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# Balancing the roles between work and family: when are we satisfied?

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## **Abstract**

Over the past decades, the traditional bread winner family has disappeared, and women started to enter the labor market. This gave rise to a new phenomenon: work-life-balance. Whereas many studies implicitly suggest that a higher work-life-balance leads to a higher life satisfaction, this research disentangles these two concepts and tries to find in what way they are influenced. The connection is found by means of the Role Strain Theory, which suggest that people have certain roles in life and limited time to devote to these roles (Greenhaus & Beutel, 1985). Conflict appears when fulfilling one role makes it more difficult to fulfill another role. Based on this theory, and with use of the in 2009 collected NELLS data, we tried to find the relation between work (working overtime, flexible working hours and working part-time) and non-work-related factors (marriage and children) and life satisfaction, and the role of work-life-balance in this relation. Results show that people who are able to choose their own working time report to be more satisfied with life, as it gives them a tool that makes it easier to divide time better between roles. Part of this relation is explained by the fact that work-life-balance is made easier when times are not restricted. Policies intended to improve the work-life-balance of employees therefore need to focus on creating flexible working hours, as this has as ultimate result that it improves life satisfaction. Furthermore, being married and having children will make you more satisfied in life, but do not have impact on your work-life-balance. In order to explain this, an elaboration of the Role Strain Theory is suggested that investigates the potential relief of stress by coming home to a family, which therefore explains the higher life satisfaction.

Key words: life satisfaction, work-life-balance, Role Strain Theory, flexible working hours

## **Introduction**

If we search for work-life-balance on Google, we can find 50 million hits and counting. These hits give a varied image: definitions of the concept, tips for a better work-life-balance, country-comparisons for the level of work-life-balance and reasons for providing a better work-life-balance among employees. Why is this topic so popular?

In the last decades labour market participation of women has grown. In the Netherlands, female labour participation has grown 10% over the last 20 years (CBS, 2018). This increase in labour market participation resulted in a diminishing standard division of labour. Whereas women in the past were responsible for the (unpaid) care of children and household and men responsible for income, this traditional division of work has faded and the traditional family has disappeared (Bonoli, 2005). Families nowadays mostly exist of dual-earning or single-parent households combining the responsibility of a job and a family. Combining these tasks and creating a balance can be seen as a challenge, and when found difficult it has a negative effect on well-being as well as work performance (Amstad, Meier, Fasel, Elfering & Semmer, 2011). What we see in the Netherlands is that in order to cope with these challenges, people and especially women, scale back in work by choosing to work part-time. Whereas on the one hand this increases work-life-balance, it is associated with a lower life satisfaction on the other hand (Roeters & Craig, 2014). This implies that a balanced life does not immediately mean a satisfied life.

Triggered by this contrast, this study tries to disentangle work-life-balance from life satisfaction. Many researchers implicitly suggest that a higher work-life-balance leads to satisfied people. However, this is, to my knowledge, not been proven directly. By looking at several work- and non-work-related factors in relation to life satisfaction, with addition of work-life-balance as mediating effect, this research tries to find out what factors make people satisfied in life and what role work-life-balance plays in this relation.

## **Theoretical framework**

Before we dive into the relation between work and non-work factors and life satisfaction and the role of work-life-balance in this, the concepts of life satisfaction and work-life-balance will be defined. Life satisfaction can be seen as “the individual assessment of a person’s quality of life based on their own set of criteria” (Pavot & Diener, 1993). Life satisfaction is a subjective evaluation of someone’s own life and depends on the importance someone gives to several domains, like work, social life and family.

The concept of work-life-balance has had a range of definitions and interpretations over the past decades. Greenhaus, Collins & Shaw (2002) discuss that definitions of work-life-balance share 2 components of equality: inputs and outcomes. Inputs can be seen as personal resources that can be attributed to roles. Balance appears when these resources are equally divided over several roles. Outcomes are mostly related to the level of satisfaction that people get by this division of resources. A definition of work-life-balance combining these two, is the one by Kirchmeyer: “achieving satisfying experiences in all life domains, and to do so requires personal resources such as energy, time, and commitment to be well distributed across domains” (Kirchmeyer, 2002; in Greenhaus et al., 2002, p. 512). Using this definition, a higher work-life-balance implies that time, energy and resources are well distributed across all roles in life, resulting in high levels of satisfaction, functioning and health. A lower work-life-balance on the other hand appears when resources are not well distributed across roles.

In order to understand the relation between the roles in life, life satisfaction and the influence of work-life-balance on this relation, we can use the ‘Role Strain Theory’ developed by Greenhaus & Beutel (1985, in Geurts & Demerouti, 2003). This theory has as starting point that people have certain roles in life and have limited time and energy to fulfil the demands of these roles. Conflict between roles appear if compliance with one role would make it more difficult to reach compliance with another role. They distinguish three types of conflicts:

1. Time-based conflict: the pressure on time that appears when time is spent in one domain or role, which makes it impossible to spend it in another role.
2. Strain-based conflict: when strain (or stress) in one role appears that influences the performance in another role. Roles are contradictory in a way that strain created in one role affects the compliance with the demands of another role.

3. Behaviour-based conflict: behaviour in one role may be incompatible with behaviour in another role. It appears if someone is unable to adjust to the behaviour that is expected in different roles.

Greenhaus & Beutel (1985) argue that fulfilling the roles in both domains of work and family are 'mutually incompatible': fulfilling the role in the domain of work as employee makes it more difficult to fulfil the role in the domain of life, as a parent for example, and vice versa. What is shown is that these conflicts of roles lead to strain and stress, which eventually can lead to job burn out, depression and life dissatisfaction (Greenhaus & Beutel, 1985; Thomas & Ganster, 1995; Allen, Herst, Bruck & Sutton, 2000). So, based on this theory, we can say that a lower balance between work and life, which can be seen as more conflicts of roles, can lead to strain and stress which in turn decreases life satisfaction.

As behaviour-based conflict is a difficult conflict to measure due to the fact that it concerns reflection on behaviour in roles, we decided, in line with other research, to leave this one out (Peters, den Dulk, van der Lippe, 2008). Therefore, this research will only focus on time- and strain-based conflict for the most prominent roles in life: work and family (Burke, 2003). In the domain of work, we can distinguish working overtime, having flexible working hours and working part-time whereas in the domain of non-work we will focus on having children and marriage.

