Happiness and Gender in the workplace: Case study using ISSP 2015

Henam Singla[*]

Abstract

Based on International Social Survey Program (ISSP) 2015, we analyzed different levels of happiness in an organization in a cross-national setting for 39 countries in the world. This paper also tries to explain the impact of Job-satisfaction using potential determinants of the variable. The main findings are: (i) Gender has a significant impact on the happiness level, this might in turn be affected by expectations of the workers. (ii) This is the first attempt to analyze the happiness level for different categories of workers as per ISCO08. (iii) Moreover, in the different categories, we observe that people requiring more skills has a direct positive relationship with the happiness level. (iv) Iceland reports the highest happiness value, followed by Norway and Austria. (v) United States, United Kingdom with high income are just above the world average in terms of mean of job satisfaction level. Econometric results reveal that usefulness of the job, autonomy and relation with the employer contributes positively to the job-satisfaction and hence, happiness level.

1 Introduction

Happiness is one of the important factor to shape our lives. The individual's happiness is difficult to measure since it depends on multiple factors. In this paper, we will make an attempt to quantify the happiness in the workplace by using a proxy variable of Job Satisfaction. Happiness is a variable of workplace social well-being measures. Since, measuring this variable can help firms' to improve firm's productivity and performance, that's why there is a growing interest among the Economists to look at this variable from the economic perspective and recommend policy implementations. Freeman (Freeman, 1977) states that job satisfaction is measured by the subjectivity of the individual. There have been several attempts to measure the well-being at work and analyze different aspects of work such as social, income, work culture, etc. There had been theories to differentiate the job satisfaction between male and females. Following conventional wisdom, the rate of happiness should be equal or more for men than women because men are paid higher wages and are better off in terms of promotion opportunities and discrimination, but the converse is true. This is termed as gender-job satisfaction paradox.(Kaiser, 2007) (Clark, 1997)

While there had been previous attempts to analyze job-satisfaction with its determinants such as contract, autonomy, skill, etc. but no one has attempted to define happiness in the workplace and analyze it. The aim of this paper is to contribute to the previous body of literature, along the track of (Sousa-Poza & Sousa-Poza, 2000b), using Econometric tools to measure Happiness level of employees. To this end, we use individual survey data from the module of 'Work Orientations' of ISSP 2015. The paper adds to the existing knowledge: (i) creating an index of happiness by using extensive job quality questions; (ii) analyzing job satisfaction level in terms of gender and diversity among the organizations by using econometric tools and accounting for potential endogeneity and misspecification problems.

The rest of the paper is structured as follows. Section 2 provides conceptual framework. Section 3 explains data and how we measure the happiness level, and Section 4 contains conclusion. The last section is the appendix with the estimation results and graphs.

2   Conceptual Framework

2.1   Job Satisfaction and Diversity

Job satisfaction can be measured by 8 variables: Gender, Age, Health, Education, Race, Marital Status, Housing Tenure, choosing Pay or promotion, Job security, relation at work. These variables are measurable, and we can run econometric regressions. Other variables which can be evaluated: Region, Job Security; Income of the individual; Spouse Work; Number of hours on work, Industry, Occupation, Establishment size, Union member, Incentive payments, Promotion opportunities, Managerial work, Temporary or contract work.

Since, happiness is a relative concept, we can use utility concept:

$$U = u(y, y*, h, E) \tag{1}$$

where, y is income (+); y* is relative income of others' (-); h is number of hours worked (-) and E is the expectations level (women set lower expectations than male due to which their job satisfaction rate is higher); it can depend on various factors such as work life balance, freedom in choosing number of work hours, non-pecuniary benefits. The bracket sign indicates a priori sign of the coefficient of the variable with respect to job satisfaction. For example, if y (employee's income) will rise, then happiness is also expected to rise, ceterius paribus. Other approaches to measure job satisfaction can be probability of quitting a job (measured by opportunity cost of worker working in his/her current job).

Happiness and productivity relation is discussed in (Oswald, Proto, & Sgroi, 2015). They perform various tasks on the individuals' in different scenarios to observe what activity yields most happiness and hence, more productivity. They concluded that the greatest rise in happiness was when the experiment involved showing movie clip to the subjects and yielded greatest productivity gain.

Lopes (Lopes, Lagoa, & Calapez, 2014) the main hypothesis is that work intensity has a major impact on worker's satisfaction with respect to autonomy. If a worker has a high degree

of autonomy, an increase in job intensity makes him/ her less satisfied. In terms of job satisfaction, they place a greater emphasis on the trend (rather than the level). The authors used Categorical Principal Components Analysis (CatPCA) to classify occupations for the skill levels (High and Low Clerical, High and Low Manual) for the following years: 1995, 2000, 2005, and 2010. They ran an ordered logit regression model to analyze at how work autonomy and work pressure affect job satisfaction (ordered multilevel scale). According to the results, high-skill workers are happier than low-skill workers, and clerical workers are happier than manual workers on average. In 1995, average satisfaction was shown to be higher than in any prior year.The results of job satisfaction are given for different countries especially Finland, Denmark, Sweden and the Netherlands. Aleksynska's (Aleksynska, 2018) objective is to highlight both a direct and an indirect effect of contractual arrangements on job satisfaction. The author also gauge the indirect effect of working conditions. The author used a simultaneous equation model, test the validity of these exclusion restrictions by using 2SLS. The six indices (physical environment, working time quality, social environment, skills and discretion and prospects, and earnings and work intensity) are used. The results showed that there is a strong positive correlation between individual job satisfaction and each of the work quality indices as mentioned above. Employment on a temporary formal contract is found to be negatively associated with a self-reported level of job satisfaction (directly as well as indirectly- working conditions).

