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Job Satisfaction in Britain: Individual and Job Related Factors

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Abstract

Recently there is a resurgence of interest in the analysis of job satisfaction variables. Job satisfaction is correlated with labor market behavior such as productivity, quits and absenteeism. Recent work examined job satisfaction in relation to various factors. In this paper four different measures of job satisfaction are related to a variety of personal and job characteristics. We use a unique data of 28 240 British employees Workplace Employee Relations Survey (**WERS97**). Our data set is larger and more recent than in the previous studies. The four measures of job satisfaction considered are satisfaction with influence over job, satisfaction with amount of pay, satisfaction with sense of achievement and satisfaction with respect from supervisors. Although the job satisfaction measures we use are somewhat different than those that are previously used in the literature, a number of results that are commonly obtained with international data are found to hold in our data set as well.

Key Words: Job Satisfaction, Individual Characteristics, Job Related Factors, Britain

JEL Classifications: L20, L29, J50

1. Introduction:

Many economists consider self-reported job satisfaction as a fascinating subjective variable (Levy-Garboua and Montmarquette, 2002:1). This attraction recently resulted in a number of studies in the empirical analysis of well-being, specifically in job satisfaction. Job satisfaction has been investigated in several disciplines such as psychology (Argyle 1989), sociology (Hodson,1985; Kalleberg and Loscocco ,1983), economics (Hamermesh 1977, 2001; Freeman, 1978), and management sciences (Hunt and Saul ,1975). Employers prefer that their employees be satisfied, since employees satisfaction is closely related to their labor market behavior such as productivity, quits and absenteeism. Several findings indicate that job satisfaction is as good predictor of quits as wages (Freeman, 1978; Akerlof et al., 1988; Clark et al. (1998). For this reason it is important to study the determinants of job satisfaction. Different aspects of job satisfaction are studied in the literature. These include job satisfaction with gender (Clark ,1997), wage growth (Clark ,1999), age (Hunt and Saul (1975), Clark et al., 1996), comparison income and unemployment (Clark and Oswald, 1994,1996) work environment (Idson, 1990), work environment and relations with managers (Gazioglu and Tansel, 2002). Locke (1976) defines the job satisfaction as the individual's subjective valuation of different aspects of their job. Higher job satisfaction may be due to improvements in the objective aspects of the job either from reduced expectations or dissatisfying aspect of job is downplayed while pleasing aspects are given greater weight. Hamermesh (1977) is one of the first studies that used job satisfaction data to investigate a model of occupational choice.

This paper analyses four different measures of job satisfaction, using British data and investigates their relationship to individual and job characteristics. Individual characteristics include age, sex, education and gender. Job characteristic include income, establishments size, hours of work and industrial composition. Clark (1996)used British Household Panel Data (BHPD91) from 1991 to investigate the determinants of job satisfaction. We use a more recent (1997) and larger data set in order to see whether the previously obtained results are upheld. Although the job satisfaction measures we use are somewhat different than those of Clark and others, a number of results that are commonly obtained with international data are found to hold in our data set as well. One special difference from the previous results in that the married individuals have lower job satisfaction levels than the unmarried in our data set. Further, it was noteworthy that individuals in education and health sectors are less satisfied with their pay but more satisfied with their sense of achievement.

Section 2 presents a brief discussion of our data and the various measures of job satisfaction used in this study. Section 3 analyses the ordered probit estimation results of the relationship between job satisfaction measures and a number of individual and job characteristics. Section 4 includes concluding remarks.