#### Work domain

Working overtime can be seen as a factor that directly effects life satisfaction, but also has an influence on work-life-balance. Meijman and Mulder (1998, in van Echteld, 2004) argued with their Effort-Recovery model that work gives returns (in productivity) for the price of mental and physical costs. When the effort of working stops, someone will recover from these efforts and the potential costs. Potential damage done to employees is dependent on the availability to recover from the efforts. If a person does not have the possibility to recover from the effort put into work, this can lead to psychological problems and irreversible mental and physical costs. Employees who work over time will not only put more effort into their work, but they will also have less time to recover. Using this model, it is expected that people who devote more time to working overtime, will experience more problems with time pressure, work-life-balance and mental pressure (van Echtelt, 2004). Working overtime results in a decreased well-being, as

people experience more work-related stress, tiredness and time conflicts which can lead to additional risks of illness (Golden, Henly & Lambert, 2013). This leads to our first hypothesis:

*H1a: More hours worked overtime leads to a lower life satisfaction*

In hypothesis 1a, we hypothesized the first line of our model presented in figure 1 (line a). Figure 1 shows that we will study the direct effect of work and non-work-related factors on life satisfaction (line a). We will also study at the effect of work and non-work-related factors on work-life-balance (line b) and the relation between the factors and life satisfaction, with taking work-life-balance into account. Looking at line b, we can argue that working overtime both influences the time-based-conflict and the strain-based-conflict, as it decreases the time left over for other roles, and increases the mental pressure and stress concerning work. We can therefore expect that:

*H1b: More hours worked overtime leads to a lower work-life-balance*

Combining both hypotheses, we can argue that line c is hypothesized as follows:

*H1c: More hours worked overtime leads to a lower work-life-balance, which in turns leads to a lower life satisfaction*

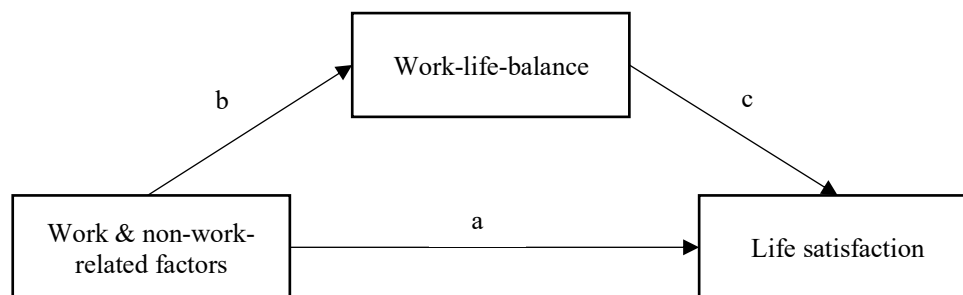


Figure 1: conceptual model

The ability to work flexible hours has recently gained popularity. Flexible working hours can be defined as the choice for employees to have control over their working hours and their “ability to increase or decrease their working hours and to alter their work schedule” (Atkinson & Hall, 2011). The direction of the effects of flexible working hours is under discussion, as it can be seen as a ‘double sword’. On one hand it eases the combination between work and life, but on the other hand it might be that this flexibility fades out the boundary between work and private life. This creates a situation for people in which they feel more difficulty to release from

work in their private time, which might negatively affect private functioning (Peters et al, 2008). However, Golden et al. (2013) have showed, using the Income-Hours-Happiness Nexus, that employees who are in control over their working times experience less symptoms of ‘overwork’, are generally happier and report higher subjective well-being than people in fixed regimes. Therefore, we expect that:

*H2a: A higher degree of flexible working hours leads to a higher life satisfaction*

Schedule flexibility can be seen as a medium to create balance between work and life responsibilities, which reduces the conflict between these spheres (Carlson, Grzywacz & Kacmar, 2010). Time-based-conflict will be reduced as people have the possibility to use the time needed to fulfil roles. Therefore, we hypothesize that:

*H2b: A higher degree of flexible working hours leads to a higher work-life-balance*

Combining these hypotheses, we can expect the following:

*H2c: A higher degree of flexible working hours leads to a higher work-life-balance, which in turn leads to a higher life satisfaction*

Another aspect in the domain of work is the choice of working hours. Previous research about working part-time compared to full-time and people’s life satisfaction has given mixed results. Van der Meer & Wielers (2011) have shown that people who are in part-time jobs are relatively more satisfied and happier than people in full-time jobs. On the other hand, part-time jobs are mostly centred in the low wage and low status occupations and thus give less opportunities for career development, less personal growth and less financial resources. Especially women, whom often reorganize their working life as children appear in their lives, experience a downgrade in their job; from higher-skill full time work to lower-skill part time work (Gregory & Connolly, 2008; Roeters & Craig, 2014). So, due to the fact that working part-time is associated with inferior conditions and lower wages, we can expect that:

*H3a: Working part-time leads to a lower life satisfaction*

However, evidence moves towards a positive effect of working part-time on life satisfaction when looking at the work-life-balance. It is argued that working part-time gives women ‘the best of both worlds’, as they are able to combine career interests with the caring responsibilities

of a family (Higgins, Duxbury & Johnson, 2000). This leads to less time- and strain-based-conflict, as roles are easier combined. Therefore, we hypothesize:

*H3b: Working part-time leads to a higher work-life-balance*

Working part-time decreases the time-based-conflict, which thus increases life satisfaction. Therefore, we hypothesize:

*H3c: Working part-time leads to a higher work-life-balance, which in turn leads to a higher life satisfaction*

#### Non-work domain ('life')

Although work contains a big part of people's life, there are also important factors to be found in the non-work domain. Over the years, research has shown a 'parenthood paradox': people want to be happy and become parents, but these goals show conflicting results as becoming a parent often reduces happiness (Baumeister, Vohs, Aaker & Garbinsky, 2013). However, children tend to give meaning to people's life, as parents 'report feelings of meaning, gratification and reward' and feel more satisfied in life when they have children (Nelson, Kushlev, English, Dunn & Lyubomirsky, 2013). Therefore, we expect that:

*H4a: Having children results in a higher life satisfaction*

However, having children has an effect on the way a family is organized. Tausig and Fenwick (2001) have shown that having children reduces the balance between work and family, as having children creates another role which impedes the balance between roles. Rearing a child ask a lot of time and increases responsibilities, which influences time- and strain-based-conflict. Especially children in the age of 0 till 4 take a large amount of time, as they need the most care (Greenhaus & Beutel, 1985). Therefore, we expect that:

*H4b: Having children lowers the work-life-balance*

Combining these hypotheses, we can expect that:

*H4c: Having children lowers the work-life-balance, which in turn leads to a lower life satisfaction*



Over the past decades, the institution marriage has seen a decline in popularity. However, it is still an important factor in people's life and well-being (Stutzer & Frey, 2003). In general, married people are known to be happier and more satisfied in life than unmarried people (Taylor, Funk & Craighill, 2006). The legal sanction of a marriage entails a lifelong commitment, which results in more investment in a relation compared to people who cohabitate (Vanassche, Swicegood & Matthijs, 2012). Marriage brings an extra source of self-esteem, by for instance an escape from stress, and someone to talk with about personal issues and problems. Next to this, it provides an intimate relationship which reduces the chance of suffering from loneliness (Stutzer & Frey, 2003). We therefore hypothesize that:

*H5a: Marriage leads to a higher life satisfaction*

Looking at work-life-balance, the conclusions of the effect of marriage is mixed. Whereas it provides self-esteem and intimate relations on the one hand, it might also provide conflict on the other hand as it adds another role to the non-work domain. Greenhaus and Beutel (1985) argue that marriage has a negative effect on the work-life-balance, as married persons experience more conflict in work and life than non-married people. We therefore expect that:

*H5b: Marriage leads to a lower work-life-balance*

Looking at the combination of hypotheses, we expect that:

*H5c: Married people have a lower work-life-balance, which in turn leads to a lower life satisfaction*

## Research question

In this research, we are interested in the relation between work and non-work factors and life satisfaction, and what role work-life-balance plays in this relation. In order to test this relation, the following question is answered:

*How do work related factors and non-work-related factors influence life satisfaction, and what part of this relation is explained by work-life-balance?*

As presented in figure 1, we will answer this question by looking at the direct effect of work and non-work-related factors on life satisfaction and looking at the indirect effect through work-life-balance. In figure 2 the hypotheses, which are outlined in the paragraphs above, are presented. The dotted lines present a negative relation, whereas the continuous lines present a positive relation. It is expected that the relation between the independent variables and life satisfaction are all mediated by work-life-balance.

