

Flexible Contract? Think Twice

The By-products of Flexible Contracts and their Interpersonal Differences

Max J. Steeman*

8 December 2019

Abstract

Statistics show that over the last decades, the portion of flex workers in the Netherlands has grown quite substantially. Between 2001 and 2011 e.g., the share of flex workers grew from 13 to 18 percent. As on the one hand, this development is perceived as favourable due to the increase in employment opportunities, policymakers have concerns regarding the by-products of flexible working contracts such as the implications regarding employee health, perceived job security and job satisfaction. As previous research has already provided some insights on these matters, this paper empirically extends this literature on these insights by broadening the view of by-products as well as providing empirical evidence for the Netherlands on these by-products. Moreover, this paper sheds the first light on interpersonal differences in the effects of flexible working contracts using the personality traits neuroticism, confidence and extraversion. The results from this paper indicate that the type of contract does affect the level of job satisfaction and that people with high levels of the personality traits neuroticism and confidence perceive flexible working contracts in terms of job satisfaction differently.

Keywords: Flexible working contracts, job satisfaction, Big Five, personality traits, employee health, employee well-being, perceived job security

JEL Codes: M12, M51

* A master thesis submitted in partial fulfilment of the requirements for the degree of Master of Science (Economics and Business: Economics of Management and Organisation) at the Erasmus School of Economics, Erasmus University. Student number: 484836. Supervisor: prof. dr. A.J. Dur.

1 Introduction

Statistics show that over the last decades, in the Netherlands, the number of flex workers, defined in this paper as workers having a temporary/non-permanent contract (Oorschot, 2004), has grown quite substantially. E.g. between 2001 and 2011, the share of flex workers grew from 13 to 18 percent. Moreover, this change seems to be particularly visible amongst young people, as the share of flex workers in the category of 15-25 years of age grew from 35% to 52% during the same time span. (Smits, 2012). The Netherlands in particular seem to have a leading position when it comes to flex workers in Europe (Corré & Sterk, 2018). As one might suggest that this modern adaption in personnel economics is economically favourable because it creates a lot of jobs and employment opportunities, thereby reducing the unemployment rate, it also brings along a number of questions on the by-products of this economic development.

This study relates to two bodies of literature. First of all, it relates to literature regarding the effects of flexible working contracts on the health and well-being of employees (e.g. Joyce et al., 2009), performance (e.g. De Menezes & Kelliher, 2011), its psychosocial effects (Janssen & Nachreiner, 2004) and job satisfaction (e.g. de Leeuw, 2016). While these studies find probable associations, none of these studies managed to find causal relationships between switching to a flexible working contract and the level of job satisfaction. Moreover, there has been substantial research on how personality traits in itself are related to job satisfaction (e.g. Furnham & Zacherl, 1986; Judge et al., 2002; Saari et al., 2004; Judge et al., 2006 and Furnham et al., 2009). Nonetheless, the literature still contains a gap when it comes to how different personality traits interact with flexible working contracts, in terms of affecting the level of job satisfaction. This paper therefore aims to extend the current literature on flexible working contracts and its by-products using the Dutch LISS panel data for the period of 2008-2017. Moreover, it tries to shed the first light on how different personality

traits affect the way in which people perceive flexible working contracts. The use of a panel dataset in this paper is quite unique (apart from de Leeuw, 2016). This enables the possibility of both worker and time fixed effects, which enhances the causality of the effect of switching to a flexible working contract on the level of job satisfaction.

This paper is organised as follows. Section 2 provides the theory for this study by discussing related literature and developing the hypotheses. Section 3 presents the data, section 4 covers the methodology, section 5 presents the results, provides robustness checks and discusses alternative explanations. Section 6 follows with the conclusions of this paper.

2 Theory

2.1 Literature Review

A lot of research has been done when it comes to flexible working contracts as it has become more and more popular throughout the last decade(s). For one thing, it is expected that in theory, these flexible working contracts would reduce the unemployment rate through increasing efficiency and competitiveness (Brewster et al., 1997). However, this is not always empirically supported. In the same study for example, it is stated that this is due to multiple reasons such as flexible working contracts possibly attracting a different workforce which would normally not have registered for work. The other side that has been a leading theme in this research is the influence of flexible working contracts on employees. Health, well-being, performance, family relations, perceived job security and job satisfaction are the most obvious associations to correlate with flexible working contracts and have been studied on an international basis (e.g. Joyce et al., 2009; Orpen, 1981; Boden, 1999; Dex & Scheibl, 2001; Härmä, 2004; Kelliher & Anderson, 2010; de Menezes & Kelliher, 2011; Crompton, 2002; Russel et al., 2009), including the Netherlands (de Leeuw, 2016). However, when it comes to an empirical analysis for the Netherlands, the leader in Europe regarding flexible contracts

(Corré & Sterk, 2018), apart from the study by de Leeuw (2016), not a lot of studies have focussed on the side effects of these contracts in the Netherlands yet. Therefore, it serves as a great opportunity to extend the current research on flexible working contracts. The recent study by de Leeuw (2016) did shed some light on the welfare effect of temporary work defined as the level of job satisfaction. Yet, it did not find statistically significant evidence for a causal relationship between flexible working contracts and the level of job satisfaction.

When it comes to an explanation of human (economic) behaviour and preferences, many economists and psychologists have extensively studied different possible determinants of heterogeneity in human behaviour (Becker et al., 2012). Using utility curves, risk preferences, game theory and many other approaches, many different theories have been developed. However, none of these approaches have managed to fully explain human (economic) behaviour. Mainly because most of these approaches rely on the assumption that humans are rational beings in their behaviour which de facto often is not the case. As this paper aims to shed light on how different people perceive and react to flexible working contracts, apart from characteristics and demographics, it is most logical to turn to the approach of personality traits. How can personality traits influence how employees perceive flexible working contracts? Again, within the approach of personality traits, many different models and methods are used to explain human (economic) behaviour. A lot of research regarding human behaviour (e.g. Goldberg, 1990, 1992; Gosling et al, 2003; John & Srivastava, 1999) has studied the Big Five personality traits (Extraversion, Emotional Stability, Agreeableness, Conscientiousness, and Openness to Experience) and their relation with job performance (i.a. Barrick & Mount, 1991, 1993; Hurtz & Donovan, 2000; Rothmann & Coetzer, 2003). However, there seems to be a gap in the literature on the influence of different personality traits such as those used in the Big Five regarding the perception and effect of flexible contracts. As the Big Five, also known as the Five Factor Model (FFM), has been criticised for not being able to fully capture relationships

between personality and outcomes (Borghans et al., 2008) and doesn't seem to capture the personality traits that interact with flex contract on the level of job satisfaction, this study takes a closer look at alternative personality traits (and measures). Nonetheless, the Five Factor Model suits as a partial approach and robustness check for this paper as it fits with the LISS panel dataset, because of the availability of variables used to construct the Big Five Factor Markers model by Goldberg (1992) by means of the International Personality Item Pool (IPIP) Multi Construct Inventory on Personalities.

2.2 Hypotheses

Many studies have looked at the relations between (Big Five) personality traits and associated differences in risk preferences (e.g. Soane & Chmiel, 2005), wage gaps (e.g. Brenzel & Laible, 2016) or positive mental health and psychopathology (Lamers et al., 2012). Yet, the study of Furnham & Zacherl (1986) was one of the first to relate personality traits to levels of job satisfaction using the P-E-N model (psychoticism, extraversion and neuroticism), as in Eysenck & Eysenck (1977), in a research group of computer employees. It was found that extraversion correlated positively with job satisfaction and that neuroticism and psychoticism at times were negatively related to job satisfaction. Costa & McCrae (1992) argue however that the trait psychoticism is too heterogeneous to be taken as a single trait and that both the traits agreeableness and conscientiousness should be used instead, which eventually led to the development of the Five Factor Model. Judge et al. (2000) find that core-self evaluations of self-esteem, generalized self-efficacy, locus of control and low neuroticism have significant relationships with job satisfaction. Moreover, Judge et al. (2002) find that the traits Neuroticism and Extraversion have respectively, negative and positive relationships with the level of job satisfaction. Alongside the Hertzberg's growth factors (as in Herzberg (1968)), Furnham et al. (2012) investigate how the Big Five personality traits affect job satisfaction, but are not able to

find many significant relationships which may be due to their small experimental sample size of 202 full time employees. McCrea and Costa (1991) state that people with high levels of neuroticism are prone to negative perceptions and this is consequently negatively related to job satisfaction (e.g. Brief 1998; Spector 1997). Hence it is expected that neuroticism is negatively related to the case of flex contracts. This is because flexible working contracts are regarded as unstable: one does not know the duration of the employment and if, or what kind of following job one may expect. Therefore, people with high levels of neuroticism or also specified as emotional instable people, are expected to have lower levels of job satisfaction under flexible working contracts (H1). Next to this, job satisfaction is also expected to be affected by the amount of someone's self-esteem. People with high levels of self-esteem stay optimistic under a high probability of failure, which increases the probability of satisfaction through the likelihood of success enhanced by optimism (Dodgson & Wood, 1998). Moreover, Locke (1996) states that whether people have low or high self-esteem changes the perception on a challenging job in terms of an undeserved opportunity and probability of failure or something to benefit and learn from respectively. Furthermore, Korman's self-consistency theory (1970) supported by Tharenou (1979), states that higher self-esteem is accompanied by choosing a profession consistent with one's interests, thus leading to a higher level of job satisfaction. When it comes to self-efficacy, people who score high are expected to prevail and manage effectively in situations with high probabilities of failure (Gist & Mitchell, 1992). Therefore, they are likely to achieve something that leads to (job) satisfaction (Judge et al., 1997) and hence both self-esteem and self-efficacy transferred into a general measure of self-confidence are expected to have a positive relationship with job satisfaction (H2). Cooper and Payne (1967) in their study find that extraverted people on average have shorter periods of service than the more introverted and Costa, McCrea and Holland (1984) find strong positive correlations between extraversion and enterprising occupations (which are expected to occur more under

flex contracts). Moreover, through high affiliation, extraverted people “have warm and friendly feelings toward others, and place a high value on close interpersonal relationships ... enjoy the company of others, and are strongly motivated toward frequent social interaction” (Watson & Clark, 1997, p. 776). Furthermore, McCrea and Costa (1991), supported by Organ and Lingl (1995), argued and found that through means of motivational factors regarding the attainment of social affection, agreeableness is positively related to satisfaction and in turn to job satisfaction. Hence, when it comes to flex contracts, a positive relationship between the combination of agreeableness and extraversion with job satisfaction is expected (H3). While at first thought, one might expect that the Big Five personality trait “openness to experience” affects the perception of flexible working contracts in terms of job satisfaction, a closer look at the e.g. IPIP inventory reveals a different insight (table A2 in the appendix). Rather, openness to experience refers to concepts that are related to having the imagination on how things could be (Feist, 1998).

3 Data

The dataset used in this paper is the Dutch LISS panel (Longitudinal Internet Studies for the Social Sciences) which is the core element of the MESS project (Measurement and Experimentation in the Social Sciences) administered by CentERdata (Tilburg University, The Netherlands). It has currently been repeated yearly for 10 waves starting in 2008 for 4500 households consisting of 7000 individuals. More information about the LISS panel can be found at: www.lissdata.nl. For this study, a panel dataset is chosen to be able to control for time invariant differences. In order to create this panel dataset, the multiple waves (2008-2018) have been merged on the basis of the encrypted household member’s number. Secondly, the work and schooling questionnaire has been merged with the introductory questionnaire containing background information about the employee in order to control for worker fixed effects. Finally,

the dataset has been merged with the personality questionnaire in order to perform the second part of the analysis. After merging the different waves of surveys with a varying response rate, the sample holds 23,395 individuals. This is because throughout the 10-year sample period, the sample of individuals has slightly changed over time. Of those 23,395 individuals, there are 1,343 individuals who have switched between normal and flex contracts and 6,971 individuals who have retained either a normal or a flex contract throughout the whole period. This accounts for a total of 125,938 observations over time of which 11,441 concern observations by switchers and 42,691 for non-switchers and the rest for workers for whom there is no info available on a contract switch.

Table 1 panel A provides the summary statistics for the different characteristics and personality scores throughout the sample. As can be seen from the variables for age, contracted hours and desired working hours, there seems to occur some measurement error in these variables as it is unlikely that there are people having the age of 108 years old in the sample or people that have worked 168 hours per week. However, as it is impossible to set the boundary for which observations can or cannot be regarded as measurement errors, and since there are no substantial outliers, these observations have been accepted as noise and have not been excluded from the dataset. Moreover, table 1 states that 25.72% of the observations in the sample from 2008 to 2017 are classified as flexible working contracts resulting in 11,384 flex contract observations. This more or less corresponds with the actual working population distribution of the Netherlands, as the average percentage of flexible working contracts for the last decade has been 27.25% (CBS, 2018), thereby increasing the representativeness of the dataset. These simple statistics regarding the personality scores do not yet provide any insights about the distribution throughout the sample. Therefore, figure A1 in the appendix improves the comparison of the distribution and tails by mean-centring the personality scores and illustrating them in histograms.

Table 1: Descriptive statistics. Panel A describes the overall sample statistics. Panel B describes the statistics for the contract specifics.