2. Data

We use a unique data of 28 240 British employees Workplace Employee Relations Survey from 1997 (**WERS97**). This is a matched employer-employee survey. It involves interviews with employees and managers in over 3000 establishments. Survey represents employers of 15,8 million workers. This is three-fourths of all employees in Britain. Clark 1996 also uses British data from BHPS 1991 survey of 5000 employees. Our data set is much larger and more recent than Clark's and involves larger establishments. Table 1 gives the distribution of reported job satisfaction measures. The job satisfaction measures are recorded in the survey as five category ordered measure. In this ordered measure the value of one corresponds to 'very dissatisfied' and five corresponds to 'very satisfied'. These four measures are satisfaction with influence over job, with amount of pay, with sense of achievement and with respect of supervisors. The most frequent (mode) response for all measures of satisfaction is 'satisfied' category. 'Very dissatisfied' and 'dissatisfied' categories are substantial, especially for satisfaction with the amount of pay. Nearly 41 percent of employees reported to be dissatisfied or very dissatisfied with their pay. While respective figures for satisfaction with influence over job and with sense of achievements is each about 15 percent and satisfaction with the respect from supervisors is 21 percent. Conversely, at the other tail of the distribution, those employees who are very satisfied with the amount of their pay is only 3.5 percent while the same figure is between 11 and 15 percent for all other measures of job satisfaction. Thus, British workers seem less satisfied with their pay but more satisfied with their job by other measures of job satisfaction. Table 2 cross tabulates the four satisfaction measures with various individual and firm characteristics. It reports the means of the variables for the categories of 'satisfied' and 'very satisfied' for each of the job satisfaction measures. Findings in this table will be discussed along with the ordered probit estimation results in the next section.

3. Estimation Results

Table 3 reports the maximum likelihood ordered probit estimates of job satisfaction. In each regression the dependent variable is five category ordered measure of job satisfaction. In such ordinal

measures of dependent variable it is proper to use ordered probit techniques (Greene, 2002; Maddala, 1983). Below we provide a discussion of each factor separately.

Gender:

Table 2 indicates that women are more satisfied (or very satisfied) with various aspects of their jobs compared to men. This result is confirmed in Table 3 when other control factors are introduced into the regressions. The coefficient estimate of the male dummy variable is negative and statistically significant throughout. The largest coefficient estimate for this variable is for satisfaction with the amount of pay indicating that men are most dissatisfied with this aspect of their job compared to women. This unexpected result has been confirmed in a number of studies (Clark, 1996; 1997; Meng, 1990 and others). Some plausible explanations for this finding may be the following: Men and women have different expectations from their jobs. Further more, their comparison groups may be different. These may have a reflection on the way they answer the job satisfaction questions. Another reason for the finding that women are more satisfied with their jobs might be that the types of jobs that men and women do are different as well as their qualifications. There may also be a participation effect. In the situations where women is a secondary bread-winner they may find it easier to leave the labor market. Thus more of the women who are satisfied at work would be working compared to dissatisfied women. This would create a sample selection problem (Heckman, 1979). The extent of the gender differential in job satisfaction is investigated in detail by Clark (1997). He found this differential can not be explained by different jobs that men and women do or by sample selection. He found that for groups for which the gender differential in job expectations is less likely, the gender differential in job satisfaction disappears. Such groups included the young, the higher educated the professionals, those in male-dominated work places and those whose mothers had a professional job. Clark also found some evidence that women have lower expectations.

Age

Clark (1996) and Clark et al. (1996) report a statistically significant U-shaped pattern in age for several job satisfaction measures. Clark et al. (1996) also found that the U-shape in age is particularly strong for full-time employees and stronger for men than for women. The same pattern is reported by Warr (1992) for job-related well-being. However, there are some contradictory evidence on this issue in the literature, such as that provided by O'Brien and Dowling (1981). We observe a non-linear relationship between age and four measures of job satisfaction in Table 2. In all cases non-linearity shows a U-shaped relationship, with those in the very young and old age groups being the most satisfied. In the regressions in Table 3 where other variables are controlled for, age-square captures

the non-linear relationship between age and job satisfaction observed in Table 2. In all four measures of job satisfaction equations, age and age-squared are statistically significant and carry negative and positive signs respectively indicating a U- shaped relationship between age and job satisfaction.

