and being appreciated for the work they have performed. There are instances of disagreement and agreement in the means of finding that one has prospects of career advancement and receives a sufficient salary. On average, respondents disagree with the statement of experiencing autonomy at work. Furthermore, the means of job demands indicate that, overall, respondents sometimes experience their work as physically demanding and are, at times, expected to work irregular hours. On average, respondents indicate they often need to work with a great deal of concentration and that their work often requires mental effort, although they report to work at their own pace regularly. Moreover, the average working hours indicate that a significant number of the respondents work parttime. Generally, overall health is also indicated as being good.

### **Analyses of family characteristics**

The first MRA included all family and job characteristics as predictors and working hours as a dependent variable. Since the fit of the model was perfect, no influence statistics were computed. Another MRA was therefore performed, in which the causal relation between family characteristics and working hours was tested. However, the mentioned characteristics did not explain a significant proportion of variance in working hours,  $R^2 = 0.079$ ,  $F(8, 11) = 0.119$ ,  $p = 0.997$ , meaning the components of family characteristics altogether do not significantly determine the amount of working hours. Further research was conducted, and two follow up MRAs were performed whereby the influence of family resources (Hypothesis 1) and demands (Hypothesis 2) on working hours were tested separately. Both MRAs indicated that a significant proportion of variance in the dependent variable could not be explained by both subjects,  $R^2 = 0.009$ ,  $F(3, 86) = 0.26$ ,  $p = 0.856$  and  $R^2 = 0.044$ ,  $F(4, 105) = 1.22$ ,  $p = 0.306$ , respectively.

In addition, all components of the predictor were separately tested in relation to working hours via MRAs (controlling for age and gender). As a result, care for children and grandchildren, individually, significantly explain 6.8% ( $F(3, 493) = 11.95$ ,  $p < 0.001$ ) and 3.8% ( $F(3, 493) = 6.58$ ,  $p < 0.001$ ) of the variance in working hours, respectively. Table 3 displays a summary of the MRAs in question. As can be seen in the table, in both the model concerning the effect of care for children ( $t = -3.74$ ,  $p < 0.001$ ) and care for grandchildren ( $t = -4.09$ ,  $p < 0.001$ ), gender appears as a significant predictor, indicating that female respondents work less hours compared to male respondents. Furthermore, only care for children significantly influences working hours,  $t = -4.11$ ,  $p < 0.001$ , meaning a high level of care for children leads to a low level of working hours. Concluding, the assumption of family characteristics predicting working hours can be rejected. Nevertheless,

one specific characteristic, namely care for children, significantly predicts working hours, individually.

**Table 3.**

*Summary of two MRAs regarding the effect of 1) care for children and 2) care for grandchildren on working hours<sup>a</sup>*

	Variable	Working hours		
		<i>B</i>	<i>SE B</i>	Beta
<i>MRA1</i>	Age	0.031	0.047	0.033
	Gender	-5.618	1.502	-0.165**
	Care for child	-5.568	1.354	-0.201**
<i>MRA2</i>	Age	-0.032	0.048	-0.034
	Gender	-6.218	1.519	-4.093**
	Care for grandchild	-2.248	1.923	-0.058

<sup>a</sup> *N* = 516, \*\* *p* ≤ 0.01

### Analyses of job characteristics

To test Hypotheses 3 and 4, an MRA was carried out to research causality between job characteristics (*X*) and working hours (*Y*). The mentioned characteristics explain a significant proportion of variance in working hours,  $R^2 = 0.157$ ,  $F(13, 458) = 6.58$ ,  $p < 0.001$ . Table 4 displays a summary of the MRA regarding the effect of job characteristics on working hours and health. In line with the results mentioned in the previous paragraph, gender significantly predicts the amount of working hours ( $t = -3.52$ ,  $p < 0.001$ ).

Concerning job resources, developmental opportunities ( $t = 3.17$ ,  $p = 0.002$ ) and appreciation for work ( $t = -1.99$ ,  $p = 0.048$ ) significantly predict working hours. While growing developmental opportunities lead to an increase in working hours, more appreciation for work performance leads to less working hours. The latter is contrary to the assumption of high levels of job resources leading to high levels of working hours. As for job demands, physical effort ( $t = -2.05$ ,  $p = 0.041$ ), concentration ( $t = 2.13$ ,  $p < 0.034$ ), and mental effort ( $t = 2.61$ ,  $p = 0.009$ ) significantly predict working hours. Notably, an increase in concentration and mental effort positively influence working hours, which contrasts with the assumption of high levels of job demands leading to low levels of working hours.