<i>Panel A</i>					
VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
Age	60,539	48.86	17.50	15	108
Job satisfaction	36,798	7.406	1.563	0	10
Hours less worked due to children	4,080	11.37	6.973	0	40
Neuroticism score	38,798	-13.60	6.847	-38	2
Extraversion score	38,798	2.633	6.471	-20	20
Agreeableness score	38,798	14.74	5.023	-12	26
Conscientiousness score	38,798	13.07	5.313	-13	26
Openness score	38,798	19.39	4.450	-2	33
Flex	40,853	0.256	0.436	0	1
Mismatch between desired and contracted hours	32,740	7.181	9.938	0	128
Perceived Job (In)security (%)	24,871	17.88	26.43	0	100
Net income	118,158	1236.89	3902.10	0	346998
Log(wage)	83,425	7.188	0.753	0	12.75

<i>Panel B</i>		
	(1) N	(2) Percentage
Observations	125,976	100.00
Workers	24,395	100.00
Observations with contract info	44,268	100.00
Normal contract observations	32,884	74.28
Flex contract observations	11,384	25.72
Switches	1,768	100.00
Switches to a flex contract	835	47.22
Switches to a normal contract	933	52.77
Workers with contract info	8,314	100.00
Non-Switchers	6,971	83.85
Switchers	1,343	16.15
Switchers with contract info	1,343	100.00
Switchers to normal only	553	41.18
Switchers to flex only	460	34.25
Multiple time switchers	330	24.57

Panel B of Table 1 illustrates a break-down of the sample in terms of contract types and switchers. In total the sample consists of over 125 thousand observations distributed over more than 24 thousand individuals. However, when skimming the dataset for observations for which information on the contract type is available, just over 44 thousand observations remain, of which only around 25% concern individuals employed under a flex contract. Moreover, of the 8,314 employees on whom there is information regarding their contract, 16.15% appear to be switchers (either to a flex contract, a normal contract or back and forth). While there has been some discussion within academics on treating observations with missing data, this study adopts

the decision not to delete observations with missing data which is often done to have exactly the same observations in all the different regression models. The reason for doing so is, whilst it is not only discouraged by several studies regarding the problem (e.g. Nakagawa & Freckleton, 2008), mainly because this study takes several steps in uncovering the effect of flexible working contracts on the level of job satisfaction. One of the earlier procedures, for example, only involves the effect of flexible working contracts on job satisfaction while later procedures involve multiple controls as well as personality traits which are, as expected, less available. Hence, untimely deleting observations with missing observations on the latter variables would mean a sizeable drop in explanatory power of earlier analyses. E.g. dropping these observations would not only result in a decrease of 26,032 contract observations (which is nearly 60% of the original sample), it would also result in an immense drop of 8,732 important flex contract observations as well as a change in the composition of the sample as the percentage flex observations decreases from 25.72% to 14.28%.

Figure 1: Average level of job satisfaction over the years. This figure shows the volatility of the average level of job satisfaction over the years.

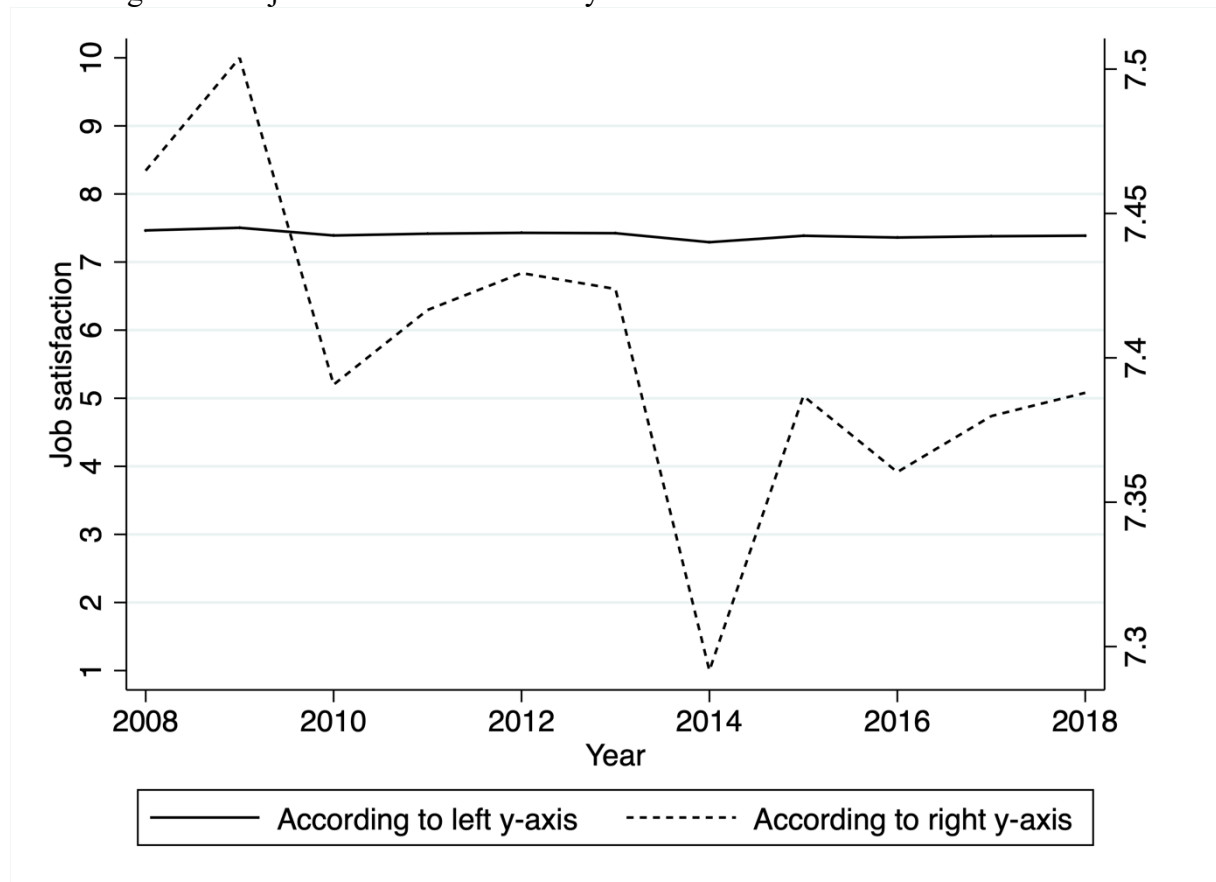
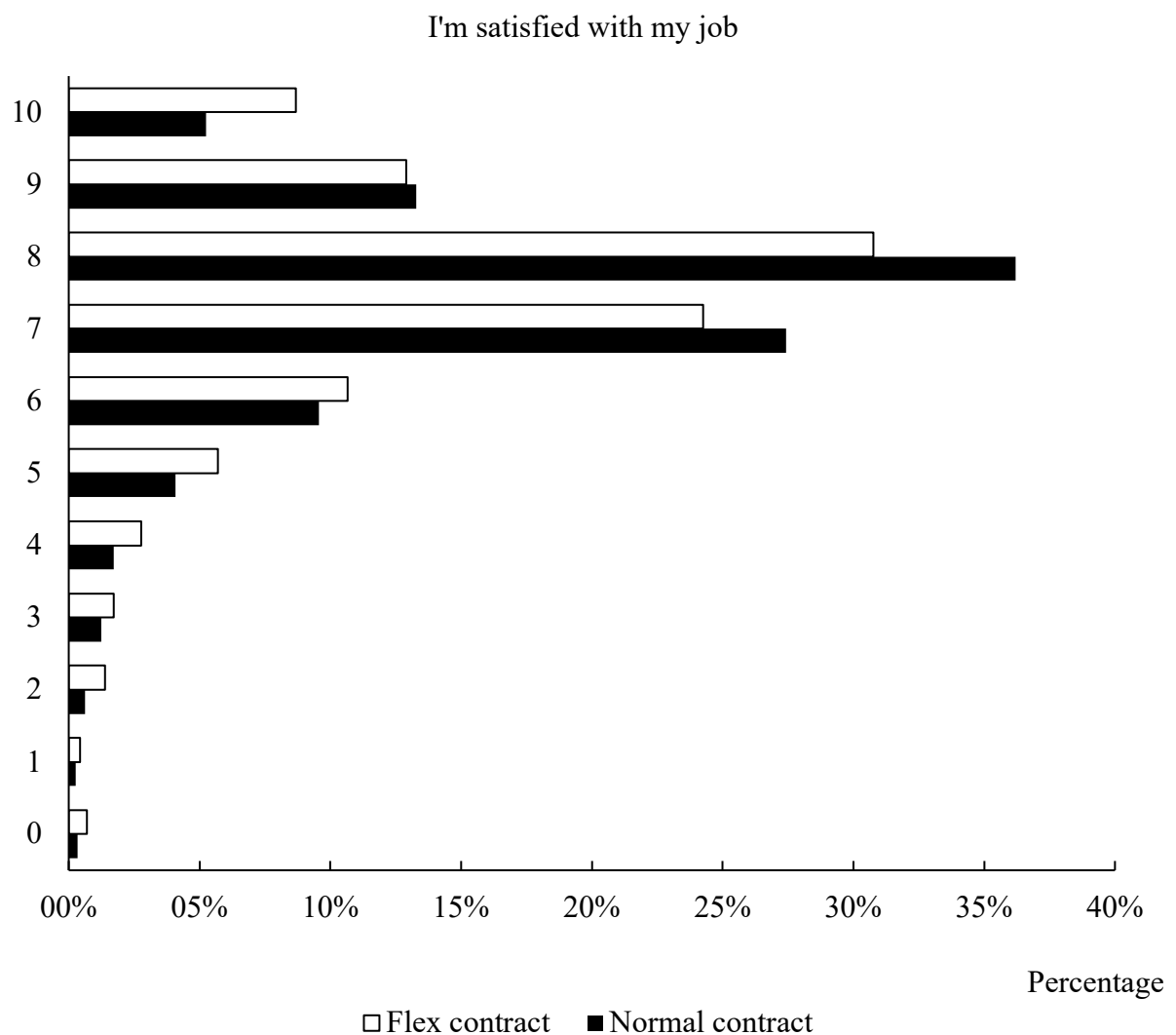


Figure 1 illustrates the average level of job satisfaction over the years throughout the sample. While the dashed line moves up and down quite much, which seems to provide some suspicion for a time trend, it stays within the interval of 7.3 to 7.5 (right y-axis). As can be seen from the solid line belonging to the left y-axis, the average level of job satisfaction throughout the sample remains stable over the years.

Table A1 in the appendix provides a summary report on the types of contracts observed in the dataset. As the aforementioned definition of flexible working contracts in this paper is a temporary/non-permanent contract (Oorschot, 2004), for the first analyses, the temporary employments, on-call employees, temp-staffers, self-employed and independent professionals are taken as flexible working contracts. Figure 2 provides the distribution of job satisfaction for the contract types using the abovementioned classification. The figure illustrates first of all, that the distribution of job satisfaction among the different contracts is quite the same. Secondly, it

is interesting to see that almost nobody is completely dissatisfied with their and that the vast majority of this sample (87.27% to 91.74%) gives a rating of 6 or higher to the level of job satisfaction.

Figure 2: Distribution job satisfaction per contract type



4 Methodology

As mentioned earlier, this paper extends the literature and evidence on the by-products of flexible working contracts in the Netherlands. As the main focus of this paper is the level of

job satisfaction as a by-product of a flex contract, the initial analyses are rather straightforward.

This leads to the following primary regression equation:

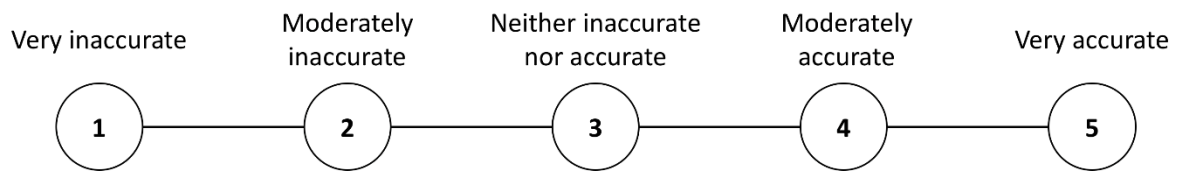
$$JS_{it} = \alpha + \lambda Y_{it}^d + \eta X_{it} + \mu_i + \tau_t + \varepsilon_{it} \quad (1)$$

Here the dependent variable JS_{it} is the level of job satisfaction for individual i at time t on a 1-4 scale as described in figure 1. Y_{it}^d is the dummy indicating whether someone is employed under a flexible working contract and therefore the main regressor of interest. X_{it} is a vector of control variables, μ_i are the worker fixed effects, τ_t the time fixed effects and ε_{it} is the error term.

For the second part of the analysis on the personality traits, the questionnaire on personality from the LISS panel had to be restructured into an inventory to be a valid measure of a personality trait that could affect job satisfaction through flexible working contracts. As also mentioned in the literature review, not all the Big Five personality traits are expected to influence how one perceives flex contracts in terms of job satisfaction. From the Big Five personality traits (Conscientiousness, Neuroticism, Extraversion, Agreeableness and Openness to Experience), Neuroticism and Agreeableness enter the regression models as variables of interest. Moreover, Extraversion enters the regression model as a control. Next to this, a new personality trait inventory regarding confidence is manually constructed as it is expected to influence on how one perceives flex contracts in terms of job satisfaction. Table A2 in the appendix provides insights on how these personality trait inventories are build up. Likewise, for the Big Five robustness analysis, Goldberg's (1992) Big-Five Factor Markers on a 10-item scale as measure for personality traits have been altered to suit this research. This is done by basing a personality value on different statements from the Big Five Inventories on which the respondents answer using a five-point Likert scale revealing how accurate this statement is to them. An example of this can be seen in figure 3. While the relation between self-esteem, self-efficacy and job satisfaction has been discussed in the prior literature review, the LISS panel

unfortunately doesn't provide the right survey questions to justify a difference between self-esteem and self-efficacy. Therefore, a measure of confidence which is expected to affect both self-esteem and self-efficacy is created and enters the regression analysis as a personality trait. The custom-made personality trait inventory for confidence itself is expected to be positively related to job satisfaction as well as an interaction term with flexible contracts (H2 adapted).

Figure 3: An example of a five-point Likert scale



Each personality trait variable in this analysis is created by summing the selected positive and negative keyed Likert scores and standardizing and centring these to a mean of zero as in equation (2) below.

$$\text{Standardized measure} = \frac{\text{score} - \text{mean score}}{\text{standard deviation score}} \quad (2)$$

This is done to be able to distinguish above- and below average score effects of certain personality traits and to improve the ease of comparing effects, by now comparing standard deviations instead of personality inventory scores which may be built upon different amounts of scores.