The various measures of satisfaction reach a minimum at different ages. Satisfaction with influence over job, satisfaction with the amount of pay, satisfaction with the sense of achievements, satisfaction with respect from supervisors reach a minimum at the ages of 33, 36, 22 and 28 respectively. It is worthy to note that workers reach a minimum for satisfaction with the amount of pay at an older age than in the case of other measures of satisfaction. Higher minimum age for satisfaction with pay is also reported by Clark et al. (1996:67). Clark et al. (1996) provided explanation for the U shape of job satisfaction with respect to age. They suggest that young workers may feel satisfied because they have little experience about the labor market against which to judge their own work. As they learn about the labor market with some years of experience they are able to better judge the conditions of their work. With this experience, satisfaction drops in the middle ages. One factor is the effect of the reduced aspirations with age. Older workers may have reduced aspirations as they realize that they face limited alternative choices as they get older. It may also be true that they may attach less importance to such ambitions. The second factor that may be responsible for older workers' higher levels of satisfaction could be a self-selection effect. Since dissatisfied older workers may find it easier to leave the labor market or find an alternative more satisfying job, the ones we observe in the labor market would be the satisfied ones. The details of this argument and a discussion of several other factors can be found in Clark et al and Kalleberg and Loscocco (1983).

Education

In Table 2 we observe that the percentage of those who are satisfied or very satisfied with their jobs is largest for the 'other' category, which is the lowest level of education. This result is confirmed in Table 3, where we observe that 'degree and postgraduate degree' and 'A-level-O-level' holders have lower levels of satisfaction compared to the individuals with lower level of education. The differential dissatisfaction is highest in the case of degree and post-graduate degree holders. Degree and postgraduate degree holders show the largest differential dissatisfaction with their sense of achievement with their job and next largest dissatisfaction is shown with the influence over their job. Association of higher levels of education with less satisfaction is a surprising but a well establish result (Clark, 1996; Clark, Oswald and Warr, 1996; Clark and Oswald, 1996). Clark and Oswald (1996) suggested that due to expectation differential between different levels of education, causal relationship

between education and job satisfaction is ambiguous. Blanch flower and Oswald (1999) and Clark and Oswald (1996) initially found a positive effect of education. But, this positive effect disappeared once a control for income is used in the regressions.

Marital Status

We separated the marital status into two categories as married and single. The married category includes those living with spouse or partner and the single category includes those who are single, widowed, divorced or separated. The cross-tabulation in Table 2 shows that the married employees are less satisfied with their job than the single ones by all four measures of satisfaction. The regressions in Table 3 confirm this results. The findings in the literature on the job satisfaction and marital status have been mixed. Clark (1996) reports that the married employees are more satisfied. It is well known that married individuals are happier in general. However, our results indicate that they are less-satisfied with their jobs compared to the single individuals.

Health Problems

The survey question asks if the employee has any long-standing health problems or disabilities, which limit what they can do at work, at home or in their leisure time. An affirmative answer indicates health problems. The cross tabulation in Table 2 shows that a high proportion of employees with health problems report high levels of satisfaction with all of the four measures of job satisfaction except for satisfaction with amount of pay. Whereas, when other variables are controlled for, in the regressions in Table 3 we observe a statistically significant negative relationship between health problems and all for measures of job satisfaction, indicating that health problems lead to lower levels of job satisfaction. This is similar to the results obtained by Clark (1996).

Race

The ethnic group that employee belongs to are categorized into White, Black and Asian. We observe in the cross-tabulation in Table 2 that the proportion of Blacks who are satisfied with the amount of their pay is very low. In concordance with this observation, in the regressions in the Table 3, Blacks have lower levels of satisfaction with the amount of their pay in comparison to the Asians. Whites have higher levels of satisfaction with their pay in comparison to Asians. For the other measures of job satisfaction Blacks and Whites are not significantly different from Asians. Clark (1996) also finds that the Blacks are relatively dissatisfied with their pay.

Job Characteristics

The cross-tabulation in Table 2 show that higher weekly level of income is associated with higher levels of job satisfaction. This table also shows a nonlinear relationship between weekly income and different measures of job satisfaction. Therefore the regressions in Table 3 include logarithm of weekly income. The coefficient estimates are positive and statistically significant indicating that higher pay is associated with higher job satisfaction, except in the case of satisfaction with the sense of achievement and respects from supervisors. The strongest relationship is found between weekly income and satisfaction with the amount of pay. Clark and Oswald (1996) and others found a strong negative relationship between job satisfaction and a comparison income where the latter is measured in various ways.