Furthermore, to test the assumption of health being a mediator between job characteristics and working hours, an MRA was performed to examine whether job characteristics predict health. Although minimal, the mentioned characteristics explain a significant proportion of variance in health,  $R^2 = 0.097$ ,  $F(13, 441) = 3.66$ ,  $p < 0.001$ . Age hereby has a significant predicting nature ( $t = -4.592$ ,  $p < 0.001$ ) on health. The older one becomes, the worse health becomes. About job characteristics, the MRA indicates that only concentration significantly affects health with  $t = -2.16$ ,  $p = 0.031$ , meaning that an increase in concentration leads to waning health. Subsequently,

an LRA was performed to control for the causal relation between health (X) and working hours (Y). As health does not explain a significant proportion of working hours,  $R^2 = 0.000$ ,  $F(1, 526) = 0.092$ ,  $p = 0.762$ , health cannot have a mediating function. Thus, the results do not align with the assumption of health having a mediating role.

**Table 4.**

*Summary of the MRA regarding the effect of job characteristics on working hours and health<sup>a</sup>*

Variable	Working hours			Health		
	<i>B</i>	<i>SE B</i>	Beta	<i>B</i>	<i>SE B</i>	Beta
Age	-0.031	0.043	-0.032	-0.012	0.003	-0.221**
Gender	-5.313	1.508	-0.156**	-0.081	0.092	-0.041
Autonomy	-0.777	0.914	-0.043	-0.008	0.056	-0.008
Developmental opp.	3.241	1.023	0.165**	0.081	0.062	0.072
Social support	-0.396	1.044	-0.020	0.067	0.063	0.057
Appreciation	-2.168	1.092	-0.110*	0.021	0.066	0.019
Career prospects	1.073	0.791	0.063	-0.027	0.048	-0.028
Salary	1.105	0.843	0.062	0.042	0.051	0.040
Physical effort	-1.780	0.869	-0.103*	0.021	0.053	0.021*
Concentration	2.598	1.221	0.120*	-0.160	0.074	-0.128
Irregular hours	0.224	0.712	0.015	-0.022	0.043	-0.025
Work at own pace	-0.701	1.036	-0.034	0.073	0.063	0.061
Mental effort	3.266	1.254	0.147**	0.105	0.076	0.082

<sup>a</sup>  $N = 518$ , \*  $p \leq 0.05$ , \*\*  $p \leq 0.01$

## Discussion

This thesis aimed to find an answer to the following question: *To what extent does FWI influence the job performance of Dutch health care workers?* The results have indicated that family characteristics hardly influence job performance. First, the hypothesis that *high levels of family resources influence job performance in a positive way* has been rejected. The same goes for the hypothesis that *high levels of family demands influence job performance in a negative way*, except for care for children. Individually, high levels of care for a child lead to low levels of working hours. Notably, multiple analyses uncovered gender as a major predictor of working hours.

Furthermore, in comparison to family characteristics, job characteristics have a stronger influence on job performance. The hypothesis that *high levels of job resources influence job performance in a positive way* holds true for developmental opportunities. Appreciation, on the other hand, proves the opposite as high levels of appreciation influence job performance in a negative way. Moreover, the hypothesis that *high levels of job demands influence job performance in a negative way* is applicable to physical effort. However, high levels of concentration and mental effort lead to high levels of working hours, which contradicts the assumption made about the causal direction. Lastly, the assumption of health having a mediating role did not add up to the results, but the results suggest physical effort and age to be predictors of health.