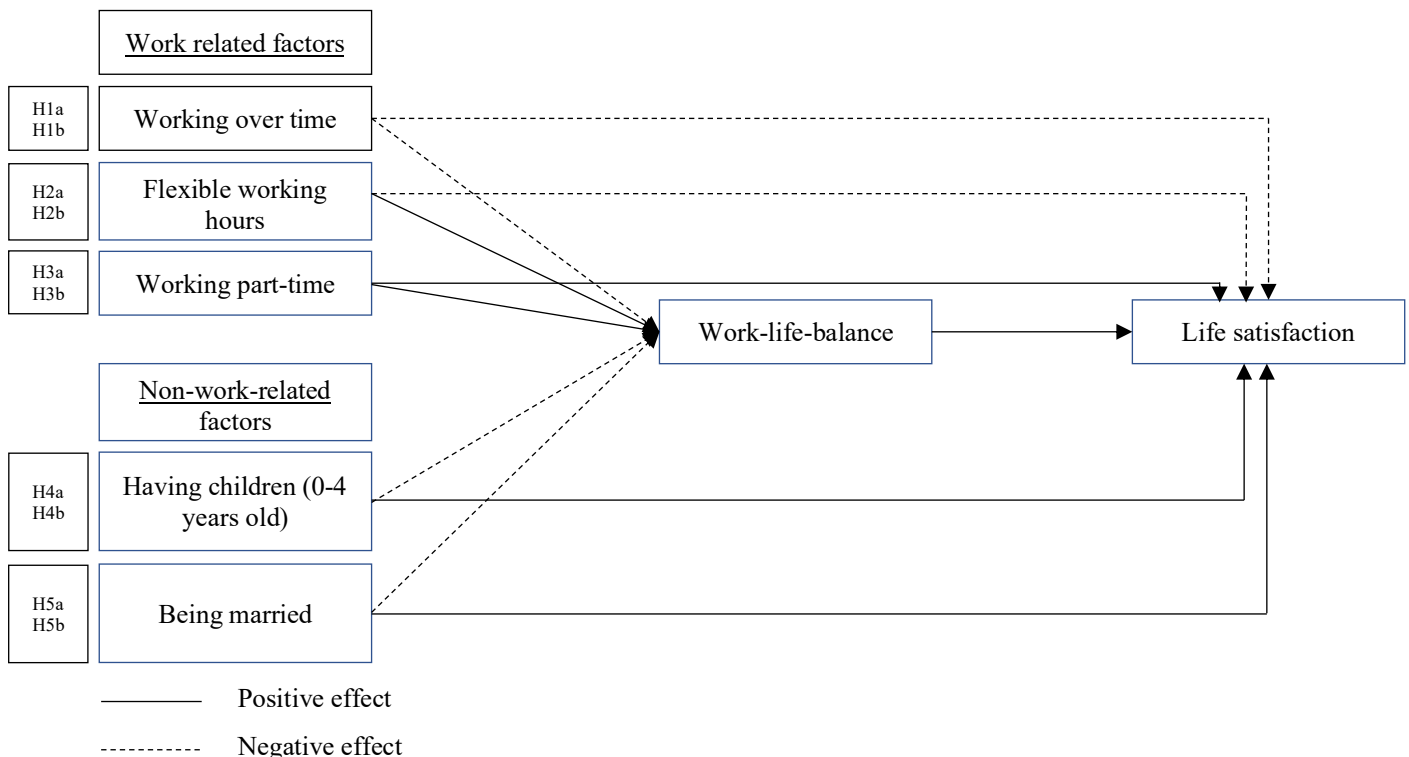


Figure 2: visual representation of hypotheses

## **Data and methods**

### **Data**

The data used for this research is the data from the first wave of the Netherland Longitudinal Lifecourse Study (NELSS) (Tolsma, Kraaykamp, de Graaf, Kalmijn & Monden, 2014). The NELSS aims to find more information on the living situations and opinions among the Dutch society, by looking at the connection between life events, social life and wellbeing of Dutch inhabitants. The data contains information on socio-demographic and socio-economics variables, social inequalities, social cohesion and integration and norms and values.

The data collection was done by a two-stage stratified sampling method. The first stage consisted of a quasi-random selection of 35 municipalities by region and urbanization. It was not completely random as the 4 cities Amsterdam, Rotterdam, Den Haag and Utrecht needed to be included to obtain a representative sample of Turks and Moroccans. The second stage was a random selection from population registry, based on age and country of birth. The data was collected by means of a mixed method; the questionnaire consisted of a face-to-face interview and a self-completion survey. The face-to-face interview focused on the socio-economic and socio-demographic background of the respondent, whereas the self-completion survey focused on the attitudes, values and norms. Participants were recruited by a letter 2 weeks before the intended interview and subsequently by personal contact by the interviewer. Participants were offered an incentive of €10 to maximize response rate and motivate respondents to complete the online survey after the interview. If respondents were not at home or refused to participate, they were approached later in the process with increased incentives. (De Graaf, Kalmijn, Kraaykamp & Monden, 2010).

The initial wave 1 conducted in 2009 consisted of  $N = 5312$  respondents in the age of 15 till 45 years old with a response rate of 56%, which is average for this type of study in the Netherlands (De Graaf et al., 2010). Respondents of Moroccan and Turkish origin were purposely overrepresented. Overall, the sample consists of 2556 native Dutch respondents, and a combination of non-native respondents of Moroccan ( $N = 1164$ ), Turkish ( $N = 1137$ ), Non-Western ( $N = 226$ ) and Western ( $N = 229$ ) origin. Looking at the representativeness of the sample, we can see that women are overrepresented in the category 'Others' (the group with exclusion of Moroccans and Turkish) and Moroccans. Older respondents are overrepresented in all groups, especially in the group 'Others'. Looking at the regions of the Netherlands, we

can see that the Southern region is overrepresented, and the Western region is underrepresented. In all groups the respondents who live in a moderately urbanized municipality are overrepresented. In order to have a representative distribution of ethnic groups, the weight provided by the data (*w1cweight2*) is used (De Graaf et al., 2010).

## **Methods**

This study focuses on the work-life balance of respondents, so information on respondents who are in a full-time study is not available or not meaningful to our study. Therefore, we exclude people younger than 18 and those who are still in education.

### Dependent variable

The dependent variable life satisfaction will be measured by a composition of 4 variables, in which the respondents could answer on a 5-point Likert scale, with 1 being 'Totally agree' and 5 being 'Totally not agree'. The questions are: 'All in all, I am satisfied with my life', 'My life is in most ways ideal', 'My living conditions are perfect' and 'The most things that I expected from life, I have experienced'. Factor analysis produced a first factor with an eigenvalue of 2,85, explaining 71% of the variance. For respondents who do not have a missing value on one of the four questions, a scale was constructed with the answers recoded reversely, so that a higher score means a higher level of life satisfaction (Cronbach's alpha = .861).

