The University Of Sheffield.

Department Of Economics.

Sheffield Economic Research Paper Series.

Generalised self-efficacy and work values as indicators of job satisfaction: evidence from China

Pamela Lenton and Lu Yin

ISSN 1749-8368

SERPS no. 2018017

November 2018

Generalised self-efficacy and work values as indicators of job satisfaction: evidence from China

Pamela Lenton* and Lu Yin+

Abstract

This paper examines the role of generalised self-efficacy and work values, on employee reports of overall job satisfaction in China from 2012 to 2014. This paper is novel in two ways. The first is that different aspects of job satisfaction in China are examined in addition to overall satisfaction and the second is that we examine self-efficacy and work values after controlling for occupation and income. The evidence presented supports our various hypotheses that self-efficacy and perceived work values play a large role in determining both reported overall job satisfaction and job satisfaction with various aspects of the job in China. In particular, we find a strong link between the National Vocational Qualification system in China and generalised self-efficacy, which we believe enhances workers sense of capability. The implication for Chinese employers is that it is imperative for their worker productivity that they look after their employees' perceived self-efficacy, possibly by encouraging access to the National Qualification system and that they also facilitate a good working environment where worker relations or '*guanxi*' can flourish.

JEL- classification: D8; J28; J81

PsychINFO classification: 3650; 3670

Keywords: Generalised self-efficacy; Work values; Job satisfaction; Ordered-probit

* Corresponding author. University of Sheffield, Department of Economics, 9 Mappin St, Sheffield, UK. Tel: +44 114 222 3418. Email: p.lenton@sheffield.ac.uk

+ School of Public Administration, Nanjing University of Finance and Economics, China. Email: luyin@nufe.edu.cn

1. Introduction

The reporting of overall job satisfaction, its relevance to the level of job turnover and the level of absenteeism within firms, has been acknowledged within the economics literature (Clark et al. 1998; Sousa-Poza and Henneberger, 2004). Hence, it is vital for firms to maintain a satisfied workforce in order to avoid the costs associated with employee turnover and a loss of productivity. Studies have typically focused on the relationship between earnings and job satisfaction, and especially the comparison of one's own earnings with those of one's colleagues or with other workers income within the industry (Clark and Oswald, 1996; Ferrer-i-Carbonell, 2005; Gazioglu and Tansel, 2006; Clark and Senik, 2010). The role of individuals' aspirations and their previous experiences in employment have been considered as providing possible explanations for the reporting of current satisfaction levels (Proto and Rustichini, 2005; Poggi, 2010), and more recently the role of personality in the reported overall job satisfaction level has received attention (Judge and Bono 2001; Steiner and Schneider 2013). Therefore, it is generally understood that job satisfaction is of importance for a productive workforce and that this depends on both pecuniary and non-pecuniary factors. We argue that the role of generalised self-efficacy is highly important to one's reporting of job satisfaction. Generalised self-efficacy is an individual's estimate of his or her ability to cope or perform and be successful (Judge and Bono, 2001). Indeed one's perception of how well one can perform in one's job is key to job satisfaction as stated in the literature, "Perceived self-efficacy is a judgment of one's ability to organise and execute given types of performances…" Bandura (1997, p21). Individuals with a high level of self-efficacy are able to deal with problems more effectively and so will have greater job satisfaction (Gist and Mitchell 1992). This paper considers generalised self-efficacy and the perceived values from performing one's job as major factors in explaining job satisfaction in China. Generalised self-efficacy, as Schwarzer at al. (1997) state, "…can be regarded as a self-confident view of one's capability to deal with certain life stressors". A strong sense of personal efficacy is found to be related to better health, higher achievement and more social integration (Schwarzer et al. 1997). There is evidence that organisational structures that support traditional Chinese values have a lower turnover of workers (Wong et al. 2001).

The small but growing economic literature that focuses on job satisfaction in China places emphasis on the level of overall job satisfaction reported by workers, with the recommendation that employers should seek methods to maximise their employees rating of this measure (Nielsen and Smyth, 2008; Nie and Sousa-Poza, 2017). However, the responses to any question of overall job satisfaction may not tell the whole story of worker satisfaction if there are areas of satisfaction and areas of dissatisfaction with specific aspects of the job. Any measure of reported overall job satisfaction cannot fully explain which aspects of a job may lead to dissatisfaction, nor can it suggest in which areas employers must focus to ensure a productive workforce. We attempt to fill this gap in the job satisfaction literature in China by examining specific areas of job satisfaction in addition to overall job satisfaction. Individuals'

levels of self-efficacy and their reported work values are two factors that have been found in the literature to be influential determinants of overall job satisfaction in China (Siu et al. 2005; Nie and Sousa-Poza, 2017). We therefore, extend the analyses by considering the influence from these factors on separate aspects of job satisfaction. In the following section, we discuss the literature and present our hypotheses to be tested. Section 3 presents the data and the estimation methodology and the results are discussed in section 4. Section 5 presents our conclusions and discussion.

2. Existing Literature and hypotheses

There has been a wide-ranging literature of the determinants of overall job satisfaction within Europe and the USA (Clark 1996; Clark et al. 1988; Ferrer-i-Carbonell, 2005; Proto and Rustchini, 2015). Studies that have focused on one's level of earnings have generally found that not only is one's own earnings important for satisfaction but that workers often compare their wages with those of colleagues. Typically, these comparisons are upward, in that individuals look at the wage of colleagues who are remunerated more highly than themselves (Ferrer-i-Carbonell, 2005). On-the-one-hand Clark and Oswald (1996) had previously found that holding income constant, more educated individuals reported lower levels of job satisfaction in Britain. However, the literature has moved from purely the pecuniary aspect of job satisfaction to examining other aspects of the job or personal characteristics that could explain differences in reported satisfaction levels. Proto and Rustichini (2015) incorporate the big five personality traits in models for both the UK and Germany and find that whilst aspirations positively influence income, personality traits have a larger effect on income and on job satisfaction. In particular, they find that neuroticism plays an important part in reporting overall job satisfaction with those who have high levels of it along with high income being more likely to be less satisfied in their job than an individual with lower income who scores low on the neuroticism scale. Poggi (2010) in a European study, argues that individuals base their evaluation of job satisfaction according to their experiences of previous working conditions and claim that this leads to aspiration bias, where individuals' previous work experiences become their lower bound of aspirations and their best future working conditions as their upper bound. Thus income alone cannot explain levels of job satisfaction, a fact that is highlighted by a puzzle in the economics literature, namely why artists choose a profession which is generally considered to be low paid and more insecure than other professions. Steiner and Schneider (2013), using German panel data have analysed this puzzle by looking at the job satisfaction of artists, a profession traditionally viewed as in a lower income bracket. A high proportion of these individuals are self-employed and Steiner and Schneider (2013) conclude that an increased variety of procedural characteristics, such as on-the-job learning and a variety of work tasks contribute to job satisfaction.

It has been suggested that self-efficacy may affect job satisfaction through its association with success within the job (Judge et al. 1997). Judge and Bono (2001) conducted a meta-analysis of ten job satisfaction studies that included personality

traits and generalised self-efficacy as explanatory factors. They found that generalised self-efficacy is highly correlated with one's self-esteem, internal locus of control and emotional stability. One's work ethic will also play a large part in one's earnings and this has been considered by Linz and Chu (2013) who on examining the work ethics between young and older workers in transition economies found that younger people actually had a stronger work ethic than older workers. They found that workers with a strong work ethic earned approximately 15% more than those who had a weak work ethic, even after controlling for the personality trait of internal locus of control.