## **Findings in the context of theory and other research**

The rejected assumption of family characteristics influencing job performance could conceivably be understood by the absence of the *internal resources* factor (cognitive features and action patterns which are part of the JD-R model of burnout). Since this thesis focused on organizational resources and left out internal resources as a potential predictor due to its scope, only part of the family resources was tested. If future research proves internal resources, as part of family resources, to be a strong predictor of job performance, the unproven assumption in this thesis can be understood. Additionally, the original authors of the JD-R model of burnout acknowledged the influence of intrapersonal characteristics to be underestimated in their model (Bakker & Demerouti, 2017). In doing so, they partly revert to the JD-C model of Karasek (1979), which indicates that job performance strongly relies on the way one deals with the extent of the given control over work. By this, the aspect of internal resources is highly about behavior and aligns with the theory of planned behavior constructed by Ajzen (1991), of which control beliefs are important aspects in explaining behavior. Behavior, such as the act of working more or less hours based on family values, indicates the potential of internal resources to predict job performance.

Second, the assumptions concerning the direction of the causal relations turned out to be partly proven. Three components of job characteristics appeared to be the opposite of the assumptions. As regards appreciation, which unexpectedly turned out to have a negative influence on working hours, Pfister et al. (2020) state that employees are scarcely fulfilled in their need for recognition of their work. The lack of appreciation may even be fortified among the health care workers as a lack of recognition is one of the major complaints among this group (Cleary et al., 2012). Working more hours in light of less appreciation may be an attempt to gain the missing appreciation and thus a negative stimulus in improving job performance. Subsequently, working less hours in light of more appreciation may be a countermovement, in which being recognized leads to less effort for the job since appreciation has already been received. This explanation is quite elaborate, but if so, this unexpected phenomenon seems to relate to behavior and the cognitive process yet again. Furthermore, the high levels of concentration and mental effort leading to high levels of working hours may be explained by the theory of occupation stress by Motowidlo et al. (1986), in which both components are marked as cognitive aspects. This means that both components may not be fit as job demands but suit better as internal (job) resources. From this point of view, the hypotheses concerning concentration and mental effort would have been the reverse and equal to the presented results.

Third, gender came up as a significant predictor of working hours, indicating a major role of sex in job performance. Interestingly, the JD-R model of burnout does not elaborate on this particular subject. Instead, an explanation of the mentioned results can be found in the strong relation between FWI and gender. About this, Merens and Van den Braken (2014) argue the dominance of

the one-and-a-half earner family model in the Netherlands. This means that the man in a family with children usually works fulltime and the woman parttime. Results from this thesis therefore confirm the existence of the mentioned model in Dutch society.

### **Strengths and limitations**

Every research has its strengths and limitations, including this thesis. To begin with, an important strength of this thesis concerns the internal validity using probability-based sampling, reliable statistical tests, and a correct operationalization of the concepts. Nonetheless, it would be worthwhile and interesting to find out whether an operationalization of the concept of job performance focusing on the quality of work (instead of the quantity of work as researched in this thesis) would provide society with additional information about a possible relation between family characteristics and job performance.

Furthermore, a limitation that cannot be ignored in this thesis concerns the external validity. With a small sample of respondents (taking into account that 1.4 million people work in the Dutch care and wellbeing sector (CBS, n.d.)), this thesis only provides first insights into the subject. Inherently, ecological validity is confined by the fact that this thesis only provides first insights and thus one should be careful in generalizing the results. As mentioned in the previous paragraph, FWI, as researched, seems to reflect the one-and-a-half-earner family model. Notably, the results of this thesis are most likely shaped by the features of this model. Thus, the interpretation of results in other countries, specifically countries in which the gender gap in the workforce is still substantial, should be done with caution.

### **Implications and recommendations**

This thesis aimed to gain more insights into the predictors of job performance through researching FWI among Dutch health care workers. Cognitive features and behavior have repeatedly been mentioned when placing the results of this research in context as it turns out to be a significant subject matter in the broadening of the understanding of FWI. For future research, it is therefore argued to conduct research on the impact of behavior, on an intrapersonal level, in relation to job performance among health care workers in light of FWI. Large scale research, to ensure external validity, is advocated. Since gender significantly influences job performance and about 80% of the respondents were characterized as being female, it is also recommended to take into account gender division and family models in future research.