Table 2 shows the proportion of employees who are satisfied with different hours of work per week. As it is expected longer hours of work are associated with lower levels of satisfaction in all four measures of job satisfaction. Accordingly, Table 3 includes logarithm of weekly hours of work, to take the non-linearity into account. Hours of work are strongly and negatively related to the satisfaction with the amount of pay consistent with economic theory. The coefficient estimate is negative and statistically insignificant in the case of satisfaction with the sense of achievement. The coefficient estimates are negative and statistically significant in the cases of satisfaction with influence over job and satisfaction with respect from supervisors.

Establishment Size

The cross-tabulation in Table 2 indicate a non-linear relationship between establishment size and the four satisfaction measures. Accordingly in Table 3 logarithm of establishment size is introduced. It enters with a statistically significant negative coefficient throughout indicating lower levels of satisfaction in larger establishments. The same result is found by Idson (1990) with the U.S. data, and by Clark with British data. Gazioglu and Tansel (2002) investigated the nature of this relationship and its connection to structure of work environment and employee-manager relationship. The effect of establishment size on satisfaction with pay is weaker than in the other satisfaction measures since it is well known that larger firms pay higher wages.

In Table 3 we observe a very strong negative relationship between union membership and the four measures of job satisfaction. The results indicate that the union members are less satisfied with their jobs. However there might be an issue of endogeneity since dissatisfied workers are more likely

to join the unions. The relationship between job satisfaction and union membership has been investigated by several researchers such as Borjas (1979), Freeman (1978), Meng (1990) and Miller (1990).

Job Security

With regards to job security the survey question asked if the respondent agrees with the following statement: 'I feel that that my job is secure in this work place'. In this study, those who strongly agree or agree with this statement are assigned a value of one and zero otherwise. Inclusion of this dummy variable in the regressions in Table 3 indicates that a secure job leads to highly significant, higher satisfaction levels for all measures of satisfaction considered. The issue of job security and job satisfaction is investigated by Blanchflower and Oswald (1999). They also found that job satisfaction is higher among those with secure jobs. Blanch flower and Oswald further asked the question if US job satisfaction falling because of increasing job insecurity or because of the decline of trade unions. They found that the answer was negative to both of the queries.

Occupation and Industrial Composition

Three occupational categories are included. The cross-tabulation in Table 2 indicates that the proportion of those employees in managerial and professional occupations who are satisfied or very satisfied with their jobs are larger than the proportion of those who are in Clerical or Sales occupations. Table 3 shows this pattern. Managers, professionals and clerical employees are more satisfied with the influence over their job (insignificant in the case of clerical), with the sense of achievements and with the respect they get from their supervisors, as compared to the sales employees. However, they are less satisfied with the amount of their pay as compared to the sales employees. Clark (1996) also found that those at the higher end of the occupational scale report higher satisfaction with various aspects of their work but are less satisfied with their pay.

With regards to the industrial composition Table 3 indicates that manufacturing sector is not significantly different from the whole-sale and retail sector for all measures of the job satisfaction. The coefficient estimates in the electricity, gas and water sector are all statistically significant and positive throughout indicating higher levels of satisfaction in this sector compared to whole-sale and retail trade. Similarly in the construction sector higher satisfaction levels are obtained relative to the whole-sale and trade sector. In the transportation sector negative and statistically significant coefficient estimates indicate that employees in this sector are less satisfied with respect to all satisfaction measures as compared to whole sale and retail trade sector employees. The coefficient

estimates for financial services sector are all insignificant except in the case of satisfaction with the respect from supervisors. In the education sector the coefficient estimate on satisfaction with the influence over job is insignificant. However, education sector employees seem unsatisfied with their pay but highly satisfied with their sense of achievement and with respect from supervisors. The health sector employees do significantly differ in their satisfaction with their influence over their job and with respect from their supervisors from the whole-sale and retail trade employees. However they are less satisfied with their pay and more satisfied with sense of achievement as compared to wholesale and retail trade sector employees.