The economic literature from China is relatively newer and the major differences in culture between the West and East is acknowledged. Luo (2016) uses the Chinese General Social Survey in 2006 to examine whether there is a gender difference in the reporting of overall job satisfaction and finds that women are less satisfied than men, which it is claimed is explained by fewer women being communist party members and that, they claim, that women are often found in poorer quality jobs. Cheng et al. (2013) estimate ordered probit models of overall job satisfaction using the Chinese General Social Survey in 2008. They find that young migrants in China are less satisfied in their job than older migrants and suggest this is due to their aspirations being high, although they do not include controls for work values or expectations in their modelling. Occupation and personal income were found to be the most important factors influencing overall job satisfaction in urban China (Nielsen and Smyth, 2008). However, neither work values nor self-efficacy were considered in any of these three studies. The Chinese work ethic and work values, typically stemming from Confucianism and communism is one of hard-work, effort without expectation of reward and strong interpersonal relationships with colleagues or *guanxi*, defined as particularistic ties with other individuals (Tsui and Fahr 1997). Productivity is most likely to be higher in firms where workers are happy and have a sense of belonging and friendship. Indeed, it has been claimed that Chinese managers favour organisations that nurture friendships between their employees (Beamer 1998). The Chinese people often view themselves as interdependent with the surrounding social context in contrast to the Western view of an independent self (Tsui and Fahr 1997). In a small sample of employees in Hong Kong and Beijing (Siu et al 2005) self-efficacy was found to be a stress moderator in well-being relationships, whilst their measure of Chinese work values were shown to be insignificant in models of well-being. However, their sample was small and no account of other controls i.e. personal characteristics or occupation were made. Their results do imply though that self-efficacy provides some protection from stress and that individuals who possess a high level of self-efficacy are more able to cope with any problems in the job. Therefore, we assume that self-efficacy would be positively related to job satisfaction. More recently, it has been claimed that workers' expectations of a job are not matched with their actual job which leads to dissatisfaction (Nie and Sousa-Poza, 2017). Indeed, using the China Labour Force Dynamics Survey (2012) they find that only 46% of Chinese workers were satisfied in their job in 2011. Their measures of job expectations by Chinese workers have been captured by the reported values of their jobs (Nie and Souza-Poza

(2017). We posit that the value placed by individuals of aspects of their job along with their perceived self-efficacy in their job play an important role in job satisfaction after accounting for income and other personal and occupational characteristics. We test the following five hypotheses:

H_1 Employees with a higher amount of generalised self-efficacy will have greater overall job satisfaction.

H_2 Employees with a higher amount of generalised self-efficacy will have greater job satisfaction in all aspects of their job.

H_3 Employees who value earning a living in their current job will have a higher amount of satisfaction with their income.

H_4 Employees who value earning respect in their current job will have a higher amount of satisfaction with their relationships with colleagues and gaining respect from others.

H_5 Employees who value satisfying one's own interests and realising one's potential will have a higher amount of satisfaction with their use of abilities and skills.

3. Data and methodology

The data used is from the China Labour Force Dynamics Survey (CLDS), pooled 2012 and 2014.[1] The data relates to individuals labour market activity in 2011 and 2013. The data contains rich information including individuals' personal characteristics, family background and their labour market status. For our purpose, and following the current literature, we use only individuals who report themselves as employees and therefore we exclude respondents who report themselves as self-employed or unemployed. Most important for our purpose, the dataset contains questions that relate to individual general self-efficacy and in addition, questions about each individual's perceived values relating to different aspects of their job. Our initial dependent variable consists of self-reported responses to individuals' overall job satisfaction, which is measured on a 5 point likert scale, ranging from being very dissatisfied to being very satisfied with their job. A novel feature of this paper is that we are also able to examine five specific aspects of job satisfaction. The dataset contains respondents' self-reported job satisfaction level with their income; their promotion prospects; their relationship with work colleagues; the usage of their ability and skills; and their respect from others. The descriptive statistics for our dependent variables are presented in Table 1. We can see that most individuals report themselves as indifferent or quite satisfied when responding to the question on overall job satisfaction. These proportions of self-reported satisfaction are similar to the

[1] The China Labor-force Dynamics Survey is a rotating panel survey, which started in 2012 with the intention of running until 2022. We are unable to exploit the panel nature of the data at this time due to attrition. For further details on the dataset see Wang et al. (2017).

overall job satisfaction reported by Nie and Sousa-Poza (2017) who use 2012 CLDS data only.

[Table 1 here]

A novel feature of this paper is that we examine job satisfaction in more detail by focusing on separate aspects of job satisfaction. Examining the reporting of job satisfaction with income a lower average level of satisfaction is evident with a similar proportion of individuals reporting being quite dissatisfied as quite satisfied (22% and 26%, respectively). Similar proportions in the quite satisfied and quite dissatisfied categories with respect to promotion opportunities are also obvious (14% and 17%, respectively). The proportions for the other dependent variables show that many respondents are either quite satisfied or indifferent within that aspect of job satisfaction. Thus, it can be seen that by only examining overall job satisfaction we would miss these obvious differences in the various aspects of job satisfaction.
The descriptive statistics for the general self-efficacy and work value variables are presented in Table 2. Following Nie and Sousa-Poza (2017), our 'Work Values' indicators are captured by the responses to six questions about the value of various aspects of respondents' jobs, to which they indicate whether the aspect is important, not important or whether they are indifferent. Specifically, the question asked is:
"How important your current job is in meeting the following needs:
Earning a living;
Achieving inner peace;
Meeting more people;
Earning respect;
Satisfying one's own interests;
Realising one's own potential?"
The responses to these questions capture the importance of each area of work to the respondent in their current job.

[Table 2 here]

We see from the descriptive statistics in table 2 that making a living is important for the majority of our sample, whereas under fifty percent class satisfying one's interests as important. The responses could be influenced by the occupation of the respondent, which would give rise to a source of bias and so to check that this was not the case we examined the responses across all occupations. Table A1 in the appendix shows that there is no bias.

There is no single universal measure of self-efficacy as people are found to differ in their efficacy across different domains of functioning and across various facets within an activity domain (Bandura 2012). Therefore, our measures of general self-efficacy are captured by the responses to five questions, the first being whether the respondent has a vocational qualification, which plays a major part in the Chinese labour market. Unlike most labour markets in the west, the vocational qualification in China, introduced in 1993, is now a prerequisite for employment in some professions,

an essential requirement for promotion and an essential facet of the Chinese employment system, for example, by 2008 more than one-third of the urban population held at least one certificate (Su and Zeng 2009). Coincidently, the proportion of our sample who hold this qualification is also one-third. We argue here that the holder of this qualification is more likely to be confident about their ability to perform their job than a non-holder, thus providing a greater level of general self-efficacy. Our second measure is whether the respondent is a Communist party member, which is included to capture success. It is argued, that being a communist party member gives the individual more confidence in one's abilities, as members are typically the most able individuals, along with membership providing a wider circle of connections that can influence one's career (Li et al. 2007). There are substantial economic benefits to party membership, such as higher income jobs in state industries, although it has been shown that more-able individuals are more likely to become party members (Li et al. 2007). In our sample seventeen percent are Communist party members, similar to that reported by Li et al. (2007).[2] The remaining three questions all relate to the level of control the respondent reports that they have over their work, specifically, the questions are:
"To what extent can you make decisions by yourself in the following aspects?
Work content;
Work progress;
Workload? "
The respondent then selects one of three possible answers;
"Decide by myself;
Decide partially by myself
Decided by others."

An individual who has more control over their work regime, we argue here, is likely to have a higher level of self-efficacy and we acknowledge that those individuals who are more confident about their ability may find themselves in positions of control. In our sample we see fifteen to twenty-four percent of individuals have complete control in various aspects of the job. At this point we must acknowledge that control could also lie within the characteristics of the job, which may lead to endogeneity in modelling. To examine if this is the case we have examined responses across all our occupation groups and these are presented in table A2 in the appendix. We find no evidence of endogeneity from the type of occupation.

The descriptive statistics for the additional control variables are presented in Table 3. We include gender in our estimation as this has been found to differ in models of job satisfaction levels and subjective well-being (Clark 1997; Sousa-Poza and Sousa-Poza, 2000; Luo 2016). The mean age of our sample is thirty eight. Also included are other factors known to influence well-being/job satisfaction such as, marital status, income, hours worked, occupation, industry, type of work unit, region and health

[2] Li et al. (2007) report Communist party membership as 20% in urban areas and 4% in rural areas.

status. We also include a dummy variable to indicate whether the respondent is a rural-to-urban migrant, which nine percent of our sample are, as they have been shown to have significantly different characteristics than urban workers (Lenton and Yin 2016).