The main aim of the paper is to report the happiness level for different categories of profession as per ISCO standards. We use the 1997 International Social Survey Program (ISSP) and analyze the 'Work Orientation' sub-category. This dataset contains countries from all the continents including Europe, Asia and Europe. It also contains less-developed countries which haven't been studied much by the economists such as Slovenia, Czech Republic, Lithuania). Not only this, we also try to compare the happiness level across countries (for example, (Sousa-Poza & Sousa-Poza, 2000b) analyzes the cross-national differences in job-satisfaction using the same dataset, but they used a bottom-up psychological model). This adds to the existing literature in the sense that previous papers ((Kaiser, 2007) and (Lopes et al., 2014)) have attempted to look at the happiness focusing on cross-country analysis. But, this is the first paper to look at the happiness at the workplace with a focus on gender and diversity. By using economet-

ric model and statistical analysis, we try to shed light on this topic as well. According to the authors of this study, economists usually do not do this, and they usually specify a model in an ad-hoc manner. Many authors ((Singh, David, & Mikkilineni, 2018) and (Wesarat, Sharif, & Abdul Majid, 2014)) mostly constructs that have a psycho-social dimension are very difficult to measure and happiness is just one of them, as its experience and expression varies from person to person (Benuyenah & Pandya, 2020). Gross National Happiness (GNH) is a measure used by authors (Benuyenah & Pandya, 2020) to use the organisational happiness in the country's growth such as Bhutan and explain employee happiness within organisations that have high employee diversity, fast-pace of work, convoluted work and information technology (IT) infrastructural systems.

2.2 Happiness linked with Productivity

Well-being at the workplace has an impact on the performance level of the employee and the productivity which he/ she brings in at the firm (Van Aerden, Puig-Barrachina, Bosmans, & Vanroelen, 2016). One experiment in a study (Oswald et al., 2015)indicated that happiness makes human being more productive (evidence of a link established between two). The study ran an experiment with 700 individuals- 4 types of experiments (initial questionnaire to rate their happiness level, shown movie clip or gave chocolates, fruits and drinks to increase their happiness, mid-level questionnaire to rate happiness, measure productivity by asking to answer correctly as many different additions of five two-digit numbers as much as possible in 10 minutes (Oswald et al., 2015). The effect of quality of employment and the health and well-being of the employee on job satisfaction is significant (Van Aerden et al., 2016). Standard Employment Relationship (SER) is the most advantageous employment arrangement when considering job satisfaction, general and mental health using means of Latent Class Cluster Analysis (LCCA) and binary logistic regression. Moreover, intrinsic rewards makes the most deviations in the employee's job satisfaction responses . This paper (Westover & Taylor, 2010) is one of the starting points to analyze impact on job-satisfaction on long-term worker productivity and performance and vary across countries in the world. The countries such as United Arab Emirates

(UAE) reports unhappiness due to job insecurity, stress to earn more and residing on work permits (Benuyenah & Pandya, 2020).

3   Data

The most accepted reason to not account for Job satisfaction and having received little importance from Economists is due to the subjective bias of the individuals. This depends on the state of mind of the individual and pre-conceived notions while answering the questions. We rely on International Social Survey Programme (ISSP) for our study. There are different topics of study available in this survey such as social networks, social inequality, family, work orientation, health and well being, etc. Since, we are trying to estimate the Happiness and well being of an employee in an organization, we are constrained at only 'Work Orientation' aspect of the survey. This survey included questions on job quality, work life balance, motivation to work, personal questions on work life aspects. This aspect of study has been conducted in 4 different years (1989, 1997, 2005, 2015). We are using the latest Work Orientations dataset, i.e., 2015 and analysing the Job Happiness. We are using only the latest wave because of the presence of our interest variables and moreover, the individuals surveyed cannot be compared in all the given years. One of the other purpose to include only 2015 is that the country coverage changed over time. So, to maintain the consistency and efficiency of our analysis, we stick to the latest Work Orientation dataset. In our final analysis survey sample, the dataset has a total of 41 countries and 51,668 observations. This is an annual dataset with cross-country collaboration. The survey data collected by ISSP is collected by independent institutions in several countries across the world[1]. The sub-fields which are defined in the survey are mostly same but the minor changes occur from time-to-time, bearing in mind the replication of results for researchers every five years.

---

[1]https://www.gesis.org/en/issp/modules/issp-modules-by-topic/work-orientations/2015

3.1 Measuring Happiness Index

Measuring happiness and the reasons to cause it are hard to find in a corporate setting. It requires appropriately measuring the concept and identifying the underlying variables. At the onlook of it, it can be observed that to measure any subjective concept can be a very challenging task. Economists' haven't agreed to a common concept of it. But, there had been several attempts in the past to create an index of Job Satisfaction. Brayfield(Brayfield & Rothe, 1951) made an attempt to index job satisfaction using a combination of Thurstone and Likert scaling methods in 1951. Their results were highly comparable to other attempt by Hoppock [2]. Harmesh (Hamermesh, 1999) focuses on the changing distribution of job satisfaction. He created a satisfaction index based on earnings, comparing their earnings allows us to test whether workers' regret about their choices dissipates over time.

Ours is the first attempt to measure happiness in the corporate setting using different variables as the parameters. We study happiness systematically and using world data which incorporates several nations data. This could be viewed as the starting point for further studies in the future. Happiness, in terms of corporate world (work perspective) is therefore based on the questions asked in ISSP survey that match the potential concept of happiness the most at the workplace based on the literature.