Training Opportunities

With respect to training opportunities during the past year we observe that all of the coefficients are statistically significant and positive indicating that training availability during the past year leads to higher levels of job satisfaction as compared to no training. This is consistent with the hypothesis that job satisfaction is an increasing function of training opportunities (Hamermesh, 1977)

4. Conclusions

This paper provides empirical analysis of the determinants of job satisfaction in Britain considering a variety of personal and job related characteristics. This paper attempts to further the analysis on employee job satisfaction. In many ways it updates the analysis of Clark (1996) with a larger and more recent data set and somewhat different measures of job satisfaction. We used data from the 1997 Workplace Employees Relationship Survey (WERS97) for 28,240 employees. A number of results that are commonly obtained with international data are found to hold in our data set as well, with a few exceptions. These can be summarized as follows: Men are less satisfied than women various aspects of their jobs; job satisfaction is U-shaped in relation to age; higher educated are less satisfied relative to those with no or few qualifications; married or spouse present employees are less satisfied than non-married. This result is one of those, which is different from the other studies. Health problems significantly reduce satisfaction; higher income produces higher levels of satisfaction; long working hours reduce satisfaction; satisfaction is lower in larger establishments. Union members are less satisfied than non-members; employees who feel that their job is secure exhibit higher levels of job satisfaction; those who are in managerial professional and clerical occupations are more satisfied than sales employees. Those employees who had job training were more satisfied than those who had no training opportunities. We also reported results on job satisfaction and the industrial composition and occupation which are not reported in the previous work. With regards to the industrial composition satisfaction of those who work in the manufacturing sector and the financial services sector is not significantly different from those in the whole-sale and retail

trade sector. Satisfaction of those who are in the electricity gas-water and construction sector is significantly more than those in the whole sale and retail trade sector. It was note-worthy that those in the education and health sector are less satisfied with their pay but more satisfied with their sense of achievement. All in all, our results confirm the robustness of the findings in the literature on job satisfaction both over time and with different measures of job satisfaction.

TABLES

Table 1: Distribution of Reported Job Satisfaction Measures

| | <u>Satisfaction with Influence Over Job</u> | | <u>Satisfaction with Amount of Pay</u> | | <u>Satisfaction with Sense of Achievement</u> | | <u>Satisfaction with Respect from Supervisors</u> | |
|-------------------|---|----------------|--|----------------|---|----------------|---|----------------|
| | <u>Number</u> | <u>Percent</u> | <u>Number</u> | <u>Percent</u> | <u>Number</u> | <u>Percent</u> | <u>Number</u> | <u>Percent</u> |
| Levels: | | | | | | | | |
| Very Dissatisfied | 887 | 3.2 | 3 478 | 12.5 | 1 275 | 4.6 | 2 358 | 8.5 |
| Dissatisfied | 3 308 | 12.0 | 7 896 | 28.2 | 2 872 | 10.3 | 3 515 | 12.7 |
| Neither | 7 162 | 26.0 | 6 568 | 23.5 | 5 941 | 21.4 | 5 636 | 20.3 |
| Satisfied | 13 075 | 47.4 | 8 911 | 32.3 | 13 519 | 48.6 | 12 250 | 44.2 |
| Very Satisfied | 3 156 | 11.4 | 1 028 | 3.5 | 4 180 | 15.0 | 3 973 | 14.3 |
| Total | 27 589 | 100.0 | 27 880 | 100.0 | 27 785 | 100.0 | 28 240 | 100.0 |