### Independent variables

#### *Work related factors*

Working overtime is measured by the questions 'How many hours a week do you work according to your contract?' and 'How many hours a week do you actually work per week?'. By subtracting the contractual hours by the actual hours, we can measure the extra time that people work. We can argue that working overtime is more conflicting when working 40 hours compared to working 20 hours, but as there is no strict definition of overwork present in the literature all values above zero are taken into account. There are some high values in these variables, but there is no big gap between the numbers so all values are interpreted as real values. The variable overwork shows some negative numbers, which tells us that these people work less than their contract prescribes. For sake of this analysis these people are assigned to the group of people that do not work overtime, and thus receive a value of 0.

Working part time is defined by CBS as working 35 hours or less. For this variable, the contractual hours that respondents reported is used. Based on the division proposed by Beham, Präg & Drobnič (2012), we divide part-time work in short part-time work (24 hours or less) and

long part-time work (25 till 35 hours). Full-time work (36 hours or more) will be used as the reference category.

Flexible working hours is measured with the question ‘How much freedom do you have in choosing your own working times?’ to which respondents could answer on a 4-point scale from ‘1. A lot of freedom’ to ‘4. No freedom’. In order to analyse the differences between groups, a one-way ANOVA test is performed. This test shows that there is significant difference between the 4 groups of answers ( $F(3, 1864) = 7,008, p < .001$ ). A Tukey post hoc test revealed that there is a significant difference in life satisfaction of people who have ‘1. a lot of freedom’ in choosing their working hours compared to people who have ‘2. quite some freedom’ ( $15,39 \pm 2,25, p = 0.017$ ), people who have ‘3. some freedom’ ( $15,33 \pm 2,37, p = 0,005$ ) and people who have ‘4. no freedom’ ( $15,23 \pm 2,54, p < 0,001$ ). Comparing ‘2. quite some freedom’ with ‘3. some freedom’ ( $p = 0,987$ ) and with ‘4. no freedom’ ( $p = 0,735$ ) does not give any significant differences, and likewise the comparison between ‘3. some freedom’ and ‘4. no freedom’ ( $p = 0,912$ ). So, other than theory suggested, we decided to recode the variable flexible working hours into a dummy variable in which the answers ‘quite some freedom’, ‘some freedom’ and ‘no freedom’ will get the value 0 and ‘a lot of freedom’ will get the value 1.

#### *Non-work-related factors*

As theory showed that having children under the age of 4 creates the most tension between roles, the question ‘What is the age of your first child at date of interview?’ (continuing up the age of the 8<sup>th</sup> child) is used to make this division. Looking at the data, some outliers can be detected. As the eldest respondent participating in the survey is 47, a first child with the age of 50 is technically impossible. Therefore, this value is reported as a missing value. For the second child, the highest value is 48, followed up with 30. Although 30 is doubtful, we decided to keep this one in the data and report 48 as missing value. The variable with the age of the 3<sup>th</sup> child contains the values 37 and 40 which are reported as missing, and so is the age of 38 for the 4<sup>th</sup> child. For the rest of the variables there are no values that might be incorrect. The respondents who have children in the age of 0 till 4 are given the value 1, and respondents who do not have any children or children above the age of 4 are given the value 0.

For the variable marriage a dummy variable is created with respondents who do not have a partner or are not married are given the value 0, and people who answered ‘yes’ to the question ‘Are you married to your partner?’ are given the value 1.

### Mediating variable

The mediating variable work-life balance is measured with the question ‘Grade: the balance between work and family (if you have children living at home)’ with 1 being the lowest mark and 10 being the highest.

### Control variables

In this research we will control for gender, age and level of education.

There are several reasons to believe that the effects aimed for at this research are different for men and women. Traditional ideas about the division in care and work might still be in place, resulting in women carrying a larger responsibility in taking care for children and doing the household (Peters et al, 2008). Therefore, we add a dummy variable gender (1 = female) as a control variable in order to see if the effect changes when gender comes in.

As age is shown to be a predictor of life satisfaction and happiness, in which younger people to be happier than elderly, we take this variable in as control (Vanassche et al, 2013). Age is measured with the variable ‘Age at time of interview’. As described above, this research is targeted at people above the age of 18.

Level of education has shown inconclusive results. Whereas Haller and Hadler (2006) show no significant results of education on happiness and life satisfaction, Peters et al. (2008) show that higher educated people seem to have more conflicts between work and life. Therefore, it is interesting to control for education. The variable is measured according to the 12 categories of the stratified educational system in the Netherlands. For sake of interpretation this variable is recoded into a continuous variable ranging from ‘0: no education/did not complete elementary school’ to ‘11: PhD’. Respondents who have finished a grade outside of The Netherlands with a degree that is not related to our educational system are given a missing value, due to the fact that it is not able to allocate them to a category.

Based on the methods described above, we can conclude that we are only able to measure time-based-conflict in this research. The data is, unfortunately, not suitable to measure strain-based-conflict as it does not go into detail about stress related factors.

### Analytic strategy

To formulate an answer to the research question, multiple regression analysis is used. Therefore, we need to check our data for normality, homoscedasticity and absence of multicollinearity. A P-P plot for our model suggests that the assumption of normality of the residuals might be violated. However, as only extreme deviations might have an impact on the

results, the results can be interpreted without problems. The homoscedasticity assumption has been met, as the plot shows no obvious signs of funneling. Analysis of the collinearity statistics show that this assumption has been met, as the VIF values are all below 10 and the tolerance well above .200.

In order to test if work-life-balance operates as a mediating variable in the relation between work- and non-work factors and life satisfaction, several models are tested. In the first model, we analyze whether there is a relation between the work and non-work factors and life satisfaction. In the second model we add the control variables to see if they affect this relation. In the third model we test the independent on our mediating variable work-life-balance and in the fourth model we add the control variables again. In the fifth model we test our model 1 again but with inclusion of our mediating variable, to see whether the variable mediates the direct relation. In the sixth and final model we add the control variables again.

## Results

This chapter will first discuss the data used for analysis, followed by the explanatory results per group of hypotheses.

### Data description

Table 1 gives an overview of the descriptive statistics of the variables. The data consists of in total 1048 respondents, with 515 men and 534 women. The mean score on life satisfaction is 15.657 on a scale of 4 till 20. There is no significant difference in the score between men and women. Looking at the work-related-factors, we see that respondents on average work 3.817 hours extra than contracted. Men work significantly more hours overtime than women (5.419 vs 2.271). Part-time work is divided in short- and long part-time work. In total, 31.5% of the people work short part-time. Men significantly work less short part-time than women (3.8% vs 58.2%) and also significantly less long part-time (8.5% vs 26.6%). This is line with the division on the Dutch labor market and is consistent with the literature which states that women tend to choose more for working part-time than men (Merens & Bucx, 2018; Gregory & Connolly, 2008). The non-work-related factors show that about 29% of the respondents have children in the age of 0 till 4, and that there is no difference between men and women. We can see that about 66% of our respondents is married, which is slightly higher compared to the 45% of the total Dutch population in 2009 (CBS, 2019). Respondents rate their work-life-balance with an average of 7.38. We can see that women report a significant higher work-life-balance than men. Furthermore, looking at the control variables, we see that the division of men and women is about 50/50 and the average finished education is an MBO-education. This is in line with the Dutch population (SCP, 2018; CBS, 2019).