In order to test the aforementioned hypotheses on the personality traits, the following regression equations are formed:

$$JS_{it} = \alpha + \beta Y_{it}^d * \Pi_{it} + \lambda Y_{it}^d + \kappa \Pi_{it} + \eta X_{it} + \mu_i + \tau_t + \varepsilon_{it} \quad (3)$$

Here JS_{it} is the job satisfaction for individual i at time t . Y_{it}^d remains the dummy variable taking a value of 1 if the individual i is employed under a flexible working contract at time t . Π_{it} is a

vector of the customized personality traits neuroticism, confidence and extraversion. Both Υ_{it}^d and Π_{it} enter the regression equations separately as well as interaction terms but the separate personality traits will be omitted in regressions with worker fixed effects, as these are held constant throughout the time period. \mathbf{X}_{it} is a vector of control variables, μ_i are the worker fixed effects, τ_t the time fixed effects and ε_{it} is the error term. Each individual's personality traits have been measured several times and because there is supportive evidence (e.g. Roberts & DelVecchio, 2000) for the general view that personality traits are quite consistent over life course and that sudden changes are rare, the average values for these traits have been computed for each person and held constant. Moreover, this reduces the possible measurement error.

The vector of control variables (\mathbf{X}_{it}) used in the above-mentioned regression specifications includes inter alia whether an employee works part-time (<30 hours/week) (van Bastelaer et al., 1997), because numerous studies (e.g. Logan et al., 1973; Eberhardt & Shani, 1984; Lee Johnson, 1991; Thorsteinson, 2003; Guest et al., 2006) have shown that, sometimes in combination with gender (Booth & van Ours, 2008), part-time work is, however arguable whether higher or lower, associated with different levels of job satisfaction. For a review and evidence, see the aforementioned sources and Barling & Gallagher (1996). Moreover, various (empirical) studies by e.g. Blanchflower & Oswald (1992), Clark (1997) and Aletraris (2010) find that women are in general more satisfied with their (temporary) jobs. Therefore, a gender dummy is included in the vector of controls as well in the specifications without worker fixed effects. Furthermore, Clark et al. (1996) finds evidence for a U-shaped relationship between age and job satisfaction and it is therefore (non-linearly) included as a control. Other observable individual establishment, (job) characteristics and demographics that could affect job satisfaction, the domestic situation and education (Amador et al., 2016) also enter the vector of controls, \mathbf{X}_{it} .

5 Results

5.1 Preliminary results

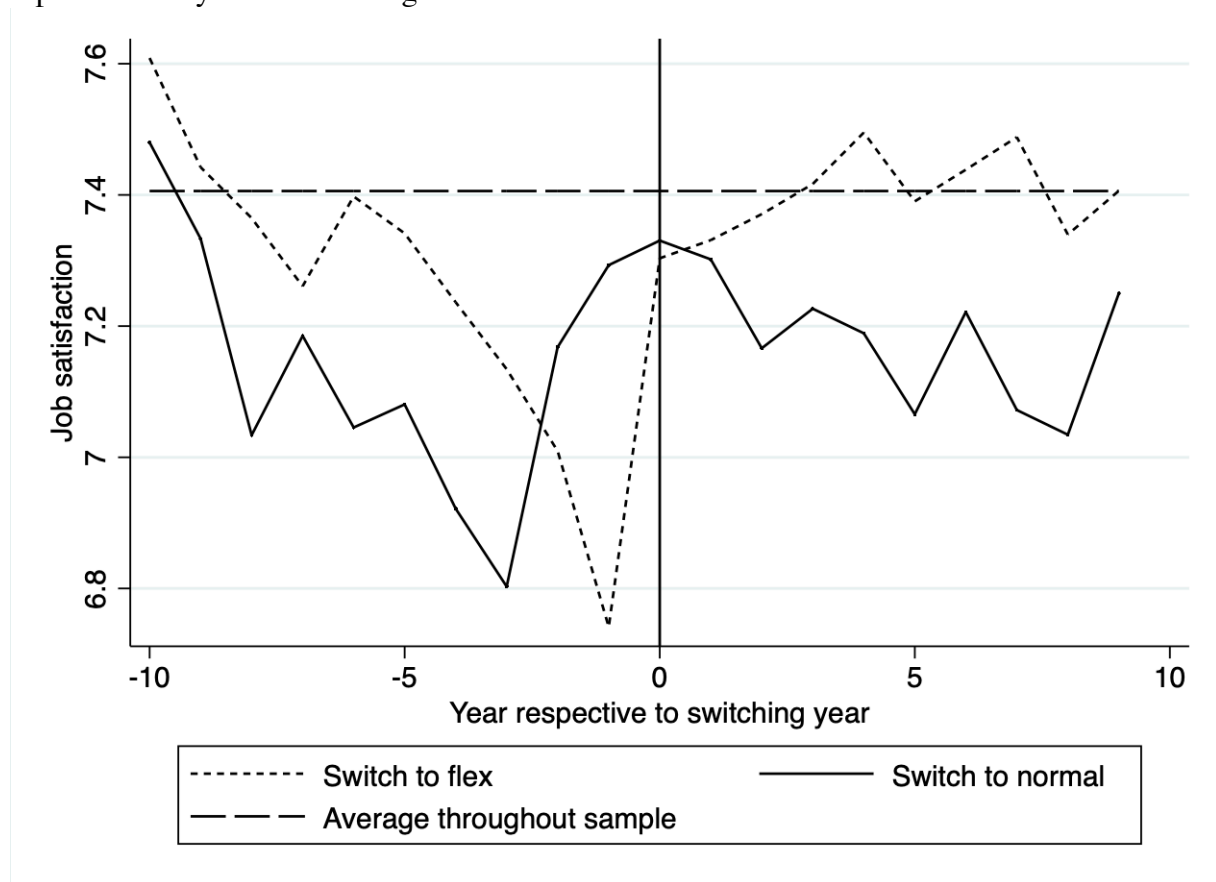
Table 2: Mean job satisfaction levels and personality trait scores: sorted by contract type. Statistical significance of the mean values by category are with respect to the mean value for all workers. Statistical significance of column (4) is with respect to both categories. Median values are between brackets. The number of observations is denoted by *n*. *** denotes statistical significance at the 1% level.

	All (1)	Normal (2)	Flex (3)	Difference (2)-(3)
Job satisfaction	7.14	7.44***	7.31***	0.13***
	[8]	[8]	[8]	[0]
<i>n</i>	36,789	28,379	8,371	
Neuroticism	12.49	12.22***	13.12 ***	-0.9***
	[12]	[12]	[13]	[-1]
<i>n</i>	39,605	18,913	6,403	
Confidence	7.63	8.40***	6.86***	1.54 ***
	[9]	[10]	[8]	[2]
<i>n</i>	39,555	18,896	6,397	
Extraversion	4.60	4.63	5.00***	-0.37***
	[5]	[5]	[5]	[0]
<i>n</i>	39,605	18,913	6,403	

Table 2 shows the preliminary cross-sectional statistical results by sorting the mean job satisfaction levels and personality scores on contract type. As can be seen from the table, does the difference between contract types in terms of the level of job satisfaction appear to be rather small. Nonetheless, these mean values are statistically significantly different from the overall mean value. Moreover, the difference between the mean values of these categories based on contract type are statistically significantly different from each other. This implies that the magnitude of a possible difference in the level of job satisfaction amongst flex workers or workers under a normal contract is rather small but even so present. When it comes to the personality traits, the table suggests that, while not very large, some difference in the personality scores exists between normal and flex contracts. This first look only provides a cross sectional observation of the possible difference in job satisfaction. Hence, this paper now turns to an analysis accounting for the effect of switchers between the types of contracts.

Figure 4 shows preliminary results of job satisfaction among switchers between normal and flex contracts. Here $t=0$ for the year in which individuals switch from a normal contract to a flex contract or vice versa. From this perspective $t=0$, the figure shows the average job satisfaction 10 years prior to the switch or after the switch, as this is the maximum reach of the sample. Moreover, beyond this point it is not expected to be influenced by the switch in any other way. The dashed line shows the average job satisfaction for people who switch from a normal contract to a flex contract and the solid line vice versa. It corresponds with figure 2 regarding the 1 to 10 scale, as the majority responds with a 7 or 8. The difference in job satisfaction throughout the years is not very divergent as it circles between 6.7 and 7.6 on the 10-point scale. While there does not seem to be any trend for people who switch to a normal contract, the average job satisfaction for people who switch to a flex contract seems to decrease prior to the switch and steadily increases thereafter. This seems to be the first indication that people who switch to a flex contract are associated with a higher job satisfaction level.

Figure 4: Timeline of average job satisfaction amongst switchers. T=0 (vertical line) represents the year of switching.



5.2 Flexible contracts and job satisfaction

Table 3 columns (1) to (4) below provide the first results emerging from regression specification (1). The first column excludes all controls and worker fixed effects while including time fixed effects. This specification is performed in order to see what happens if the cross-sectional part of the panel data is emphasized. However, as this study tries to uncover a causal relationship, the other analyses include worker fixed effects. Column (2) excludes all controls, column (3) includes controls which are rather job specific, namely whether the employee works part time or full time and in which sector, and column (4) includes all the controls, excluding income. These controls are the former plus the education level of the worker, the age, whether the employee works less due to children and the number of hours, the domestic situation of the worker and the match between the working hours and desired working hours for the employee. Throughout all the columns (1)-(4), robust errors are clustered at the

worker level. Columns (5) and (6) extend the analysis and will be discussed in sections 5.6 and 5.7, respectively.

Table 3: Regression results for flex contracts. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively. Column (5) and (6) are discussed in sections 5.6 and 5.7, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.126*** (0.0340)	0.135*** (0.0427)	0.146*** (0.0402)	0.152*** (0.0411)	0.282*** (0.0686)	0.301*** (0.0704)
Job Security					-0.00430*** (0.000561)	-0.00427*** (0.000573)
Flex * Job Security					-0.00147 (0.00135)	-0.00163 (0.00143)
Constant	7.436*** (0.0162)	7.390*** (0.00926)	7.236*** (0.292)	7.830*** (0.676)	10.04*** (1.049)	8.856*** (1.207)
Observations	36,750	33,731	30,028	29,686	18,540	17,359
R-squared	0.002	0.581	0.595	0.594	0.622	0.625
Time FE	✓	✓	✓	✓	✓	✓
Worker FE	X	✓	✓	✓	✓	✓
Sector Control	X	X	✓	✓	✓	✓
Part-time Control	X	X	✓	✓	✓	✓
Education control	X	X	X	✓	✓	✓
Age Control	X	X	X	✓	✓	✓
Domestic Situation Control	X	X	X	✓	✓	✓
Income Control	X	X	X	X	X	✓
Person Cluster	✓	✓	✓	✓	✓	✓

It is interesting to see that the relationship between flexible working contracts and job satisfaction changes, when worker fixed effects are included. This represents more or less a switch from a more cross-sectional view to a more panel-based view. Column 1 uncovers a negative relationship between the two while columns 2-4 show a positive relationship. This that the job satisfaction level among non-flex workers is on average higher than for flex workers, while people who switch to a flex contract (non-flex contract) achieve a higher (lower) job satisfaction level. This is so because once the worker fixed effects are included, the coefficient of λ is now only estimated by the variation of the contract type for the same person. When including the total set of controls excluding income (column 4), the R-squared of the model increases and the coefficient of λ tends to be the highest of the first four models. Column 4 states that when an employee switches from a normal contract to a flex contract, his job satisfaction measure increases with 0.152 on the 10-point Likert scale (as in figure 3). While it is consistent with the expectation that without the worker fixed effects, the R-squared of the

model is notably low (0.002), the R-squared when including these fixed effects is rather high (i.e. column 4: 0.594). Through all the columns, the flex variable shows a significant relationship with job satisfaction at the 1% level.

5.3 Personality traits

Table 4: Regression results for customized personality traits and flex contracts. The personality scores have been standardized as in equation (2). Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.0380 (0.0327)	0.133*** (0.0424)	0.134*** (0.0424)	0.149*** (0.0412)	0.285*** (0.0712)	0.310*** (0.0722)
Neuroticism	-0.196*** (0.0202)					
Flex * Neuroticism	0.00398 (0.0407)	0.0781 (0.0489)	0.104** (0.0479)	0.124** (0.0481)	0.169** (0.0781)	0.159** (0.0777)
Confidence	0.280*** (0.0228)					
Flex * Confidence	0.0470 (0.0433)	0.127** (0.0560)	0.125** (0.0559)	0.134** (0.0558)	0.0846 (0.0958)	0.0272 (0.0887)
Extraversion	0.0305* (0.0163)					
Flex * Extraversion	-0.0255 (0.0337)	-0.0281 (0.0431)	-0.0391 (0.0437)	-0.0448 (0.0405)	-0.00315 (0.0632)	0.0234 (0.0660)
Job Security					-0.00430*** (0.000561)	-0.00426*** (0.000573)
Flex * Job Security					-0.00156 (0.00136)	-0.00175 (0.00143)
Constant	7.360*** (0.0161)	7.391*** (0.00925)	6.891*** (0.266)	7.845*** (0.678)	10.05*** (1.047)	8.858*** (1.204)
Observations	36,054	33,626	32,573	29,615	18,538	17,357
R-squared	0.073	0.580	0.585	0.594	0.622	0.625
Time FE	✓	✓	✓	✓	✓	✓
Worker FE	X	✓	✓	✓	✓	✓
Sector Control	X	X	✓	✓	✓	✓
Part-time Control	X	X	✓	✓	✓	✓
Education control	X	X	X	✓	✓	✓
Age Control	X	X	X	✓	✓	✓
Domestic Situation Control	X	X	X	✓	✓	✓
Income Control	X	X	X	X	X	✓
Person Cluster	✓	✓	✓	✓	✓	✓

The above-discussed results already arouse interest, as they contradict some earlier findings by e.g Booth et al. (2002) and Chadi & Hetschko (2015). Yet, they add to the mixed/inconsistent previous findings (e.g. de Cuyper et al., 2008; Jahn et al., 2012) on the effect of flex contracts on job satisfaction under worker fixed effects, thereby not under cross-sectional conditions. However, this study also extends enlarges the current base of literature by looking at what happens when personality traits of employees are taken into account when assessing the effect of flex contracts. Table 4 columns (1) to (4) provide the results for regression specification (3). The order of the columns (1) to (4) regarding fixed effects and controls matches the one of table 2; with respect to column (1), column (2) includes worker

fixed effects, column (3) adds job specific controls and column (4) adds worker specific controls. Columns (5) and (6) will be discussed in sections 5.6 and 5.7, respectively. While not significant, column (1) once more shows a negative relationship between flex contracts and job satisfaction. In addition, columns (2)-(4) again show a positive relationship between flex contracts and job satisfaction at a 1% level. Therefore, this once again reveals that job satisfaction levels for flex workers are on average associated to be lower, while levels of job satisfaction tend to increase when workers switch to flexible working contract. While, on a cross-sectional basis, statistically significant evidence of a relationship between the interaction of flex contracts and the trait neuroticism with job satisfaction is not found, the personality trait neuroticism itself does seem to be negatively associated with the level of job satisfaction irrespective of the contract type. Specifically, a one standard deviation raise in the level of neuroticism is correlated with a 0.196-point decrease on the job satisfaction scale, holding everything else constant. In the same manner, a one standard deviation increase in the level of confidence is associated with 0.280 point higher on the job satisfaction scale (significant at a 1% level), while it does not significantly seem to correlate in interaction with a flexible working contract. When it comes to extraversion however, only a relationship significant at the 10% level is found for the separate personality. The effect of a standard deviation increase in the measure of extraversion is associated with a 0.0305-point increase on the scale of job satisfaction.