Largely, we identified the variables which have an impact on the happiness of the employee at workplace. There could have been several variables but we included three questions/ variables from the survey. First, we identified the question of Job Satisfaction where the respondent answers on a Likert scale of 0-7. Second, we include a variable of usefulness, i.e. where the respondent feels happy about his job doing useful work for the society. Third, autonomy has an impact on the happiness of the employees. This question asks the respondent if she/ he has the flexibility to decide the working hours of the job. These variables are also included in the World Happiness Report (2021) but that includes all aspects of life and not only work. So, as per the analysis and existing literature, we choose these three variables which we thought to be

---

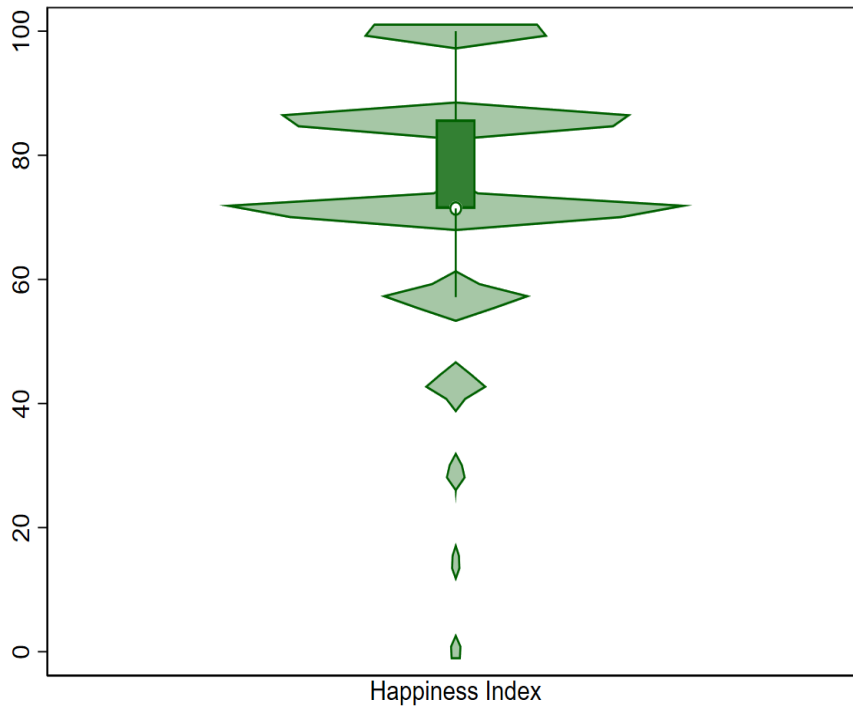[2]Hoppock, R. Job satisfaction. New York: Harper and Brothers, 1935

Figure 1: Violin plot, Happiness Index. Source: Authors based on International Social Survey Programme (ISSP) 2015

consistent with our study and justifies the existing literature as well.

The above figure 2 shows a violin plot that shows the respondent's answer distribution for the three above-mentioned variables. The plot is made for the observations only when Happiness is greater than 1 because less than 0 are those observations where the values are missing or the the respondent didn't answer. These are 28,308 data points that are plotted in the graph. A violin plot gives the kernel density of the data and has features of both box and density plots. As observed from the graph, the majority of the data lie above 75 indicating that there is a high concentration of data points in the "Strongly Agree" and "Agree" category. The white dot on the graph represents the mean, i.e 75.9 in this case and the box gives out the interquartile range. The standard deviation is only 16.7 indicating that there is low variation in the respondent's answer. Only 7% of the respondents lie in the lower category of the responses ("Strongly Disagree" and "Disagree") of the happiness index indicating that very handful of the individuals are not satisfied, do not consider their job useful and have no power of autonomy to decide working hours.

Violin plots are most useful in the case of categorical responses (Olsson, 1979). We create an

index by combining the three variables using polychoric principal component analysis (PCA). Since, the variables in our analysis are ordered responses with a well-defined continuum, that is why it is the perfect fit here. Rather standard PCA assumes the data to be continuous and normally distributed. 1 gives out the Simple Pearson's coefficent to determine if we can use PCA or not. The coefficient is minimum 0.76 and Cronbach's α is 0.84 which is a good indicator to use PCA.

Variable	Job Satisfaction	Usefulness	Autonomy
Job Satisfaction	1.0000		
Usefulness	0.8952	1.0000	
Autonomy	0.8007	0.7670	1.0000

Table 1: Simple Pearson's correlation coefficient

The above lower triangular matrix shows the high correlation among the variables. The three variables used to create happiness index are justified. Polychoric PCA determines the linear combinations of the polychoric correlation matrix of the input variables and preserves the ordinal or binary nature of the variables (Olsson, 1979). We ran the PCA analysis to determine which component should be preserved and which could be dropped. The first principal component accounted for 88.11% of the total variance. The eigenvalue associated with the first principal component is 2.64. On the other hand, the second component explained only 8.5% of the total variance. Moreover, it had an eigenvalue of 0.25. As per the the Kaiser rule, we should keep the components which has an eigenvalue of greater than 1, so following it, we only keep the first principal component (Jolliffe, 2005). For the ease of interpretation, we rescaled the variable from 0 to 100.

3.2 Other variables in the data

Other than the variables mentioned above, the survey has other data points which answer questions regarding the workplace of the employee. The previous questions answered only a few environment related and that have the most impact on happiness as per the literature. Our key independent variables are listed in Table 2 in the appendix. The measure of happiness con-

structed above does not reflect any personal questions or the working conditions of the work-place. Moreover, an employee's subjective judgement regarding work can also be affected by the home questions (number of children, is spouse working or not, etc.). Importantly, the questions of autonomy, job satisfaction and usefulness reflect the personal needs of the individual that are satiated.