Table 2: Means of the Variables (%)

| | <u>Satisfaction with Influence Over Job</u> | | <u>Satisfaction with Amount of Pay</u> | | <u>Satisfaction with Sense of Achievement</u> | | <u>Satisfaction with Respect from Supervisors</u> | |
|------------------------------------|---|-----------------------|--|-----------------------|---|-----------------------|---|-----------------------|
| | <u>Satisfied</u> | <u>Very Satisfied</u> | <u>Satisfied</u> | <u>Very Satisfied</u> | <u>Satisfied</u> | <u>Very Satisfied</u> | <u>Satisfied</u> | <u>Very Satisfied</u> |
| <u>Individual Characteristics:</u> | | | | | | | | |
| Male | 45.7 | 12.3 | 29.5 | 3.3 | 46.8 | 14.1 | 42.1 | 12.3 |
| Female | 48.9 | 11.2 | 35.0 | 3.6 | 51.2 | 16.0 | 46.3 | 16.3 |
| <u>Age:</u> | | | | | | | | |
| 20 or less | 45.3 | 7.7 | 38.9 | 3.7 | 42.3 | 9.1 | 44.4 | 16.1 |
| 20-24 | 49.8 | 8.2 | 29.4 | 2.8 | 47.3 | 12.9 | 44.3 | 13.3 |
| 25-29 | 47.3 | 10.0 | 27.1 | 3.7 | 46.9 | 11.8 | 42.4 | 12.2 |
| 30-39 | 45.0 | 11.1 | 32.7 | 3.6 | 47.7 | 13.4 | 42.4 | 11.3 |
| 40-49 | 47.1 | 11.2 | 31.5 | 3.6 | 50.9 | 14.6 | 44.4 | 14.0 |
| 50-59 | 49.5 | 13.1 | 32.7 | 3.7 | 49.7 | 19.8 | 46.5 | 17.7 |
| 60 and over | 54.6 | 21.7 | 37.8 | 6.2 | 52.8 | 27.3 | 49.1 | 26.3 |
| <u>Level of Education:</u> | | | | | | | | |
| Degree+Postgraduate | 47.8 | 12.8 | 34.0 | 3.9 | 49.6 | 16.2 | 45.8 | 13.9 |
| A Level+0 level | 46.4 | 10.3 | 32.1 | 2.9 | 48.2 | 13.0 | 43.6 | 13.0 |
| Other | 49.2 | 13.8 | 30.9 | 4.2 | 50.3 | 18.7 | 44.2 | 17.9 |
| <u>Marital Status:</u> | | | | | | | | |
| Married+Spouse Present | 45.9 | 9.9 | 30.0 | 2.7 | 46.8 | 13.1 | 43.3 | 14.0 |
| Single | 47.9 | 12.5 | 33.3 | 3.7 | 50.0 | 15.9 | 44.7 | 14.5 |
| Health Problems | 55.2 | 20.1 | 38.9 | 6.6 | 52.2 | 25.8 | 50.7 | 25.4 |
| <u>Race:</u> | | | | | | | | |
| White | 47.4 | 11.7 | 32.7 | 3.5 | 9.1 | 15.2 | 44.4 | 14.3 |
| Black | 42.9 | 11.8 | 19.1 | 1.3 | 49.0 | 10.6 | 40.1 | 12.1 |
| Asian | 47.4 | 12.0 | 25.9 | 3.1 | 46.8 | 13.0 | 43.6 | 14.5 |
| <u>Job Characteristics:</u> | | | | | | | | |
| <u>Weekly Income:</u> | | | | | | | | |
| Less than £140 | 49.0 | 10.6 | 36.0 | 3.7 | 49.7 | 17.0 | 47.0 | 19.1 |
| £141-£260 | 44.7 | 10.1 | 33.4 | 1.9 | 47.6 | 12.8 | 41.4 | 12.9 |
| £261-£430 | 46.6 | 11.1 | 31.5 | 2.6 | 48.6 | 14.1 | 43.0 | 11.7 |
| £431 or more | 50.9 | 16.8 | 45.0 | 7.2 | 52.0 | 18.1 | 48.2 | 14.8 |
| <u>Hours of Work per Week:</u> | | | | | | | | |
| Less than 16 | 48.5 | 11.6 | 39.2 | 4.5 | 49.0 | 17.9 | 47.1 | 18.9 |
| 16-29 | 49.2 | 10.1 | 39.1 | 3.2 | 50.6 | 17.2 | 48.1 | 17.5 |
| 30-39 | 46.6 | 10.4 | 28.6 | 3.1 | 48.2 | 12.4 | 42.7 | 12.8 |
| 40 hours or more | 47.0 | 13.2 | 31.4 | 3.6 | 49.2 | 15.8 | 43.7 | 13.4 |
| Union Member | 44.2 | 9.5 | 31.0 | 2.9 | 57.3 | 13.6 | 41.7 | 11.5 |