### Analysis

Table 2 gives an overview of the results of the various models we tested. The results are given per group of hypotheses.

#### *Working overtime*

The first set of hypotheses contain working overtime. The first hypothesis, 1a stating ‘more hours worked overtime results in a lower life satisfaction’ is rejected as we find no significant results ( $b = .009$ ,  $p = .405$ ). Hypothesis 1b stated that ‘More hours worked overtime leads to a lower work-life-balance’. The analysis shows a significant small negative relation between



working overtime and work-life-balance ( $b = -.019$ ,  $p = .001$ ) and therefore this hypothesis is accepted.

Table 1 – Descriptive statistics by gender and T-test (SD)

Variable name	Range	Mean Total (N = 1048)	Mean Men (N = 515)	Mean Women (N = 534)	Mean Difference (T-test)
<b>Dependent variable</b>					
Life satisfaction	4 – 20	15.657 (2.312)	15,571 (2,245)	15,740 (2,374)	-0,169
<b>Independent variables</b>					
<i>Work-related factors</i>					
Overwork	0 – 79	3,817 (7,044)	5,419 (8,332)	2,271 (5,073)	3,148***
Flexible working hours	0 - 1	0,282	0,290	0,275	0,015
Short part-time (0-24 h/pw)	0 - 1	0,315	0,038	0,582	-,544***
Long part-time (25-25 h/pw)	0 - 1	0,177	0,085	0,266	-,181***
<i>Non-work-related factors</i>					
Having kids under 4 years old	0 - 1	0,291	0,311	0,275	0,038
Married	0 - 1	0,664	0,691	0,639	0,052
<b>Mediating variable</b>					
Work-life balance	1 -10	7,38 (1,289)	7,29 (1,256)	7,48 (1,315)	-,189*
<b>Control variables</b>					
Gender	0 - 1	0,509	-	-	-
Educational level	0 - 10	5,578 (2,321)	5,593 (2,429)	5,563 (2,213)	0,030
Age	18 - 49	36,05 (6,156)	36,53 (6,089)	35,59 (6,190)	0,942*

\*  $p < 0,05$ , \*\*  $p < 0,01$ , \*\*\*  $p < 0,001$

The last hypothesis, 1c, stated that ‘More hours worked overtime leads to a lower work-life-balance, which in turns leads to a lower life satisfaction’. This hypothesis is rejected, as we find a positive relation between working overtime and life satisfaction when adding work-life-balance ( $b = 0.021$ ,  $p = 0.028$ ). Work-life-balance can, in this case, be seen as a suppressor variable. A suppression variable is defined as “a variable which increases the predictive validity of another variable (or set of variables) by its inclusion in a regression equation” (Conger, 1974, p 36-37). By including work-life-balance into the model, the magnitude of the relationship between working overtime and life satisfaction changes. A reason for this can be found in the fact that working overtime is correlated with work-life-balance ( $-.107^{***}$ , see Appendix A). Therefore, we have to be careful with interpreting this result.

### *Flexible working hours*

Hypothesis 2a stated that ‘a higher degree of flexible working hours leads to a higher life satisfaction’. We find a large positive effect of flexible working hours on life satisfaction ( $b =$

.573,  $p < .001$ ) and therefore we accept this hypothesis. Hypothesis 2b stated that ‘a higher degree of flexible working hours leads to a higher work-life-balance’ and this hypothesis is accepted too, as we find a medium positive relation between flexible working hours and work-life-balance ( $b = .251$ ,  $p = .004$ ). The last hypothesis, 2c, stated that ‘a higher degree of flexible working hours leads to a higher work-life-balance, which in turn leads to a higher life satisfaction’. With inclusion of work-life-balance we still find a large positive effect between flexible working hours and life satisfaction ( $b = .407$ ,  $p = .005$ ), and therefore we accept hypothesis 2c.

As all relations are significant and the effect of flexible working hours on life satisfaction is decreased by adding work-life-balance to the model, mediation can be expected. The direct effect of flexible working hours is large ( $b = .407$ ), whereas the indirect effect via work-life-balance can be seen as a medium effect ( $b = .166$ ). A Sobel test was conducted to check the significance of the indirect effect. The test found a significant partial mediation in the model ( $z = 2.012$ ,  $p = .044$ ).

#### *Working part-time*

Hypothesis 3a states that ‘working part-time leads to a lower life satisfaction’. This hypothesis is, for both short part-time ( $b = .216$ ,  $p = .340$ ) and long part-time ( $b = -.055$ ,  $p = .811$ ), rejected as we find no significant results. The second hypothesis, H3b, states that ‘working part-time leads to a higher work-life-balance’. We find a large positive result of working short part-time on work-life-balance compared to the reference category full-time ( $b = .695$ ,  $p < .001$ ), but no significant results for working long part-time on work-life-balance. Therefore, hypothesis 3b is partially accepted. Hypothesis 3c, which states that ‘working part-time leads to a higher work-life-balance, which in turn leads to a higher life satisfaction’, is rejected as we cannot find any significant results of working part-time short ( $b = -.242$ ,  $p = .257$ ) or long ( $b = -.191$ ,  $p = .371$ ) on life satisfaction when adding work-life-balance.

#### *Children (under 4 years old)*

Moving towards non-work-related factors, hypothesis 4a stated that ‘having children results in a higher life satisfaction’. We find a large positive relation between having children and life satisfaction ( $b = .567$ ,  $p = 0.001$ ), so therefore we can accept hypothesis 4a. Hypothesis 4b stating that ‘having children lowers the work-life-balance’ is rejected as we find no significant result for this relation ( $b = .152$ ,  $p = .110$ ). The third hypothesis, 4c, stated that ‘Having children

Table 2 – The relation between work and non-work factors and life satisfaction, with mediation of work-life-balance

	Life satisfaction			Work-life-balance			Life satisfaction		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6			
<b>Work related factors</b>	B SE	B SE	B SE	B SE	B SE	B SE			
Working over hours	.009 (.010)	.008 (.010)	<b>-.017**</b> (.006)	<b>-.019**</b> (.006)	<b>.019*</b> (.009)	<b>.021*</b> (.009)			
Flexible working hours	<b>.650***</b> (.155)	<b>.573***</b> (.155)	<b>.212*</b> (.087)	<b>.251**</b> (.087)	<b>.519***</b> (.146)	<b>.407**</b> (.145)			
Part-time (0-24 h/pw)	.288 (.160)	.216 (.227)	<b>.505***</b> (.089)	<b>.695***</b> (.127)	-.024 (.152)	-.242 (.214)			
Part-time (25-35 h/pw)	.105 (.195)	-.055 (.229)	.018 (.109)	.206 (.128)	.094 (.183)	-.191 (.214)			
<b>Non-work-related factors</b>									
Having children under 4 years old	<b>.723***</b> (.154)	<b>.567**</b> (.169)	.113 (.086)	.152 (.095)	<b>.653***</b> (.144)	<b>.467*</b> (.158)			
Married	<b>.639***</b> (.148)	<b>.688***</b> (.151)	<b>.177*</b> (.083)	.153 (.084)	<b>.530***</b> (.140)	<b>.587***</b> (.141)			
<b>Mediating variable</b>									
Work-life-balance	X X	X X	X X	X X	<b>.618***</b> (.052)	<b>.660**</b> (.052)			
<b>Control variables</b>									
Gender	X X	.143 (.210)	X X	<b>-.266*</b> (.117)	X X	.318 (.195)			
Educational level	X X	<b>.139***</b> (.030)	X X	<b>-.057**</b> (.017)	X X	<b>.177***</b> (.028)			
Age	X X	-.017 (.013)	X X	.004 (.007)	X X	-.019 (.012)			
Constant	14.695*** (.164)	14.540*** (.520)	7.076*** (.091)	6.965*** (.314)	10.322*** (.400)	9.723*** (.613)			
R square	.053	.075	.054	0.70	.166	.201			

\* p < 0,05, \*\* p < 0,01, \*\*\* p < 0,001. X is not taken into the analysis

lowers the work-life-balance, which in turn leads to a lower life satisfaction'. Analysis shows a large positive result of having children on life satisfaction with addition of work-life-balance ( $b = .467, p = .003$ ). This is contradictory to our hypothesis, as we expected a negative relation. Therefore, we should reject hypothesis 4c.