[Table 3 here]

Importantly, we include income and occupation because these are factors that have previously been claimed to be the major influences on job satisfaction in China (Nielsen and Smyth, 2008). Occupation is in seven categories, where it can be seen that forty percent of the sample work in manufacturing.
We estimate an ordered probit model of the overall satisfaction and we also estimate the same for each of our five specific satisfaction measures, which is a similar method to that used by Nielsen and Smyth (2008) and Nie and Sousa-Poza (2017). The ordered probit model is given as follows:

$$S_i = \beta_0 + \beta_1 X_i + \beta_2 GSE_i + \beta_3 WV_i + \epsilon_i \qquad (1)$$

Where S_i denotes the job satisfaction level of individual *i*, X_i is a vector of individual characteristics for respondent *i*, GSE_i is a vector of generalised self-efficacy characteristics for individual *i* and WV_i is a vector of individual i's work values. ϵ_i is the error term.

4. Results

We begin by discussing the results of our ordered probit estimation of overall job satisfaction. The marginal effects of our probits, calculated at the means, are presented in table 4. In the reporting overall job satisfaction we find no statistically significant difference between males and females, which is in accord with the finding of Nie and Sousa-Poza (2017) and in contrast to the finding of Luo (2016) who finds that women are less satisfied than men. Focussing on our self-efficacy variables, we see that possessing a National Vocational Qualification increases the probability of reporting being satisfied with one's job and decreases the probability of being dissatisfied. All marginal effects are highly statistically significant and imply that vocational work training leads to more confidence in one's ability, hence improving one's satisfaction with the job. In stark contrast, the formal academic educational variables have no statistical significance on overall job satisfaction, suggesting that the Chinese National Vocational Qualification system is contributing more than academic qualifications in relation to overall job satisfaction.

[Table 4 here]

Where one's work content and workload are determined solely by oneself, i.e. the individual has complete control and so a level of self-efficacy over their work situation, the probability of reporting being quite or very satisfied is increased (the marginal effects show an increase of around 0.3 and 0.4 percentage points, respectively and statistically significant). Hence, our results so far provide evidence to support hypothesis 1. Whilst we see positive marginal effects on reporting being quite satisfied or very satisfied with respect to overall satisfaction where the respondent is a member of the Communist party, we note that these results are not statistically significant. Turning to our work values measures we find that making a living is not an important influence on overall job satisfaction, rather achieving inner peace, earning respect from others, satisfying one's own interests and realising one's potential have much more weight on reporting satisfaction. These work values are highly statistically significant and suggest that once income is controlled for overall job satisfaction in China is gained from how well individuals perceive they perform in their job and the respect they earn from doing their job well.

We now turn our attention to the results from our ordered probit estimations of job satisfaction with various aspects of the job, a novel feature of this paper, the marginal effects, calculated at the means of which are reported in table 5.

[Table 5 here]

We will discuss findings by hypotheses. Firstly, hypothesis 2 focuses on how self-efficacy is a positive attribute in all aspects of the job. The findings are mixed as the marginal effects indicate that those respondents with higher levels of self-efficacy are not more likely to be satisfied with their income. Indeed, holding a National Vocational Qualification appears to lead to an increase in the probability of being dissatisfied with one's income (marginal effects show an increase of 1 and 2 percentage points in the probability of reporting being very dissatisfied and quite dissatisfied, respectively and highly statistically significant. As we have seen from the previous estimation of overall satisfaction, holders of this qualification are more satisfied overall but the dissatisfaction in relation to income may indicate that these individuals are not receiving the remuneration they expected for having gained it. Similarly, where respondents' work progress is determined completely by themselves we find that the probability of reporting satisfaction with income is reduced. We believe that this could be due to a lack of expected remuneration for one's responsibilities. There is limited evidence that generalised self-efficacy has a positive effect on promotion prospects. The variables that capture having complete control over areas of one's work are never statistically significant and the marginal effects on holding a National Vocational Qualification indicate that the holder has an increased probability of being dissatisfied with their promotion prospects, we suggest for the same reason as speculated with income, because of the individual's expectation that may be linked with gaining it. This result appears to concur with the role of aspiration bias in reporting job satisfaction (Poggi, 2010). However, the marginal effects show that being a Communist party

member does lead to a small increase the probability of reporting satisfaction with one's promotion opportunities.

There is evidence that a greater amount of generalised self-efficacy will lead to a higher level of satisfaction with the relationship with one's work colleagues. The statistically significant marginal effects in table 5 show that the holding of a National Vocational Qualification, being in complete control of one's workload or of one's work progress increase the probability of reporting job satisfaction with one's the relationship with colleagues (marginal effects for control of workload show a 5 percentage point and 3 percentage point increase in the probability of reporting being quite satisfied and very satisfied, respectively). These results we suggest, are indicative of a high level of self-efficacy making one happy at one's work in China, which in turn is reflected by good working relationships. Turning to job satisfaction with the use of one's abilities and skills, we see that holding a National Vocational Qualification, being in sole control of one's workload and being a member of the Communist party produce positive and statistically significant marginal effects on the probability of reporting being quite or very satisfied with the use of one's abilities or skills in the job. We would expect the National Vocational Qualification to lead to use of skills as this qualification is occupation related and the fact that this qualification has more influence on job satisfaction with the use of abilities and skills than formal education indicates the prestige of the Chinese system of occupational training. Thus, these findings show evidence to support hypothesis 2. Examining the results of job satisfaction with the respect from others, again the marginal effects reveal that holding a National Vocational Qualification and being in sole control of one's workload are both factors that will increase the probability of reporting being satisfied with this aspect of the job (marginal effects of 3 percentage points and 5 percentage points on the probability of reporting being quite satisfied, respectively). We note that being a member of the Communist party, whilst having a positive marginal effect on satisfaction has no statistical significance. Hence, the former two variables provide some evidence to support hypothesis 2.

Turning to hypothesis 3 and our discussion of the results from our work values measures, we see that where respondents state that they consider making a living to be most important for them, the marginal effects show no statistically significant effect on job satisfaction with income. Therefore, hypothesis 3 is rejected. This we consider may be due to expectations, whilst stating that making a living is most important, perhaps respondents' income does not reach the level expected for their work effort. In fact, interestingly, the values of achieving inner peace, satisfying one's interests and realising one's potential all have strongly significant positive marginal effects, suggesting that non-pecuniary values are more important than making a living even for satisfaction with income.

Where respondents state that earning respect from others is important the marginal effects reveal that this is indeed the most important influence on both the probability of reporting job satisfaction with the relationship with colleagues and of reporting job satisfaction with the respect from other people (increasing the probabilities of reporting

being very satisfied by 3 percentage points and nearly 6 percentage points, respectively). Thus, the evidence here supports hypothesis 4.

Finally, the results reveal that hypothesis 5 is supported. Both the values of satisfying one's own interests and of realising one's own potential have significantly positive marginal effects on job satisfaction with the use of abilities and skills in the job (increasing the probability of reporting being quite satisfied by around 3 and 14 percentage points, respectively and of reporting being very satisfied by around 2 and 6 percentage points, respectively).

5. Conclusions

This paper has investigated whether generalised self-efficacy and personal work values are major factors to explain individual self-reported job satisfaction in China in 2011 to 2013. There are two novel features of this paper that add to the current literature, the first being that an analysis of the influence of generalised self-efficacy and work values are examined after controlling for worker income and occupation, the former two of which have generally found to be important influences on reported job satisfaction. The second novel feature is that our data set allows us to examine reported job satisfaction for five different aspects of the job. In these respects we have added to the economic literature of job satisfaction in China. We have tested a number of hypotheses relating to how self-efficacy and stated work values may influence the reporting of job satisfaction for each aspect of the job. We find evidence that generalised self-efficacy is an important influence on overall job satisfaction and for many of the different aspects of the job after controlling for income and occupation. In particular, the holding of a National Vocational Qualification in China appears to give a strong sense of job satisfaction in many aspects. This Chinese qualification is unlike the National Vocational Qualification in the UK as it applies to many professions and is mandatory in some, even where an individual already holds a higher education qualification. This qualification appears to provide the holder with a higher level of self-efficacy than traditional academic qualifications and we suggest that this is an area that warrants further research. The work values measures of earning respect, satisfying one's interests and realising one's own potential are indicative of satisfaction with gaining respect from other people, good relations with colleagues and the use of one's abilities and skills.