As mentioned earlier, the separate personality traits for columns (2)-(4) are omitted as they are held constant throughout the period per worker and these columns include worker fixed effects. Throughout columns (2) to (4), none of the coefficient signs of the variables change. Rather, when adding the job specific controls and the worker specific controls, this solely seems to increase the strength of the relationships and the significance of some variables as well as the R-squared of the model. As it is believed that the job specific and worker specific controls

improve the model substantially, column (4) represents the model of interest. A note should be made on the interpretation of columns (2)-(4) as worker fixed effects are now included. Before, the observed relationships were based on differences between observations of people under flex or normal contracts, while at this point the analysis is restricted to the switch of the different type of contracts a worker undergoes, thereby increasing the plausibility of a causal relationship. To begin with, when holding everything else constant, employment switch to a flex contract is associated with an increase of 0.149 point on the job satisfaction scale, which is significant at the 1% level. Moreover, *ceteris paribus*, a one standard deviation increase of the customized personality trait neuroticism, under a flex contract, is associated with a $(0.149 + 0.124) 0.273$ -point increase on the job satisfaction scale, in comparison to under a normal contract. This is significant at the 5% level. Recalling that a high neuroticism score by construction is defined as being the case when a person is less emotionally stable, this result implies that people who are emotionally unstable, retrieve more job satisfaction from working under flex contracts, rather than being employed under a normal contract, in comparison to their opposing emotionally stable peers. This opposes the previous set hypothesis 1. A reason for this could be that employees who are regarded as less emotionally stable are self-conscious about this instability and seek this in their career as well for the sake of not knowing where they would find joy in the future. Moreover, a flexible working contract could provide more certainty about the start and end date of someone's contract (and thus more clarity and less alterability). A permanent/normal contract nowadays provides less and less lifelong job security in contrast to in former times. Hence a worrier or someone with a higher level of neuroticism in this case might be anxious about whether he or she will keep the job or adjustment of the job, tasks, expectations and possible reorganisations etc. And this could lead to workers putting themselves under more pressure to perform or imputing themselves more with the things that do not go well. Anyhow, the thing is that in the case of temporary contracts with a clear end of

term, the termination of the contract will most probably not be attributed to a possible own failure.

Significant at the 5% level, a one standard deviation-increase in the confidence measure when being employed under a flex contract is associated with a $(0.149 + 0.134)$ 0.283-point increase on the job satisfaction scale in comparison with being employed under a normal contract, holding everything else constant. Thus, people with higher levels of confidence are able to retrieve more job satisfaction out of flex work relative to people with lower levels of confidence. This is as expected as flex work is relatively rather unstable and therefore requires some confidence. While this study does not find any significant evidence for relationships between the interaction of flex contracts and extraversion with the level of job satisfaction, throughout all the columns, the sign of the coefficient implies that more extraverted people under flex contracts would retrieve less job satisfaction in comparison to less extraverted people. A possible reason for this could be that more extraverted people are less able to establish a connection with others under flexible/temporary contracts as they feel that they are less part of the organisation/team in comparison to normal or permanent contract. Hence it could be that they invest less time in others or vice versa as they are likely to leave within a foreseeable timeframe resulting less joy from the interaction with others by there more extraverted people. Moreover, a freelancer or on call employee that works once in a while has less opportunity to establish fundamental relationships with other from work. Once again however, this study does not provide any significant evidence for this relationship. Therefore, no actual conclusions can be drawn from this result.

Regarding the economic significance of the results from both analyses, the R-squared's under worker fixed effects are believed to be quite high. Moreover, while the coefficients seem to be rather small at first sight, one should keep in mind that the average level of job satisfaction fluctuates between 7.3 and 7.5 throughout the years. And while this average may not be

representative for each individual, it does support the economic significance of the (statistically significant) coefficients that reach from 0.124 to 0.149 on this average job satisfaction interval of 0.2. Moreover, as discussed in section 2 and illustrated in figure 2, people have the tendency to answer with a 7 or 8 on the statement of being satisfied with his or her job on the scale of 10. Hence, with little variation in the dependent variable, these coefficients from the independent variables seem to explain this variation quite substantially.¹

5.4 The instability of personality traits over time

While it has been argued that people's personality traits are quite stable over change in the personality of a worker over time may provide meaningful insights. In the case of worker fixed effects, this contemplates that we're now able to observe both the effect of the (changing) personality trait on the level of job satisfaction as well as it's interaction effect with a flexible working contract. It therefore may enable better distinction between both effects and convey interesting information in the case of a changing sign of one of the interaction coefficients.

As we can see from table A4 in the appendix in which personality traits are not taken as fixed but rather observed every year, the results for the more cross-sectional based view without worker fixed effects (column (1)), are rather consistent with those from Table 4. The coefficients do not differ much in size and hold the same positive or negative relationship with the level of job satisfaction. The coefficient of the personality trait extraversion for this analysis is even found to be statistically significant at a 1% level. Looking at column (4), which is the main column of interest as it includes worker fixed effects as well as worker characteristics, the

¹ Table A13 in the appendix provides evidence for robustness regarding the dependent variable. In this table, the dependent variable has been interchanged with another measure of job satisfaction which is on a scale of 1 to 4 ("entirely disagree", "disagree", "agree" and "entirely agree", respectively) on the statement "Everything considered, I am satisfied with my job". As one can see, the results are robust for the interchange of the dependent variable. Some relations even turn from a 5% level statistical significance to a 1% level with a smaller scale on the dependent variable.

new results provide supportive evidence for the prior results, considering that the prior relationships found don't seem to be mitigated through the dynamics of a changing personality trait. And while it is not the topic of this paper to investigate how personality traits affect job satisfaction without any interaction with flexible working contracts, the results nonetheless are interesting and may serve as a partial explanation for the unexpected relationships previously found. It is in fact the case that in interaction with flexible working contracts, neuroticism seems to have a positive relationship with the level of job satisfaction. But as a standalone, an increase in the personality trait neuroticism seems to negatively affect the level of job satisfaction, significant at the 1% level. This implies that an increasing level of neuroticism decreases a worker's job satisfaction but that the worker should be better off under a flexible working contract in comparison to a normal contract when enduring a high level of neuroticism. Moreover, it is reassuring to see that an increase in confidence not only tends to result in an increase in the level of job satisfaction, but that this effect is enlarged by means of employment under a flexible working contract. Furthermore, a statistically significant positive relationship with the standalone personality trait extraversion and the level of job satisfaction is found. Next to the above-mentioned findings, the fact that the coefficients only differ slightly in magnitude emphasizes that the prior effect found for the interaction terms is compelling. The most coefficients even seem to be bigger than before, suggesting a downwards bias of the previous results meaning that the previous found effects even tend to be underestimated.

5.5 The Big Five personality traits

Sections 2 and 4 have discussed which personality traits might interact with flexible working contracts in having an effect on the level of job satisfaction experienced by a worker. While this paper is based on the assumption that these personality traits are appropriate for conducting this research and this postulation is not the main discussion or topic of the paper,

the following robustness check is nevertheless performed. The personality traits that enter the regression separately as well as in interaction with the flexible working contract dummy have been interchanged with the Big Five personality traits based on Goldberg's (1992) lexical inventory retrieved from the International Personality Item Pool (IPIP). Table A3 in the appendix provides an overview of this lexical inventory for each personality trait from the Big Five. Table A5 in the appendix replicates the main personality analysis from Table 4 by holding the personality traits constant over time. Table A6 in the appendix replicates the extended analysis from section 5.4 by treating the personality traits as dynamic. Before looking at the results from table A5 and A6, an important note must be made that, in order to compare the neuroticism personality trait from the customized inventory pool and the IPIP Big Five personality, one must flip the sign. This is because using the IPIP Big Five inventory, a higher score in the neuroticism resembles a more emotionally stable instead of instable person.

Regarding column (1) (cross-sectional based view without worker fixed effects) from table A5, the standalone personality trait neuroticism shows the same effect as previously (keeping in mind the opposite computation of neuroticism), but the interaction effect between now seems to show an opposite relationship; a decrease in the level of neuroticism (in terms of emotional instability, so an increase in the variable), is associated with a higher level of job satisfaction. A possible reason for this could be that when measured using the Big Five IPIP inventories, people under flexible working contracts endure a lower level of job satisfaction. However, this result is not statistically significant and doesn't account worker fixed effects and therefore does not raise any substantial concerns. The personality trait extraversion seems to correspond with the earlier results quite well regarding the sign and magnitude. In interaction with flexible working contracts however, it now holds a positive relationship. Nonetheless, this coefficient is not found to be significant at the 10% level and therefore should not raise any concerns. While the above described results showed some sign reversal, the model of interest

(column 4), restores confidence to the earlier found results as a higher level of emotional instability (neuroticism) is associated to a higher level of job satisfaction when interacted with a flexible working contract. Likewise, the results for the personality trait extraversion also correspond with earlier discoveries; when interacted with a flexible working contract, a higher level of extraversion is associated with a lower level of job satisfaction. However, the same goes out for this analysis as it did for the previous analysis. Namely the fact that no statistically significant evidence at any substantial level is found for this relationship. Henceforth, no conclusion can be drawn from this coefficient apart from the fact that the level of extraversion does not seem to have any effect on the level of job satisfaction when interacted with a flexible working contract.

When comparing table A4 with A6 which both treat personality traits as dynamic over time, on a cross sectional basis, none of the results differ from those discussed above in section 5.3 or 5.4. Regarding column (4), most of the coefficients and relationships correspond as well. Only the personality trait extraversion in interaction with a flexible working contract shows an opposite relationship; a higher level of extraversion is associated with a higher level of job satisfaction under a flexible working contract. This relationship, however, is insignificant at the 1%, 5% and 10% level and therefore does not convey any different informative results. The standalone variable for extraversion in the Big Five analysis however does seem to be significantly positively related to the level of job satisfaction at the 5% level.

5.6 Perceived Job Security

The above discussed results and analyses provide insights on the interaction of personality traits with flex contracts on the level of job satisfaction. While it is not the main focus of this paper, it is interesting to see if these results hold when accounting for perceived job security. Perceived job security has been proved to be a major influencer of the level of job

satisfaction (e.g. Ashford et al., 1989; Davy et al., 1991, 1997; Hartley et al., 1990; Heaney et al., 1994; Rosenblatt & Ruvio, 1996; Sverke et al., 2002, 2006; de Graaf-Zijl, 2012; Dawson et al., 2017). This could mean that the effects of personality traits as well as the flexible working contracts could be mitigated to perceived job security if included in the analysis. Column 5 in both table 3 and 4 add a variable representing perceived job security as well as the interaction of this variable with the flexible working contract dummy. The question from the survey for this perceived job security variable is: “Do you think that there is any chance that you might lose your job in the coming 12 months?” The respondents can respond with the probability of losing their job in percentages where 0% indicates that they are sure to keep their job and 100% indicates that they are sure to lose their job. As can be seen from the descriptive statistics provided by table 1, people are rather confident regarding their job security as the mean is just below 18 percent. This means that on average, people think that there is a +/- 18% chance that they might lose their job in the coming 12 months.

Both table 3 and 4 reveal the same change in the prior estimated results. When adding perceived job security as a variable as well as an interaction term with the flex dummy, the coefficient of the standalone is amplified, the perceived job security standalone variable shows a negative relationship with job satisfaction significant at a 1% level and the interaction term is not found to be affecting job satisfaction in a statistically significant manner. An important remark should be made on the interpretation of the perceived job security variable, as it can rather be formulated as perceived job insecurity instead. The coefficient of column 5 from table 4 can be interpreted as follows; a 1% increase in the perceived likelihood of losing one's job in the coming 12 months, results in a decrease of 0.0043 on the job satisfaction scale, *ceteris paribus*. While this may seem as a rather small effect at first sight, one should keep in mind that the input is expressed in percentages.

Moreover, as can be seen from table 4, it is interesting that the formerly estimated effect on job satisfaction through the interaction term of the personality trait confidence and the flex dummy now seems to be mitigated to the perceived job security variable, as the relationship no longer holds any statistically significant evidence. This is not a big surprise however, as it expected that one's confidence is affected by the amount of perceived job security. This is supported by table A10 in the appendix which shows that, while small, a statistically significant correlation exists at the 1% level between the personality trait confidence and the perceived job security variable.

These results might indicate that the prior conclusion on the effect of the personality trait confidence in interaction with flexible working contracts should be adapted. If the previously found effect of the personality trait on job satisfaction is indeed mitigated to perceived job security when added to the equation, then confidence regarding perceived job security more specifically seems to affect job satisfaction rather than confidence in general.

5.7 Income

This section looks closer at what happens to the previously found results in the different subsegments based on income of the sample. It has not yet been added as a control for the previous regressions, as income is expected to undermine personality traits. Moreover, there seems to be a measurement error in this variable. This is because the question regarding one's net income is formulated as "Personal net monthly income in Euros" and while the vast majority of respondents specify a value below €5,000, there are people who filled in values above €340,000 as well as a monthly income value such as €1 or €10. It is therefore expected that people might have misread the question and sometimes filled in hourly wages or yearly income levels. Figure A2 in the appendix further reveals that as responses stretch as far as over €340,000, they often do not exceed €3000 and many responses are given such as €0 or

extremely low. This could also mean that people were less willingly to provide their actual net income or were paid per task rather than a fixed income per month. However, as there is quite some dispersion between actual income levels, it's difficult to draw a line between reasonable values and outliers or misinterpretations/measurement errors. Therefore, those values have not been dropped from the sample and enter this regression analysis as well. Hence, it's important not to put too much weight on this control variable. Looking at column 6 of table 3 and 4, it is reassuring to see that the results are not altered too much. In fact, the flex dummy coefficient is even magnified further. Moreover, it does not alter the significance of the other previously found relationships. Therefore, at first glance these results seem to be robust throughout different income levels. In table A12 in the appendix it can be seen that the logarithm of wage has a positive relationship with the level of job satisfaction, significant at the 1% level.