### *Marriage*

Looking at marriage, we expected that 'marriage leads to a higher life satisfaction' (H5a). As we find a large positive result of marriage on life satisfaction ( $b = .688, p < .001$ ), we can accept this hypothesis. Hypothesis 5b stating 'marriage leads to a lower work-life-balance' is rejected, as we find no significant result ( $b = .153, p = .070$ ). The third hypothesis, 5c, stated that 'Married people have a lower work-life-balance, which in turn leads to a lower life satisfaction'. As we find a large positive relation between marriage and life satisfaction when taking work-life-balance into account ( $b = .587, p < .001$ ), we should reject this hypothesis. The result is contradictory to our expectation.

### *Control variables*

Looking at the control variables, we see that educational level has a positive significant effect on life satisfaction ( $b = .139, p < .001$ ). By adding the control variables in model 4, we see that marriage loses its significance. Gender and educational level are both negatively significant related to work-life-balance. This implies that women report a significantly lower work-life-balance than men, and that a higher educational level results in a lower work-life-balance. In model 6 we see that educational level has a significant positive effect on life satisfaction again ( $b = .177, p < .001$ ).

So, to summarize, for work-related-factors we can accept hypothesis 1b ('working overtime results in a lower work-life-balance') and the hypotheses concerning flexible working hours completely and hypothesis 3b partially ('working part-time increases work-life-balance'). Looking at non-work-related factors, we can accept the hypothesis 4a stating 'having children results in a higher life satisfaction' and hypothesis 5a stating 'married people report a higher life satisfaction than non-married people'. The rest of the hypotheses are rejected.

## **Conclusion and discussion**

Whereas many studies have the implicit assumption that a higher work-life-balance leads to more life satisfaction, this research disentangled these two concepts. By using the NELLS data from 2009 this research tried to answer the question '*How do work related factors and non-work-related factors influence life satisfaction, and what part of this relation is explained by the perceived work-life-balance?*'. The Role Strain Theory created by Greenhaus and Beutel (1985) was used to distinguish several work and non-work-related factors that influence the time- and strain-based conflict.

Our findings suggest that flexible working hours have a direct impact on life satisfaction for both men and women, and part of this relation is explained by the increased work-life-balance people experience. This indicates that having the freedom to choose your own working hours is a useful way to improve someone's work-life-balance, which in turn increases life satisfaction. Flexible working hours, as concluded by Carlson et al (2010), can be seen as a medium to ease time-based, and probably also strain-based-conflict. Whereas other work-related-factors, like working overtime and working part-time, might not be of choice for the employee because of the type of job or because of financial issues, flexible working hours make it possible to reduce the conflicts that arise. When it comes to other work-related-factors, we do find that working short part-time increases work-life-balance compared to working full time, as well as working overtime decreases work-life-balance, but no connection with life satisfaction is found. We can therefore not add to the discussion about the effect of working part-time on life satisfaction.

Turning to non-work-related factors, we found something different. What was expected, based on the Role Strain Theory, is that marriage and being a parent adds another role in life, which increases time-based-conflict and strain-based-conflict. Because of these increased conflicts, it would decrease work-life-balance and in turn decreases life satisfaction. However, we do not find any relation between marriage and children and work-life-balance. What we do find, is that marriage and being a parent increases life satisfaction in a direct way. Reasons for this increase can be that children, as suggested before, give meaning to people's life (Nelson et al, 2013) as well as marriage bringing an extra source of self-esteem and reduces suffering from loneliness (Stutzer & Frey, 2003). So, we can argue that time- and strain-based conflict are not present for non-work-related factors. Based on this point, it seems like the Role Strain Theory fails to explain the value that come along with marriage and children and their relation to work-life-

balance. As these non-work-related factors do not have influence on work-life-balance but do make people more satisfied with their lives, it can even be argued that being married and having children might reduce the potential conflicts and therefore increase life satisfaction. When parents get home from a long day at work to their family, it might be a release from the work-related stress, instead of the expected increased stress because of this other role. It is therefore suggested that the Role Strain Theory needs a little elaboration, in not only measuring the factors that increase stress, but also looking at factors that might reduce stress. However, this is still hypothetical and future research will need to find more evidence for this.

Looking at our research, we can say that the biggest limitation of this research is that it's main focus is on time-based-conflict. We decided to leave behaviour-based-conflict out, but the data used was not suitable to add strain-based-conflict. We were therefore not fully able to test the complete theory. It is arguable that for example working overtime or working full-time does not only give more problems with the division of time, but also increases strain-based-conflict due to the increased responsibilities and pressure that comes along. Therefore, it is suggested that future research will go more deeply into the underlying stress mechanisms that come along with work related factors. Furthermore, a limitation of the data is that we might experience selection effect. We were not able to rule the effect that people who experience a lower work-life-balance or lower life satisfaction choose to work part-time or get married for example, and therefore reports a higher work-life-balance in a later stadium. This limitation is good to keep in mind when analysing the results.

With this research, we added to the existing literature that it is important to take work-life-balance and life satisfaction as two separate concepts. We showed that we cannot implicitly assume that with a higher work-life-balance, we are likewise more satisfied with our life. The way in which we can affect both, is by giving people the opportunity to choose their own working hours. In this way people are better able to manage other roles, which are harder to change, at the same time. As preliminary research is showing that life satisfaction positively attributes to job performance, it is wise for (national) policy-makers and employers to focus on this aspect (Jones, 2006). Flexible working hours give people a tool to combine demanding jobs with other roles in life. Unfortunately, we were not able to measure everything properly and therefore more detailed data is needed on to get a complete picture of the situation. This data should reveal better what stress does to our perception of work-life-balance and life satisfaction, and how non-work-related factors might work as a stress relief instead of stress

gain. However, we can conclude that it is beneficial for society, as well as for families, to give people the opportunity to work flexible hours and to provide people with means to improve their balance between several roles that life gives.