It is evident that good relationships with work colleagues, *guanxi*, applying oneself to one's work and realising one's potential are more important to Chinese workers than income. Hence, we have strong evidence that self-efficacy and work values should be included in estimations of job satisfaction in China, else we may incorrectly conclude that occupation and income tell the full story. We have acknowledged possible endogeneity from the self-efficacy measures that could reflect job characteristics, however, we have investigated this possibility and find no evidence of this in our data. The Chinese culture, which prizes the values of realising one's owns potential, one's

relationships with colleagues, respect in the community and *guanxi* in particular, we suggest is an area for further research.

A happy, satisfied workforce is a productive workforce it is said. The implications of our findings for Chinese employers is that it is imperative for them that they enhance their employees' perceived self-efficacy, possibly by encouraging access to the National Qualification system and that they also facilitate a good working environment where worker relations or '*guanxi*' can flourish and workers will be satisfied, in order to ensure high levels, or even increase their levels of worker productivity.

Acknowledgments

We thank the suppliers of our data. Data used in this paper is from the China Labor-force Dynamics Survey (CLDS) by the Center for Social Sciences Survey at Sun Yat-Sen University in Guangzhou, China. The opinions are the authors' alone. Please refer to http://css.sysu.edu.cn for more information about the CLDS data. We thank Mark Bryan for his invaluable comments and suggestions.

References

Bandura, A. (1997). *Self-Efficacy. The exercise of control*. W.H. Freeman and Company.

Bandura, A. (2012). On the functional Properties of Perceived Self-Efficacy Revisited. *Journal of Management*, 38(1), 9-44.

Beamer, L. (1998). Bridging business cultures. *The China Business Review*, 25(3), 54-58.

Chen, Y., Démurger, S., & Fournier, M. (2005). Earnings Differentials and Ownership Structure in Chinese Enterprises. *Economic Development and Cultural Change*, 53(4), 933-958.

Cheng, Z., Wang, H., & Smyth, R. (2013). Happiness and job satisfaction in urban China: A comparative study of two generations of migrants and urban locals. *Urban Studies*, 51(10) 2160-2184.

Clark, A.E. (1997). Job satisfaction and gender: Why are women so happy at work? Labour Economics, 4, 341-372.

Clark, A.E., Georgellis, Y., & Sanfey, P. (1998). Job Satisfaction, wage changes, and quits: Evidence from Germany. *Research in Labour Economics*, 17, 95-122.

Clark, A.E., & Oswald, A.J. (1996). Satisfaction and comparison income. *Journal of Public Economics*, 61(3), 359-381.

Clark, A.E., & Senik, C. (2010). Who Compares to Whom? The Anatomy of Income Comparisons in Europe. *Economic Journal*, 110, (May), 573-594.

Ferrer-i-Carbonell, A. (2005). Income and well-being: An empirical analysis of the comparison income effect. *Journal of Public Economics*, 89 (5-6), 997-1019.

Fisher, C.D., & Yuan, Anne Xue Ya. (1998). What motivates employees? A comparison of US and Chinese responses. *The International Journal of Human Resource Management*, 9(3) 516 – 528.

Gazioglu, S., & Tansel, A. (2006). Job Satisfaction in Britain: individual and job related factors. *Applied Economics*, 38 (10) 1163-1171.

Gist, M.E., & Mitchell, T.R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17, 183-211.

Judge, T.A., Locke, E. A. & Durham, C.C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organisational Behaviour*, 19, 151-188.

Judge, T.A., & Bono, J.E. (2001). Relationship of Core Self-Evaluations Traits – Self-Esteem, Generalized Self-Efficacy, Locus of Control, and Emotional Stability-With Job Satisfaction and Job Performance: A Meta-Analysis. *Journal of Applied Psychology* 86 (1), 80-92.

Lenton, P., & Yin, L. (2016) The Educational Success of China's Young Generation of Rural-to-Urban Migrants. SERPS Discussion Paper No 2016007, University of Sheffield.

Li, H., Liu, P.W., Zhang, J., & Ma, N. (2007). Economic Returns to Communist Party Membership: Evidence from Urban Chinese Twins. *Economic Journal*, 117, 1504-1520.

Linz, S.J., & Chu, Y, L. (2013). Work ethic in formerly socialist economies. *Journal of Economic Psychology*, 39, 185-203.

Luo, Y. (2016). Gender and Job Satisfaction in Urban China: The Role of Individual, Family, and Job Characteristics. *Social Indicators Research* 125, 289-389.

Nie, P., & Sousa-Poza., A. (2017). What Chinese Workers Value: An Analysis of Job Satisfaction, Job Expectations, and Labor Turnover in China. IZA Discussion Paper Number 10963, Institute of Labor Economics.

Nielsen, I., & Smyth, R. (2008). Job satisfaction and response to incentives among China's urban workforce. *The Journal of Socio-Economics*, 37(5), 1921-1936.

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

Proto, E., and Rustichini, A. (2015). Life satisfaction, income and personality. *Journal of Economic Psychology*, 48, 17-32.

Schwarzer, R., Bäßler, J., Kwiatek, P., & Schröder, K. (1997). The Assessment of Optimistic Self-beliefs: Comparison of the German, Spanish and Chinese Versions of the General Self-efficacy Scale. *Applied Psychology: An International Review*, 1997, 46 (1), 69-88.

Siu, Oi-ling., Spector, P.E., Cooper, C.L., & Lu, C. (2005). Work Stress, Self-Efficacy, Chinese Work Values, and Work Well-Being in Hong Kong and Beijing. *International Journal of Stress Management*, 12, (3), 274-288.

Sousa-Poza, A., & Henneberger, F. (2004). Analyzing Job Mobility with Job Turnover Intentions: An International Comparative Study. *Journal of Economic Issues,* 36(1), 113-137.

Sousa-Poza, A., & Sousa-Poza, A.A. (2000). Taking Another Look at the Gender/Job-Satisfaction Paradox. *Kyklos*, 53, 135-152.

Steiner, L., and Schneider, L. (2013). The happy artist: an empirical application of the work-preference model. *Journal of Cultural Economics*, 37, 225-246.

Su, Zhongxing., & Zeng, Xiangquan. (2009). China's National Vocational Qualification Certificates and Their Impact on Technical Worker's Skill Level, Job Performance and Earnings: Evidence from Six Enterprises in the Manufacturing Industry. IZA Conference Paper.

Tsui, A.S., & Farh, J.L. (1997). Where Guanxi Matters: Relational Demography and Guanxi in the Chinese Context. *Work and Occupations*, 24(1), 56-79.

Wang, J., Zhou, Y., & Liu, S. (2017). China Labor-force Dynamics Survey: Design and practice. Chinese Sociological Dialogue, 1-15.

Wong, C.S., Wong, Y.T., Hui, C., & Law, K.S. (2001). The significant role of Chinese employees' organizational commitment: implications for managing employees in Chinese societies. *Journal of World Business*, 36(3), 326-340.

Table 1.

