

***Job Satisfaction Among  
Russian Workers***

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***Job Satisfaction Among Russian Workers***

*Abstract*

Why do Russians work without wages? This paper investigates the extent to which job satisfaction and attitude toward work in general may account for the observed behavior of Russian workers. To analyze the level and determinants of job satisfaction among Russian workers, this paper utilizes survey data collected from 1,200 workers and managers employed in seventy-six organizations in Moscow, Saratov and Taganrog. The paper is divided into five parts. Part 1 presents the three measures of job satisfaction used in this analysis. Response patterns, analyzed by occupational status, gender, and generation, are discussed. Part 2 first explores gender and generational differences in attitudes toward work in general, and then examines the relationship between attitude toward work and job satisfaction. The results indicate that both gender and generation are significant in response patterns regarding attitudes toward work. Generational differences also are significant in response patterns relating the results of working hard to performance, productivity, and doing the job well. Regression analysis documents the positive relationship between attitude toward work and the level of job satisfaction. Part 3 focuses on the relationship between job satisfaction and performance. Three noteworthy results emerge. First, regardless of the specification or measure, there is a strong positive correlation between job satisfaction and performance. The relationship is not affected by gender, age, or educational attainment level of the respondents. Second, it is not possible using these data to establish causality between job satisfaction and performance. It appears, instead, that unspecified factors may be affecting the two conditions simultaneously. Finally, the results generated from these data are not significantly different from results based on previous surveys of U.S. workers, as well as a survey completed in 1996 of Russian and Polish workers. Part 4 analyzes the relationship between job satisfaction and organizational commitment. Among the workers participating in this survey there is, generally, only a moderate degree of organizational commitment. Commitment is highest among workers who feel they are making a contribution. The results document a positive relationship between job satisfaction and organizational commitment, although the causality is not well-defined. Concluding remarks are offered in Part 5.

Key Words: Russia, job satisfaction, performance, organizational commitment

JEL Classification: J28, P23

*Job Satisfaction Among Russian Workers*

Workers fared rather poorly during Russia's transition from a planned to a market economy. For much of the past decade, falling real wages characterized many occupations, sectors and regions; unpaid wages accounted for nearly one-third of the wage bill (Goskomstat 2000). Desai and Idson (2000) provide a detailed account of "work without wages" in the 1990s, complementing existing studies of the impact of the transition on Russia's labor market (Clarke 1996 1998 1999, Commander and Coricelli 1995, Gimpel'son and Lippoldt 1999 2001, Linz 1995 1996 2000 2002, Standing 1996).

Despite the growing literature analyzing changes in the Russian labor market, numerous questions remain unanswered. Do wage differentials explain the high rate of labor turnover? Are wages determined by supply and demand conditions? How does the change in ownership structure influence a firm's employment strategy? To what extent have female employees borne a disproportionate share of the cost of the transition? Are generational differences significant in explaining employee responses to changing labor market conditions? Why do Russians work without wages?

This paper focuses on the latter question, investigating the extent to which job satisfaction and attitude toward work in general may account for the observed behavior of Russian workers. If workers express positive attitudes toward work in general, and/or a high level of job satisfaction, then the hypothesis that job satisfaction is a contributing factor to work without wages cannot be rejected. Survey data collected from employees in Moscow, Saratov, and Taganrog, Russia in summer 2000 are used to analyze the level and variation of job satisfaction among Russian workers. The paper tests the hypothesis that a positive relationship exists between job satisfaction and performance, as well as

between job satisfaction and organizational commitment. Previous studies using data collected primarily from U.S. workers generate ambiguous results in terms of the direction of causality (Bagozzi 1980, Bartol 1979, Baseman and Strasser 1984, Darden *et al* 1989, Good and Huddleston 1997, Iaffaldano and Muchinsky 1985, Larwood *et al* 1998, Lincoln and Kalleberg 1985, Mathieu and Hamel 1989, Morrison 1997, Mortimer and Lorence 1989, Petty *et al* 1984, Reichers 1985, Hackett *et al* 1994). Consequently, a second aim is to determine whether job satisfaction among Russian workers is the cause or the effect of performance and/or organizational commitment.

Why is it important to understand the factors that influence job satisfaction among Russian workers? If job satisfaction among Russian workers is positively correlated to performance and organizational commitment, targeting factors that influence job satisfaction will have a significant impact on a firm's financial position due to improvements in labor productivity. Measures of the level of job satisfaction and the extent of variation by gender and generation allow for the design of desirable work conditions and effective incentive structures. Russian managers, as well as managers of foreign firms operating in Russia, are likely to be interested in these results. If job satisfaction among Russian workers is significantly different from that found in studies completed in other countries, identifying the factors that contribute to observed differences is essential to research analysts and policy makers alike. Both are likely to incorporate cultural differences, where warranted, in developing managerial strategies and investment assistance packages. Finally, assessing the level and variation in job satisfaction among Russian workers in 2000 provides the foundation for future studies to document changes in employee response patterns as work conditions adjust to the evolving economic environment.

To analyze the level and determinants of job satisfaction among Russian workers, this paper utilizes survey data collected from 1,200 workers and managers employed in seventy-six organizations

in Moscow, Saratov and Taganrog. Appendix A provides a detailed description of the survey participants, as well as a complete listing of the questions used in this analysis. The survey instrument was adapted from a study conducted by Huddleston and Good (1999) in Russia and Poland in 1996. As with their study, local project coordinators administered the questionnaire to workers and managers at their workplace, having already secured permission from the director to conduct the survey at the organization.

The paper is divided into five parts. Part 1 presents the three measures of job satisfaction used in this analysis. Response patterns, analyzed by occupational status, gender, and generation, are discussed. Part 2 first explores gender and generational differences in attitudes toward work in general, and then examines the relationship between attitude toward work and job satisfaction. The results indicate that both gender and generation are significant in response patterns regarding attitudes toward work. Generational differences also are significant in response patterns relating the results of working hard to performance, productivity, and doing the job well. Regression analysis documents the positive relationship between attitude toward work and the level of job satisfaction. Part 3 focuses on the relationship between job satisfaction and performance. Three noteworthy results emerge. First, regardless of the specification or measure, there is a strong positive correlation between job satisfaction and performance. The relationship is not affected by gender, age, or educational attainment level of the respondents. Second, it is not possible using these data to establish causality between job satisfaction and performance. It appears, instead, that unspecified factors may be affecting the two conditions simultaneously. Finally, the results generated from these data are not significantly different from results based on previous surveys of U.S. workers (Darden *et al* 1989, Iaffaldano and Muchinsky 1985, Mortimer and Lorence 1989, Petty *et al* 1984), as well as a survey completed in 1996 of Russian and

Polish workers (Good and Huddleston 1997). Part 4 analyzes the relationship between job satisfaction and organizational commitment. Among the workers participating in this survey there is, generally, only a moderate degree of organizational commitment. Commitment is highest among workers who feel they are making a contribution. The results document a positive relationship between job satisfaction and organizational commitment, although the causality is not well-defined. Concluding remarks are offered in Part 5.