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# Appendices

## Appendix 1 – Correlation table

Table 3 – Correlation matrix

Variable	Life sat.	Overtime	Flexible w.h.	Parttime S	Parttime L	Kids under 4	Marital stat.	WLB	Gender	Education	Age
1 Life satisfaction	1										
2 Working overtime	.025	1									
3 Flexible working hours	.122***	.077*	1								
4 Parttime small (0-24 h)	.049	-.094**	-.038	1							
5 Parttime big (25-35 h)	-.017	-.094**	-.019	-.314***	1						
6 Kids under 4 years	.133***	-.030	-.007	-.020	.010	1					
7 Marital status	.074*	-.005	-.027	-.006	.010	.108***	1				
8 Work-life-balance	.355***	-.107**	.058	.189***	-.050	.035	.058	1			
9 Gender	.037	-.223***	-.016	.586***	.237***	-.042	.002	.073*	1		
10 Educational level	.159***	.040	.118***	-.093**	.107**	.097**	.065*	-.109***	-.006	1	
11 Age	-.064*	.007	.038	.015	-.009	-.422***	.223***	.025	-.077*	-.047	1

\* p < 0,05, \*\* p < 0,01, \*\*\* p < 0,001

## Appendix 2 – Syntax

### \* Syntax Master Thesis

\* In order to have a representative distribution of ethnicity, the weight variable is used.

```
WEIGHT BY w1cweight2.
```

\* Filter by age above 18 and not in education.

```
FREQUENCIES
```

```
w1cage
```

```
w1fa22 .
```

```
FREQUENCIES w1cage .
```

```
RENAME VARIABLES (w1cage = age) .
```

```
FREQUENCIES age .
```

```
COMPUTE filt_1 = 0 .
```

```
IF (age > 17 AND w1fa22 = 3 ) filt_1 = 1 .
```

```
FREQUENCIES filt_1 .
```

```
VARIABLE LABELS filt_1 'Filter age over 18 and not in school' .
```

```
FILTER by filt_1 .
```

\*Life satisfaction

```
FREQUENCIES
```

```
w1sca3a
```

```
w1sca3b
```

```
w1sca3c
```

```
w1sca3d.
```

```
RENAME VARIABLES (w1sca3a = lifesat1a) (w1sca3b = lifesat2a) (w1sca3c = lifesat3a)  
(w1sca3d = lifesat4a) .
```

\* recode variables so that a higher mark means more satisfied with life

```
RECODE lifesat1a (1=5) (2 = 4) (3 = 3) (4 = 2) (5 = 1) (SYSMIS = SYSMIS) INTO lifesat1 .  
FREQUENCIES lifesat1 .
```

```
RECODE lifesat2a (1=5) (2 = 4) (3 = 3) (4 = 2) (5 = 1) (SYSMIS = SYSMIS) INTO lifesat2 .  
FREQUENCIES lifesat2.
```

```
RECODE lifesat3a (1=5) (2 = 4) (3 = 3) (4 = 2) (5 = 1) (SYSMIS = SYSMIS) INTO lifesat3 .  
FREQUENCIES lifesat3.
```

```
RECODE lifesat4a (1=5) (2 = 4) (3 = 3) (4 = 2) (5 = 1) (SYSMIS = SYSMIS) INTO lifesat4 .  
FREQUENCIES lifesat4.
```

## FACTOR

```
/VARIABLES lifesat1 lifesat2 lifesat3 lifesat4  
/MISSING LISTWISE  
/ANALYSIS lifesat1 lifesat2 lifesat3 lifesat4  
/PRINT INITIAL EXTRACTION  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/ROTATION NOROTATE  
/METHOD=CORRELATION.
```

\* factor analysis shows one factor.

```
COMPUTE filterlife = nmis(lifesat1, lifesat2, lifesat3, lifesat4) .  
FREQUENCIES filterlife .  
TEMPORARY .  
SELECT IF filterlife = 0.
```

## RELIABILITY

```
/VARIABLES=lifesat1 lifesat2 lifesat3 lifesat4  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/SUMMARY=TOTAL.
```

\* Cronbach alpha of .861, which is an acceptable scale. We can therefore compute the variable life satisfaction.

```
COMPUTE lifesat = lifesat1 + lifesat2 + lifesat3 + lifesat4 .  
EXECUTE .
```

```
FREQUENCIES lifesat .  
DESCRIPTIVES lifesat .
```

\* How many contractual hours.

```
FREQUENCIES w1fa46 .  
DESCRIPTIVES w1fa46 .
```

\* How many real hours?.

```
FREQUENCIES w1fa47 .  
DESCRIPTIVES w1fa47 .
```

```
RENAME VARIABLES (w1fa46 = contracthours) (w1fa47 = realhours) .
```

```
frequencies contracthours  
/format notable  
/histogram.  
FREQUENCIES contracthours .
```

```
frequencies realhours  
/format notable  
/histogram.  
FREQUENCIES realhours .
```

\* To measure overtime, contractual hours are subtracted from real hours.

```
COMPUTE overwork1 = realhours - contracthours .
```

```
FREQUENCIES overwork1 .
```

\* there are variables with a negative number. As they do not work any hours extra, they are recoded into

```
RECODE overwork1 (-45 THRU 0 = 0) (ELSE = COPY) INTO overwork.
```

```
FREQUENCIES overwork .
```

```
COMPUTE overwork2 = SQRT(overwork) .
```

```
FREQUENCIES overwork2 .
```

```
COMPUTE overworkdum = 99999 .
```

```
IF (overwork = 0) overworkdum = 0.
```

```
IF (overwork >= 1) overworkdum = 1.
```

```
FREQUENCIES overworkdum .
```

```
MISSING VALUES overworkdum (99999) .
```

```
FREQUENCIES overworkdum .
```

\* Working parttime vs fulltime is on the boundary of 35 hours according to CBS.

```
FREQUENCIES contracthours .
```

```
RECODE contracthours (0 THRU 35 = 1) (36 thru HIGHEST = 0) (SYSMIS = SYSMIS)  
INTO parttime .
```

```
FREQUENCIES parttime .
```

```
RECODE contracthours (0 THRU 24 = 1) (25 THRU 34 = 2) (35 THRU HIGHEST = 3)  
INTO parttime2 .
```

```
FREQUENCIES parttime2.
```

```
COMPUTE partsmall = 0.
```

```
IF (parttime2 = 1) partsmall = 1.
```

```
COMPUTE partbig = 0 .
```

```
IF (parttime2 = 2) partbig = 1 .
```

```
RECODE contracthours (0 THRU 35 = 0) (36 thru HIGHEST = 1) (SYSMIS = SYSMIS)  
INTO fulltime .
```

```
FREQUENCIES fulltime .
```

\* Flexible working hours.

```
FREQUENCIES w1fa50 .
```

\* Ordinal variable so an ANOVA is performed to see the differences between the groups.

```
ONEWAY lifesat BY w1fa50
```

```
/STATISTICS DESCRIPTIVES HOMOGENEITY
```

/MISSING ANALYSIS  
/POSTHOC=TUKEY ALPHA(0.05).

\* Only 'a lot of freedom' differs significantly so variable is recoded into dummy with the other 3 as 0.

RECODE w1fa50 (1 =1) (2 3 4 = 0) INTO flexworkdum .  
FREQUENCIES flexworkdum .

FREQUENCIES w1fe1.  
RECODE w1fe1 (1=1) (2=0) (SYSMIS = SYSMIS) INTO children .  
FREQUENCIES children.

\*First check the age of the respondents to see if the age of children is possible or if there are any outliers.  
FREQUENCIES age .