Descriptive statistics – Job Satisfaction dependent variables

N= 8661	Mean	Std Err	95% CI	
Overall Job Satisfaction	3.458	0.008	3.443	3.473
Very dissatisfied	0.011	0.001	0.009	0.013
Quite dissatisfied	0.057	0.002	0.052	0.062
Indifferent	0.435	0.005	0.425	0.446
Quite satisfied	0.456	0.005	0.445	0.466
Very satisfied	0.040	0.002	0.036	0.045
Job satisfaction with income	2.956	0.010	2.936	2.975
Very dissatisfied	0.069	0.003	0.063	0.074
Quite dissatisfied	0.223	0.004	0.214	0.232
Indifferent	0.420	0.005	0.410	0.430
Quite satisfied	0.261	0.005	0.252	0.270
Very satisfied	0.027	0.002	0.024	0.031
Job satisfaction with promotion opportunities	2.962	0.008	2.947	2.978
Very dissatisfied	0.048	0.002	0.044	0.053
Quite dissatisfied	0.141	0.004	0.133	0.148
Indifferent	0.626	0.005	0.616	0.636
Quite satisfied	0.170	0.004	0.162	0.178
Very satisfied	0.015	0.001	0.012	0.017
Job satisfaction with relationship with colleagues	3.596	0.008	3.580	3.611
Very dissatisfied	0.007	0.001	0.005	0.009
Quite dissatisfied	0.043	0.002	0.039	0.048
Indifferent	0.372	0.005	0.362	0.383
Quite satisfied	0.502	0.006	0.491	0.513
Very satisfied	0.076	0.003	0.070	0.081
Job satisfaction with use of abilities and skills	3.512	0.008	3.497	3.528
Very dissatisfied	0.009	0.001	0.007	0.012
Quite dissatisfied	0.051	0.002	0.046	0.056
Indifferent	0.417	0.005	0.407	0.428
Quite satisfied	0.463	0.005	0.452	0.473
Very satisfied	0.060	0.003	0.055	0.065
Job satisfaction with respect from others	3.573	0.008	3.557	3.588
Very dissatisfied	0.011	0.001	0.009	0.013
Quite dissatisfied	0.047	0.002	0.043	0.052
Indifferent	0.369	0.005	0.036	0.038
Quite satisfied	0.505	0.005	0.494	0.516
Very satisfied	0.068	0.003	0.063	0.074

Table 2.

Descriptive statistics - General self-efficacy and work values

N= 8661	Mean	Std Err	95% CI	
General Self-Efficacy				
Vocational/Professional qualification	0.339	0.005	0.329	0.349
Communist Party membership	0.171	0.004	0.163	0.178
Work content				
Determined by myself	0.150	0.004	0.142	0.157
Determined by others	0.435	0.005	0.424	0.455
Determined jointly myself and others	0.415	0.005	0.405	0.426
Work Progress				
Determined by myself	0.243	0.005	0.234	0.252
Determined by others	0.361	0.005	0.351	0.371
Determined jointly myself and others	0.396	0.005	0.386	0.407
Workload				
Determined by myself	0.211	0.004	0.202	0.219
Determined by others	0.394	0.005	0.384	0.404
Determined jointly myself and others	0.395	0.005	0.385	0.406
Work Values of current job				
Making a living				
Not important	0.049	0.002	0.044	0.053
Indifferent	0.135	0.004	0.128	0.142
Important	0.816	0.004	0.808	0.825
Achieving inner peace				
Not important	0.071	0.003	0.066	0.077
Indifferent	0.294	0.005	0.284	0.304
Important	0.634	0.005	0.624	0.645
Meeting more people				
Not important	0.120	0.003	0.113	0.126
Indifferent	0.345	0.005	0.335	0.355
Important	0.535	0.005	0.524	0.545
Earning Respect				
Not important	0.071	0.003	0.066	0.077
Indifferent	0.318	0.005	0.309	0.328
Important	0.611	0.005	0.600	0.621
Satisfying one's interests				
Not important	0.130	0.004	0.123	0.137
Indifferent	0.405	0.005	0.395	0.415
Important	0.465	0.005	0.455	0.476
Realising one's potential				
Not important	0.097	0.003	0.091	0.103
Indifferent	0.343	0.005	0.333	0.353
Important	0.559	0.005	0.549	0.570

Table 3.

Descriptive statistics - additional control variables

N= 8661	Mean	Std Err	95% CI	
age	38.292	0.111	38.074	38.511
male	0.571	0.005	0.561	0.581
Han	0.936	0.003	0.930	0.941
Single	0.156	0.004	0.148	0.163
Married	0.812	0.004	0.804	0.820
Divorced/Widowed	0.033	0.002	0.029	0.036
Parental education level	2.793	0.016	2.762	2.823
Agricultural Hukou	0.474	0.005	0.463	0.484
Urban Area	0.647	0.005	0.637	0.657
Migrant	0.090	0.003	0.084	0.096
Medical Insurance	0.469	0.005	0.458	0.479
Primary school education	0.132	0.004	0.125	0.139
Middle school education	0.295	0.005	0.285	0.304
High school education	0.153	0.004	0.146	0.161
Vocational school education	0.110	0.003	0.103	0.116
College education	0.148	0.004	0.141	0.156
University – including postgraduate	0.162	0.004	0.155	0.170
Working hours a week	48.107	0.181	47.752	48.463
Working days a month	24.078	0.052	23.977	24.181
Full-time	0.953	0.002	0.949	0.958
Log annual wage	9.838	0.021	9.797	9.879
Occupation				
Principals in State	0.011	0.001	0.009	0.013
Professional Technician	0.197	0.004	0.189	0.206
Clerk and related personnel	0.133	0.004	0.126	0.140
Primary producers	0.013	0.001	0.011	0.016
Manufacturing	0.406	0.005	0.395	0.416
Commercial and personnel	0.212	0.004	0.204	0.221
Other occupation unspecified	0.028	0.002	0.024	0.031
Industry				
Agriculture	0.019	0.001	0.016	0.022
Mining, Manufacturing, production	0.386	0.005	0.376	0.397
Transport and storage	0.085	0.003	0.079	0.091
Financial intermediation an real estate	0.037	0.002	0.033	0.041
Wholesale and Retail, Catering	0.098	0.003	0.092	0.105
Social Services and Health	0.145	0.004	0.138	0.153
Public Services	0.175	0.004	0.167	0.184
Other industry unspecified	0.054	0.002	0.049	0.058
Work unit				
State owned	0.373	0.005	0.363	0.383
Private enterprise	0.404	0.005	0.024	0.031
Collective owned enterprise	0.028	0.002	0.024	0.031
Foreign owned and joint enterprise	0.057	0.002	0.052	0.062
Small business	0.107	0.003	0.101	0.114
Other business unspecified	0.031	0.002	0.028	0.035
Region				
Eastern China	0.581	0.005	0.571	0.591
Western China	0.225	0.004	0.216	0.234
Middle China	0.194	0.004	0.186	0.202
Health Status				
Healthy	0.706	0.005	0.697	0.716
Quite Healthy	0.254	0.005	0.245	0.263
Unhealthy	0.039	0.002	0.035	0.044

Table 4.