### ***1. Measures of Job Satisfaction***

Job satisfaction generally implies a positive evaluation of work and a positive effect deriving from it; that is, a “positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke 1976, p. 1300). Since job satisfaction may refer to an employee’s overall evaluation of the job or specific components or tasks associated with the job, both dimensions are explicitly addressed in this analysis.<sup>1</sup>

The first measure of job satisfaction is derived from responses by employees to the statement: *Generally speaking, I am very satisfied with this job* (SATISFY1). Participants were asked to select a number from 1 to 5, where 1 = *strongly disagree* and 5 = *strongly agree*; 3 is interpreted as a neutral response. For the purposes of this analysis, it is assumed that the higher the number selected, the greater the level of job satisfaction. A second measure, using the same format and scale, asks employees to respond to the statement: *I am generally satisfied with the kind of work I do in this job* (SATISFY2). A third measure attempts to capture the level of job satisfaction using a negatively-

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<sup>1</sup> In the survey instrument, participants were given the written instruction that: “The purpose of the following section is to give you a chance to tell how you feel about your present job, what things you are satisfied with and what things you are not satisfied with.” Participants were asked to “circle the appropriate answer” for five statements that follow the phrase: “On my present job, this is how I feel about ...”

worded phrase, asking employees to respond to the statement: *I frequently think of quitting this job* (THNKQT). In this case, the level of job satisfaction is assumed to be inversely related to the numerical response.

Are Russian workers satisfied with their jobs? Table 1 provides the mean response for each of the job satisfaction statements. As seen in the top panel of Table 1, respondents were generally satisfied with their own job (SATISFY1) and the kind of work they do in their job (SATISFY2); mean response rates were close to 4.0 for workers. Indeed, more than one-third of the workers participating in the survey selected “strongly agree” when asked about their satisfaction with their job (33.3%) and the kind of work they do at their job (34.6%). Among managers, mean response rates were significantly higher; more than 45% of the participating managers selected “strongly agree” for both job satisfaction questions. No significant gender differences emerged with respect to reported level of job satisfaction, nor were there gender differences in responses related to thoughts of quitting (THNKQT).<sup>2</sup>

Generational differences in response patterns were evident, however. Older workers (born before 1965) were significantly more satisfied with their job and their work than younger workers; older workers also thought less frequently about quitting.<sup>3</sup> Participants with higher education (more than 15 years of schooling) were significantly more likely to agree with the two statements that they were satisfied with their job and satisfied with their work, and significantly more likely to strongly disagree

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<sup>2</sup> Marital status emerged as significant in response patterns about satisfaction with one’s work (SATISFY2): married women, in particular, were more likely to select strongly agree. In all other cases, marital status was not significant.

<sup>3</sup> For more general discussion of the importance of age in explaining the level of job satisfaction, see Kalleberg and Loscocco (1983), Mortimer *et al* (1988).



with the statement that they often thought of quitting.<sup>4</sup>

The last two variables in the top panel, ALLSATIS and ALLQUIT, reflect participants' responses to statements about whether their co-workers are satisfied and whether their co-workers frequently think about quitting.<sup>5</sup> While participants reported themselves to be rather satisfied with their jobs and the kind of work they do in their jobs, they were somewhat less sanguine about their co-workers' level of job satisfaction (ALLSATIS, ALLQUIT). Mean response rates were 2.8 and 2.5, respectively. No gender or generational differences emerged in the response patterns.

Why is it that workers who report themselves as satisfied with their job and the work that they do in their job are surrounded by co-workers who they regard as dissatisfied? One explanation may be that discussions with co-workers may frequently focus on workplace or job complaints. While respondents' complaints may be interpreted by their co-workers as exhibiting dissatisfaction, and vice versa, when reporting about themselves, respondents report honestly that they are satisfied with their job and their work. Venting, or sharing complaints with co-workers, may be as routine in Russia as in the U.S. among individuals who find their job and the work that they do in their job to be generally satisfying. The fact that managers are significantly more likely than workers to agree that co-workers are satisfied suggests that workers may not share complaints with their supervisors. Alternatively, managers simply may not "hear" dissatisfaction expressed by their subordinates. There is certainly nothing to be gained by managers saying that their co-workers are dissatisfied, and possibly there is

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<sup>4</sup> Glenn and Weaver (1982), Lincoln and Kalleberg (1985) and Miller (1980) analyze the relationship between level of education and job satisfaction.

<sup>5</sup> Participants were asked to respond to: *Most people on this job are very satisfied with the job* and *People on this job often think of quitting*. Participants were given the option of selecting one of five options, from *strongly disagree* (= 1) to *strongly agree* (= 5), where the neutral response = 3.

something to be lost.

How to explain the relatively high level of job satisfaction expressed by participants in this study? Several explanations are offered in the job satisfaction literature.<sup>6</sup> These explanations include respondent characteristics (age, gender, occupational status, education), skill level required to complete the job, extrinsic rewards for work (pay and prestige, for example) and intrinsic rewards or direct enjoyment of work. Part of the explanation for the high level of job satisfaction expressed by the Russian workers participating in this survey may lie in the Soviet legacy of the centrality of work. If work is central to one's identity or quality of life, as was the case in the Soviet economy (Gregory and Stuart 1986), it may be culturally difficult to admit dissatisfaction.<sup>7</sup> Part of the explanation may lie in the individual's attitude toward work (Warr *et al* 1979). This study focuses on the explanatory power of attitude toward work on the level of job satisfaction, following the work of Beynon and Blackburn (1972), Dubin and Champoux (1974), Friedlander (1966), Schuman (1971), Broom and Glenn (1966), and Vroom (1964).

## ***2. Determinants of Job Satisfaction: Attitude toward Work***

To what extent is job satisfaction determined by attitudes toward work? Russian workers participating in this survey were asked to indicate their agreement or disagreement with eight statements

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<sup>6</sup> The literature focuses on numerous studies of U.S. workers conducted between 1958 and 1977, reporting response rates exceeding 80% to a question asking participants whether they are satisfied with their job or not. See, for example, Glenn and Weaver (1982), Quinn *et al* (1974), Katzell (1979).

<sup>7</sup> Strauss (1974) documents response patterns among U.S. workers indicating high levels of satisfaction, even if the job is reported as "boring." These results are associated with instances where individuals have a high stake in their job or hold their work role as central to their personal identity for whatever reason. See also Gecas (1986).

intended to capture their attitude toward work.<sup>8</sup> The middle panel of Table 1 reports mean response rates for these statements. Implicit in this analysis is the assumption that positive attitudes toward work will be positively correlated with job satisfaction. It is assumed, for example, that if individuals view work generally as a drudgery or an otherwise unpleasant experience, it is unlikely that they will express a high level of job satisfaction. A job satisfaction “score” of 4 or 5 is assumed here to signal a high level of satisfaction.<sup>9</sup>

Three of the attitude toward work statements in the survey instrument capture dimensions of the Protestant work ethic: *Hard work makes one a better person* (BETTERPR); *Wasting time is as bad as wasting money* (WASTE); and *A good indication of a person’s worth is how well his/her job is done* (WORTH). While the Protestant work ethic is not typically associated with Russia, strong agreement with these statements is assumed to signify a positive attitude toward work. Russian workers participating in this project tended not to agree with the statement that “hard work makes one a better

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<sup>8</sup> Respondents were given the written instruction to “Please specify your agreement or disagreement with the following statements by circling the appropriate response.” For each statement, respondents were given the option of selecting one of five options, from *strongly disagree* (= 1) to *strongly agree* (= 5), where the neutral response = 3. The statements read as follows:

*When the workday is finished, a person should forget his job and enjoy himself.*  
*Hard work makes one a better person.*  
*The principal purpose of a person’s job is to provide a means for enjoying free time.*  
*Wasting time is as bad as wasting money.*  
*Whenever possible, a person should relax and accept life as it is, rather than always striving for unreachable goals.*  
*A good indication of a person’s worth is how well his/her job is done.*  
*If all other things are equal, it is better to have a job with a lot of responsibility than one with little responsibility.*  
*People who “do things the easy way” are the smart one.*

<sup>9</sup> That is, if respondents select “agree” or “strongly agree” with the satisfaction measures, SATISFY1 and SATISFY2, this is interpreted as a high level of job satisfaction. If respondents select “disagree” or “strongly disagree” to the statement regarding often think of quitting (THNKQT), this also is interpreted as a signal of a high level of job satisfaction.

person” – the mean response for BETTERPR was 2.36.<sup>10</sup> Participants did tend to agree with the latter two dimensions (WASTE, WORTH), however. The mean response for WASTE was 4.29, with women significantly more likely than men to strongly agree with the statement that “wasting time is as bad as wasting money.” Women also were significantly more likely than men to strongly agree with statements about the importance of non-work time (FORGETJB, ENJOY, RELAX), as well as with the statement that “smart people ‘do things the easy way’” (EASYWAY).

Generational differences, as well as differences by level of educational attainment, are evident among the participants in this survey in reported attitudes toward work. Older workers were significantly more likely to **disagree** that hard work makes one a better person (BETTERPR): the mean response for workers born before 1965 was 2.2, compared to 2.7 for younger workers.<sup>11</sup> Older workers were significantly more likely than younger workers to strongly **agree** that (1) wasting time is as bad as wasting money (WASTE), (2) a person should relax and accept life as it is (RELAX), (3) a good indication of a person’s worth is how well his/her job is done (WORTH), (4) it is better to have job with a lot of responsibility (RESPON), and (4) people who ‘do things the easy way’ are the smart ones (EASYWAY). Workers completing more than 15 years of schooling were significantly more likely to **disagree** with the statements that “when the workday is finished a person should forget his job” (FORGETJB) and that the “principal purpose of a person’s job is to provide a means for enjoying free time” (ENJOY). Respondents with higher education were significantly more likely to **agree** with the

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<sup>10</sup> This result was especially strong among married participants.

<sup>11</sup> Married workers also were significantly more likely to disagree with this statement.

statements that wasting time is as bad as wasting money (WASTE),<sup>12</sup> a good indication of a person's worth is how well his/her job is done (WORTH), it is better to have job with a lot of responsibility (RESPON), and people who 'do things the easy way' are the smart ones (EASYWAY).

Attitude toward work was the focus of three additional statements relating hard work to high productivity, doing the job well, and good performance.<sup>13</sup> For these three statements, respondents were asked to indicate how often it is true, using a 5-point scale, where *never* = 1 and *almost always* = 5. The bottom panel of Table 1 reports the mean response values for the statements relating hard work to high productivity (WKHPROD), doing the job well (WKHWELL), and good performance (WKHPERFM). Participants in this survey project indicate that it is often the case that working hard pays off in terms of higher productivity, doing the job well, and good job performance. Mean response values are 4.0 or higher. Gender differences emerge in only one instance: responses of men to the statement that "working hard leads to doing my job well." Men were significantly less likely than women to say this was always the case. Generational differences appear for all three variables: older workers were significantly more likely than younger workers to select **almost always** for these statements.<sup>14</sup>

To what extent does general attitude toward work contribute to explaining the level of job

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<sup>12</sup> Married workers tend also to more strongly agree with this statement than unmarried (never married, divorced, widowed) workers.

<sup>13</sup> Respondents were given the following written instructions: "Below you will see a number of pairs of factors. You are to indicate by circling the appropriate number to the right of each pair how often it is true for *you personally* that the first factor leads to the second on *your job*. Remember, for each pair, indicate how often it is true by circling the number under the response which seems most accurate." The statements read as follows:

*Working hard leads to high productivity*  
*Working hard leads to doing my job well*  
*Working hard leads to good job performance*

<sup>14</sup> Level of education and marital status have no significant effect on the response patterns to these three variables.

satisfaction among Russian employees participating in this survey? Table 2 reports results from ordered probit regression analysis in which the dependent variable is a measure of job satisfaction, and the independent variables reflect the different attitudes toward work described above (Table 1).<sup>15</sup> The top panel of Table 2 includes the eight “attitude toward work” variables; the bottom panel focuses on the “results associated with working hard.” I expect to find job satisfaction to be positively correlated with variables which reflect a positive attitude toward work: BETTERPR, WASTE, WORTH, RESPON; and negatively correlated to: FORGETJB, ENJOY, RELAX, EASYWAY.

In the first column of Table 2, in both the top and bottom panels, the dependent variable is SATISFY1, the extent to which respondents report being generally satisfied with their job. As seen in the top panel, the probability that the job satisfaction score will be high (respondents select “agree” or “strongly agree” to the statement that they are satisfied with their job) is significantly lower among respondents who think it best to “forget about the job at the end of the workday” (FORGETJB), and significantly higher among respondents who “prefer jobs with more responsibilities” (RESPON), who think “hard work makes one a better person” (BETTERPR), and who think “a person’s worth is positively related to the quality of their work” (WORTH). These results support the hypothesis that a positive attitude toward work in general is associated with a high level of job satisfaction. Unexpected was the result that the job satisfaction score is high among respondents who think that it is “not necessary to always strive for unreachable goals” (RELAX). However, if achieving work goals generates job satisfaction, then it stands to reason that RELAX and job satisfaction will be positively correlated, especially among individuals who set low goals. The remaining variables (WASTE,

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<sup>15</sup> Ordered probit is used because the categorical variables used in this analysis are ranked from 1 to 5.

ENJOY, EASYWAY) were not significant.

Overall, these eight variables intended to capture attitude toward work do not account for much of the explanation of job satisfaction.<sup>16</sup> Moreover, controlling for differences in respondent characteristics (age, gender, and education level) did not significantly affect the results.<sup>17</sup> In short, these results suggest that while there is clearly a positive correlation between work attitudes and job satisfaction, the causality is not well-defined: job satisfaction is only partially explained by general attitudes toward work.

As seen in column 2, similar results are obtained when the dependent variable is SATISFY2, the extent to which respondents report being satisfied with the kind of work that their job entails. That is, the probability that the respondent will select “agree” or “strongly agree” to the statement about job satisfaction which focuses on the kind of work done in the job is lower among respondents who think it best to forget about the job at the end of the workday, and higher among respondents who prefer jobs with more responsibilities, who think that always striving for unreachable goals is not necessary, and who think a person’s worth is positively related to the quality of their work. When the focus is on satisfaction with the kind of work their job entails, as is the case in this specification, older workers (born before 1965) generate a higher job satisfaction score than younger workers.

Column 3 reports regression results where the dependent variable is “frequently think of quitting” (THINKQT). Numerous studies document an inverse relationship between job satisfaction

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<sup>16</sup> The conventional measure of goodness of fit,  $R^2$ , is not particularly meaningful when the data involve categorical variables. The pseudo  $R^2$  generated by the statistical program, STATA, for this ordered probit regression is .0220.