In addition, this thesis reflects the intersecting of several societal issues, namely an aging population, work-family conflict, and gender issues. It is therefore recommended for research institutions to develop a new program to encourage researchers from different disciplines (e.g., business management, psychology, sociology, health studies) to be involved in interdisciplinary

research to gain integral insights into the issue of FWI in relation to health care workers' job performance. Interdisciplinary research is expected to result in enhanced fundamental understanding of the issue. Through the integral approach, unambiguous insights into job performance and indirectly into the wicked problem of labor shortage in the health care sector may be gained. This knowledge may lead to a new understanding of the latter problem and possible solutions.

Concluding, as the predicting nature of family characteristics, being part of FWI, on job performance has not been detected, the importance of future research on the behavioral and cognitive process is needed to provide additional insights into this matter. Interdisciplinary research is hereby advocated to gain a complete understanding of the subject.

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## Appendix I.

<b>Variables</b>		<b>LISS questions</b>	<b>LISS answering options</b>
<i>Demographics</i>	Gender	Cf19l003 What is your gender?	1 = Male 2 = Female
	Age	Cf19l004 What is your age?	<number>
	Education	Cw19l006 What is the highest level of education that you have completed with diploma or certificate?	1 = none 2 = elementary 3 = middle school 4 = secondary school 5 = post-secondary, non-tertiary 6 = tertiary 7 = post-tertiary 8 = other 99 = I don't know
<i>Job performance</i>	Working hours	Cw19l127 How many hours per week do/did you actually work on average in your (last) job?	<number>
<i>Family resources</i>	Support partner	Cf19l198 How have you and your partner arranged the work of raising and caring for the children? – story reading, playing games, other forms of play	1 = I do a lot more than my partner 2 = I do more than my partner 3 = We do roughly the same amount of work
		Cf19l199 How have you and your partner arranged the work of raising and caring for the children? – bringing to/ fetching from daycare or school, attending sports activities, clubs, etc.	4 = My partner does more than I 5 = My partner does a lot more than I
		Cf19l200 How have you and your partner arranged the work of raising and caring for the children? – talking about problems in school	
	Support father	Cf19l133 Did you receive any help from your father over the past 3 months in tending to the children, such as child- or babysitting, caring or transport?	1 = no 2 = once or twice 3 = several times
Support mother	Cf19l134 Did you receive any help from your mother over the past 3 months in tending to the children, such as child- or babysitting, caring or transport?		

<i>Family demands</i>	Care for grandparent	Cw19l562 To whom are you providing informal care? – Grandparent outside of the household	0 = no 1 = yes
		Cw19l565 To whom are you providing informal care? – Live-in grandparent	
	Care for parent	Cw19l559 To whom are you providing informal care? - Parent outside of the household	
		Cw19l561 To whom are you providing informal care? – Live-in parent	
	Care for child	Cw19l436 Do you have children?	
	Care for grandchild	Cw19l437 Do you have grandchildren?	
<i>Job resources</i>	Autonomy	Cw19l429 There is/was very little freedom for me to determine how to do my work.	1 = disagree entirely 2 = disagree
	Developmental opportunities	Cw19l430 I have/had the opportunity to learn new skills.	3 = agree 4 = agree entirely
	Social support	Cw19l431 I get/got sufficient support in difficult situations.	
	Appreciation	Cw19l432 I get/got the appreciation I deserve for my work.	
	Career prospects	Cw19l434 My prospects of career advancement/promotion in my job are/were poor.	
	Salary	Cw19l433 My salary/income is/was sufficient, given my effort and performance.	
<i>Job demands</i>	Physical effort	Cw19l416 Is/was your work physically demanding?	1 = often
	Concentration	Cw19l421 Do/did you need to work with a lot of concentration?	2 = sometimes 3 = never
	Irregular hours	Cw19l425 Do/did you work irregular hours?	
	Working at own pace	Cw19l412 Can/could you work at your own pace?	
	Mental effort	Cw19l420 Does/did your work require mental effort?	
<i>Health</i>	General health	Ch19l004 How would you describe your health, generally speaking?	1 = poor 2 = moderate 3 = good 4 = very good 5 = excellent

## Appendix II.

\* Encoding: UTF-8.

\* Syntax Masterthesis 'Family-work conflict and its implication for job performance in the Dutch health care sector' 2021 using LISS Panel datasets.