\*Age of children.  
FREQUENCIES w1cagekid01 .  
MISSING VALUES w1cagekid01 (50 56) .

FREQUENCIES w1cagekid02 .  
MISSING VALUES w1cagekid02 (48 40 33) .

FREQUENCIES w1cagekid03 .  
MISSING VALUES w1cagekid03 (37, 41, 31) .

FREQUENCIES w1cagekid04 .  
MISSING VALUES w1cagekid04 (38) .

FREQUENCIES w1cagekid05 .  
FREQUENCIES w1cagekid06 .  
FREQUENCIES w1cagekid07 .  
FREQUENCIES w1cagekid08 .  
FREQUENCIES w1cagekid09 .

COMPUTE kidunder4 = 999.  
IF (w1cagekid01 < 5 OR w1cagekid02 < 5 OR w1cagekid03 < 5 OR w1cagekid04 < 5 OR  
w1cagekid05 < 5 OR w1cagekid06 < 5 OR w1cagekid07 < 5 OR w1cagekid08 < 5)  
kidunder4 = 1 .  
IF (w1cagekid01 > 4 OR w1cagekid02 > 4 OR w1cagekid03 > 4 OR w1cagekid04 > 4 OR  
w1cagekid05 > 4 OR w1cagekid06 > 4 OR w1cagekid07 > 4 OR w1cagekid08 > 4)  
kidunder4 = 0 .  
IF (children = 0) kidunder4 = 0 .

FREQUENCIES kidunder4 .  
MISSING VALUES kidunder4 (999) .  
FREQUENCIES kidunder4 .

\*Marriage

FREQUENCIES w1fb1 .  
FREQUENCIES w1fb8 .  
FREQUENCIES w1fb10 .

COMPUTE married = 99999.  
IF (w1fb1 = 2) married = 0 .  
IF (w1fb10 = 2) married = 0 .  
IF (w1fb10 = 1) married = 1 .  
FREQUENCIES married .  
MISSING VALUES married (99999) .

\* work life balance

FREQUENCIES w1sca4f .

RENAME VARIABLES w1sca4f = wlbalance .  
DESCRIPTIVES wlbalance .

\* Control variables

\* Age

\* Renamed above \*

\* Gender: female

FREQUENCIES w1csex .  
RECODE w1csex (1 = 0) (2 = 1) INTO female .  
FREQUENCIES female .

\* Level of education

FREQUENCIES

w1fa23b02  
w1fa23b03  
w1fa23b04  
w1fa23b05  
w1fa23b06  
w1fa23b07  
w1fa23b08  
w1fa23b09  
w1fa23b10  
w1fa23b11  
w1fa23b12 .

FREQUENCIES w1fa23b13 w1fa23b14 w1fa23b15 .

COMPUTE education = 99999 .  
IF (w1fa23b02 = 2) education = 0 .  
IF (w1fa23b03 = 1) education = 1 .



```
IF (w1fa23b04 = 1) education = 2 .
IF (w1fa23b05 = 1) education = 3 .
IF (w1fa23b06 = 1) education = 4 .
IF (w1fa23b07 = 1) education = 5 .
IF (w1fa23b08 = 1) education = 6 .
IF (w1fa23b09 = 1) education = 7 .
IF (w1fa23b10 = 1) education = 8 .
IF (w1fa23b11 = 1) education = 9 .
IF (w1fa23b12 = 1) education = 10 .
```

```
FREQUENCIES education .
```

\* there are some respondents who can't be given a value due to the fact that they completed a degree in a foreign country.

\* these are given a missing value.

```
FREQUENCIES w1fa23b13 w1fa23b14 w1fa23b15 .
```

```
MISSING VALUES education (99999) .
```

```
FREQUENCIES education .
```

```
COMPUTE filter = nmis (lifesat, overwork, parttime, flexworkdum, children, kidunder4,
married, wbalance, education, age, female) .
```

```
FREQUENCIES filter .
```

```
RECODE filter (0 = 1) (1 THRU 7 = 0) INTO filter1 .
```

```
FREQUENCIES filter1 .
```

```
SELECT IF filter1 = 1 .
```

```
DESCRIPTIVES lifesat, overwork, partsmall, partbig, flexworkdum, kidunder4, married,
wbalance, education, age, female .
```

```
TEMPORARY .
```

```
SELECT IF female = 0 .
```

```
DESCRIPTIVES lifesat, overwork, partsmall, partbig, flexworkdum, kidunder4, married,
wbalance, education, age, female, income .
```

```
TEMPORARY .
```

```
SELECT IF female = 1 .
```

```
DESCRIPTIVES lifesat, overwork, partsmall, partbig, flexworkdum, kidunder4, married,
wbalance, education, age, female, income .
```

```
T-TEST GROUPS=female(0 1)
```

```
  /MISSING=ANALYSIS
```

```
  /VARIABLES=lifesat overwork flexworkdum partsmall partbig kidunder4 married
  education age income
```

```
  /CRITERIA=CI(.95).
```

```
CORRELATIONS
```

```
  /VARIABLES=lifesat overwork flexworkdum partsmall partbig kidunder4 married
  wbalance female
```

```
  education age
```

```
  /PRINT=TWOTAIL NOSIG
```

/MISSING=PAIRWISE.

#### CORRELATIONS

/VARIABLES=lifesat overwork flexworkdum partsmall partbig kidunder4 marital  
wbalance female  
education ethnic  
/PRINT=TWOTAIL NOSIG  
/MISSING=PAIRWISE.

\* Factor analysis to see whether the variables on work can be a construct

#### FACTOR

/VARIABLES overwork fulltime flexworkdum  
/MISSING LISTWISE  
/ANALYSIS overwork fulltime flexworkdum  
/PRINT INITIAL CORRELATION EXTRACTION ROTATION  
/PLOT EIGEN  
/CRITERIA MINEIGEN(1) ITERATE(25)  
/EXTRACTION PC  
/CRITERIA ITERATE(25)  
/ROTATION VARIMAX  
/METHOD=CORRELATION.

\* Although the variables load on 1 factor, we see that by looking at the communalities none of the variables load strongly on the component.

\* Check normality

#### REGRESSION

/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT lifesat  
/METHOD=ENTER overwork flexworkdum partsmall partbig married kidunder4 female  
education age  
/SCATTERPLOT=(\*ZRESID , \*ZPRED)  
/RESIDUALS NORMPROB(ZRESID).

\* First model: independent on life satisfaction without and with control variables

#### REGRESSION

/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT lifesat  
/METHOD=ENTER overwork flexworkdum partsmall partbig kidunder4 married .

#### REGRESSION

```
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT lifesat
/METHOD=ENTER overwork flexworkdum partsmall partbig kidunder4 married female
education age .
```

\* Second model: independent on work lifebalance, without and with control variables.

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT wlbalance
/METHOD=ENTER overwork flexworkdum partsmall partbig kidunder4 married .
```

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT wlbalance
/METHOD=ENTER overwork flexworkdum partsmall partbig kidunder4 married female
education age .
```

\* Third model: independent variables and work life balance on life satisfaction, without and with control variables.

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT lifesat
/METHOD=ENTER overwork flexworkdum partsmall partbig kidunder4 married wlbalance
.
```

```
REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT lifesat
/METHOD=ENTER overwork flexworkdum partsmall partbig kidunder4 married wlbalance
female education age .
```