<sup>17</sup> Age is included as a dummy variable = 1 if born after 1965, zero otherwise. Gender is included as a dummy variable = 1 if female respondent, zero otherwise. Education is included as a dummy variable = 1 if years of schooling is more than 15, zero otherwise.

and intention to leave the organization (Angel and Perry 1981, Larwood *et al* 1998, Morrison 1997, Mowday *et al* 1984). Among the 1200 participants in this survey, the correlation coefficients between the two job satisfaction measures (SATISFY1, SATISFY2) and the measure of intention to leave (THNKQT) are -.4498 and -.4559, respectively. Consequently, I expect to find opposite signs on the work attitude coefficients when the dependent variable is “frequently think of quitting” (THNKQT). As seen in column 3, among those who think often of quitting, there is a significantly higher agreement with the statement that a person should forget about the job when the workday is finished (FORGETJB), as expected. The results document a significantly stronger disagreement with the statement that a person’s worth is defined by how well he/she does their job, as well. Quite unexpectedly, among those reporting themselves as frequently thinking about quitting, there is a relatively high degree of agreement with the statement that “hard work makes one a better person” (BETTERPR).

While the explanatory power of the eight variables included in this analysis to capture attitude toward work is rather low,<sup>18</sup> suggesting that other factors are important in defining the level of job satisfaction, the results that a positive attitude toward work corresponds to a high level of job satisfaction is remarkably robust.

The bottom panel of Table 2 reports results using the three outcomes associated with working hard as the independent variables. These variables represent a second attempt to capture attitude toward work. Implicit in this analysis is the assumption that perceptions that “hard work pays off” is a reflection of a positive attitude toward work, and thus is likely to be positively associated with job satisfaction.

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<sup>18</sup> In each case, the pseudo  $R^2$  is about .02.



The positive association between job satisfaction and attitude toward work is evident in these results. Among those expressing a generally high level of satisfaction with their job (SATISFY1, column 1), respondents were significantly more likely to relate working hard and productivity (WKHPROD) and working hard and doing the job well (WKHWELL). Among those expressing a high level of satisfaction with the work that they do in their job, the same results obtain (SATISFY2, column 2). Those who report themselves as thinking often of quitting (THNKQT, column 3) are significantly less likely to agree with the statement that *hard work leads to high productivity*, or that *hard work leads to doing my job well*. Respondents' views on the relationship between working hard and good job performance (WKHPERFM) have no influence on their reports of job satisfaction.

Interestingly, older workers as a group distinguish between the three measures of job satisfaction. When asked about their general satisfaction with their job (SATISFY1), they respond no differently than others, as seen by the fact that the coefficient on GENRNTL in column 1 is not significantly different from zero. However, when asked about their satisfaction with the work they do in their job (SATISFY2), or whether they think often of quitting (THNKQT), the response patterns of older workers are significantly different. Holding attitudes toward work constant, participants who had work experience in the former Soviet economy report a higher level of satisfaction, on average, than those who came of age after perestroika.

A consistent pattern emerges in these results. While job satisfaction is only partially explained by attitudes toward work among the Russian employees participating in this survey, job satisfaction is strongly positively correlated to a positive attitude toward work. That is, job satisfaction is significantly higher among respondents who disagree with the statement that it is best to forget about the job at the end of the day, and who agree with the three statements that jobs with more responsibilities are

preferable, always striving for unreachable goals is not necessary, and a person's worth is positively related to the quality of their work. Gender and generational differences emerge in response patterns regarding attitudes toward work, although they do not significantly affect the explanatory power that a positive attitude toward work has on the level of job satisfaction.

### ***3. Job Satisfaction and Performance***

Research on job satisfaction and attitudes toward work is motivated by a desire to improve job performance and productivity. The causal link between job satisfaction and performance, however, appears quite tenuous (Berg 1978, Mortimer and Lorence 1989). In the current literature, it is not clear whether job satisfaction contributes to performance, or performance contributes to job satisfaction. Nor is the case ruled out where both are influenced by third condition, such as pay or prestige.

In this study, three performance measures are utilized.<sup>19</sup> Respondents were asked to select from a 5-point scale, where 1 = *much worse than others*, 3 = *similar to others*, and 5 = *much better than others*, the most appropriate response to the statement: *Compared to other employees doing similar work, the overall quantity and quality of my performance is ...* (PERFM). Among participants in this survey, nearly 60% selected "similar to others;" the mean response value was 3.4. Workers with a higher education were significantly more likely to select "much better than others," as were older workers (born before 1965). The second measure uses the same format and scale, asking respondents: *Compared to other employees doing similar work, how productive are you?* Once again, the mean response value was 3.4 (PRODUCTV), with the same pattern for older and more

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<sup>19</sup> Respondents were given the written instruction: "For the following items, **compare yourself to other employees** at your place of work who do work similar to your work. How do you rate yourself in terms of quantity and quality of performance?"

educated workers. The third measure of performance asked respondents: *Compared to other employees doing similar work, how well do you anticipate problems that may arise and try to prevent them or minimize their effects?* (ANTICIP) While the mean response value is the same as for the other two measures, 3.4, there were no significant generational or educational attainment effects in the response pattern.

To what extent does job satisfaction contribute to performance? The top panel of Table 3 reports the ordered probit regression results where the dependent variable is a measure of performance and the independent variable is a measure of job satisfaction, with dummy variables added to control for differences by gender, generation and education level. In the first column, the performance measure is PERFM, the respondent's assessment of his/her quantity and quality of performance in comparison to other workers. The independent variable is the general job satisfaction measure (SATISFY1). The coefficient on SATISFY1 is positive and significant, indicating that among the workers participating in this survey, those who report themselves as satisfied with their jobs also report their level of performance as higher than their co-workers. Among those with higher education, as well as older workers, this result is particularly striking. Gender has no effect on relationship between job satisfaction and performance. When the independent variable is satisfaction with one's work (SATISFY2), or thinking of quitting (THNKQT), the coefficients are not significant. The relatively low level of explanatory power of these three specifications suggests that, among the Russian workers participating in this survey, performance is not determined by job satisfaction.<sup>20</sup>

In column 2, the dependent variable is PRODUCTV, the respondent's reported level of

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<sup>20</sup> The pseudo  $R^2$  is only half the value (.01) as that derived from the specification which related job satisfaction to work attitudes (.02).

productivity in comparison to co-workers. In column 3, the dependent variable is ANTICIP, the respondent's reported ability to anticipate and solve problems in comparison to co-workers. The results obtained for these two specifications are essentially the same as for the first specification. In short, while there is a significantly strong positive correlation between satisfaction and performance, especially among workers with higher education and among older workers, regardless of the performance measure used, the role of job satisfaction in explaining the performance response patterns is relatively small.