**\* Merging dataset1 [Work and Schooling Wave 12] with dataset2 [Health Wave 12] and dataset3 [Family and Household Wave 12].**

```
DATASET ACTIVATE DataSet1.
```

```
SORT CASES BY nomem_encr.
```

```
DATASET ACTIVATE DataSet2.
```

```
SORT CASES BY nomem_encr.
```

```
DATASET ACTIVATE DataSet1.
```

```
MATCH FILES /FILE=*
```

```
  /FILE='DataSet2'
```

```
  /BY nomem_encr.
```

```
EXECUTE.
```

```
SORT CASES BY nomem_encr.
```

```
DATASET ACTIVATE DataSet3.
```

```
SORT CASES BY nomem_encr.
```

```
DATASET ACTIVATE DataSet1.
```

```
MATCH FILES /FILE=*
```

```
  /FILE='DataSet3'
```

```
  /BY nomem_encr.
```

```
EXECUTE.
```

**\* Recoding age and education into different categories.**

```
RECODE cf19l004 (Lowest thru 17=1) (18 thru 24=2) (25 thru 34=3) (35 thru 44=4) (45 thru 54=5) (55 thru 64=6) (65 thru Highest=7) INTO AgeNewCategories.
```

```
VARIABLE LABELS AgeNewCategories 'agenewcategories'.
```

```
EXECUTE.
```

```
RECODE cw19l006 (1=1) (2=2) (3=3) (4=4) (5=4) (6=5) (7=5) INTO EducationCategories.
```

```
VARIABLE LABELS EducationCategories 'educationcategories'.
```

```
EXECUTE.
```

**\*Recoding direction answering options job demands from positive (often) to negative (never) to negative (never) to positive (often).**

RECODE cw19l412 cw19l416 cw19l421 cw19l420 cw19l424 cw19l425 (1=3) (2=2) (3=1) INTO OwnPace  
PhysicalEffort Concentration MentalEffort ExtraHours IrregularHours.

VARIABLE LABELS OwnPace 'ownpace' /PhysicalEffort 'physicaleffort' /Concentration 'concentration'  
/MentalEffort 'mentaleffort' /IrregularHours 'irregularhours'.

EXECUTE.

**\*Merging data family resources: Partner support in tending to the children.**

COMPUTE PartnerSupportTendingChildren=(cf19l198 + cf19l199 + cf19l200) / 3.

EXECUTE.

**\*Merging data Family Demands: Informal Care parents.**

COMPUTE InformalCareParents=(cw19l559+cw19l561) / 2.

EXECUTE.

**\* Selecting target group: Respondents who work or worked in the sector healthcare and welfare.**

USE ALL.

COMPUTE filter\_\$(cw19l402 = 13).

VARIABLE LABELS filter\_ '\$cw19l402 = 13 (FILTER)'.  
VALUE LABELS filter\_ \$ 0 'Not Selected' 1 'Selected'.

FORMATS filter\_ \$ (f1.0).

FILTER BY filter\_ \$.

FILTER BY filter\_ \$.

EXECUTE.

**\* Frequencies demographic characteristics.**

FREQUENCIES VARIABLES=cf19l003 AgeNewCategories EducationCategories  
/ORDER=ANALYSIS.

**\*Descriptives main variables.**

DESCRIPTIVES VARIABLES=PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562 InformalCare-  
Parents

    cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l433 cw19l434 PhysicalEffort Con-  
centration IrregularHours OwnPace MentalEffort cw19l127 ch19l004

    /STATISTICS=MEAN STDDEV MIN MAX.

**\*HYPOTHESES 1-4.**

**\*Control for multicollinearity demographics, family and work characteristics (X).**

REGRESSION

    /MISSING PAIRWISE

```
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l004
/METHOD=ENTER cf19l003 PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l003
/METHOD=ENTER cf19l004 PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT PartnerSupportTendingChildren
/METHOD=ENTER cf19l004 cf19l003 cf19l133 cf19l134 cw19l562
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l133
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l134 cw19l562
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.
```