There is a mention of diversity variable where the survey has a presence of ISCO08 variable. This is the new variable introduced in our paper only. This can be used for further investigations. It is divided into 10 categories as per International Labor Organization (ILO) standards. In addition, we have several independent variables that can have an impact on happiness. The socio-economic variables, working conditions (relationship with the employer, public/ private, working hours, discrimination, opportunities for advancement, independent work, stressful work, interesting job). Skills is also included where the employee skills are taken into account as per ILO standards and included a training variable if the company has provided any form of training to its employees. Our analysis also include preference for full-time/ part-time work, spouse working or not, number of children.

3.3 Empirical approach

In order to explain the happiness and job satisfaction level on the independent variables, we ran an ordered probit model to determine the impact as per the following equation:

$$JS_i = \alpha_0 + \alpha_1 E + ln(W) + \alpha_2 D_i + \mu \tag{2}$$

where JS_i is the job satisfaction level which assumes value from 0-3, 3 being the highest level of reported satisfaction. E is a vector of the variables where employees have some discretion over their work as per the theory (usefulness of the job for the employee, autonomy to decide working hours and relation with the Employer). ln(W) gives the log of working hours, D_i is a vector of the dummy variables which represent job characteristics with respect to work such as public organization or not, discrimination, opportunities for advancement exists, interesting

work as per the employee or not, independent work or not, involves stressful work or not, gender and i represents to all the individuals in the survey and μ is the stochastic error term. The results of equation 2 are given in Table 3 using ordered probit model.

In addition, we analyzed job satisfaction with diversity and gender. We ran an ordered probit model including interaction term in the following equation:

$$JS_i = \beta_0 + \beta_1 E + ln(W) + \beta_2 D_i + \beta_3 D_i * gender + \epsilon \tag{3}$$

where JS_i is the job satisfaction level which takes value from 0-3, 3 being the highest level of reported satisfaction. E is a vector of the variables for the employee characteristics and job relation (skill, relation with the employer, gender). ln(W) gives the log of working hours, D_i is a vector of the dummy variables which represent diversity as per the table 4. It has nine categories as per ISCO08. $D_i * gender$ gives the values for the interaction term where we analyze the female categories of each level as per the diversity categories and ϵ is the stochastic error term. The results of equation 3 are given in Table 4 using ordered probit model.

4 Results

In Figure 3, the mean of job-satisfaction level for different countries is observed which has 37 countries. The question observed is, "How satisfied are you in your main job?". Respondents answered this question on a seven-point scale. The categories range from "completely satisfied" to "completely dissatisfied". Some responses having missing values or "Don't know" are eliminated due to under-biasedness. We have converted the responses on a level that seven is the highest with completely satisfied and 0 being the lowest with completely dissatisfied[3]. In Figure 3, it plots the job satisfaction for thirty-seven countries including United States and India. It is clearly shown in the plot that World average is 5.33 which is more than the 75% of the

---

[3]We have done this to maintain consistency in the results so that the highest number indicates the higher level of job satisfaction. Moreover, there will be a slight change in the ranking of the countries if we take other scale such as two or three pointer scale.

level indicating that the countries report quite high level of job satisfaction overall. Some more interesting results presented are: (1) Workers in Venezuela reported the highest level of job satisfaction and workers in Japan the lowest level. (2) The top four countries who have reported the highest levels are Venezuela, Austria, Switzerland and Mexico respectively. (3) More than half of the countries in the survey have reported equal to or more than he world average of job-satisfaction. (4) The United States is just above the world average by 0.13 points. (4) Chile and Poland are among the countries who reported the lowest job satisfaction level. (5) All of the five Eastern European countries considered here (Russia, Hungary, Bulgaria, Slovenia and Czech Republic) are ranked among the lowest eight in the ladder. The most surprising result is that of "Japan", since having the highest level of technology in the world and a country with the optimum economic model which claims the best working conditions, work-life balance, good services to the citizens and better in terms of everything in the world, should have the better life satisfaction.

In Table 3, we have presented the results of an ordered probit regression model. The results are presented with the independent variables given in table 2. The dependent variable has job satisfaction with two type of variables: one with a range of three and another with a range of seven. This variable has been reclassified to these two categories because the standard deviation is low and we want to compare the results of two different ranges. Moreover, the lower range has very little values in both he categories. As per the results, we can analyze that skills, log of working hours per week, public organization and gender are not significant at 10% level. As we can observe, the working hours has an expected coefficient for the category with a wider range of the dependent variable.