The bottom panel of Table 3 reports ordered probit regression results where job satisfaction is the dependent variable, and performance is the independent variable. Once again, controls are included for age, gender, and level of educational attainment. As seen in column 1, when general job satisfaction is the dependent variable (SATISFY1), there is a positive coefficient on each of the measures of performance, as expected, but only the coefficient on PRODUCTV is significant. Respondent characteristics are not significant. Similar results obtain when a more specific measure of job satisfaction is used (column 2, SATISFY2), although older workers tend to respond significantly differently than younger workers. When THINKQT is the dependent variable (column 3), none of the coefficients are significant. On the basis of the explanatory power of the specification, the extent to which performance explains satisfaction is rather small; smaller, in fact, than the reverse specification. Indeed, income earned from the current job (YTHISJOB) has an equally good explanatory power for both satisfaction and performance, suggesting that it would be wise to consider the possibility that these two multidimensional conditions, job satisfaction and performance, are jointly affected by variables not specified in this analysis, such as perception of self and self-esteem, degree of work autonomy, reward structure, promotion opportunities, or friendliness of co-workers, for example.

Results from the Russian workers participating in this survey indicate that, first, regardless of the specification or measure, there is a strong positive correlation between job satisfaction and performance. The relationship is not affected by gender or the educational attainment level of the respondents, but generation does tend to factor in, as older workers are more likely to exhibit a positive link between satisfaction and performance. Respondent characteristics are significant in performance measure response patterns, however. Older workers, and workers completing more than 15 years of schooling, tend to report themselves as performing better than their co-workers. Second, it is not possible using these data to establish causality between job satisfaction and performance. It appears, instead, that unspecified factors may be affecting the two conditions simultaneously. While the social psychology and occupational sociology literatures offer a variety of explanations, the data collected in this survey are not suited to testing alternative hypotheses generated in the literature. Finally, the results generated from these data are not significantly different from results based on previous surveys of U.S. workers (Darden *et al* 1989, Iaffaldano and Muchinsky 1985, Mortimer and Lorence 1989, Petty *et al* 1984), as well as a survey completed in 1996 of Russian and Polish workers (Good and Huddleston 1997).

#### ***4. Job Satisfaction and Organizational Commitment***

Organizational commitment, referring to the attachment to one's place of work, is used to assess the likelihood among workers of turnover, absenteeism, and improved job performance (Mowday *et al* 1979, Dunham *et al* 1994, Weiner and Vardi 1980). While causality between organizational commitment and job satisfaction has not been established, research linking job satisfaction and organizational commitment seeks to (1) evaluate the role of respondent characteristics in determining the level and variation in each (Ensher *et al* 2001, Elizur and Koslowsky 2001); (2) find ways to predict

and thus reduce employee turnover (Ben-Bakr *et al* 1994, Hatcher 1999, Ketchand and Strawson 1998, Poznanski and Bline 1997); (3) identify possible mechanisms to increase job performance (Putterill and Rohrer 1995, Yousef 1998); and (4) explore differences across cultures (Ibrahim and Rue 1994, Lincoln and Kalleberg 1996, Putterill and Rohrer 1995, Yousef 1998). Here, the objective is to assess the level and variation in organizational commitment among the Russian workers participating in this survey, as well as to analyze the extent to which job satisfaction contributes to explaining both.

Nine statements in the survey instrument addressed organizational commitment. In each case, participants were asked to indicate their level of agreement or disagreement with each statement, using a 5-point scale, where 1 = *strongly disagree* and 5 = *strongly agree*. In seven of the nine statements, the higher the score, the greater the degree of organizational commitment; two questions were worded in a negative way, so that the lower the score, the greater the degree of organizational commitment.

The most direct statement of organizational commitment: *I feel myself to be part of the organization* (PARTORG), generated a mean value of 3.7, significantly above the neutral score of 3, but not exactly a strong signal of organizational commitment. No gender differences emerged in the response patterns, but generational differences and differences in educational attainment were significant: older workers and workers with higher education were significantly more likely to strongly agree with the statement. This same pattern was found for a second statement used to measure organizational commitment: *I am quite proud to be able to tell people the company for whom I work* (PROUD, mean value = 3.6). That is, both older workers and workers completing more than 15 years of schooling were significantly more likely to agree with the statement. Older workers also were significantly likely to agree with the statement: *The offer of a little more money with another company would not seriously make me think of changing jobs* (NOTCHGJB, mean value = 3.5).

Neither gender nor level of educational attainment generated significant differences in the response patterns to this statement. All participants responded similarly to the statement: *I would recommend a close friend to join this company* (RECOMMEN, mean value = 3.3). That is, no significant gender, generational, or educational attainment differences emerged. On the whole, these response patterns do not signify a high level of organizational commitment among the participants in this survey.

Participants in this survey felt most strongly about making a contribution to their organization. Mean response values were highest for the following two statements: *To know that my own work has made a contribution to the good of the organization would please me* (GOODJOB, mean value = 4.2); and *In my work I like to feel that I am making some contribution, not just for myself but for the organization as well* (CONTRIB, mean value = 4.0). Older workers were significantly more likely to strongly agree with both statements; workers with higher education were significantly likely to strongly agree with the former. No gender differences in response patterns emerged.

Negatively worded statements: *I sometimes feel like leaving this company for good* (QUIT, mean value = 2.2); and *I am not willing to do more than my job description requires just to help the organization* (DONOMORE, mean value = 2.5) indicate a moderate degree of organizational commitment. The only significant difference in response patterns emerged from workers with less than 15 years of schooling: they were significantly more likely to agree with these two statements.

In studies conducted in the U.S., the statement that *Even if the company were not doing well financially, I would be reluctant to change to another company* (NOTCHGJB) is used as a measure of organizational commitment. In Russia, where the financial position of many firms is rather precarious, the response patterns may not signal the same result as is interpreted in the response patterns of U.S. workers. For the Russian workers participating in this survey, the mean value for

NOTCHGJB is 3.4, not significantly different from the neutral response. Older workers, however, were significantly more likely to agree with the statement.

Overall, these results indicate a rather neutral level of organizational commitment. No gender differences emerged in response patterns related to organizational commitment among the participants in this survey. Older worker and workers with higher education exhibit a stronger organizational commitment than younger, less educated workers. These response patterns generally conform to studies of organizational commitment conducted among workers in the United States.

To what extent does job satisfaction depend upon organizational commitment? The current literature presents conflicting results regarding the causality between job satisfaction and organizational commitment. Common to all studies, however, is a positive correlation between job satisfaction and organizational commitment. Consequently, I expect to find the job satisfaction “score” to be higher among respondents who are proud of working at their organization, who feel a part of their organization, who would recommend their organization to others, who feel like they are making a contribution to their organization, and who do not think about quitting or changing jobs.

Table 4 presents the ordered probit regression results where the measure of job satisfaction is the dependent variable, and the organizational commitment variables are the explanatory variables, with controls included for respondent characteristics (age, gender, educational attainment level). In column 1, the general job satisfaction measure (SATISFY1) is used. Column 2 reports results when satisfaction with specific elements of the job is used (SATISFY2). In column 3, the frequency of thinking about quitting the organization (THNKQT) is used as the dependent variable.

Three results emerge, regardless of the measure of job satisfaction used. The level and variation of job satisfaction expressed by the participants in this survey **is not explained** by the extent to which



they report themselves as feeling part of the organization (PARTORG). Rather, job satisfaction is expressed by participants who report themselves as proud of working at their organization (PROUD), who would recommend close friends to join the company (RECOMMEN), and who report themselves as unlikely to change jobs (QUIT, NOTCHGJB). Second, these results are not affected by gender or educational attainment level, and only marginally affected by generation – all other things equal, older workers tend to express a higher level of job satisfaction than younger workers (born after 1965). Finally, the explanatory power of these specifications in which organizational commitment contributes to job satisfaction is not high, leaving one to conclude that less than one-quarter of the explanation for the level and variation of job satisfaction expressed by these Russian workers is accounted for by the measures used to capture the degree of organizational commitment.