Overall Job satisfaction: Marginal effects

N=8661	Very dissatisfied		Quite dissatisfied		Indifferent		Quite Satisfied		Very Satisfied	
Age	0.000*	(0.000)	0.002*	(0.001)	0.004*	(0.002)	-0.005*	(0.003)	-0.001*	(0.001)
Age square	-0.001***	(0.000)	-0.004***	(0.001)	-0.010***	(0.003)	0.011***	(0.003)	0.003***	(0.001)
Male	0.001	(0.003)	0.003	(0.002)	0.008	(0.006)	-0.010	(0.007)	-0.003	(0.002)
Married	0.001	(0.001)	0.004	(0.004)	0.010	(0.011)	-0.012	(0.012)	-0.003	(0.004)
Urban Area	0.004***	(0.001)	0.012***	(0.004)	0.032***	(0.009)	-0.037***	(0.011)	-0.011***	(0.003)
Migrant	-0.002	(0.001)	-0.007	(0.005)	-0.019	(0.013)	0.022	(0.015)	0.006	(0.004)
Vocational school	-0.000	(0.002)	-0.001	(0.005)	-0.003	(0.013)	0.004	(0.016)	0.001	(0.005)
College Education	-0.000	(0.002)	-0.002	(0.005)	-0.004	(0.014)	0.005	(0.016)	0.001	(0.005)
Degree or above education	-0.001	(0.002)	-0.002	(0.006)	-0.006	(0.015)	0.007	(0.017)	0.002	(0.005)
Hours worked per week	0.000***	(0.000)	0.000***	(0.000)	0.001***	(0.000)	-0.001***	(0.000)	-0.000***	(0.000)
Days worked per month	0.000***	(0.000)	0.001***	(0.000)	0.003***	(0.001)	-0.003***	(0.001)	-0.001***	(0.000)
Log net annual wage	-0.000	(0.000)	-0.000	(0.000)	-0.000	(0.002)	0.000	(0.002)	0.000	(0.001)
Clerk and related personnel	-0.002*	(0.001)	0.007*	(0.004)	-0.019*	(0.011)	0.022*	(0.013)	0.007*	(0.004)
Manufacturing	0.003**	(0.001)	0.009***	(0.004)	0.025***	(0.010)	-0.029***	(0.011)	-0.008***	(0.003)
Collective–owned enterprise	0.005**	(0.002)	0.016**	(0.007)	0.042**	(0.018)	-0.049**	(0.021)	-0.014**	(0.006)
Small business	-0.002*	(0.001)	-0.008*	(0.004)	-0.020*	(0.010)	0.023*	(0.012)	0.007*	(0.004)
Overtime	0.002***	(0.001)	0.007***	(0.002)	0.018***	(0.006)	-0.021***	(0.007)	-0.006***	(0.002)
Middle China	0.002**	(0.001)	0.006**	(0.003)	0.016**	(0.008)	-0.018**	(0.009)	-0.005**	(0.003)
Western China	0.001	(0.001)	0.003	(0.003)	0.007	(0.008)	-0.009	(0.009)	-0.003	(0.003)
Good health	-0.008***	(0.001)	-0.027***	(0.003)	-0.070***	(0.007)	0.081***	(0.008)	0.024***	(0.003)
Work values										
Making a living is important	-0.000	(0.001)	-0.001	(0.004)	-0.003	(0.009)	0.003	(0.011)	0.001	(0.003)
Achieving inner peace is important	-0.005***	(0.001)	-0.016***	(0.003)	-0.041***	(0.008)	0.047***	(0.009)	0.010***	(0.003)
Meeting more people is important	-0.001*	(0.001)	-0.005*	(0.003)	-0.013*	(0.008)	0.015*	(0.009)	0.004*	(0.003)
Earning respect is important	-0.006***	(0.001)	-0.020***	(0.003)	-0.051***	(0.008)	0.059***	(0.010)	0.017***	(0.003)
Satisfying own interests is important	-0.005***	(0.001)	-0.017***	(0.003)	-0.044***	(0.008)	0.051***	(0.009)	0.015***	(0.003)
Realising one's potential	-0.008***	(0.001)	-0.028***	(0.003)	-0.074***	(0.009)	0.085***	(0.010)	0.025***	(0.003)
General Self-efficacy										
Vocational work qualification	-0.002***	(0.001)	-0.008***	(0.003)	-0.021***	(0.007)	0.024***	(0.008)	0.007***	(0.002)
Work content determined by oneself	-0.002**	(0.001)	-0.008**	(0.004)	-0.022**	(0.011)	0.026**	(0.013)	0.008**	(0.004)
Work progress determined by oneself	-0.001	(0.001)	-0.004	(0.004)	-0.010	(0.010)	0.011	(0.012)	0.003	(0.003)
Work load determined by oneself	-0.003**	(0.001)	-0.010**	(0.004)	-0.026**	(0.011)	0.030**	(0.012)	0.009**	(0.004)
Communist Party member	-0.001	(0.001)	-0.003	(0.003)	-0.009	(0.009)	0.010	(0.010)	0.003	(0.003)
LR chi 2(64) = 1770.65	Prob > chi2 = 0.0000									

Variables included in the estimation but not reported here for brevity include: Occupation, industry and full-time. ***,**,*, denote significance at 10%, 5% and 1%, respectively.

Table 5.
Job Satisfaction with specific aspects of the job.

	Very dissatisfied		Quite dissatisfied		Indifferent		Quite Satisfied		Very Satisfied	
Job Satisfaction with Income										
Male	-0.008*	(0.003)	-0.013***	(0.005)	-0.000	(0.000)	0.017***	(0.007)	0.004***	(0.002)
Degree or above education	-0.019**	(0.007)	0.030**	(0.012)	-0.000	(0.001)	0.040**	(0.016)	0.009**	(0.004)
Log net annual wage	-0.003***	(0.001)	-0.005***	(0.001)	-0.000	(0.000)	0.006***	(0.002)	0.001***	(0.000)
Work values										
Making a living is important	-0.002	(0.005)	-0.003	(0.007)	-0.000	(0.000)	0.004	(0.010)	0.001	(0.002)
Achieving inner peace is important	-0.018***	(0.004)	-0.029***	(0.006)	-0.000	(0.000)	0.038***	(0.008)	0.009***	(0.002)
Meeting more people is important	-0.001	(0.004)	-0.001	(0.006)	-0.000	(0.000)	0.001	(0.008)	0.000	(0.002)
Earning respect is important	0.001	(0.004)	0.002	(0.007)	0.000	(0.000)	-0.002	(0.009)	0.001	(0.002)
Satisfying own interests is important	-0.020***	(0.004)	-0.032***	(0.006)	-0.000	(0.001)	0.042***	(0.009)	0.010***	(0.002)
Realising one's potential	-0.019***	(0.004)	-0.030***	(0.007)	-0.000	(0.001)	0.040***	(0.009)	0.009***	(0.002)
General Self-efficacy										
Vocational work qualification	0.012***	(0.004)	0.020***	(0.006)	0.000	(0.000)	-0.026***	(0.007)	-0.006***	(0.002)
Work content determined by oneself	-0.008	(0.005)	-0.014	(0.009)	0.000	(0.000)	0.018	(0.018)	0.004	(0.003)
Work progress determined by oneself	0.008*	(0.005)	0.013*	(0.009)	0.000	(0.000)	-0.018*	(0.011)	-0.004*	(0.003)
Work load determined by oneself	-0.003	(0.005)	-0.004	(0.008)	-0.000	(0.000)	0.005	(0.011)	0.001	(0.003)
Communist Party member	-0.001	(0.004)	-0.001	(0.007)	-0.000	(0.000)	0.001	(0.009)	0.000	(0.002)
LR chi 2(64) = 1160.84	Prob > chi2 = 0.0000									
Job Satisfaction with Promotion Opportunity										
Male	-0.006**	(0.003)	-0.009**	(0.004)	0.000	(0.000)	0.013**	(0.006)	0.002**	(0.001)
Degree or above education	-0.016***	(0.006)	-0.026***	(0.010)	0.000	(0.000)	0.036***	(0.014)	0.006***	(0.002)
Work values										
Making a living is important	0.001	(0.004)	0.002	(0.006)	-0.000	(0.000)	-0.003	(0.008)	-0.001	(0.001)
Achieving inner peace is important	-0.009***	(0.003)	-0.014***	(0.005)	0.000	(0.001)	0.020***	(0.007)	0.003***	(0.001)
Meeting more people is important	-0.013***	(0.003)	-0.021***	(0.005)	0.000	(0.001)	0.029***	(0.007)	0.005***	(0.001)
Earning respect is important	-0.002	(0.003)	-0.003	(0.006)	0.000	(0.000)	0.005	(0.008)	0.001	(0.001)
Satisfying own interests is important	-0.019***	(0.003)	-0.031***	(0.005)	0.000	(0.001)	0.044***	(0.007)	0.007***	(0.001)
Realising one's potential	-0.012***	(0.004)	-0.019***	(0.006)	0.000	(0.001)	0.027***	(0.008)	0.004***	(0.001)
General Self-efficacy										
Vocational work qualification	0.011***	(0.003)	0.018***	(0.005)	-0.000	(0.001)	-0.025***	(0.006)	-0.004***	(0.001)
Work content determined by oneself	-0.001	(0.004)	-0.001	(0.007)	0.000	(0.000)	0.002	(0.010)	0.000	(0.002)
Work progress determined by oneself	0.005	(0.004)	0.009	(0.007)	-0.000	(0.000)	-0.012	(0.009)	-0.002	(0.001)
Work load determined by oneself	-0.004	(0.004)	-0.007	(0.007)	0.000	(0.000)	0.010	(0.010)	0.002	(0.002)
Communist Party member	-0.006*	(0.004)	-0.010*	(0.006)	0.000	(0.000)	0.015*	(0.008)	0.002*	(0.001)
LR chi 2(64) = 1090.23	Prob > chi2 = 0.0000									