5 Appendix

Figure 2: Mean of Job Satisfaction for all countries on a scale of 0-7 (Highest- 7)
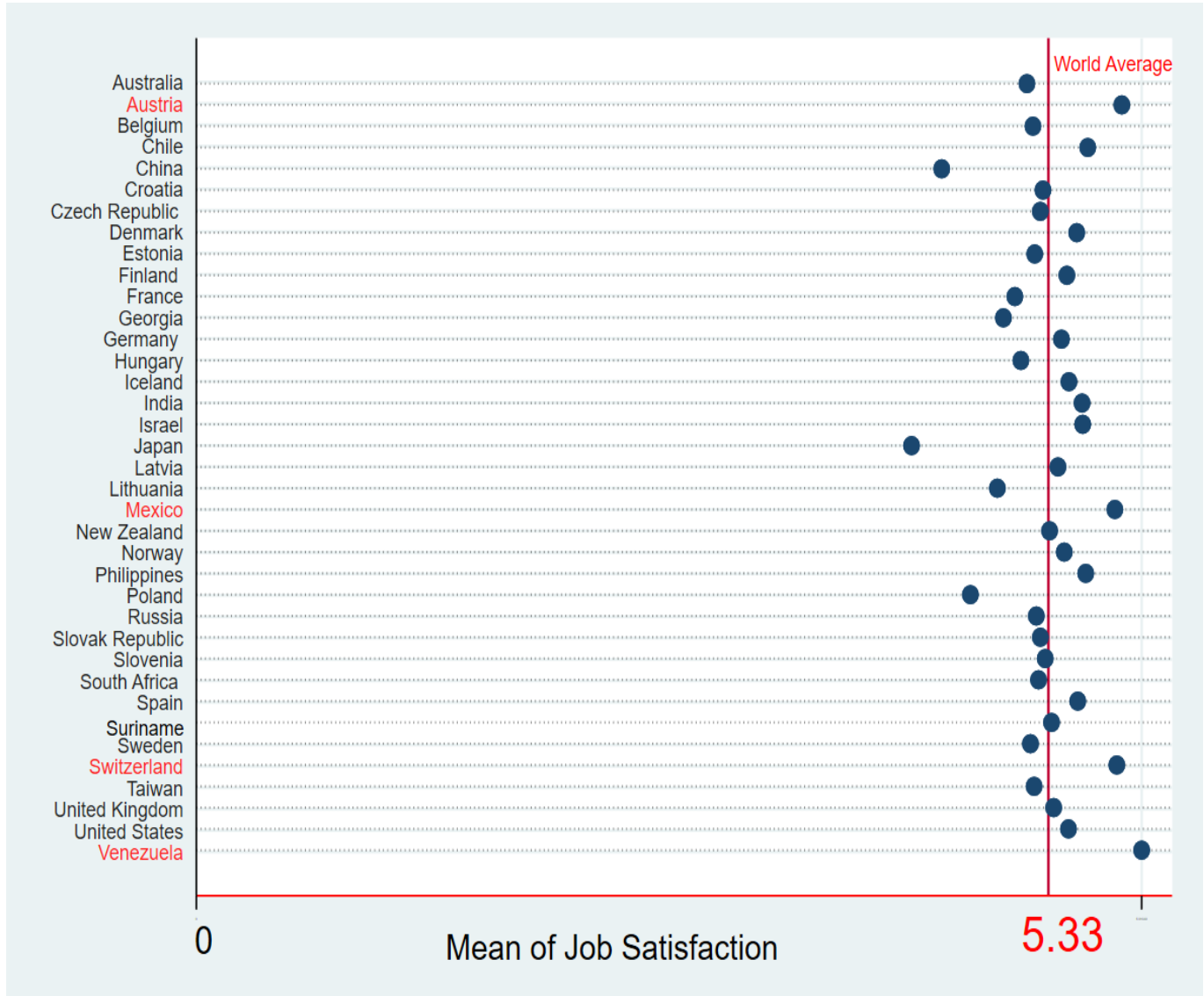
Table 2 : Variable Description

Variables	Definition
	Dependent variable
Happiness Index	An index created using polychoric principal component analysis (PCA) and eliminating all except first component of it. It involved three questions from the survey (1) "How satisfied are you in your (main) job, all things considered"; (2) "As per the respondent, her/ his job is useful to society" and (3) "How much are you free to decide your working hours?". The first two questions are measured on a ordinal scale, 1 = Strongly Agree; 2 = Agree; 3 = Neither; 4 = Disagree; 5 = Strongly Disagree.The last question has three possible outcomes: 1 = Cannot change, fixed time; 2 = Can decide within certain limits; 3 = Entirely free to decide. The index is created reordering these variables allocating the highest value to the outcome which will yield more happiness. Thereafter, the index is rescaled from 0 to 100 range indicating 100 being the highest level of happiness of the employee.
	Independent variables
Diversity	This variable has 10 dummy variables on the basis of the major groups in ISCO08[4]. International labor organization has given 10 major groups and similarly 10 variables are created for each of the categories: Managers, Professional, Technicians and associate professionals, Clerical support workers, Service and sales workers, Skilled agricultural, forestry and fishery workers, Craft and related trades workers, Plant and machine operators, and assemblers, Elementary occupation, Armed forces occupations.
Skill	A variable generated of three categories (High, Middle and Low skilled). The dummy variables are coded as 1 if the respondent is high skilled and similarly for the rest. Skilled categories are given by International Labour Organization 2012.

Relation with Employer	A binary indicator variable with the question of "In general, how would you describe relations at your workplace between management and employee". We converted the responses on an ordinal scale of 0-3. The variable is coded as 3 if the relationship is "Very good" and "Quite good", 2 if relationship is "Neither good nor bad", 1 if relationship is "Very Bad" and "Quite Bad".
Work Hours	Log of work hours per week in the main job given by the respondent
Control Variables	Gender (1 = female and 0 = male), public/ private (1 = Public, 0= Private, working hours per week, discrimination (1 if any type of discrimination occurs with the employee, opportunities for advancement (1 if the opportunities for advancement exists), independent work (1 if the respondent has independent work to do), stressful work (1 if the respondent is involved in stressful work), interesting job (1 if the respondent thinks that his/ her job is interesting and they enjoy to do it)