## **5. *Conclusions***

Why do Russians work without wages? This paper uses data collected in summer 2000 from 1,200 Russian workers and managers in Moscow, Saratov and Taganrog, to analyze the level and variation in job satisfaction as a possible explanation. Among participants in this survey, the level of job satisfaction was quite high – more than one-third of the workers and nearly half of the managers selected “strongly agree” to statements related to job satisfaction. Participants were somewhat less sanguine about their co-workers level of satisfaction. It is not possible, using these data, to determine whether respondents may find it culturally difficult to admit dissatisfaction about their job, but are able to express dissatisfaction when describing the attitudes of their co-workers, or whether response patterns simply capture a “venting” result. Quite clear in these results, however, is the finding that the level of job satisfaction expressed by these participants is only partially explained by their attitudes toward work. Similar to studies conducted using U.S. workers, there is a significant positive relationship between the

job satisfaction and attitude toward work, although the causality is not well-defined.

A significant positive relationship between job satisfaction and performance emerges from these data, regardless of the measures used to capture these two conditions. The relationship is not affected by gender or the educational attainment level of the respondents, although generation does tend to factor in, as older workers are more likely to exhibit a stronger positive link between satisfaction and performance. The causal link between job satisfaction and performance, however, appears quite tenuous. These results indicate that the case where both job satisfaction and performance are influenced by third condition, such as pay or prestige, cannot be ruled out.

The level of organizational commitment expressed by these Russian workers is not high; nor is the extent to which organizational commitment explains the level of job satisfaction. The results do indicate, however, a strong positive relationship between job satisfaction and organizational commitment.

These survey data, collected from 1,200 employees in Moscow, Saratov and Taganrog, suggest a number of reasons why Russians work without wages. The first involves non-monetary rewards. Among participants in this survey, it was important to feel that they made a contribution to the organization. More than 55% selected “strongly agree” to the statement about the importance of making a contribution to the organization (CONTRIB); nearly half selected “strongly agree” to the statement that they are pleased to know their work made a contribution to the good of the organization (GOODJOB). More than half disagreed with the statement that they would be unwilling to do more than their job description to help the organization (DONOMORE).

The Russian workers participating in this survey exhibited a positive attitude toward work, which may also help to explain why they work without wages. Two-thirds agreed with the statement

that a person's worth is defined by how well they do their job (WORTH). Among these respondents, there is a strong indication that intrinsic rewards and/or the centrality of work influences their view of their job.

A third reason explanation for why Russians work without wages may relate to generational conditions. These results suggest that older workers, employees brought up in the Soviet regime, are more likely than younger workers (born after 1965) to work without wages. As a group, older workers express a higher level of job satisfaction and a lower likelihood of changing jobs or looking for alternative employment. This result holds regardless of gender and education level.

The positive relationship between job satisfaction, performance, and organizational commitment documented by these results suggest a number of strategies that managers might adopt to increase the productivity of their workers. First, when designing incentives or work conditions, it is not necessary to consider men and women separately. Gender differences were rarely significant among these respondents. Second, because the results generated in this study come from employees in a variety of workplaces, from manufacturing to retail to other service organizations, and because these results are similar to findings generated in studies of U.S. workers, there appears to be little compelling reason to develop specialty incentives or workplace specific conditions. That is, strategies to enhance job satisfaction, performance, and organizational commitment that have been successful elsewhere are likely to be equally successful in Russia; cultural differences in the results do not appear significant. Third, targeting workers over the age of 40 for special recognition is likely to have the largest payoff; this group exhibits the greatest potential for responding to both monetary and non-monetary rewards.

Why do Russians work without wages? If the Soviet legacy of the centrality of work remains rather strong, especially among workers who gained experience prior to perestroika as these data

suggest, then we should find the distribution of unpaid wages to be skewed towards older workers.

However, the official data are not reported in such a way as to empirically test this proposition.

**Table 1: Job Satisfaction and Attitude Toward Work:  
Mean Response Patterns by Gender, Occupational Status**

*Job Satisfaction*

	All	N	Men	N	Women	N	Managers	N	Workers	N
SATISFY1	3.79	1185	3.84	449	3.77	710	4.11*	122	3.76	1063
SATISFY2	3.86	1171	3.85	442	3.86	710	4.19*	121	3.82	1050
THNKQT	2.11	1170	2.13	447	2.10	711	1.80*	120	2.15	1048
ALLSATIS	2.82	1177	2.84	447	2.80	711	3.05*	120	2.79	1057
ALLQUIT	2.52	1178	2.50	447	2.53	712	2.39	120	2.54	1058

*Work Attitudes*

	All	N	Men	N	Women	N	Managers	N	Workers	N
FORGETJB	3.67	1180	3.37	446	3.86*	715	3.53	118	3.69	1062
BETTERPR	2.36	1176	2.57	447	2.22*	715	2.53	120	2.34	1056
ENJOY	3.42	1175	3.27	445	3.51*	711	3.35	121	3.43	1054
WASTE	4.29	1184	4.18	447	4.35*	718	4.25	120	4.29	1064
RELAX	3.55	1180	3.35	445	3.69*	716	3.49	120	3.56	1060
WORTH	3.85	1179	3.85	445	3.85	715	4.03	118	3.83	1061
RESPON	3.25	1179	3.27	445	3.25	715	3.62*	121	3.21	1058
EASYWAY	3.97	1182	3.86	447	4.02**	716	4.12	120	3.95	1062
WKHPROD	3.90	1173	3.85	445	3.94	709	3.99	122	3.89	1051
WKHWELL	3.82	1168	3.56	444	3.97*	705	3.97*	121	3.81	1047
WKHPERM	4.33	1178	4.28	442	4.36	717	4.39	122	4.32	1056