To take this analysis regarding income one step further, quartiles have been calculated on the basis of the distribution of income in the sample. Table A11 in the appendix replicates model 4 from table 3 and 4 as well as model 5 from table 4 and splits the sample into different income segments. I.e. panel A represents the initial model of interest only including the flex dummy and controls, panel B represents the main model of interest by adding personality traits and panel C extends the model by adding perceived job security. Column (1) specifies the sample when net income is equal to zero and columns (2)-(5) represent the different quartiles of income segments. First of all, by splitting the sample into different segments of income, for each regression there is a reduction in the amount of observation, which could explain the decrease in explanatory power when it comes to a decline in statistically significant relationships found. The table reveals that flex contracts seem to affect job satisfaction less positively or even negatively in lower income segments and more positively in higher income segments. Moreover, the personality traits appear to statistically significantly affect the level of job satisfaction more in the middle segments regarding income. However, this is no surprise.

As previously discussed, there's a likelihood that the sample contains measurement errors and undefinable outliers in the tails of the income distribution.

Moreover, if income is added as a control to the model without perceived job security, which is not displayed for brevity purposes, a similar result as in section 5.6 is observed. I.e. the coefficient of the interaction term between the confidence trait and the flex dummy is no longer statistically significant, but the coefficient for the logarithm of wage is positive and significant at a 1% level. Hence, this contributes to the earlier proposition in section 5.6 that it is not the personality trait confidence in general that affects the level of job satisfaction but rather the confidence in job specific aspects such as perceived job security and the net income level.

5.8 Education

Another question that could be raised with these results, is whether these relationships are the same in different segments of the sample based on the obtained level of education of the respondents. Table A7 in the appendix reproduces table 4 and divides the sample into low and high education subsegments. In this analysis, a low level of education denotes practical continued education or lower. A high level of education denotes applied sciences or academic education. While the results gradually are the same for both the segments, it seems that personality traits in interaction with flexible working contracts are more determinants of job satisfaction in the segment of high education than in the segment of low education. A possible explanation for this could be that people who have attained a higher level of education are more able to find a job that suits their interests and personality, as the opportunities in general increase with the level of education. People who have attained a lower level of education might be focussed more on their leisure time activities that suit their personality, rather than on their jobs, as, due to the lack of opportunities, they might fail to find their desired job. Moreover, people

with a lower education might be schooled more specifically (in the sense of vocational education) and henceforth not have been able to develop many generally applicable skills, which leads to a greater dependence on their current job. Therefore, they are much more vulnerable for possible discontinuity of their job and dependent on their current income. Thus, it could be that their level of job satisfaction depends more on these factors than on their personality traits. Hence, in this sense it's no surprise that, when including perceived job security and income, the coefficient for the flex dummy is lower.

6 Conclusion

This paper adds to the current body of literature on the welfare effects of flexible working contracts. Moreover, it is the first to shed light on the effect of interaction between personality traits and flexible working contracts on the level of job satisfaction. From both analyses, with and without personality traits, an interesting relationship regarding the effect of a flex contract on the level of job satisfaction prevails. On a cross-sectional basis, the results indicate that the level of job satisfaction amongst workers under a normal contract is higher than for people under a flexible working contract. While under a panel-based view with worker fixed effects, people who switch from a normal contract to a flex contract on average experience an increase in the level of job satisfaction.

Concerning the personality traits neuroticism, confidence and extraversion, a higher level of neuroticism is associated with a lower level of job satisfaction. Both a higher level of confidence and a higher level of extraversion are associated with higher levels of job satisfaction. These results correspond with the earlier set hypotheses based on economic reasoning and previous literature. When these personality traits are held constant using worker fixed effects, they seem to interact with flexible working contracts on the level of job satisfaction quite interestingly. Especially when it comes to the trait of neuroticism. This is

because as hypothesis 1 states that emotional instable people (high levels of neuroticism), are expected to have lower levels of job satisfaction under flexible working contracts, while the results from these analyses contradict this conjecture. A relationship significant at the 1% level is found which suggests that workers who switch from a normal contract to a flex contract experience a decrease in the level of job satisfaction. As previously discussed, this could be due to the clarity in the nature of flexible working contracts. Ad hoc, normal contracts are not as permanent as they used to be, putting pressure to perform on people who are anxious about losing their job. Moreover, due to the clear end of terms of temporary contracts, people with high levels of neuroticism may be less likely to attribute failure to themselves and thereby seize more job satisfaction. Next, while it was expected that extraversion in interaction with a flex contract and the level of job satisfaction would have a positive relationship, a negative relationship has been found throughout the different specifications. As discussed in section 5, this might be due to the inability to establish fundamental relationships with others under flexible working contracts. However, because throughout these specifications, none of these relationships seem to be statistically significant even at the 10% level, underlying concerns regarding this result are tempered and no conclusions can be drawn from this result. Regarding the personality trait of confidence, as in line with its hypothesis, it is found to be significantly related to the level of job satisfaction when interacted with flex contracts. Robustness checks on the instability of personality traits as well as the different measures of personality traits using Goldberg's (1992) Five Factor model provided substantial support for the findings in this paper by tempering the concerns that the effect could be mitigated due to other factors.

When adding perceived job security to the equation, the prior coefficient for a flex contract is magnified. Moreover, the relationship between the interaction of flex contracts with the personality trait neuroticism still holds. However, when perceived job security, net income or both are added to the analysis, something interesting happens with the confidence measure

interacted with a flex contract. The sign of the coefficient does not change with this adjustment, but the model fails to provide any statistically significant evidence for the relationship whilst the coefficients for income and perceived job security are both statistically significant. This insinuates that it is not the personality trait confidence in general that affects the level of job satisfaction, but rather the confidence in job specific aspects such as perceived job security and the net income level.

As aforementioned, the findings in this paper shed the first light on the effect of interaction between personality traits and flexible working contracts on the level of job satisfaction. While these analyses do uncover statistically significant relationships, they are not always in line with previous expectations throughout the different models. This therefore raises further questions and interesting topics for future research which will eventually lead to the important insights of the by-products of flexible working contracts in a world where such a contract type seems to become more and more the standard within the labour market.

References

- Aletraris, L. (2010). How satisfied are they and why? A study of job satisfaction, job rewards, gender and temporary agency workers in Australia. *Human Relations*, 63(8), 1129-1155.
- Amador, L. B., Nicolás, Á. L., & Vila, L. E. (2008). Education and competence mismatches: job satisfaction consequences for workers. *XVI Jornadas ASEPUMA–IV Encuentro International Rect@ VolActas_16Issue1*, 105.
- Ambridge, B. (2014). *Psy-Q: You know your IQ-now test your psychological intelligence*. Profile Books.
- Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, cause, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management journal*, 32(4), 803-829.
- Barling, J., & Gallagher, D. G. (1996). Part-time employment. *International review of industrial and organizational psychology*, 11, 243-278.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel psychology*, 44(1), 1-26.
- Barrick, M. R., & Mount, M. K. (1993). Autonomy as a moderator of the relationships between the Big Five personality dimensions and job performance. *Journal of applied Psychology*, 78(1), 111.
- van Bastelaer, A., Lemaître, G., & Marianna, P. (1997). The definition of part-time work for the purpose of international comparisons.
- Becker, A., Deckers, T., Dohmen, T., Falk, A., & Kosse, F. (2012). The relationship between economic preferences and psychological personality measures. *Annu. Rev. Econ.*, 4(1), 453-478.

- Blanchflower, D., & Oswald, A. (1992). *Entrepreneurship, happiness and supernormal returns: Evidence from Britain and the US* (No. w4228). National Bureau of Economic Research.
- Boden, R. J. (1999). Flexible working hours, family responsibilities, and female self-employment. *American Journal of Economics and Sociology*, 58(1), 71-83.
- Booth, A. L., Francesconi, M., & Frank, J. (2002). Temporary jobs: stepping stones or dead ends?. *The economic journal*, 112(480), F189-F213.
- Booth, A. L., & Van Ours, J. C. (2008). Job satisfaction and family happiness: the part-time work puzzle. *The Economic Journal*, 118(526).
- Borghans, L., Duckworth, A. L., Heckman, J. J., & Ter Weel, B. (2008). The economics and psychology of personality traits. *Journal of human Resources*, 43(4), 972-1059.
- Brenzel, H., & Laible, M. C. (2016). *Does personality matter? The impact of the Big Five on the migrant and gender wage gaps* (No. 26/2016). IAB-Discussion Paper.
- Brewster, C., Mayne, L., & Tregaskis, O. (1997). Flexible working in Europe: A review of the evidence. *MIR: Management International Review*, 85-103.
- Brief, A. P. (1998). *Attitudes in and around organizations* (Vol. 9). Sage.
- CBS (2018). Flexwerk in Nederland en de EU. Retrieved from <https://www.cbs.nl/nl-nl/dossier/dossier-flexwerk/hoofdcategorieen/flexwerk-in-nederland-en-de-eu>
- Chadi, A., & Hetschko, C. (2015). Flexibilization without hesitation? Temporary contracts and job satisfaction. *Oxford Economic Papers*, 68(1), 217-237.
- Clark, A. E. (1997). Job satisfaction and gender: why are women so happy at work? *Labour economics*, 4(4), 341-372.
- Clark, A., Oswald, A., & Warr, P. (1996). Is job satisfaction U-shaped in age? *Journal of occupational and organizational psychology*, 69(1), 57-81.

- Corré, A., & Sterk, A. (2018). Nederland is kampioen in flexwerken. Is dat erg? Retrieved from <https://www.nrc.nl/nieuws/2018/04/24/nederland-is-europees-kampioen-flexwerken-a1600659>
- Costa, P. T., McCrae, R. R., & Holland, J. L. (1984). Personality and vocational interests in an adult sample. *Journal of Applied psychology*, 69(3), 390.
- Costa Jr, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and individual differences*, 13(6), 653-665.
- Cooper, R., & Payne, R. (1967). Extraversion and some aspects of work behavior. *Personnel Psychology*, 20(1), 45-57.
- Crompton, R. (2002). Employment, flexible working and the family. *The British journal of sociology*, 53(4), 537-558
- de Cuyper, N., de Jong, J., de Witte, H., Isaksson, K., Rigotti, T., & Schalk, R. (2008). Literature review of theory and research on the psychological impact of temporary employment: Towards a conceptual model. *International Journal of Management Reviews*, 10(1), 25-51.
- Davy, J. A., Kinicki, A. J., & Scheck, C. L. (1991). Developing and testing a model of survivor responses to layoffs. *Journal of Vocational Behavior*, 38(3), 302-317.
- Davy, J. A., Kinicki, A. J., & Scheck, C. L. (1997). A test of job security's direct and mediated effects on withdrawal cognitions. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 18(4), 323-349.
- Dawson, C., Veliziotis, M., & Hopkins, B. (2017). Temporary employment, job satisfaction and subjective well-being. *Economic and Industrial Democracy*, 38(1), 69-98.
- Dex, S., & Scheibl, F. (2001). Flexible and family-friendly working arrangements in UK-based SMEs: business cases. *British Journal of Industrial Relations*, 39(3), 411-431.

- Eberhardt, B. J., & Shani, A. B. (1984). The effects of full-time versus part-time employment status on attitudes toward specific organizational characteristics and overall job satisfaction. *Academy of Management Journal*, 27(4), 893-900.
- Eisenberg, A. E., Baron, J., & Seligman, M. E. (1998). Individual differences in risk aversion and anxiety. *Psychological Bulletin*, 87(1), 245-251.
- Eysenck, H. J., & Eysenck, S. B. G. (1977). *Psychoticism as a dimension of personality*. Taylor & Francis Group.
- Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality and social psychology review*, 2(4), 290-309.
- Furnham, A., Eracleous, A., & Chamorro-Premuzic, T. (2009). Personality, motivation and job satisfaction: Herzberg meets the Big Five. *Journal of managerial psychology*, 24(8), 765-779.
- Furnham, A., & Zacherl, M. (1986). Personality and job satisfaction. *Personality and Individual Differences*, 7(4), 453-459.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management review*, 17(2), 183-211.
- Goldberg, L. R. (1990). An alternative" description of personality": the big-five factor structure. *Journal of personality and social psychology*, 59(6), 1216.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological assessment*, 4(1), 26.
- Gosling, S. D., Rentfrow, P. J., & Swann Jr, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in personality*, 37(6), 504-528.
- Guest, D. E., Oakley, P., Clinton, M., & Budjanovcanin, A. (2006). Free or precarious? A comparison of the attitudes of workers in flexible and traditional employment contracts. *Human Resource Management Review*, 16(2), 107-124.

- de Graaf-Zijl, M. (2012). Job satisfaction and contingent employment. *De Economist*, 160(2), 197-218.
- Härmä, M. (2004). Flexible working hours, health, and well-being in Europe: some considerations from a SALTSA project. *Chronobiology international*, 21(6), 831-844.
- Hartley, J., Jacobson, D., Klandermans, B., & Van Vuuren, T. (1990). Job insecurity: Coping with jobs at risk. Sage Publications Ltd.
- Heaney, C. A., Israel, B. A., & House, J. S. (1994). Chronic job insecurity among automobile workers: Effects on job satisfaction and health. *Social science & medicine*, 38(10), 1431-1437.
- Herzberg, F. (1968). One more time: How do you motivate employees.
- Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The Big Five revisited. *Journal of applied psychology*, 85(6), 869.
- Jahn, E. (2015). Don't worry, be flexible?-job satisfaction among flexible workers. *Australian Journal of Labour Economics*, 18(2), 147.
- Jahn, E. J., Riphahn, R. T., & Schnabel, C. (2012). Feature: flexible forms of employment: boon and bane. *The Economic Journal*, 122(562), F115-F124.
- Janssen, D., & Nachreiner, F. (2004). Health and psychosocial effects of flexible working hours. *Revista de saude publica*, 38, 11-18.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*, 2(1999), 102-138.
- Joyce, K., Pabayo, R., Critchley, J. A., & Bambra, C. (2009). Flexible working conditions and their effects on employee health and wellbeing. *Cochrane Database Syst Rev*, 2.
- Judge, T. A., Bono, J. E., & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of applied psychology*, 85(2), 237.

- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: A meta-analysis. *Journal of applied psychology*, 87(3), 530.
- Kanfer, R., Wanberg, C. R., & Kantrowitz, T. M. (2001). Job search and employment: A personality-motivational analysis and meta-analytic review. *Journal of Applied psychology*, 86(5), 837.
- Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work. *Human relations*, 63(1), 83-106.
- Kendler, K. S., Myers, J., & Prescott, C. A. (2002). The etiology of phobias: an evaluation of the stress-diathesis model. *Archives of General Psychiatry*, 59(3), 242-248.
- Korman, A. K. (1970). Toward an hypothesis of work behavior. *Journal of Applied psychology*, 54(1p1), 31.
- Lamers, S. M., Westerhof, G. J., Kovács, V., & Bohlmeijer, E. T. (2012). Differential relationships in the association of the Big Five personality traits with positive mental health and psychopathology. *Journal of Research in Personality*, 46(5), 517-524.
- Logan, N., O'Reilly III, C. A., & Roberts, K. H. (1973). Job satisfaction among part-time and full-time employees. *Journal of vocational behavior*, 3(1), 33-41.
- Lee, T. W., & Johnson, D. R. (1991). The effects of work schedule and employment status on the organizational commitment and job satisfaction of full versus part time employees. *Journal of vocational Behavior*, 38(2), 208-224.
- de Leeuw, D. (2016). *The welfare effect of temporary work: a Dutch case study using LISS panel-data* (Master's thesis).
- Locke, E. A. (1996). Self-esteem and work. *Int Rev Ind Org Psychol*, 11, 1-32.
- McCrae, R. R., & Costa Jr, P. T. (1991). Adding Liebe und Arbeit: The full five-factor model and well-being. *Personality and social psychology bulletin*, 17(2), 227-232.

- de Menezes, L. M., & Kelliher, C. (2011). Flexible working and performance: A systematic review of the evidence for a business case. *International Journal of Management Reviews*, 13(4), 452-474.
- Nakagawa, S., & Freckleton, R. P. (2008). Missing inaction: the dangers of ignoring missing data. *Trends in Ecology & Evolution*, 23(11), 592-596.
- Oorschot, W. V. (2004). Flexible work and flexicurity policies in the Netherlands. Trends and experiences. *Transfer: European Review of Labour and Research*, 10(2), 208-225.
- Organ, D. W., & Lingl, A. (1995). Personality, satisfaction, and organizational citizenship behavior. *The journal of social psychology*, 135(3), 339-350.
- Orpen, C. (1981). Effect of flexible working hours on employee satisfaction and performance: A field experiment. *Journal of Applied Psychology*, 66(1), 113.
- Paulus, M. P., Rogalsky, C., Simmons, A., Feinstein, J. S., & Stein, M. B. (2003). Increased activation in the right insula during risk-taking decision making is related to harm avoidance and neuroticism. *Neuroimage*, 19(4), 1439-1448.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality traits from childhood to old age: a quantitative review of longitudinal studies. *Psychological bulletin*, 126(1), 3.
- Rosenblatt, Z., & Ruvio, A. (1996). A test of a multidimensional model of job insecurity: The case of Israeli teachers. *Journal of organizational behavior*, 17(S1), 587-605.
- Rothmann, S., & Coetzer, E. P. (2003). The big five personality dimensions and job performance. *SA Journal of Industrial Psychology*, 29(1), 68-74.
- Russell, H., O'Connell, P. J., & McGinnity, F. (2009). The impact of flexible working arrangements on work-life conflict and work pressure in Ireland. *Gender, Work & Organization*, 16(1), 73-97.

- Saari, L. M., & Judge, T. A. (2004). Employee attitudes and job satisfaction. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 43(4), 395-407.
- Salgado, J. F. (1997). The five factor model of personality and job performance in the European community. *Journal of Applied psychology*, 82(1), 30.
- Soane, E., & Chmiel, N. (2005). Are risk preferences consistent?: The influence of decision domain and personality. *Personality and Individual Differences*, 38(8), 1781-1791.
- Smits, W. (2012). Nearly one in five employees are flex workers. Retrieved from <https://www.cbs.nl/en-gb/news/2012/22/nearly-one-in-five-employees-are-flex-workers>
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences* (Vol. 3). Sage publications.
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: a meta-analysis and review of job insecurity and its consequences. *Journal of occupational health psychology*, 7(3), 242.
- Sverke, M., Hellgren, J., & Näswall, K. (2006). *Job insecurity: A literature review*. Arbetslivsinstitutet.
- Tharenou, P. (1979). Employee self-esteem: A review of the literature. *Journal of Vocational Behavior*, 15(3), 316-346.
- Thorsteinson, T. J. (2003). Job attitudes of part-time vs. full-time workers: a meta-analytic review. *Journal of Occupational and Organizational Psychology*, 76(2), 151-177.
- Turban, D. B., Stevens, C. K., & Lee, F. K. (2009). Effects of conscientiousness and extraversion on new labor market entrants' job search: The mediating role of metacognitive activities and positive. *Personnel Psychology*, 62(3), 553-573.

- van Dam, K., & Menting, L. (2012). The role of approach and avoidance motives for unemployed job search behavior. *Journal of Vocational behavior*, 80(1), 108-117.
- Wanberg, C. R., Kanfer, R., & Banas, J. T. (2000). Predictors and outcomes of networking intensity among unemployed job seekers. *Journal of Applied Psychology*, 85(4), 491.

Appendix

Figure A1: Histograms of personality scores. In order to be able to compare the distributions and tails of the personality scores, they have been mean centred for these figures. Figure (A), (B), and (C), provide the histograms for the neuroticism, confidence and extraversion personality scores, respectively.

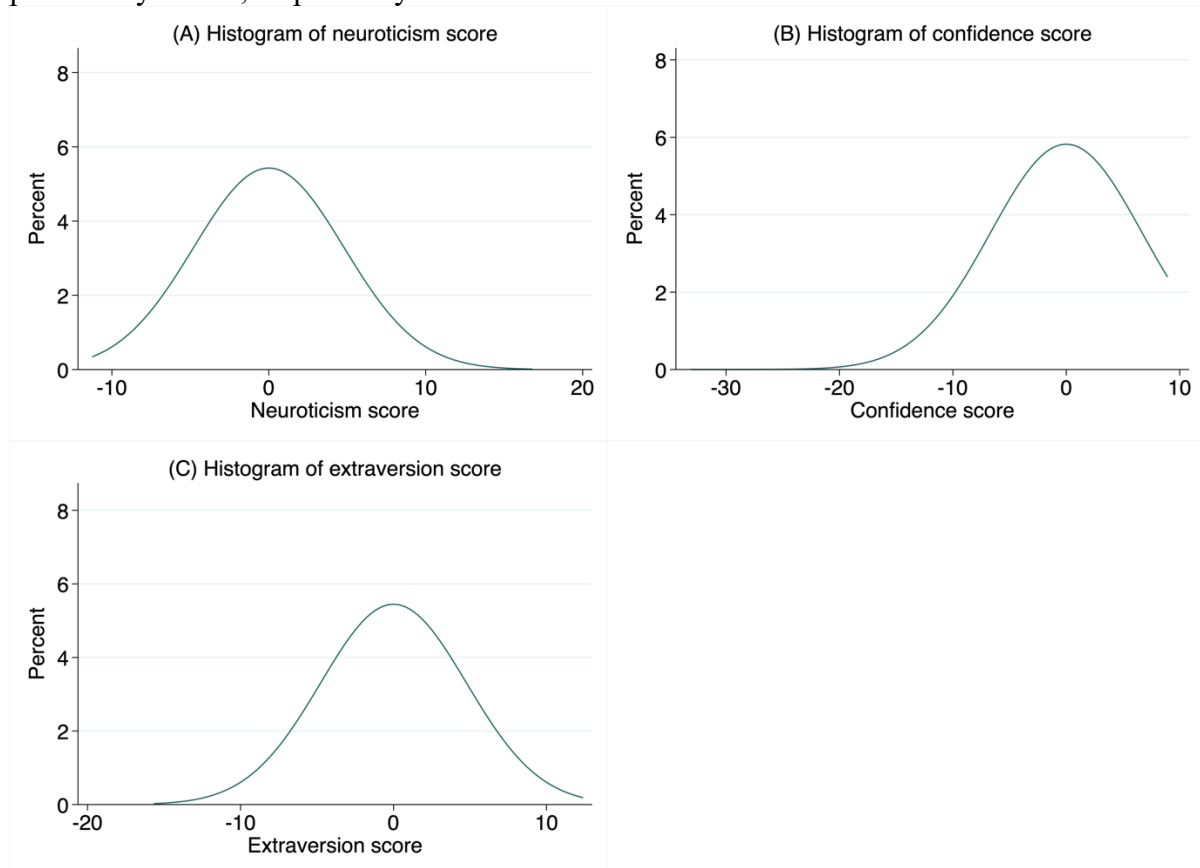


Figure A2: Kernel Density Estimation of Net Income. The zoom reveals that the monthly net income often doesn't exceed €3000. Moreover, it shows that the sample contains a lot of net income levels equal to 0.

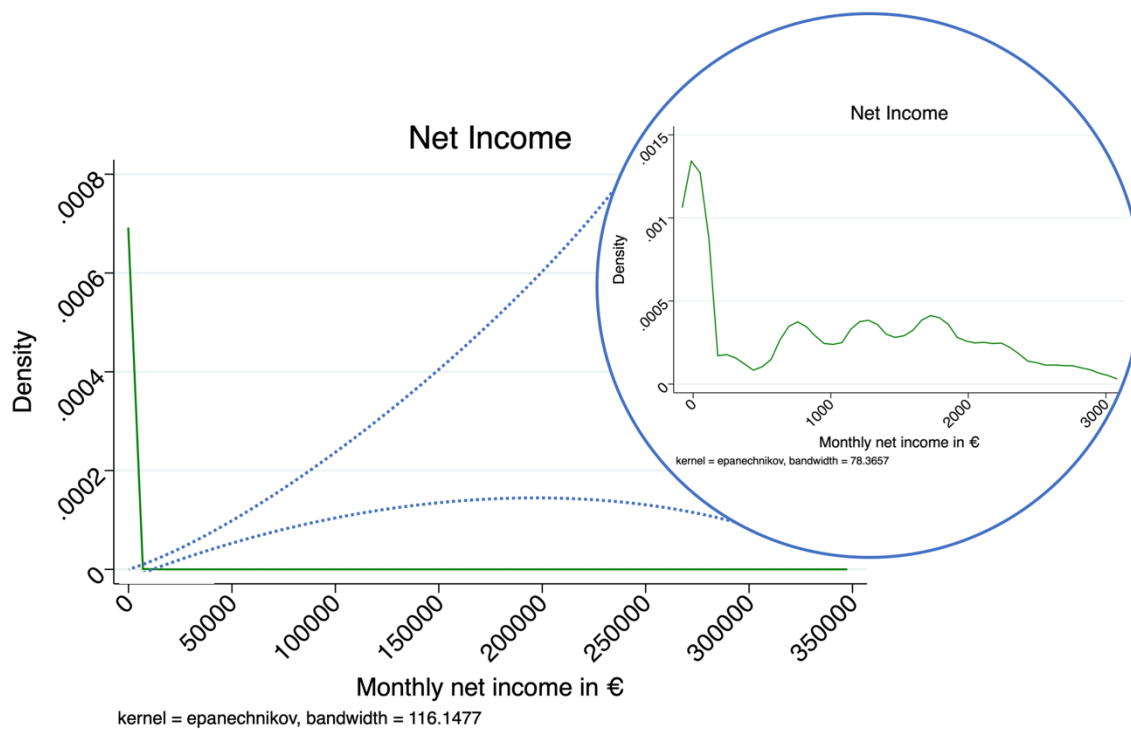


Table A1: Tabulation of contract type

Contract type	Freq.	Percent	Cum.
employee in permanent employment	21,756	72.38	72.38
employee in temporary employment	3,501	11.65	84.03
on-call employee	1,007	3.35	87.38
temp-staffer	724	2.41	89.79
self-employed/freelancer	2,303	7.66	97.45
independent professional	320	1.06	98.52
director of a limited liability or priv	136	0.45	98.97
majority shareholder director	309	1.03	100.00

Table A2: The customized personality inventories. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

<u>EMOTIONAL INSTABILITY</u>			<u>EXTRAVERSION</u>			<u>CONFIDENCE</u>		
+/- keyed	LISS Item	Statement	+/- keyed	LISS Item	Statement	+/- keyed	LISS Item	Statement
+	P033	Worry about things.	+	P040	Start conversations.	+	P071	I feel that I have a number of good qualities
+	P023	Get stressed out easily.	+	P030	Feel comfortable around people.	+	P073	I am able to do things as well as most other people
+	P058	Have frequent mood swings	+	P050	Talk to a lot of different people at parties.	+	P082	I have confidence in my capabilities
+	P053	Change my mood a lot	+	P060	Don't mind being the center of attention.			
+	P043	Am easily disturbed						
+	P063	Get irritated easily						
-	P028	Am relaxed most of the time.	-	P065	Am quiet around strangers.	-	P078	I certainly feel useless at times
			-	P025	Don't talk a lot.	-	P079	At times, I think I am no good at all
			-	P055	Don't like to draw attention to myself.	-	P072	All in all, I am inclined to feel that I am a failure
						-	P074	I feel I do not have much to be proud of

Table A3: Goldberg's (1992) Big Five Factor Model lexical inventory. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

EMOTIONAL STABILITY			EXTRAVERSION			AGREEABLENESS			CONSCIENTIOUSNESS			INTELLECT/OPENNESS		
+/- keyed	LISS Item	Statement	+/- keyed	LISS Item	Statement	+/- keyed	LISS Item	Statement	+/- keyed	LISS Item	Statement	+/- keyed	LISS Item	Statement
+	P028	Am relaxed most of the time.	+	P020	Am the life of the party.	+	P026	Am interested in people.	+	P022	Am always prepared.	+	P024	Have a rich vocabulary.
+	P038	Seldom feel blue.	+	P030	Feel comfortable around people.	+	P036	Sympathize with others' feelings.	+	P032	Pay attention to details.	+	P034	Have a vivid imagination.
			+	P040	Start conversations.	+	P046	Have a soft heart.	+	P042	Get chores done right away.	+	P044	Have excellent ideas.
-	P023	Get stressed out easily.	+	P050	Talk to a lot of different people at parties.	+	P056	Take time out for others.	+	P052	Like order.	+	P054	Am quick to understand things.
-	P033	Worry about things.	+	P060	Don't mind being the center of attention.	+	P061	Feel others' emotions.	+	P062	Follow a schedule.	+	P059	Use difficult words.
-	P043	Am easily disturbed.				+	P066	Make people feel at ease.	+	P067	Am exacting in my work.	+	P064	Spend time reflecting on things.
-	P048	Get upset easily.	-	P035	Don't talk a lot.							+	P069	Am full of ideas.
-	P053	Change my mood a lot.	-	P035	Keep in the background.	-	P051	Am not really interested in others.	-	P027	Leave my belongings around.			
-	P058	Have frequent mood swings.	-	P045	Have little to say.	-	P031	Insult people.	-	P037	Make a mess of things.	-	P029	Have difficulty understanding abstract ideas.
-	P063	Get irritated easily.	-	P055	Don't like to draw attention to myself.	-	P041	Am not interested in other people's problems.	-	P047	Often forget to put things back in their proper place.	-	P039	Am not interested in abstract ideas.
-	P068	Often feel blue	-	P065	Am quiet around strangers.	-	P021	Feel little concern for others.	-	P057	Shirk my duties.	-	P049	Do not have a good imagination.