REGRESSION

```
/MISSING PAIRWISE
```

/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf191134  
/METHOD=ENTER cf191004 cf191003 PartnerSupportTendingChildren cf191133 cw191562  
InformalCareParents cw191436 cw191437 cw191429 cw191430 cw191431 cw191432 cw191434 cw191433  
cw191416 cw191421 cw191425 cw191412 cw191420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw191562  
/METHOD=ENTER cf191004 cf191003 PartnerSupportTendingChildren cf191133 cf191134  
InformalCareParents cw191436 cw191437 cw191429 cw191430 cw191431 cw191432 cw191434 cw191433  
cw191416 cw191421 cw191425 cw191412 cw191420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT InformalCareParents  
/METHOD=ENTER cf191004 cf191003 PartnerSupportTendingChildren cf191133 cf191134 cw191562  
cw191436 cw191437 cw191429 cw191430 cw191431 cw191432 cw191434 cw191433  
cw191416 cw191421 cw191425 cw191412 cw191420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw191436  
/METHOD=ENTER cf191004 cf191003 PartnerSupportTendingChildren cf191133 cf191134 cw191562  
InformalCareParents cw191437 cw191429 cw191430 cw191431 cw191432 cw191434 cw191433  
cw191416 cw191421 cw191425 cw191412 cw191420.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l437  
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562  
InformalCareParents cw19l436 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433  
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l429  
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562  
InformalCareParents cw19l436 cw19l437 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433  
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l430  
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562  
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l431 cw19l432 cw19l434 cw19l433  
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l431  
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562  
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l432 cw19l434 cw19l433  
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l432  
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562  
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l434 cw19l433  
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l134  
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cw19l562  
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l433  
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l433  
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cw19l562  
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434  
cw19l416 cw19l421 cw19l425 cw19l412 cw19l420.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l416  
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cw19l562  
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433  
cw19l421 cw19l425 cw19l412 cw19l420.

REGRESSION

/MISSING PAIRWISE

```
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l421
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cw19l562
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433
cw19l425 cw19l412 cw19l420.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l425
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cw19l562
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433
cw19l416 cw19l421 cw19l412 cw19l420.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l412
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cw19l562
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433
cw19l416 cw19l421 cw19l425 cw19l420.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l420
/METHOD=ENTER cf19l004 cf19l003 PartnerSupportTendingChildren cf19l133 cw19l562
InformalCareParents cw19l436 cw19l437 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433
cw19l416 cw19l421 cw19l425 cw19l412.
```

**\*MRA demographics, family and job characteristics (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT cw191127

/METHOD=ENTER cf191004 cf191003 PartnerSupportTendingChildren cf191133 cf191134 cw191562

InformalCareParents cw191436 cw191437 cw191429 cw191430 cw191431 cw191432 cw191434 cw191433

PhysicalEffort Concentration IrregularHours OwnPace MentalEffort

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).

**\* HYPOTHESES 1 & 2: Family characteristics.**

**\*Control for multicollinearity demographics and family characteristics (X).**

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT cf191003

/METHOD=ENTER cf191004 PartnerSupportTendingChildren cf191133 cf191134 InformalCareParents

cw191562 cw191436 cw191437.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT cf191004

/METHOD=ENTER cf191003 PartnerSupportTendingChildren cf191133 cf191134 InformalCareParents

cw191562 cw191436 cw191437.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT PartnerSupportTendingChildren

/METHOD=ENTER cf19l003 cf19l004 cf19l133 cf19l134 InformalCareParents cw19l562 cw19l436  
cw19l437.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT cf19l133

/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l134 InformalCareParents  
cw19l562 cw19l436 cw19l437.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT cf19l134

/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l133 InformalCareParents  
cw19l562 cw19l436 cw19l437.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT InformalCareParents

/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l133 cf19l134 cw19l562  
cw19l436 cw19l437.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT cw19l562

/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l133 cf19l134 InformalCare-  
Parents cw19l436 cw19l437.

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l436
/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l133 cf19l134 InformalCare-
Parents cw19l562 cw19l437.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l437
/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l133 cf19l134 InformalCare-
Parents cw19l562 cw19l436.
```

**\*MRA demographics, family characteristics (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l127
/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l133 cf19l134 InformalCare-
Parents cw19l562 cw19l436 cw19l437
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*HYPOTHESIS 1. Family resources.**

**\*Control for multicollinearity demographics and family resources (X).**

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l003
/METHOD=ENTER cf19l004 PartnerSupportTendingChildren cf19l133 cf19l134.
```

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l004  
/METHOD=ENTER cf19l003 PartnerSupportTendingChildren cf19l133 cf19l134.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT PartnerSupportTendingChildren  
/METHOD=ENTER cf19l003 cf19l004 cf19l133 cf19l134.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l133  
/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l134.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l134  
/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l133.