\* Gender differences / occupational status differences significant @ 1%

\*\* Gender differences / occupational status differences significant @ 5%

**Table 2: Job Satisfaction and Attitude Toward Work:  
Ordered Probit Regression Results**

	<i>SATISFY1</i>		<i>SATISFY2</i>		<i>THNKQT</i>	
	coefficient	z-stat	coefficient	z-stat	coefficient	z-stat
FORGETJB	-.1069*	-4.06	-.1252*	-4.69	.1275*	4.60
BETTERPR	.0611*	2.44	.0496**	1.95	.0517**	2.00
ENJOY	-.0012	-0.49	.0271	1.05	-.0047	-0.18
WASTE	-.0073	-0.24	.0240	0.78	.0032	0.10
RELAX	-.0509**	2.00	.0648*	2.51	.0037	0.14
WORTH	.0665*	2.43	.0985*	3.40	-.0681**	-2.28
RESPON	.0909*	3.48	.0585**	2.22	-.4389	-1.42
EASYWAY	.0157	0.59	.0096	0.36	-.0005	-0.01
GENDER <sup>a</sup>	.0310	0.45	.0802	1.61	-.0989	-1.40
GENRNTL <sup>b</sup>	-.1143	-1.67	-.1985*	-2.87	.1721*	2.42
EDUCLVL <sup>c</sup>	.0771	1.12	.0819	1.18	-.0886	-1.23
	n = 1119		n = 1105		n = 1105	
	pseudo R <sup>2</sup> = .0220		pseudo R <sup>2</sup> = .0261		pseudo R <sup>2</sup> = .0187	
	<i>SATISFY1</i>		<i>SATISFY2</i>		<i>THNKQT</i>	
	coefficient	z-stat	coefficient	z-stat	coefficient	z-stat
WKHPROD	.2046*	5.14	.1881*	4.69	-.1325*	-3.21
WKHWELL	.1749*	4.92	.1679*	4.68	-.1256*	-3.43
WKHPERFM	.0281	0.60	-.0113	-0.24	.0243	0.51
GENDER <sup>a</sup>	-.1117**	-1.65	-.0332	-0.48	-.0168	-0.24
GENRNTL <sup>b</sup>	-.0326	-0.49	-.1318**	-1.98	.1306**	1.92
EDUCLVL <sup>c</sup>	.1348**	2.00	.1470**	2.15	-.1430**	-2.03
	n = 1134		n = 1124		n = 1121	
	pseudo R <sup>2</sup> = .0353		pseudo R <sup>2</sup> = .0332		pseudo R <sup>2</sup> = .0172	

\* significant @ 1%

\*\* significant @ 5%

<sup>a</sup> GENDER = 1 if female respondent

<sup>b</sup> GENRNTL = 1 if respondent born after 1965

<sup>c</sup> EDUCLVL = 1 if respondent reports more than 15 years of schooling

**Table 3: Job Satisfaction and Performance:  
Ordered Probit Regression Results**

	<i>PERFM</i>		<i>PRODUCTV</i>		<i>ANTICIP</i>	
	coefficient	z-stat	coefficient	z-stat	coefficient	z-stat
SATISFY1	.0938*	3.09	.1104*	3.59	.0611**	2.04
GENDER <sup>a</sup>	-.0849	-1.15	.0223	0.30	-.1342	-1.84
GENRNTL <sup>b</sup>	-.2346*	-3.24	-.2332*	-3.18	-.1410**	-1.97
EDUCLVL <sup>c</sup>	.1960*	2.64	.2325*	3.10	.0335	0.45
	n = 1046		n = 1033		n = 1033	
	pseudo R <sup>2</sup> = .0162		pseudo R <sup>2</sup> = .0196		pseudo R <sup>2</sup> = .0059	
SATISFY2	.0515	1.68	.1042*	3.33	.0392	1.29
GENDER <sup>a</sup>	-.0893	-1.21	-.0003	-0.04	-.1360	-1.85
GENRNTL <sup>b</sup>	-.2341*	-3.21	-.2135*	-2.90	-.1367	-1.90
EDUCLVL <sup>c</sup>	.1832*	2.46	.2142*	2.85	.0307	0.41
	n = 1034		n = 1022		n = 1021	
	pseudo R <sup>2</sup> = .0120		pseudo R <sup>2</sup> = .0170		pseudo R <sup>2</sup> = .0044	
THNKQT	.0090	0.33	-.0110	-0.40	-.0025	-0.09
GENDER <sup>a</sup>	-.1044	-1.41	.0024	0.33	-.1631**	-2.22
GENRNTL <sup>b</sup>	-.2489*	-3.41	-.2501*	-3.39	-.1408**	-1.95
EDUCLVL <sup>c</sup>	-.2162*	2.90	.2491*	3.30	.0542	0.73
	n = 1032		n = 1019		n = 1020	
	pseudo R <sup>2</sup> = .0122		pseudo R <sup>2</sup> = .0138		pseudo R <sup>2</sup> = .0045	
	<i>SATISFY1</i>		<i>SATISFY2</i>		<i>THNKQT</i>	
	coefficient	z-stat	coefficient	z-stat	coefficient	z-stat
PERFM	.0711	1.08	-.0258	-0.38	.0550	0.80
PRODUCTV	.1477**	2.14	.2068*	2.95	-.0502	-0.71
ANTICIP	.0484	0.86	.0214	0.38	-.0224	-0.38
GENDER <sup>a</sup>	-.0259	-0.37	.0400	0.56	-.0555	-0.76
GENRNTL <sup>b</sup>	-.0755	-1.09	-.1672**	-2.40	.1701**	2.38
EDUCLVL <sup>c</sup>	.1087	1.51	.1178	1.63	-.1547**	-2.07
	n = 1018		n = 1007		n = 1005	
	pseudo R <sup>2</sup> = .0091		pseudo R <sup>2</sup> = .0098		pseudo R <sup>2</sup> = .0048	

\* significant @ 1%

\*\* significant @ 5%

<sup>a</sup> GENDER = 1 if female respondent<sup>b</sup> GENRNTL = 1 if respondent born after 1965<sup>c</sup> EDUCLVL = 1 if respondent reports more than 15 years of schooling

**Table 4: Job Satisfaction and Organizational Commitment:  
Ordered Probit Regression Results**

	<i>SATISFY1</i>		<i>SATISFY2</i>		<i>THNKQT</i>	
	coefficient	z-stat	coefficient	z-stat	coefficient	z-stat
PROUD	.1874*	5.77	.1138*	3.50	.1077*	3.12
QUIT	-.2333*	-7.58	-.1996*	-6.77	.4606	14.68
DONOMORE	-.0114	-0.42	.0222	0.81	.0669**	2.37
NOTCHGJB	.1291*	4.64	.1362*	4.89	-.0816*	-2.74
PARTORG	-.0534	-1.53	.0245	0.72	-.0343	-0.96
GOODJOB	.2274*	5.25	.1792*	4.15	-.0667	-1.49
RECOMMEN	.1775*	6.26	.1320*	4.65	-.1316*	4.42
CONTRIB	-.0316	-0.72	-.0063	-0.14	-.0157	-0.35
GENDER <sup>a</sup>	-.0199	-0.29	.0610	0.88	-.0851	-1.98
GENRNTL <sup>b</sup>	-.0888	-1.28	-.1796*	-2.59	.1745**	2.42
EDUCLVL <sup>c</sup>						
	n = 1122		n = 1108		n = 1112	
	pseudo R <sup>2</sup> = .1532		pseudo R <sup>2</sup> = .1234		pseudo R <sup>2</sup> = .1422	

\* significant @ 1%

\*\* significant @ 5%

<sup>a</sup> GENDER = 1 if female respondent

<sup>b</sup> GENRNTL = 1 if respondent born after 1965

<sup>c</sup> EDUCLVL = 1 if respondent reports more than 15 years of schooling



## **Appendix A: Sample Description**

The survey of Russian employees was conducted in Moscow, Saratov, and Taganrog, in summer 2000. Two project coordinators in each city administered the questionnaires at each workplace, after having first secured permission to do so.<sup>21</sup> The seventy-six participating workplaces included 35 manufacturing (heavy and light industry) organizations, 19 retail shops, 6 schools, 5 university and other institutes of higher learning, and 11 other service organizations. Project coordinators in some instances distributed questionnaires to employees in common areas of the workplace; in other instances, questionnaires were distributed in the individual shops/departments. In every instance, respondents who elected to participate were assured of anonymity and confidentiality.<sup>22</sup> While response rates by workplace were not calculated, overall, more than 73% of the distributed questionnaires were completed.