Table A4: Regression results for personality traits and flex contracts when not holding personality constant. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.0518 (0.0358)	0.145** (0.0595)	0.145** (0.0597)	0.171*** (0.0587)	0.190* (0.102)	0.256** (0.104)
Neuroticism	-0.219*** (0.0196)	-0.154*** (0.0287)	-0.161*** (0.0287)	-0.152*** (0.0255)	-0.127*** (0.0309)	-0.130*** (0.0314)
Flex * Neuroticism	0.000990 (0.0426)	0.0938* (0.0545)	0.120** (0.0541)	0.175*** (0.0537)	0.185** (0.0742)	0.168** (0.0753)
Confidence	0.259*** (0.0214)	0.122*** (0.0276)	0.109*** (0.0273)	0.0745*** (0.0255)	0.0800*** (0.0307)	0.0861*** (0.0313)
Flex * Confidence	0.0369 (0.0432)	0.124** (0.0523)	0.123** (0.0528)	0.154*** (0.0553)	0.242*** (0.0807)	0.149** (0.0754)
Extraversion	0.0430*** (0.0166)	0.0391 (0.0278)	0.0481* (0.0275)	0.0619** (0.0263)	0.0743** (0.0311)	0.0671** (0.0317)
Flex * Extraversion	-0.0191 (0.0360)	-0.00493 (0.0492)	-0.0142 (0.0493)	-0.0406 (0.0487)	-0.0642 (0.0718)	-0.0689 (0.0751)
Job Security					-0.00330*** (0.000757)	-0.00327*** (0.000763)
Flex * Job Security					-0.00284 (0.00198)	-0.00363* (0.00201)
Constant	7.395*** (0.0167)	7.386*** (0.0131)	7.307*** (0.278)	8.972*** (1.518)	12.02*** (1.457)	10.75*** (1.622)
Observations	20,398	17,202	16,633	15,095	9,327	8,720
R-squared	0.073	0.627	0.632	0.639	0.665	0.666
Time FE	✓	✓	✓	✓	✓	✓
Worker FE	X	✓	✓	✓	✓	✓
Sector Control	X	X	✓	✓	✓	✓
Part-time Control	X	X	✓	✓	✓	✓
Education control	X	X	X	✓	✓	✓
Age Control	X	X	X	✓	✓	✓
Domestic Situation Control	X	X	X	✓	✓	✓
Income Control	X	X	X	X	X	✓
Person Cluster	✓	✓	✓	✓	✓	✓

Table A5: Regression results for IPIP Big Five personality traits and flex contracts when holding personality constant. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.0375 (0.0330)	0.134*** (0.0429)	0.135*** (0.0430)	0.144*** (0.0412)	0.277*** (0.0708)	0.300*** (0.0730)
Neuroticism	0.350*** (0.0181)					
Flex * Neuroticism	0.0231 (0.0356)	-0.0189 (0.0432)	-0.0460 (0.0425)	-0.0785* (0.0426)	-0.143** (0.0658)	-0.149** (0.0670)
Agreeableness	0.136*** (0.0184)					
Flex * Agreeableness	-0.0632* (0.0367)	0.00999 (0.0533)	-0.000794 (0.0541)	-0.0412 (0.0522)	-0.0550 (0.0768)	-0.00792 (0.0766)
Extraversion	0.0473*** (0.0173)					
Flex * Extraversion	0.0316 (0.0361)	0.0117 (0.0468)	0.00357 (0.0475)	-0.00608 (0.0444)	0.0537 (0.0685)	0.0584 (0.0699)
Conscientiousness	0.111*** (0.0178)					
Flex * Conscientiousness	0.0239 (0.0367)	0.0712 (0.0502)	0.0766 (0.0511)	0.0737 (0.0478)	0.0660 (0.0769)	0.0491 (0.0793)
Openness	-0.0643*** (0.0183)					
Flex * Openness	-0.0463 (0.0363)	-0.00249 (0.0479)	-0.00574 (0.0493)	0.0716 (0.0450)	0.0467 (0.0689)	0.0415 (0.0708)
Job Security					-0.00430*** (0.000561)	-0.00427*** (0.000573)
Flex * Job Security					-0.00151 (0.00136)	-0.00168 (0.00144)
Constant	7.375*** (0.0157)	7.391*** (0.00927)	6.890*** (0.266)	7.871*** (0.678)	10.09*** (1.047)	8.895*** (1.208)
Observations	36,063	33,626	32,573	29,615	18,538	17,357
R-squared	0.074	0.580	0.585	0.594	0.622	0.625
Time FE	✓	✓	✓	✓	✓	✓
Worker FE	X	✓	✓	✓	✓	✓
Sector Control	X	X	✓	✓	✓	✓
Part-time Control	X	X	✓	✓	✓	✓
Education control	X	X	X	✓	✓	✓
Age Control	X	X	X	✓	✓	✓
Domestic Situation Control	X	X	X	✓	✓	✓
Income Control	X	X	X	X	X	✓
Person Cluster	✓	✓	✓	✓	✓	✓

Table A6: Regression results for IPIP Big Five personality traits and flex contracts when not holding personality constant. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.0488 (0.0361)	0.145** (0.0602)	0.146** (0.0604)	0.166*** (0.0595)	0.199* (0.102)	0.265*** (0.103)
Neuroticism	0.355*** (0.0184)	0.224*** (0.0283)	0.225*** (0.0278)	0.198*** (0.0255)	0.168*** (0.0307)	0.173*** (0.0315)
Flex * Neuroticism	0.0146 (0.0392)	-0.0561 (0.0527)	-0.0820 (0.0519)	-0.130** (0.0521)	-0.0805 (0.0775)	-0.102 (0.0803)
Agreeableness	0.120*** (0.0179)	-0.0191 (0.0255)	-0.0181 (0.0249)	0.00844 (0.0241)	0.0308 (0.0303)	0.0236 (0.0313)
Flex * Agreeableness	-0.109*** (0.0382)	-0.0421 (0.0508)	-0.0418 (0.0514)	-0.0391 (0.0501)	-0.0156 (0.0766)	0.0259 (0.0802)
Extraversion	0.0588*** (0.0174)	0.0707** (0.0295)	0.0821*** (0.0295)	0.0720** (0.0280)	0.0684** (0.0331)	0.0591* (0.0339)
Flex * Extraversion	0.0502 (0.0390)	0.0645 (0.0525)	0.0518 (0.0522)	0.0254 (0.0520)	0.0228 (0.0802)	-0.0105 (0.0798)
Conscientiousness	0.104*** (0.0173)	0.0383 (0.0260)	0.0343 (0.0265)	0.0457* (0.0257)	0.0456 (0.0326)	0.0385 (0.0326)
Flex * Conscientiousness	0.0698* (0.0393)	0.102* (0.0522)	0.100* (0.0530)	0.0638 (0.0516)	0.0719 (0.0796)	0.0419 (0.0833)
Openness	-0.0607*** (0.0178)	-0.0134 (0.0259)	-0.0271 (0.0260)	-0.0297 (0.0247)	0.0110 (0.0301)	0.0172 (0.0310)
Flex * Openness	-0.0561 (0.0391)	-0.0500 (0.0550)	-0.0332 (0.0552)	0.0507 (0.0512)	-0.0548 (0.0753)	-0.0384 (0.0774)
Job Security					-0.00331*** (0.000755)	-0.00327*** (0.000761)
Flex * Job Security					-0.00292 (0.00198)	-0.00369* (0.00202)
Constant	7.414*** (0.0164)	7.391*** (0.0132)	7.280*** (0.281)	8.960*** (1.513)	11.81*** (1.475)	10.58*** (1.634)
Observations	20,416	17,213	16,642	15,102	9,331	8,725
R-squared	0.075	0.627	0.632	0.638	0.664	0.666
Time FE	✓	✓	✓	✓	✓	✓
Worker FE	X	✓	✓	✓	✓	✓
Sector Control	X	X	✓	✓	✓	✓
Part-time Control	X	X	✓	✓	✓	✓
Education control	X	X	X	✓	✓	✓
Age Control	X	X	X	✓	✓	✓
Domestic Situation Control	X	X	X	✓	✓	✓
Income Control	X	X	X	X	X	✓
Person Cluster	✓	✓	✓	✓	✓	✓

Table A7: Regression results for customized personality traits and flex contracts when split between low and high education levels. The personality scores have been standardized as in equation (2). A low level of education denotes practical continued education or lower. A high level of education denotes applied sciences or academic education. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

EDUCATION LEVEL	VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
<u>Low level of education</u>	Flex	-0.0530 (0.0446)	0.116* (0.0628)	0.120* (0.0627)	0.116** (0.0552)	0.301*** (0.104)	0.255** (0.111)
	Neuroticism	-0.209*** (0.0281)					
	Flex * Neuroticism	-0.0354 (0.0572)	0.0223 (0.0804)	0.0830 (0.0722)	0.120* (0.0675)	0.106 (0.118)	0.118 (0.127)
	Confidence	0.281*** (0.0299)					
	Flex * Confidence	-0.0293 (0.0566)	0.102 (0.0738)	0.126* (0.0713)	0.0937 (0.0676)	0.00648 (0.132)	-0.00600 (0.142)
	Extraversion	0.0253 (0.0231)					
	Flex * Extraversion	-0.0191 (0.0465)	0.000410 (0.0635)	-0.0129 (0.0630)	-0.0321 (0.0555)	-0.0593 (0.0892)	-0.0359 (0.0947)
	Job Security					-0.00418*** (0.000688)	-0.00408*** (0.000692)
	Flex * Job Security					-0.00152 (0.00188)	-0.00174 (0.00200)
	Constant	7.378*** (0.0214)	7.390*** (0.0133)	6.780*** (0.296)	7.992*** (0.981)	8.844*** (1.326)	8.252*** (1.530)
	Observations	20,388	18,600	18,056	16,631	10,372	9,646
	R-squared	0.071	0.600	0.607	0.622	0.650	0.654
<u>High level of education</u>	Flex	-0.0160 (0.0477)	0.121* (0.0670)	0.136** (0.0679)	0.151** (0.0679)	0.185* (0.102)	0.267*** (0.0968)
	Neuroticism	-0.173*** (0.0281)					
	Flex * Neuroticism	0.0597 (0.0543)	0.110 (0.0718)	0.116 (0.0736)	0.131* (0.0723)	0.194* (0.109)	0.174 (0.106)
	Confidence	0.268*** (0.0342)					
	Flex * Confidence	0.167*** (0.0644)	0.176* (0.103)	0.144 (0.104)	0.187* (0.103)	0.242* (0.145)	0.144 (0.123)
	Extraversion	0.0379* (0.0220)					
	Flex * Extraversion	-0.0315 (0.0487)	-0.0233 (0.0678)	-0.0368 (0.0690)	-0.0202 (0.0603)	0.0346 (0.0860)	0.0535 (0.0894)
	Job Security					-0.00426*** (0.00105)	-0.00434*** (0.00110)
	Flex * Job Security					-0.00123 (0.00199)	-0.000789 (0.00205)
	Constant	7.345*** (0.0236)	7.416*** (0.0137)	6.681*** (0.409)	7.453*** (0.729)	8.016*** (1.300)	5.592*** (1.610)
	Observations	14,349	13,299	12,832	11,770	7,500	7,086
	R-squared	0.076	0.567	0.573	0.578	0.591	0.592
	Time FE	✓	✓	✓	✓	✓	✓
	Worker FE	X	✓	✓	✓	✓	✓
	Sector Control	X	X	✓	✓	✓	✓
	Part-time Control	X	X	✓	✓	✓	✓
	Education control	X	X	X	✓	✓	✓
	Age Control	X	X	X	✓	✓	✓
	Domestic Situation Control	X	X	X	✓	✓	✓
	Income Control	X	X	X	X	X	✓
	Person Cluster	✓	✓	✓	✓	✓	✓