**\*MRA demographics, family resources (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l127

```
/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren cf19l133 cf19l134
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*HYPOTHESIS 2. Family demands.**

**\*Control for multicollinearity demographics and family demands (X).**

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l003
/METHOD=ENTER cf19l004 InformalCareParents cw19l562 cw19l436 cw19l437.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l004
/METHOD=ENTER cf19l003 InformalCareParents cw19l562 cw19l436 cw19l437.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT InformalCareParents
/METHOD=ENTER cf19l003 cf19l004 cw19l562 cw19l436 cw19l437.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l562
/METHOD=ENTER cf19l003 cf19l004 InformalCareParents cw19l436 cw19l437.
```

REGRESSION

```
/MISSING PAIRWISE
```

```
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l436
/METHOD=ENTER cf19l003 cf19l004 InformalCareParents cw19l562 cw19l437.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l437
/METHOD=ENTER cf19l003 cf19l004 InformalCareParents cw19l562 cw19l436.
```

**\*MRA demographics, family resources (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l127
/METHOD=ENTER cf19l003 cf19l004 InformalCareParents cw19l562 cw19l436 cw19l437
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*ADDITIONAL ANALYSES family characteristics.**

**\*Control for multicollinearity demographics and partner support (X).**

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l003
/METHOD=ENTER cf19l004 PartnerSupportTendingChildren.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
```

```
/NOORIGIN  
/DEPENDENT cf19l004  
/METHOD=ENTER cf19l003 PartnerSupportTendingChildren.
```

REGRESSION

```
/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT PartnerSupportTendingChildren  
/METHOD=ENTER cf19l003 cf19l004.
```

**\*MRA demographics and partner support (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

```
/MISSING PAIRWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l127  
/METHOD=ENTER cf19l003 cf19l004 PartnerSupportTendingChildren  
/SCATTERPLOT=(*ZRESID,*ZPRED)  
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*Control for multicollinearity demographics and father support (X).**

REGRESSION

```
/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l003  
/METHOD=ENTER cf19l004 cf19l133.
```

REGRESSION

```
/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l004  
/METHOD=ENTER cf19l003 cf19l133.
```

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l133  
/METHOD=ENTER cf19l003 cf19l004.

**\*MRA demographics and father support (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l127  
/METHOD=ENTER cf19l003 cf19l004 cf19l133  
/SCATTERPLOT=(\*ZRESID ,\*ZPRED)  
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).

**\*Control for multicollinearity demographics and mother support (X).**

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l003  
/METHOD=ENTER cf19l004 cf19l134.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf19l004  
/METHOD=ENTER cf19l003 cf19l134.

REGRESSION

/MISSING PAIRWISE

```
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l134
/METHOD=ENTER cf19l003 cf19l004.
```

**\*MRA demographics and mother support (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l127
/METHOD=ENTER cf19l003 cf19l004 cf19l134
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*Control for multicollinearity demographics and care for grandparent (X).**

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l003
/METHOD=ENTER cf19l004 cw19l562.
```

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l004
/METHOD=ENTER cf19l003 cw19l562.
```

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
```

```
/DEPENDENT cw191562  
/METHOD=ENTER cf191003 cf191004.
```

**\*MRA demographics and care grandparent (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

```
REGRESSION  
/MISSING PAIRWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw191127  
/METHOD=ENTER cf191003 cf191004 cw191562  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*Control for multicollinearity demographics and care for parent (X).**

```
REGRESSION  
/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf191003  
/METHOD=ENTER cf191004 InformalCareParents.
```

```
REGRESSION  
/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cf191004  
/METHOD=ENTER cf191003 InformalCareParents.
```

```
REGRESSION  
/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT InformalCareParents  
/METHOD=ENTER cf191003 cf191004.
```

**\*MRA demographics and care parent (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l127
/METHOD=ENTER cf19l003 cf19l004 InformalCareParents
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*Control for multicollinearity demographics and care for child (X).**