| | | | | | | | | |
|--|------|------|------|-----|------|------|------|------|
| Gender Concentration of the Work Place | | | | | | | | |
| Mostly Men | 46.4 | 12.0 | 31.1 | 3.5 | 48.1 | 13.8 | 42.7 | 12.1 |
| Mostly Women | 48.0 | 11.6 | 33.3 | 3.4 | 49.9 | 16.2 | 45.7 | 16.3 |
| <u>Establishment Size:</u> | | | | | | | | |
| Less than 25 employees | 49.9 | 14.4 | 33.1 | 3.3 | 51.9 | 18.1 | 44.4 | 19.0 |
| 25-99 employees | 47.9 | 11.8 | 31.9 | 3.4 | 49.9 | 16.0 | 44.5 | 15.5 |
| 100-199 employees | 46.1 | 11.9 | 31.1 | 3.7 | 47.9 | 14.0 | 43.6 | 12.6 |
| 200-499 employees | 46.5 | 11.2 | 33.4 | 3.3 | 47.7 | 13.7 | 43.7 | 12.6 |
| 500 or more employees | 47.0 | 10.4 | 32.7 | 3.7 | 48.3 | 14.1 | 43.3 | 13.3 |
| <u>Occupation:</u> | | | | | | | | |
| Managerial/Professional | 49.9 | 14.5 | 35.7 | 4.4 | 51.5 | 18.0 | 46.6 | 15.2 |
| Clerical | 47.1 | 9.8 | 29.7 | 2.5 | 49.1 | 14.2 | 43.6 | 13.7 |
| Sales | 43.7 | 9.9 | 31.1 | 3.3 | 45.2 | 11.3 | 42.1 | 13.3 |

The Satisfaction Means for Those Who Agree or Strongly Agree with the Following Statements:

I Feel that My Job is Secure in this Work Place:

52.7 15.3 37.3 4.7 52.9 18.8 49.4 19.4

Table 3: Maximum Likelihood Ordered Probit Estimates of Job Satisfaction

| | Satisfaction with <u>Influence Over Job</u> | | Satisfaction with <u>Amount of Pay</u> | | Satisfaction with <u>Sense of Achievement</u> | | Satisfaction with <u>Respect from Superv.</u> | |
|---------------------------------|--|-----------------|---|-----------------|--|-----------------|--|-----------------|
| | <u>Coefficient</u> | <u>t-Ratio*</u> | <u>Coefficient</u> | <u>t-Ratio*</u> | <u>Coefficient</u> | <u>t-Ratio*</u> | <u>Coefficient</u> | <u>t-Ratio*</u> |
| Male | -0.066 | 3.95 | -0.244 | 14.64 | -0.919 | 5.44 | -0.113 | 6.86 |
| Age | -0.188 | 4.10 | -0.027 | 6.20 | -0.010 | 2.11 | -0.021 | 5.00 |
| Age Square ($\times 10^{-3}$) | 0.305 | 5.48 | 0.374 | 6.99 | 0.231 | 4.20 | 0.374 | 7.18 |
| <u>Level of Education</u> | | | | | | | | |
| Degree + Postgraduate | -0.275 | 10.41 | -0.205 | 7.74 | -0.295 | 11.09 | -0.200 | 7.65 |
| A level + 0 level | -0.155 | 7.52 | -0.063 | 3.08 | -0.178 | 8.56 | -0.127 | 6.46 |
| Married | -0.077 | 4.65 | -0.404 | 2.45 | -0.065 | 3.96 | -0.020 | 1.20 |
| Health Problems | -0.210 | 6.95 | -0.142 | 4.66 | -0.164 | 5.61 | -0.143 | 4.88 |
| <u>Race:</u> | | | | | | | | |
| White | -0.054 | 1.24 | 0.135 | 3.09 | 0.033 | 0.76 | -0.063 | 1.47 |
| Black | -0.045 | 0.64 | -0.143 | 1.88 | -0.044 | 0.60 | -0.107 | 1.50 |
| <u>Job Characteristics:</u> | | | | | | | | |
| Log Weekly Income | 0.133 | 6.81 | 0.621 | 37.05 | 0.021 | 1.08 | 0.025 | 1.30 |
| Log Hours of Work | -0.158 | 6.45 | -0.856 | 45.63 | -0.038 | 1.54 | -0.174 | 7.50 |
| Log Estab. Size | -0.026 | 4.48 | -0.016 | 2.84 | -0.038 | 6.41 | -0.025 | 4.27 |
| Union Member | -0.239 | 15.48 | -0.143 | 9.25 | -0.161 | 10.35 | -0.207 | 13.62 |
| Secure Job | 0.521 | 36.29 | 0.341 | 24.02 | 0.455 | 31.72 | 0.532 | 37.89 |
| <u>Occupation:</u> | | | | | | | | |
| Managerial/Professional | 0.272 | 10.75 | -0.060 | 2.43 | 0.351 | 13.79 | 0.256 | 10.38 |
| Clerical | 0.064 | 3.14 | -0.170 | 8.55 | 0.166 | 8.22 | 0.101 | 5.24 |
| <u>Gender Concentration:</u> | | | | | | | | |
| Mostly Men | 0.011 | 0.58 | -0.032 | 1.67 | 0.073 | 3.81 | -0.267 | 1.42 |
| <u>Industrial Composition:</u> | | | | | | | | |
| Manufacturing | 0.031 | 1.30 | 0.037 | 1.56 | 0.004 | 0.16 | -0.020 | 0.78 |
| Electricity+Gas+Water | 0.142 | 3.86 | 0.378 | 10.51 | 0.063 | 1.70 | 0.152 | 4.01 |
| Construction | 0.112 | 3.10 | 0.067 | 1.85 | 0.083 | 2.36 | 0.087 | 2.48 |
| Transportation | -0.138 | 4.46 | -0.060 | 1.89 | -0.108 | 3.37 | -0.089 | 2.86 |
| Financial Services | 0.026 | 1.13 | 0.022 | 0.94 | 0.361 | 0.56 | 0.089 | 3.86 |
| Education Sector | -0.014 | 0.54 | -0.153 | 5.82 | 0.269 | 10.27 | 0.129 | 5.03 |
| Health Sector | -0.024 | 0.91 | -0.124 | 4.90 | 0.220 | 8.45 | 0.012 | 0.50 |

| <u>Training:</u> | | | | | | | | |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Less Than 5 Days | 0.074 | 4.51 | 0.104 | 6.38 | 0.124 | 7.58 | 0.169 | 10.02 |
| 5 Days or More | 0.222 | 10.61 | 0.189 | 9.15 | 0.336 | 10.10 | 0.356 | 17.16 |
| Constant | | | | | | | | |
| Threshold Parameters: | 2.035 | 17.72 | 1.43 | 13.44 | 1.614 | 14.30 | 2.058 | 19.31 |
| μ (1) | 0.904 | 57.50 | 0.986 | 92.98 | 0.709 | 53.59 | 0.618 | 59.71 |
| μ (2) | 1.724 | 99.68 | 1.630 | 133.97 | 1.431 | 94.74 | 1.264 | 102.36 |
| μ (3) | 3.236 | 164.00 | 3.190 | 167.08 | 2.922 | 165.68 | 2.646 | 172.44 |
| - Log Likelihood | 30 420 | | 32 879 | | 30 762 | | 33 750 | |
| Chi-Squared (26) | 2 465 | | 2 834 | | 2 590 | | 3 022 | |
| Number of Observations | 23 948 | | 23 895 | | 23 948 | | 24 670 | |

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