Table A8: Regression results for flex contracts. In order to perform a robustness check, the dependent variable job satisfaction has been measured using a 1-4 scale in this analysis. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively. Column (5) and (6) are discussed in sections 5.6 and 5.7, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.0440*** (0.0122)	0.0543*** (0.0175)	0.0676*** (0.0182)	0.0696*** (0.0185)	0.142*** (0.0324)	0.140*** (0.0344)
Job Security					-0.00192*** (0.000233)	-0.00194*** (0.000242)
Flex * Job Security					-0.000733 (0.000593)	-0.000548 (0.000635)
Constant	3.147*** (0.00621)	3.127*** (0.00416)	3.044*** (0.105)	2.795*** (0.325)	3.036*** (0.450)	2.721*** (0.512)
Observations	41,160	36,739	29,538	29,201	18,295	17,105
R-squared	0.001	0.503	0.511	0.513	0.538	0.538
Time FE	✓	✓	✓	✓	✓	✓
Worker FE	X	✓	✓	✓	✓	✓
Sector Control	X	X	✓	✓	✓	✓
Part-time Control	X	X	✓	✓	✓	✓
Education control	X	X	X	✓	✓	✓
Age Control	X	X	X	✓	✓	✓
Domestic Situation Control	X	X	X	✓	✓	✓
Income Control	X	X	X	X	X	✓
Person Cluster	✓	✓	✓	✓	✓	✓

Table A9: Regression results for customized personality traits and flex contracts. In order to perform a robustness check, the dependent variable job satisfaction has been measured using a 1-4 scale in this analysis. The personality scores have been standardized as in equation (2). Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.00269 (0.0117)	0.0542*** (0.0174)	0.0563*** (0.0174)	0.0683*** (0.0184)	0.144*** (0.0331)	0.142*** (0.0353)
Neuroticism	-0.0900*** (0.00782)					
Flex * Neuroticism	0.0170 (0.0147)	0.0304 (0.0203)	0.0364* (0.0201)	0.0756*** (0.0215)	0.0983*** (0.0346)	0.0970*** (0.0356)
Confidence	0.0928*** (0.00811)					
Flex * Confidence	0.0449*** (0.0150)	0.0265 (0.0230)	0.0274 (0.0231)	0.0680*** (0.0246)	0.0528 (0.0432)	0.0401 (0.0441)
Extraversion	0.0155** (0.00647)					
Flex * Extraversion	-0.0155 (0.0122)	-0.0155 (0.0176)	-0.0185 (0.0178)	-0.0161 (0.0183)	0.00917 (0.0291)	0.0199 (0.0305)
Job Security					-0.00192*** (0.000232)	-0.00195*** (0.000242)
Flex * Job Security					-0.000768 (0.000593)	-0.000596 (0.000635)
Constant	3.122*** (0.00596)	3.127*** (0.00418)	2.921*** (0.0911)	2.797*** (0.324)	3.049*** (0.449)	2.731*** (0.511)
Observations	40,453	36,636	35,887	29,137	18,293	17,103
R-squared	0.066	0.502	0.504	0.513	0.538	0.539
Time FE	√	√	√	√	√	√
Worker FE	X	√	√	√	√	√
Sector Control	X	X	√	√	√	√
Part-time Control	X	X	√	√	√	√
Education control	X	X	X	√	√	√
Age Control	X	X	X	√	√	√
Domestic Situation Control	X	X	X	√	√	√
Income Control	X	X	X	X	X	√
Person Cluster	√	√	√	√	√	√

Table A10: The Pearson correlation coefficient between Confidence and Perceived Job Security. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

	Confidence	Perceived Job Security
Confidence	1.0000	
Perceived Job Security	-0.1226***	1.0000
P-value	0.0000	

Table A11: Regression results for customized personality traits and flex contracts classified into income level. The personality scores have been standardized as in equation (2). Column (1) represents observations for which the income is zero. Columns (2)-(5) represent quartiles of the sample based on their income. The quartiles are calculated when omitting observations with a wage equal to zero. The dependent variable throughout all columns is the level of job satisfaction on a 10-point scale. Panel A represents regressions with only the flex variable and controls. Panel B adds the customized personality traits. Panel C adds the perceived job security. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

VARIABLES	(1) Wage = 0	(2) 0%-25%	(3) 25%-50%	(4) 50%-75%	(5) 75%-100%
<i>Panel A</i>					
Flex	-0.400* (0.214)	0.00120 (0.102)	0.147 (0.107)	0.174* (0.0891)	0.175** (0.0741)
Constant	4.812 (9.234)	12.42** (4.988)	7.284*** (1.907)	8.632*** (3.140)	6.879*** (1.410)
Observations	504	3,812	5,923	7,996	10,342
R-squared	0.725	0.654	0.644	0.636	0.626
<i>Panel B</i>					
Flex	-0.557* (0.285)	-0.0342 (0.0979)	0.106 (0.102)	0.191** (0.0891)	0.146* (0.0797)
Flex * Neuroticism	-0.311 (0.311)	0.238* (0.129)	0.198* (0.109)	0.351*** (0.103)	0.00341 (0.0898)
Flex * Confidence	-0.420 (0.360)	0.0808 (0.144)	0.0146 (0.108)	-0.0619 (0.137)	0.152 (0.110)
Flex * Extraversion	0.0561 (0.324)	-0.109 (0.119)	-0.0617 (0.0815)	0.0440 (0.0963)	-0.0223 (0.0746)
Constant	5.067 (9.288)	12.40** (5.007)	7.300*** (1.910)	8.334*** (3.117)	6.861*** (1.417)
Observations	502	3,810	5,913	7,975	10,318
R-squared	0.727	0.655	0.644	0.637	0.626
<i>Panel C</i>					
Flex		0.241 (0.206)	0.0674 (0.187)	0.119 (0.139)	0.324*** (0.123)
Flex * Neuroticism		0.213 (0.256)	0.0364 (0.147)	0.406*** (0.132)	0.0527 (0.121)
Flex * Confidence		0.102 (0.298)	-0.241 (0.174)	-0.101 (0.163)	0.166 (0.183)
Flex * Extraversion		-0.0629 (0.184)	-0.141 (0.117)	0.0706 (0.141)	0.0475 (0.0960)
Perceived Job Security	0.0498 (0.0340)	-0.00207 (0.00170)	-0.00398*** (0.00128)	-0.00403*** (0.00110)	-0.00406*** (0.000872)
Flex * Perceived Job Security	-0.0674* (0.0343)	-0.00320 (0.00329)	0.000278 (0.00253)	0.000674 (0.00350)	-0.000505 (0.00221)
Constant	63.89** (23.16)	12.04 (7.396)	8.808*** (1.824)	8.574** (3.732)	9.544*** (1.673)
Observations	48	1,811	3,669	5,475	6,701
R-squared	0.808	0.676	0.684	0.653	0.644
Time FE	√	√	√	√	√
Worker FE	√	√	√	√	√
Sector Control	√	√	√	√	√
Part-time Control	√	√	√	√	√
Education control	√	√	√	√	√
Age Control	√	√	√	√	√
Domestic Situation Control	√	√	√	√	√
Person Cluster	√	√	√	√	√

Table A12: Regression results for customized personality traits and flex contracts including control coefficients. The personality scores have been standardized as in equation (2). Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.0380 (0.0327)	0.133*** (0.0424)	0.134*** (0.0424)	0.149*** (0.0412)	0.285*** (0.0712)	0.310*** (0.0722)
Neuroticism	0.280*** (0.0228)					
Flex * Neuroticism	0.00398 (0.0407)	0.0781 (0.0489)	0.104** (0.0479)	0.124** (0.0481)	0.169** (0.0781)	0.159** (0.0777)
Confidence	0.280*** (0.0228)					
Flex * Confidence	0.0470 (0.0433)	0.127** (0.0560)	0.125** (0.0559)	0.134** (0.0558)	0.0846 (0.0958)	0.0272 (0.0887)
Extraversion	0.0305* (0.0163)					
Flex * Extraversion	-0.0255 (0.0337)	-0.0281 (0.0431)	-0.0391 (0.0437)	-0.0448 (0.0405)	-0.00315 (0.0632)	0.0234 (0.0660)
Fulltime dummy			0.148*** (0.0472)	0.113** (0.0449)	0.0227 (0.0657)	-0.00354 (0.0653)
Sector: mining			1.172** (0.533)	0.781 (0.600)	0.530 (0.364)	0.342 (0.413)
Sector: industrial production			0.130 (0.279)	0.0169 (0.283)	-0.137 (0.358)	-0.302 (0.409)
Sector: utilities production, distribution and/or trade (electricity, natura..			0.107 (0.324)	-0.190 (0.320)	-0.461 (0.427)	-0.735 (0.479)
Sector: construction			0.327 (0.320)	0.286 (0.315)	-0.0199 (0.395)	-0.214 (0.454)
Sector: retail trade (including repairs of consumer goods)			0.253 (0.277)	0.125 (0.283)	-0.0282 (0.366)	-0.276 (0.419)
Sector: catering			0.228 (0.324)	0.164 (0.329)	-0.766 (0.525)	-1.080* (0.553)
Sector: transport, storage and communication			0.248 (0.304)	0.147 (0.304)	-0.0941 (0.390)	-0.306 (0.445)
Sector: financial			0.270 (0.294)	0.142 (0.303)	-0.146 (0.393)	-0.349 (0.444)
Sector: business services (including real estate, rental)			0.456 (0.287)	0.284 (0.294)	0.0509 (0.360)	-0.139 (0.409)
Sector: government services, public administration and mandatory social insu..			0.683** (0.298)	0.406 (0.296)	0.263 (0.394)	0.0932 (0.442)
Sector: education			0.748** (0.301)	0.545* (0.303)	0.147 (0.396)	0.0503 (0.442)
Sector: healthcare and welfare			0.548* (0.281)	0.449 (0.286)	0.304 (0.372)	0.111 (0.417)

Sector: environmental services, culture, recreation and other services	0.324	0.125	0.0112	-0.0970
	(0.296)	(0.306)	(0.386)	(0.428)
Sector: other	0.251	0.207	-0.00936	-0.224
	(0.271)	(0.275)	(0.356)	(0.408)
Hour-match worked and desired		-0.00468***	-0.00401***	-0.00420***
		(0.000875)	(0.00103)	(0.00105)
Age		-0.00357	-0.0467*	-0.0553*
		(0.0191)	(0.0282)	(0.0291)
Age^2		-0.000193	-4.28e-06	5.32e-05
		(0.000147)	(0.000206)	(0.000215)
Education: highschool low		-0.150	-0.443	-0.458
		(0.176)	(0.301)	(0.293)
Education: highschool high		-0.207	-0.597*	-0.576*
		(0.179)	(0.327)	(0.319)
Education: practical continued education		-0.157	-0.396	-0.373
		(0.176)	(0.315)	(0.307)
Education: appled sciences		-0.187	-0.465	-0.452
		(0.181)	(0.327)	(0.318)
Education: academic		-0.0686	-0.372	-0.387
		(0.188)	(0.339)	(0.331)
Education: special		0.710*	0.187	0.205
		(0.368)	(0.377)	(0.368)
Education: other		-0.0875	-0.324	-0.318
		(0.191)	(0.335)	(0.327)
Domestic situation: (Un)married co-habitation, without child(ren)		0.104*	0.137*	0.168**
		(0.0595)	(0.0710)	(0.0742)
Domestic situation: (Un)married co-habitation, with child(ren)		0.0635	0.0925	0.122
		(0.0633)	(0.0779)	(0.0822)
Domestic situation: Single, with child(ren)		0.0767	-0.0696	-0.0730
		(0.0852)	(0.105)	(0.111)
Domestic situation: Other		0.0449	0.149	0.199
		(0.114)	(0.145)	(0.148)
Perceived Job Security			-0.00430***	-0.00426***
			(0.000561)	(0.000573)
Flex * Perceived Job Security			-0.00156	-0.00175
			(0.00136)	(0.00143)
Log(wage)				0.219***
				(0.0763)
Constant	7.360***	7.391***	6.891***	7.845***
	(0.0161)	(0.00925)	(0.266)	(0.678)
Observations	36,054	33,626	32,573	29,615
R-squared	0.073	0.580	0.585	0.594
Time FE	✓	✓	✓	✓
Worker FE	X	✓	✓	✓
Person Cluster	✓	✓	✓	✓

Table A13: Regression results for customized personality traits and flex contracts with an alternative measure of job satisfaction. The personality scores have been standardized as in equation (2). Job satisfaction here is measured on a scale of 1 to 4 (“entirely disagree”, “disagree”, “agree” and “entirely agree”, respectively) on the statement “Everything considered, I am satisfied with my job”. Robust standard errors are in parentheses. *, **, and *** stand for a 10%, 5%, and 1% significance level, respectively.

VARIABLES	(1) Job satisfaction	(2) Job satisfaction	(3) Job satisfaction	(4) Job satisfaction	(5) Job satisfaction	(6) Job satisfaction
Flex	-0.00269 (0.0117)	0.0542*** (0.0174)	0.0563*** (0.0174)	0.0683*** (0.0184)	0.144*** (0.0331)	0.142*** (0.0353)
Neuroticism	-0.0900*** (0.00782)					
Flex * Neuroticism	0.0170 (0.0147)	0.0304 (0.0203)	0.0364* (0.0201)	0.0756*** (0.0215)	0.0983*** (0.0346)	0.0970*** (0.0356)
Confidence	0.0928*** (0.00811)					
Flex * Confidence	0.0449*** (0.0150)	0.0265 (0.0230)	0.0274 (0.0231)	0.0680*** (0.0246)	0.0528 (0.0432)	0.0401 (0.0441)
Extraversion	0.0155** (0.00647)					
Flex * Extraversion	-0.0155 (0.0122)	-0.0155 (0.0176)	-0.0185 (0.0178)	-0.0161 (0.0183)	0.00917 (0.0291)	0.0199 (0.0305)
Job Security					-0.00192*** (0.000232)	-0.00195*** (0.000242)
Flex * Job Security					-0.000768 (0.000593)	-0.000596 (0.000635)
Constant	3.122*** (0.00596)	3.127*** (0.00418)	2.921*** (0.0911)	2.797*** (0.324)	3.049*** (0.449)	2.731*** (0.511)
Observations	40,453	36,636	35,887	29,137	18,293	17,103
R-squared	0.066	0.502	0.504	0.513	0.538	0.539
Time FE	√	√	√	√	√	√
Worker FE	X	√	√	√	√	√
Sector Control	X	X	√	√	√	√
Part-time Control	X	X	√	√	√	√
Education control	X	X	X	√	√	√
Age Control	X	X	X	√	√	√
Domestic Situation Control	X	X	X	√	√	√
Income Control	X	X	X	X	X	√
Person Cluster	√	√	√	√	√	√