Table 3: Ordered Probit Regresssion Results of Determinants of Job-Satisfaction

	Job Satisfaction level (1-3)	Satisfaction level (1-7)
Skills (on a scale of 1-3)	0.0779	0.0918*
	(1.47)	(2.51)
Usefulness of the job for the employee	0.196***	0.231***
	(16.02)	(24.47)
Autonomy to decide working hours	0.218***	0.238***
	(14.98)	(24.37)
Relation with the Employer	0.420***	0.378***
	(41.86)	(47.90)
Log of working hours per week	0.0348	-0.00161
	(1.62)	(-0.11)
Public organization or not	0.0328	0.0240
	(1.39)	(1.52)
Discrimination	-0.371***	-0.263***
	(-15.93)	(-15.01)
Opportunities for advancement exists	0.176***	0.278***
	(6.57)	(17.46)
Interesting work as per the employee or not	0.852***	0.773***
	(37.82)	(44.41)
Independent work or not	0.185***	0.200***
	(8.31)	(12.23)
Involves stressful work or not	-0.291***	-0.225***
	(-14.28)	(-15.94)
Gender	0.00346	-0.0219
	(0.16)	(-1.50)
N	25925	25925

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

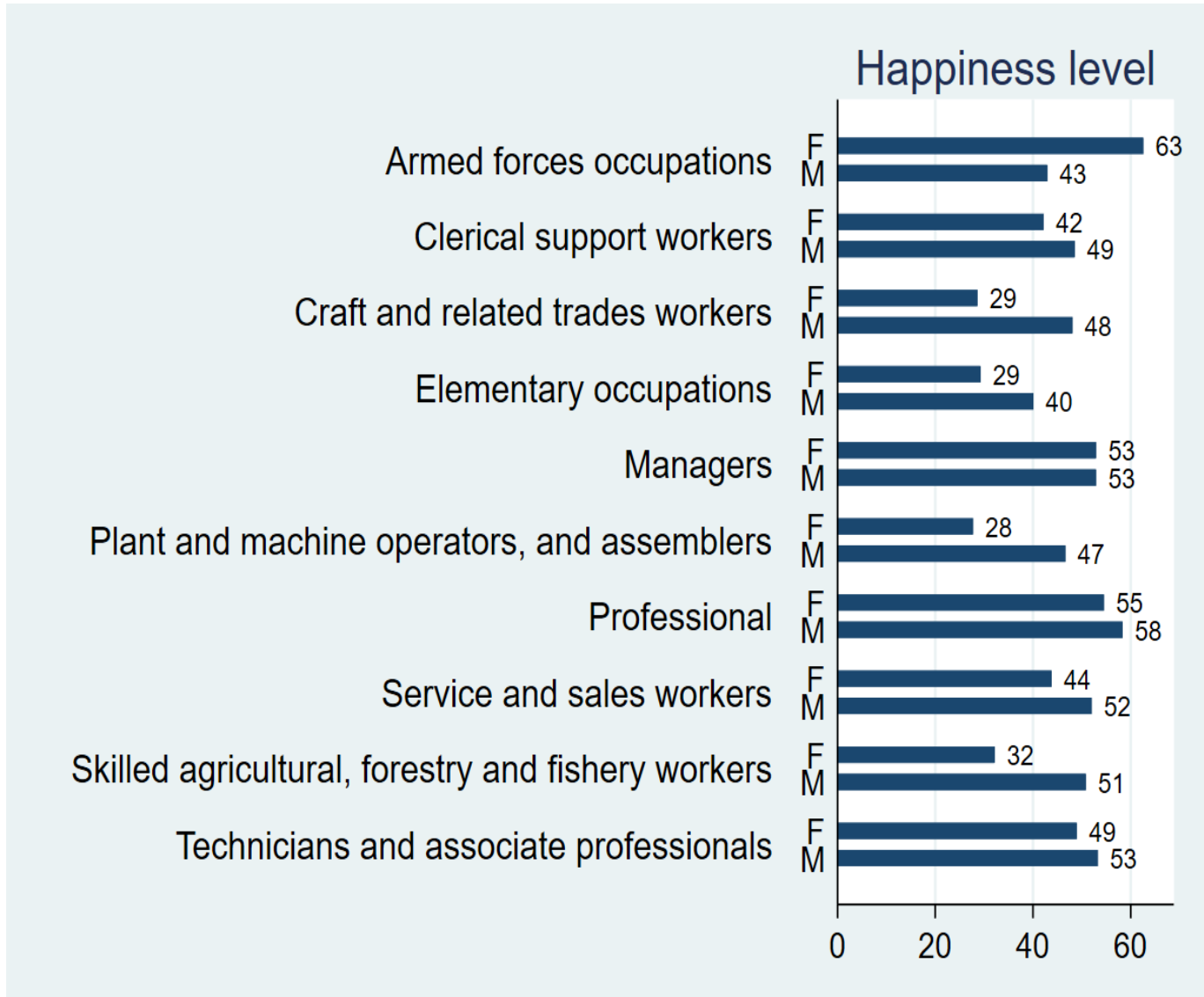Figure 3: Mean of Happiness level for all categories as per ISCO08

Happiness level

Category	Gender	Value
Armed forces occupations	F	63
	M	43
Clerical support workers	F	42
	M	49
Craft and related trades workers	F	29
	M	48
Elementary occupations	F	29
	M	40
Managers	F	53
	M	53
Plant and machine operators, and assemblers	F	28
	M	47
Professional	F	55
	M	58
Service and sales workers	F	44
	M	52
Skilled agricultural, forestry and fishery workers	F	32
	M	51
Technicians and associate professionals	F	49
	M	53

Table 4: Ordered Probit Regresssion Results with Interaction terms of Gender and Diversity

	Satisfaction level (1-3)	Satisfaction level (1-7)
Skill	0.0415	0.0701
	(0.79)	(1.93)
Relation with employer	0.450***	0.399***
	(47.14)	(51.82)