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l003
/METHOD=ENTER cf19l004 cw19l436.
```

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l004
/METHOD=ENTER cf19l003 cw19l436.
```

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l436
/METHOD=ENTER cf19l003 cf19l004.
```

**\*MRA demographics and care child (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

```
REGRESSION
```

```
/MISSING PAIRWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l127
/METHOD=ENTER cf19l003 cf19l004 cw19l436
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*Control for multicollinearity demographics and care grandchild (X).**

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l003
/METHOD=ENTER cf19l004 cw19l437.
```

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cf19l004
/METHOD=ENTER cf19l003 cw19l437.
```

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw19l437
/METHOD=ENTER cf19l003 cf19l004.
```

**\*MRA demographics and care grandchild (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

```
REGRESSION
/MISSING PAIRWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
```

```
/NOORIGIN
/DEPENDENT cw191127
/METHOD=ENTER cf191003 cf191004 cw191437
/SCATTERPLOT=(*ZRESID ,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

**\*HYPOTHESIS 3 & 4.**

**\*Control for multicollinearity demographics and work characteristics (X).**

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw191429
/METHOD=ENTER cw191430 cw191431 cw191432 cw191434 cw191433 PhysicalEffort Concentration Ir-
regularHours OwnPace MentalEffort.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw191430
/METHOD=ENTER cw191429 cw191431 cw191432 cw191434 cw191433 PhysicalEffort Concentration Ir-
regularHours OwnPace MentalEffort.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT cw191431
/METHOD=ENTER cw191429 cw191430 cw191432 cw191434 cw191433 PhysicalEffort Concentration Ir-
regularHours OwnPace MentalEffort.
```

REGRESSION

```
/MISSING PAIRWISE
/STATISTICS COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
```

/DEPENDENT cw19l432  
/METHOD=ENTER cw19l429 cw19l430 cw19l431 cw19l434 cw19l433 PhysicalEffort Concentration Ir-  
regularHours OwnPace MentalEffort.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l434  
/METHOD=ENTER cw19l429 cw19l430 cw19l431 cw19l432 cw19l433 PhysicalEffort Concentration Ir-  
regularHours OwnPace MentalEffort.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT cw19l433  
/METHOD=ENTER cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 PhysicalEffort Concentration Ir-  
regularHours OwnPace MentalEffort.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT PhysicalEffort  
/METHOD=ENTER cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433 Concentration Irregu-  
larHours OwnPace MentalEffort.

REGRESSION

/MISSING PAIRWISE  
/STATISTICS COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT Concentration  
/METHOD=ENTER cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433 PhysicalEffort Irregu-  
larHours OwnPace MentalEffort.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT IrregularHours

/METHOD=ENTER cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433 PhysicalEffort Concentration OwnPace MentalEffort.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT OwnPace

/METHOD=ENTER cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433 PhysicalEffort Concentration IrregularHours MentalEffort.

REGRESSION

/MISSING PAIRWISE

/STATISTICS COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT MentalEffort

/METHOD=ENTER cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433 PhysicalEffort Concentration IrregularHours OwnPace.

**\*Multiple regression: Demographics and job characteristics (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

/MISSING PAIRWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT cw19l127

/METHOD=ENTER cf19l003 cf19l004 cw19l429 cw19l430 cw19l431 cw19l432 cw19l434 cw19l433 PhysicalEffort Concentration IrregularHours OwnPace MentalEffort

/SCATTERPLOT=(\*ZRESID ,\*ZPRED)

/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).

**\*Multiple regression: Demographics and job characteristics (X) and health (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

/MISSING PAIRWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ch191004

/METHOD=ENTER cf191003 cf191004 cw191429 cw191430 cw191431 cw191432 cw191434 cw191433

PhysicalEffort Concentration IrregularHours OwnPace MentalEffort

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).

**\*Linear regression: Health (X) and working hours (Y) (and control for normality, linearity and homoscedasticity).**

REGRESSION

/MISSING PAIRWISE

/STATISTICS COEFF OUTS R ANOVA

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT cw191127

/METHOD=ENTER ch191004

/SCATTERPLOT=(\*ZRESID,\*ZPRED)

/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).