	Very dissatisfied		Quite dissatisfied		Indifferent		Quite Satisfied		Very Satisfied	
Job Satisfaction with relationship with colleagues										
Male	0.002***	(0.001)	0.007***	(0.002)	0.024***	(0.007)	-0.020***	(0.006)	-0.012***	(0.004)
Degree or above education	0.004***	(0.001)	0.018***	(0.005)	0.062***	(0.017)	-0.054***	(0.015)	-0.031***	(0.009)
Work values										
Making a living is important	-0.000	(0.000)	-0.002	(0.003)	-0.006	(0.011)	0.006	(0.009)	0.003	(0.005)
Achieving inner peace is important	-0.003***	(0.001)	-0.012***	(0.003)	-0.041***	(0.009)	0.035***	(0.008)	0.020***	(0.004)
Meeting more people is important	-0.003***	(0.001)	-0.011***	(0.003)	-0.037***	(0.009)	0.032***	(0.008)	0.018***	(0.005)
Earning respect is important	-0.004***	(0.001)	-0.015***	(0.003)	-0.051***	(0.010)	0.044***	(0.008)	0.025***	(0.005)
Satisfying own interests is important	-0.003***	(0.001)	-0.013***	(0.003)	-0.043***	(0.009)	0.037***	(0.008)	0.021***	(0.005)
Realising one's potential	-0.003***	(0.001)	-0.013***	(0.003)	-0.045***	(0.010)	0.039***	(0.009)	0.022***	(0.005)
General Self-efficacy										
Vocational work qualification	-0.002***	(0.001)	-0.006***	(0.002)	-0.022**	(0.008)	0.019***	(0.007)	0.011***	(0.044)
Work content determined by oneself	0.000	(0.001)	0.000	(0.004)	0.001	(0.013)	-0.001	(0.011)	-0.001	(0.006)
Work progress determined by oneself	-0.002*	(0.001)	-0.007**	(0.003)	-0.023**	(0.012)	0.020**	(0.010)	0.012**	(0.006)
Work load determined by oneself	-0.004***	(0.001)	-0.017***	(0.004)	-0.059***	(0.012)	0.051***	(0.011)	0.029***	(0.006)
Communist Party member	-0.001	(0.007)	-0.005	(0.003)	-0.016	(0.010)	0.014	(0.009)	0.008	(0.005)
LR chi 2(64) = 878.32	Prob > chi2 = 0.0000									
Job Satisfaction with use of abilities and skills										
Male	-0.001	(0.001)	-0.002	(0.002)	-0.007	(0.007)	0.007	(0.007)	0.003	(0.003)
Degree or above education	0.002	(0.002)	0.009	(0.005)	0.026	(0.016)	-0.026	(0.016)	-0.011	(0.007)
Work values										
Making a living is important	-0.001	(0.001)	-0.004	(0.003)	-0.012	(0.010)	0.012	(0.010)	0.005	(0.004)
Achieving inner peace is important	-0.002***	(0.001)	-0.007***	(0.003)	-0.022***	(0.008)	0.022***	(0.008)	0.010***	(0.004)
Meeting more people is important	-0.000	(0.001)	-0.001	(0.003)	-0.002	(0.008)	0.002	(0.008)	0.001	(0.004)
Earning respect is important	-0.002***	(0.001)	-0.009***	(0.003)	-0.026***	(0.009)	0.026***	(0.009)	0.011***	(0.004)
Satisfying own interests is important	-0.003***	(0.001)	-0.011***	(0.003)	-0.033***	(0.009)	0.033***	(0.009)	0.015***	(0.004)
Realising one's potential	-0.013***	(0.002)	-0.046***	(0.004)	-0.137***	(0.009)	0.136***	(0.009)	0.060***	(0.005)
General Self-efficacy										
Vocational work qualification	-0.003***	(0.001)	-0.011***	(0.003)	-0.033***	(0.008)	0.033***	(0.008)	0.014***	(0.003)
Work content determined by oneself	-0.001	(0.001)	-0.004	(0.004)	-0.011	(0.012)	0.011	(0.012)	0.005	(0.005)
Work progress determined by oneself	-0.001	(0.001)	-0.005	(0.004)	-0.015	(0.011)	0.015	(0.011)	0.006	(0.005)
Work load determined by oneself	-0.002***	(0.001)	-0.009***	(0.004)	-0.025**	(0.011)	0.025**	(0.011)	0.011**	(0.005)
Communist Party member	-0.002**	(0.001)	-0.006**	(0.003)	-0.019**	(0.009)	0.019**	(0.009)	0.008*	(0.004)
LR chi 2(64) = 1414.80	Prob > chi2 = 0.0000									

	Very dissatisfied		Quite dissatisfied		Indifferent		Quite Satisfied		Very Satisfied	
Job satisfaction with respect from others										
Male	0.001	(0.001)	0.003	(0.002)	0.008	(0.007)	-0.008	(0.006)	-0.004	(0.004)
Degree or above education	0.000	(0.002)	0.000	(0.005)	0.001	(0.016)	-0.001	(0.014)	-0.000	(0.008)
Work values										
Making a living is important	0.002	(0.001)	0.005	(0.003)	0.016	(0.010)	-0.014	(0.009)	-0.008	(0.005)
Achieving inner peace is important	-0.001*	(0.001)	-0.004*	(0.003)	-0.014*	(0.008)	0.013*	(0.007)	0.007*	(0.004)
Meeting more people is important	-0.001	(0.001)	-0.002	(0.003)	-0.005	(0.008)	0.005	(0.008)	0.002	(0.004)
Earning respect is important	-0.012***	(0.001)	-0.036***	(0.003)	-0.113***	(0.009)	0.104***	(0.008)	0.056***	(0.005)
Satisfying own interests is important	-0.003***	(0.001)	-0.010***	(0.003)	-0.032***	(0.009)	0.029***	(0.008)	0.016***	(0.004)
Realising one's potential	-0.008***	(0.001)	-0.023***	(0.003)	-0.073***	(0.009)	0.068***	(0.008)	0.036***	(0.005)
General Self-efficacy										
Vocational work qualification	-0.003***	(0.001)	-0.009***	(0.002)	-0.029***	(0.007)	0.026***	(0.007)	0.014***	(0.004)
Work content determined by oneself	0.001	(0.001)	0.002	(0.004)	0.005	(0.012)	-0.005	(0.011)	-0.003	(0.006)
Work progress determined by oneself	-0.001	(0.001)	-0.003	(0.003)	-0.008	(0.011)	0.008	(0.010)	0.004	(0.005)
Work load determined by oneself	-0.005***	(0.001)	-0.016***	(0.004)	-0.052***	(0.011)	0.048***	(0.010)	0.026***	(0.006)
Communist Party member	-0.001	(0.001)	-0.004	(0.003)	-0.013	(0.009)	0.012	(0.009)	0.007	(0.005)
LR chi 2(64) = 1617.69	Prob > chi2 = 0.0000									

Standard errors in parentheses. Variables included in the estimation but not reported here for brevity include: Age, marital status, net wage, full-time, occupation, industry, migrant, primary, middle and high school and job values 'not important'. ***,**,*, denote significance at 10%, 5% and 1%, respectively. Base category for value of job is indifferent.

Appendix

Table A1.

Cross tabulations: Self-efficacy responses across each occupation.