Log of working hours per week	0.0384	0.000406
	(1.84)	(0.03)
Female	0.464	0.114
	(0.94)	(0.39)
Diversity		
Managers	0.336*	0.212
	(2.09)	(1.88)
Professionals	0.295	0.162
	(1.89)	(1.45)
Technicians & associate professionals	0.383*	0.153
	(2.44)	(1.37)
Clerical support workers	0.261	0.124
	(1.53)	(1.02)
Service and sales workers	0.323	0.320*
	(1.77)	(2.48)
Skilled agricultural, forestry and	0.495*	0.467***
fishery workers	(2.53)	(3.37)
Craft and related trades workers	0.386*	0.317*
	(2.05)	(2.38)
Plant and machine operators, and	0.352	0.262
assemblers	(1.86)	(1.95)
Elementary occupations	0.182	0.197
	(0.96)	(1.46)
Interaction Terms		
Female Managers	-0.461	-0.146
	(-0.92)	(-0.49)

Female Professionals	-0.411	-0.141
	(-0.83)	(-0.48)
Female Technicians & associate professionals	-0.547	-0.164
	(-1.10)	(-0.56)
Female Clerical support workers	-0.465	-0.142
	(-0.93)	(-0.48)
Female Service and sales workers	-0.471	-0.156
	(-0.95)	(-0.53)
Female Skilled agricultural, forestry	-0.580	-0.211
and fishery workers	(-1.15)	(-0.69)
Female Craft and related trades workers	-0.489	-0.178
	(-0.98)	(-0.59)
Female Plant and machine operators,	-0.644	-0.250
and assemblers	(-1.29)	(-0.83)
Female Elementary occupations	-0.361	-0.0661
	(-0.73)	(-0.22)
N	25925	25925

t statistics in parentheses

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

Table 5: Happiness level for countries in the ISPP

Country	Happiness Level	Country	Happiness Level
Australia	44.86	Austria	54.03
Belgium	41.48	Chile	38.41
China	29.02	Taiwan	47.81
Croatia	40.17	Czech Republic	42.89
Denmark	49.08	Estonia	43.45
Finland	41.38	France	41.23
Georgia	22.12	Germany	49.12
Hungary	41.43	Iceland	59.83
India	39.04	Israel	50.58
Japan	39.17	Latvia	45.95
Lithuania	36.27	Mexico	45.25
New Zealand	49.17	Norway	57.74
Philippines	44.90	Poland	29.90
Russia	41.95	Slovak Republic	39.42
Slovenia	36.11	South Africa	21.96
Spain	37.54	Suriname	41.46
Sweden	47.15	Switzerland	53.88
Great Britain and/or United Kingdom	39.44	United States	49.23
Venezuela	31.96		

References

Akerlof, G. A., Rose, A. K., Yellen, J. L., Ball, L., & Hall, R. E. (1988). Job switching and job satisfaction in the us labor market. *Brookings papers on economic activity*, *1988*(2), 495–594.

Aleksynska, M. (2018). Temporary employment, work quality, and job satisfaction. *Journal of Comparative Economics*, *46*(3), 722–735.

Andrade, M. S., & Westover, J. H. (2018). Generational differences in work quality characteristics and job satisfaction. In *Evidence-based hrm: A global forum for empirical scholarship*.

Andrade, M. S., Westover, J. H., & Peterson, J. (2019). Job satisfaction and gender. *Journal of Business Diversity*, *19*(3).

Artz, B. (2012). Does the impact of union experience on job satisfaction differ by gender? *ILR Review*, *65*(2), 225–243.

Artz, B., Blanchflower, D. G., & Bryson, A. (2021). *Unions increase job satisfaction in the united states* (Tech. Rep.). National Bureau of Economic Research.

Aydogdu, S., & Asikgil, B. (2011). An empirical study of the relationship among job satisfaction, organizational commitment and turnover intention. *International review of management and marketing*, *1*(3), 43–53.

Bauer, T. K. (2004). High performance workplace practices and job satisfaction: Evidence from europe. *Available at SSRN 582304*.

Bender, K. A., Donohue, S. M., & Heywood, J. S. (2005). Job satisfaction and gender segregation. *Oxford economic papers*, *57*(3), 479–496.

Benuyenah, V., & Pandya, B. (2020). Meaning of "employee happiness" within the context of complex organisations? an explanatory review on the uae labour force. *Rajagiri Management Journal*.

Bozeman, B., & Gaughan, M. (2011). Job satisfaction among university faculty: Individual, work, and institutional determinants. *The Journal of Higher Education*, *82*(2), 154–186.

Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of applied psychology*, *35*(5), 307.

Chiplunkar, G., & Goldberg, P. K. (2021). *Aggregate implications of barriers to female entrepreneurship* (Tech. Rep.). National Bureau of Economic Research.

Clark, A. E. (1997). Job satisfaction and gender: why are women so happy at work? *Labour economics*, *4*(4), 341–372.

Cuberes, D., & Teignier, M. (2016). Aggregate effects of gender gaps in the labor market: A quantitative estimate. *Journal of Human Capital*, *10*(1), 1–32.

Dalton, A. H., & Marcis, J. G. (1987). Gender differences in job satisfaction among young adults. *Journal of Behavioral Economics*.

De Bustillo Llorente, R. M., & Macias, E. F. (2005). Job satisfaction as an indicator of the quality of work. *The Journal of Socio-Economics*, *34*(5), 656–673.

DeSantis, V. S., & Durst, S. L. (1996). Comparing job satisfaction among public-and private-sector employees. *The American Review of Public Administration*, *26*(3), 327–343.

Dhuru, P. (2016). A study on cultural differences of organizations based in india and middle

east. *OPUS: HR Journal*, *7*(2), 16–31.

Donohue, S. M., & Heywood, J. S. (2004). Job satisfaction and gender: an expanded specification from the nlsy. *International Journal of Manpower*.