Table A1 summarizes the basic sample characteristics. Just over 45% of the participants were located in Taganrog; some 49% in Saratov, and nearly 6% in Moscow. By design, workers comprised about 90% of the total number of participants.

While the mean age of the respondents was 39 years, the age distribution of the sample consists of a nearly even split between participants who were 30 years old or younger at the time the survey was conducted (28%), between the ages of 31 and 40 years old (25%), between the ages of 41 and 50 years old (25%), and over 50 years old (22%). For the purposes of this analysis, younger workers are defined as

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<sup>21</sup> Since funds were not available to construct a representative sample of workplaces by city, project coordinators were instructed to contact and include as wide a variety of workplaces as possible.

<sup>22</sup> Individuals were given opportunity to take or decline taking the survey instrument. If taken, individuals had choice to return or not return the questionnaire.

persons born after 1965. Younger workers account for 43% of the participants.

As a group, managers were significantly older than workers (44 years compared to 39 years), and earned significantly more each month (2312 rubles per month compared to 1067 rubles per month). Managers had worked at their current organization, on average, at least 14 years, compared to 10 years for workers. Managers were significantly less likely than workers to have reported a period of unemployment.

Women account for about 62% of the respondents, and 48% of the managers participating in the survey. Women comprise a somewhat greater proportion of the older workers (66%) than the younger workers (56%). Women participating in this project had significantly fewer years of education and worked significantly more years at their current organization than the men participating in this project. Women, both as workers and managers, earned significantly less, on average, than their male counterparts. Women were significantly less likely than men to have reported a period of unemployment, and significantly more likely to report their marital status as divorced.<sup>23</sup>

Average earnings varied significantly by region: in Moscow, average earnings from the respondent's primary job totaled 1722 rubles per month (~\$69);<sup>24</sup> in Saratov, 1213 rubles (\$48); and in Taganrog, 1087 rubles (\$43). More than 80% of those responding to the question (n=1077) reported receiving \$30 or less per month from their primary job at the time the survey was conducted.<sup>25</sup> Just under 10% reported receiving between \$30 and \$60 per month; a similar percentage reported receiving over \$60 per month.

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<sup>23</sup> Just over 62% of the survey participants were married at the time the questionnaire was administered; 13% reported themselves as divorced; 21% single; and the remainder selected "widowed" or "other."

<sup>24</sup> The question asked respondents to report their monthly wage at the time. At the time, the exchange rate was approximately 25 rubles per \$1. Income categories were created to put their responses into a broader perspective.

<sup>25</sup> In many studies, absolute poverty is defined as incomes equal to \$1 per day. See for example, UNDP's *Poverty in Transition* (1998).

When asked about income received per month from all jobs which the respondent held at the time of the survey: 36% reported receiving \$30 or less from all their jobs; 39% reported receiving between \$30 and \$60 per month; 11% reported receiving between \$60 and \$90 per month; and 14% reported receiving over \$90 per month.

In terms of work experience, nearly 20% of the participants reported working less than 2 years at their current place of employment; 47% reported working between 2 and 10 years at their current place of employment; 15% reported working between 11 and 20 years at their current workplace; and 19% reported working more than 20 years at their current place of employment. Fewer than one-in-four participants responding to the question (n=1146) reported experiencing a period of unemployment.

Table A2 reports the mean value of the variables used in this analysis of job satisfaction among Russian workers.

**TABLE A1: Sample Characteristics**

<b>Number of Respondents</b>	<b>Moscow</b>		<b>Saratov</b>		<b>Taganrog</b>		<b>Total</b>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Workers	69	6.4	523	48.5	486	45.1	1078	100
Managers	0	0.0	62	49.2	60	50.8	122	100
Men	33	7.3	188	41.7	230	51.0	453	100
Women	36	5.0	383	52.7	307	42.3	726	100
Younger	19	1.7	233	44.7	269	51.6	521	100
Older	50	7.4	352	51.8	277	40.8	679	100
<b>Total</b>	<b>69</b>	<b>5.8</b>	<b>585</b>	<b>48.8</b>	<b>546</b>	<b>45.5</b>	<b>1200</b>	<b>100</b>
<b>Respondent Characteristic Mean Response</b>	<b>Moscow</b>		<b>Saratov</b>		<b>Taganrog</b>		<b>Total</b>	
	Mean	N	Mean	N	Mean	N	Mean	N
Year born	1952	69	1960	582	1963	528	1961	1179
Years of schooling	16.3	65	15.0	571	14.9	534	15.0	1170
Income [main job] (rubles)	1722	69	1213	567	1087	441	1194	1077
Income [all jobs] (rubles)	2270	69	1374	555	1216	434	1368	1058
Years at current workplace	18.8	69	11.1	580	8.6	530	10.4	1179

Table A2: Variable List

<i>Variable name</i>	<i>Definition</i>	<i>Mean</i>
SATISFY1	Generally speaking, I am very satisfied with this job.	3.792
SATISFY2	I am generally satisfied with the kind of work I do in this job.	3.860
THNKQT	I frequently think of quitting this job.	2.114
ALLSATIS	Most people on this job are very satisfied with the job.	2.819
ALLQUIT	People on this job often think of quitting.	2.522
BETTERPR	Hard work makes one a better person.	2.361
WASTE	Wasting time is as bad as wasting money.	4.289
WORTH	A good indication of a person's worth is how well his/her job is done.	3.847
FORGETJB	When the workday is finished, a person should forget his job and enjoy himself.	3.669
ENJOY	The principal purpose of a person's job is to provide means for enjoying free time.	3.423
RELAX	Whenever possible, a person should relax and accept life as it is, rather than always striving for unreachable goals.	3.552
EASYWAY	People who "do things the easy way" are the smart ones.	3.959
RESPON	If all other things are equal, it is better to have a job with a lot of responsibility than one with little responsibility.	3.249
WKHPERFM	Working hard leads to good performance.	4.329
WKHPROD	Working hard leads to high productivity.	3.905
WKHWELL	Working hard leads to doing my job well.	3.822
PERFM	Compared to other employees doing similar work, the overall quality and quantity of my performance is ...	3.386
PRODUCTV	Compared to other employees doing similar work, how productive are you?	3.362
ANTICIP	Compared to other employees doing similar work, how well do you anticipate problems that may arise and try to prevent them or minimize their effects?	3.385
YTHISJOB	What is your monthly wage for this job? (rubles)	1,194
PARTORG	I feel myself to be a part of this organization.	3.669
PROUD	I am quite proud to be able to tell people the company for whom I work.	3.567
NOTCHGJB	The offer of a little more money with another company would not seriously make me think of changing jobs.	3.554
RECOMMEN	I would recommend a close friend to join this company.	3.269
GOODJOB	To know that my own work has made a contribution to the good of the organization would please me.	3.967
CONTRIB	In my work I like to feel that I am making some contribution, not just for myself but for the organization as well.	4.253
QUIT	I sometimes fell like leaving this company for good.	2.216
DONOMORE	I am not willing to do more than my job description requires just to help the organization.	2.503
NOTCHGJB	Even if the company were not doing well financially, I would be reluctant to change to another company.	3.554

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William Davidson Institute Working Paper 468

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