Occupation	Determined by myself	Determined jointly myself and others	Determined by others	Total
Work content				
Principals in State	15	57	23	95
	(15.79%)	(60.00%)	(24.21%)	(100.00%)
Professional	245	980	483	1708
Technician	(14.34%)	(57.38%)	(28.28%)	(100.00%)
Clerk and related	108	611	431	1150
personnel	(9.39%)	(53.13%)	(37.48%)	(100.00%)
Primary producers	305	773	762	1840
	(16.58%)	(42.01%)	(41.41%)	(100.00%)
Manufacturing	24	40	50	114
	(21.05%)	(35.09%)	(43.86%)	(100.00%)
Commercial and	536	1052	1925	3513
personnel	(15.26%)	(29.95%)	(54.80%)	(100.00%)
Other occupation	64	85	92	241
unspecified	(26.56%)	(35.27%)	(38.17%)	(100.00)
Total	1297	3598	3766	8661
	(14.98%)	(41.54%)	(43.48%)	(100.00%)
Work progress				
Principals in State	27	50	18	95
	(28.42%)	(52.63%)	(18.95%)	(100.00)
Professional	427	926	355	1708
Technician	(25.00%)	(54.22%)	(20.78%)	(100.00)
Clerk and related	222	576	352	1150
personnel	(19.30%)	(50.09%)	(30.61%)	(100.00%)
Primary producers	489	687	664	1840
	(26.58%)	(37.34%)	(36.09%)	(100.00%)
Manufacturing	31	43	40	114
	(27.19%)	(37.72%)	(35.09%)	(100.00%)
Commercial and	824	1069	1620	3513
personnel	(23.46%)	(30.43%)	(46.11%)	(100.00%)
Other occupation	83	82	76	241
unspecified	(34.44%)	(34.02%)	(31.54%)	(100.00%)
Total	2103	3433	3125	8661
	(24.28%)	(39.64%)	(36.08%)	(100.00%)
Workload				
Principals in State	22	52	21	95
	(23.16%)	(54.74%)	(22.11%)	(100.00%)
Professional	288	897	523	1708
Technician	(16.86%)	(52.52%)	(30.62%)	(100.00%)
Clerk and related	168	575	407	1150
personnel	(14.61%)	(50.00%)	(35.39%)	(100.00%)
Primary producers	408	707	725	1840
	(22.17%)	(38.42%)	(39.40%)	(100.00%)
Manufacturing	36	33	45	114
	(31.58%)	(28.95%)	(39.47%)	(100.00%)
Commercial and	825	1073	1615	3513
personnel	(23.48%)	(30.54%)	(45.97%)	(100.00%)
Other occupation	78	87	76	241
unspecified	(32.37%)	(36.10%)	(31.54%)	(100.00%)
Total	1825	3424	3412	8661
	(21.07%)	(39.53%)	(39.39%)	(100.00%)

Table A2.

Cross tabulations: Work values responses across each occupation.

Occupation	Not important	Indifferent	Important	Total
Making a living				
Principals in State	11	20	64	95
	(11.58%)	(21.05%)	(67.37%)	(100.00%)
Professional Technician	80	235	1393	1708
	(4.68%)	(13.76%)	(81.56%)	(100.00%)
Clerk and related	79	175	896	1150
personnel	(6.87%)	(15.22%)	(77.91%)	(100.00%)
Primary producers	104	277	1459	1840
	(5.65%)	(15.05%)	(79.29%)	(100.00%)
Manufacturing	2	10	102	114
	(1.75%)	(8.77%)	(89.47%)	(100.00%)
Commercial and	132	401	2980	3513
personnel	(3.76%)	(11.41%)	(84.83%)	(100.00%)
Other occupation	13	51	177	241
unspecified	(5.39%)	(21.16%)	(73.44%)	(100.00%)
Total	421	1169	7071	8661
	(4.86%)	(13.50%)	(81.64%)	(100.00%)
Achieving inner peace				
Principals in State	4	21	70	95
	(4.21%)	(22.11%)	(73.68%)	(100.00%)
Professional Technician	95	411	1202	1708
	(5.56%)	(24.06%)	(70.37%)	(100.00%)
Clerk and related	67	344	739	1150
personnel	(5.83%)	(29.91%)	(64.26%)	(100.00%)
Primary producers	137	570	1133	1840
	(7.45%)	(30.98%)	(61.58%)	(100.00%)
Manufacturing	8	41	65	114
	(7.02%)	(35.96%)	(57.02%)	(100.00%)
Commercial and	295	1079	2139	3513
personnel	(8.40%)	(30.71%)	(60.89%)	(100.00%)
Other occupation	13	81	147	241
unspecified	(5.39%)	(33.61%)	(61.00%)	(100.00%)
Total	619	2547	5495	8661
	(7.15%)	(29.41%)	(63.45%)	(100.00%)
Meeting more people				
Principals in State	4	15	76	95
	(4.21%)	(15.79%)	(80.00%)	(100.00%)
Professional Technician	195	573	940	1708
	(11.42%)	(33.55%)	(55.04%)	(100.00%)
Clerk and related	108	358	684	1150
personnel	(9.39%)	(31.13%)	(59.48%)	(100.00%)
Primary producers	212	615	1013	1840
	(11.52%)	(33.42%)	(55.05%)	(100.00%)
Manufacturing	16	42	56	114
	(14.04%)	(36.84%)	(49.12%)	(100.00%)
Commercial and	462	1291	1760	3513
personnel	(13.15%)	(36.75%)	(50.10%)	(100.00%)
Other occupation	39	98	104	241
unspecified	(16.18%)	(40.66%)	(43.15%)	(100.00%)
Total	1036	2992	4633	8661
	(11.96%)	(34.55%)	(53.49%)	(100.00%)
Earning respect				
Principals in State	3	11	81	95
	(3.16%)	(11.58%)	(85.26%)	(100.00%)
Professional Technician	82	433	1193	1708
	(4.80%)	(25.35%)	(69.85%)	(100.00%)

Clerk and related	61	336	753	1150
personnel	(5.30%)	(29.22%)	(65.48%)	(100.00%)
Primary producers	142	612	1086	1840
	(7.72%)	(33.26%)	(59.02%)	(100.00%)
Manufacturing	12	27	75	114
	(10.53%)	(23.68%)	(65.79%)	(100.00%)
Commercial and	298	1245	1970	3513
personnel	(8.48%)	(35.44%)	(56.08%)	(100.00%)
Other occupation	18	93	130	241
unspecified	(7.47%)	(38.59%)	(53.94%)	(100.00%)
Total	616	2757	5288	8661
	(7.11%)	(31.83%)	(61.06%)	(100.00%)
Satisfying one's interest				
Principals in State	10	28	57	95
	(10.53%)	(29.47%)	(60.00%)	(100.00%)
Professional Technician	140	541	1027	1708
	(8.20%)	(31.67%)	(60.13%)	(100.00%)
Clerk and related	123	463	564	1150
personnel	(10.70%)	(40.26%)	(49.04%)	(100.00%)
Primary producers	243	773	824	1840
	(13.21%)	(42.01%)	(44.78%)	(100.00%)
Manufacturing	15	41	58	114
	(13.16%)	(35.96%)	(50.88%)	(100.00%)
Commercial and	555	1547	1411	3513
personnel	(15.80%)	(44.04%)	(40.17%)	(100.00%)
Other occupation	38	114	89	241
unspecified	(15.77%)	(47.30%)	(36.93%)	(100.00%)
Total	1124	3507	4030	8661
	(12.98%)	(40.49%)	(46.53%)	(100.00%)
Realising one's potential				
Principals in State	4	19	72	95
	(4.21%)	(20.00%)	(75.79%)	(100.00%)
Professional Technician	94	455	1159	1708
	(5.50%)	(26.64%)	(67.86%)	(100.00%)
Clerk and related	109	368	673	1150
personnel	(9.48%)	(32.00%)	(58.52%)	(100.00%)
Primary producers	183	650	1007	1840
	(9.95%)	(35.33%)	(54.73%)	(100.00%)
Manufacturing	11	36	67	114
	(9.65%)	(31.58%)	(58.77%)	(100.00%)
Commercial and	414	1345	1754	3513
personnel	(11.78%)	(38.29%)	(49.93%)	(100.00%)
Other occupation	27	101	113	241
unspecified	(11.20%)	(41.91%)	(46.89%)	(100.00%)
Total	842	2974	4845	8661
	(9.72%)	(34.34%)	(55.94%)	(100.00%)