Faragher, E. B., Cass, M., & Cooper, C. L. (2013). The relationship between job satisfaction and health: a meta-analysis. *From stress to wellbeing Volume 1*, 254–271.

Finlay, W., Martin, J. K., Roman, P. M., & Blum, T. C. (1995). Organizational structure and job satisfaction: Do bureaucratic organizations produce more satisfied employees? *Administration & Society*, *27*(3), 427–450.

Fischer, J. A., & Sousa-Poza, A. (2009). Does job satisfaction improve the health of workers? new evidence using panel data and objective measures of health. *Health economics*, *18*(1), 71–89.

Fletcher, E., Pande, R., & Moore, C. M. T. (2017). Women and work in india: Descriptive evidence and a review of potential policies.

Freeman, R. B. (1977). Job satisfaction as an economic variable.

Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences. *Journal of applied psychology*, *92*(6), 1524.

Gu, M., Tan, J. H. L., Amin, M., Mostafiz, M. I., & Yeoh, K. K. (2021). Revisiting the moderating role of culture between job characteristics and job satisfaction: a multilevel analysis of 33 countries. *Employee Relations: The International Journal*.

Hamermesh, D. S. (1999). *The changing distribution of job satisfaction*. National Bureau of Economic Research Cambridge, Mass., USA.

Hauff, S., Richter, N. F., & Tressin, T. (2015). Situational job characteristics and job satisfaction: The moderating role of national culture. *International business review*, *24*(4), 710–723.

Hsieh, C.-T., Hurst, E., Jones, C. I., & Klenow, P. J. (2019). The allocation of talent and us economic growth. *Econometrica*, *87*(5), 1439–1474.

Jeffrey Hill, E., Yang, C., Hawkins, A. J., & Ferris, M. (2004). A cross-cultural test of the work-family interface in 48 countries. *Journal of marriage and family*, *66*(5), 1300–

1316.

Jolliffe, I. (2005). Principal component analysis. *Encyclopedia of statistics in behavioral science*.

Kaiser, L. C. (2007). Gender-job satisfaction differences across europe: An indicator for labour market modernization. *International Journal of Manpower*.

Kawaguchi, D. (2008). Self-employment rents: Evidence from job satisfaction scores. *Hitotsubashi Journal of Economics*, 35–45.

Lévy-Garboua, L., Montmarquette, C., & Simonnet, V. (2007). Job satisfaction and quits. *Labour Economics*, *14*(2), 251–268.

Lopes, H., Lagoa, S., & Calapez, T. (2014). Work autonomy, work pressure, and job satisfaction: An analysis of european union countries. *The Economic and Labour Relations Review*, *25*(2), 306–326.

Millán, J. M., Hessels, J., Thurik, R., & Aguado, R. (2013). Determinants of job satisfaction: a european comparison of self-employed and paid employees. *Small business economics*, *40*(3), 651–670.

Moens, E., Baert, S., Verhofstadt, E., & Van Ootegem, L. (2021). Does loneliness lurk in temp work? exploring the associations between temporary employment, loneliness at work and job satisfaction. *PloS one*, *16*(5), e0250664.

Nikolova, M., & Cnossen, F. (2020). What makes work meaningful and why economists should care about it. *Labour Economics*, *65*, 101847.

Olsson, U. (1979). Maximum likelihood estimation of the polychoric correlation coefficient. *Psychometrika*, *44*(4), 443–460.

Oswald, A. J., Proto, E., & Sgroi, D. (2015). Happiness and productivity. *Journal of labor economics*, *33*(4), 789–822.

Perugini, C., & Vladisavljević, M. (2019). Gender inequality and the gender-job satisfaction paradox in europe. *Labour Economics*, *60*, 129–147.

Poggi, A. (2010). Job satisfaction, working conditions and aspirations. *Journal of Economic Psychology*, *31*(6), 936–949.

Sánchez-Sánchez, N., & Puente, A. C. F. (2021). Public versus private job satisfaction. is there

a trade-off between wages and stability? *Public Organization Review*, *21*(1), 47–67.

Singh, S., David, R., & Mikkilineni, S. (2018). Organizational virtuousness and work engagement: Mediating role of happiness in india. *Advances in Developing Human Resources*, *20*(1), 88–102.

Skalli, A., Theodossiou, I., & Vasileiou, E. (2008). Jobs as lancaster goods: Facets of job satisfaction and overall job satisfaction. *The Journal of Socio-Economics*, *37*(5), 1906–1920.

Sousa-Poza, A., & Sousa-Poza, A. A. (2000a). Taking another look at the gender/job-satisfaction paradox. *Kyklos*, *53*(2), 135–152.

Sousa-Poza, A., & Sousa-Poza, A. A. (2000b). Well-being at work: a cross-national analysis of the levels and determinants of job satisfaction. *The journal of socio-economics*, *29*(6), 517–538.

Tims, M., Bakker, A. B., & Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of occupational health psychology*, *18*(2), 230.

Usui, E. (2008). Job satisfaction and the gender composition of jobs. *Economics Letters*, *99*(1), 23–26.

Van Aerden, K., Puig-Barrachina, V., Bosmans, K., & Vanroelen, C. (2016). How does employment quality relate to health and job satisfaction in europe? a typological approach. *Social Science & Medicine*, *158*, 132–140.

Wesarat, P.-o., Sharif, M. Y., & Abdul Majid, A. H. (2014). A conceptual framework of happiness at the workplace. *Asian Social Science*, *11*(2), 78–88.

Westover, J. H., & Taylor, J. (2010). International differences in job satisfaction: The effects of public service motivation, rewards and work relations. *International Journal of Productivity and Performance Management*.