A Relational Occupational Scale for Russia[1]

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In this paper I construct a relational occupational scale for post-Soviet Russia using data from the ISSP for 1992-2006 and Goodman's RC type II model. The resulting scale is similar to the scales previously constructed for Western countries. Non-manual occupations rank higher than manual, and professionals rank higher than managers. The scale for Russia is well correlated with education, subjective social class and self-placement on the scale of perceived social hierarchy, as well as with international occupational scales, in particular the ISEI.

1. Occupational inequality in the USSR and Russia

It is not necessary to be a social scientist to know that the social standing of occupations varies. Some occupations are better paid and attract more educated people and are also respected in society than others, and people who belong to high- and low-status occupations differ with respect to their lifestyles and the cultural norms that they share. The social scientists who have been interested in occupational inequalities have produced a variety of scales that aim to account for the differences in occupational stratification.

Most of the research on occupational scales has been focused on the USA and Western European societies as data for those societies are usually both of a better quality and more easily accessible. Occupational stratification in other parts of the world has been studied only to a limited degree. The aim of this paper is to construct and validate an occupational scale for Russia.

Russia is a country with a long tradition of occupational inequalities. The differences in the social status of aristocracy, merchants, intelligentsia and peasants were an important part of everyday life in imperial Russia. One of the aims of the Russian revolution of 1917 was to eradicate status

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inequalities. In one of their first decrees the Bolsheviks abolished estates and all related privileges and limitations. In the 1920s and 1930s the Communist government, in what amounted to an affirmative action policy, promoted people with working-class and peasant backgrounds, while opportunities for the educated classes were systematically restricted (Fitzpatrick 1979).

Social equality was one of the key elements of the official Soviet ideology that claimed that class inequalities were absent in the USSR. At the level of the official rhetoric, manual workers had high prestige and social standing. But in reality the occupational hierarchy existed and did not necessarily favour manual workers.

In 1950-51, in the course of the Harvard project on the Soviet social system, about 2,100 Soviet refugees who lived in Munich and in the USA were asked to rate 13 occupations according to their desirability. This was the first study of occupational prestige in the USSR. The occupations were ranked in the following order (from the most to the least desirable): doctor, scientific worker, engineer, factory manager, foreman, accountant, armed forces officer, teacher, rank-and-file worker, brigade leader (farm), party secretary, collective farm chairman, collective farmer (Inkeles 1959, p.77). As is evident from this list, non-manual occupations (intelligentsia) were ranked higher than manual.

In the 1960s sociologists in the USSR conducted several studies of occupational prestige. In 1963 Shubkin and his colleagues from Novosibirsk surveyed 3,000 secondary school pupils who were asked to rate 74 occupations on the 10-point scale. In the resulting scale scientific and engineering occupations were ranked at the very top, while manual jobs in industry, construction and transportation occupied intermediate positions, and occupations in agriculture and sales and services were assigned the lowest social standing (Yanowitch 1969). Some white-collar occupations (such as sales personnel, clerks, accountants and bookkeepers) ranked remarkably low.

Another survey of secondary school students was administered by Vodzinskaya in Leningrad in 1964. This is the survey that Treiman (1977) used in his cross-national study of occupational prestige. At the top of Vodzinskaya's prestige scale were scientists, doctors and other professionals. Skilled manual and agricultural labourers were ranked significantly lower. Remarkably, non-manual service, sales and clerical occupations ranked even lower than agricultural occupations.

Treiman compared Soviet and Eastern European prestige scales with the international scale and concluded that in socialist countries manual occupations were ranked somewhat higher and clerical occupations were, on the contrary, downgraded (Treiman 1977, p.146).

I am not aware of any studies of occupational scales conducted in the USSR or Russia since the 1960s.[2] Did the socialist experience have any long-term effect on status hierarchy in Russia? Given the continued inertia from the socialist past, we could expect skilled manual occupations to be ranked higher and clerical occupations to be ranked lower in Russia compared to other countries. However, as shown in this paper, the occupational status order in contemporary Russia is very similar to that of Western industrial countries, with only minor differences found.

2. Approaches to the study of occupational hierarchy

The major goal of this study is to construct a relational occupational scale for Russia. There are three major approaches to constructing occupational scales: prestige scales, socio-economic indices and relational scales.

First occupational scales were based on surveys of people who were asked to rank occupations according to their prestige. After that the ranks were aggregated and a scale was produced (see, for instance, Treiman 1977). In the 1960s, Duncan (1961) introduced an occupational socio-economic index (SEI), which was derived by regressing occupational prestige on occupational

[2] An exception is the CAMSIS scale described below.

earnings and education. For the purpose of this paper, I do not review these two well-known approaches (for a review see Grusky and van Rompaey 1992, Hauser and Warren 1997}, but focus on the third, relational approach.

The assumption of relational occupational scales is that people tend to form intimate associations (friendship and marriage) with those who are equal in terms of social standing. Thus, using data on frequencies of intimate associations between occupations one can derive a scale that shows relative occupational distances. Contrary to the SEI or prestige scales, relational scales do not depend on occupational income, education or subjective rankings of prestige, but only on the structure of "real-life" associations.

It was shown for prestige scales that they are very similar in all complex societies and fairly stable in different time periods (Treiman 1977). This allowed Ganzeboom and Treiman (1996) to construct international versions of prestige and socio-economic scales that can be used in cross-national research (namely, the SIOPS – the Standard International Occupational Prestige Scale and the ISEI – the International Socio-Economic Index). Contrary to prestige scales and SEI, relational scales exist for individual countries (for a discussion of universal and specific scales see Lambert 2008).

Since the 1960s, there has been a large number of studies that used the relational approach to construct occupational scales (Laumann 1966, Laumann 1973, Oldman and Illsley 1966, Stewart et al. 1973, Feldman and El Houri 1975}. Those studies employed different types of data (on marriage, friendship or social mobility) as well as various statistical techniques, usually either multidimensional scaling, correspondence analysis or Goodman's RCII modelling. However, despite all technical differences, the approach has remained essentially the same.

In the recent years, two teams of researchers have produced relational scales for a number of countries. First, following initial research by Stewart et al. (1973, 1980) the Cambridge (or

CAMSIS) scale has been upgraded for the UK and constructed for some other countries (Prandy and Lambert 2003, Prandy and Jones 2001). Second, as part of their project on cultural consumption in the UK Chan and Goldthorpe (2004) constructed a status scale that later was replicated at the international level (Chan 2010). While statistical procedures used in both projects were similar, the interpretation of resulting scales differed substantially.

The authors of the CAMSIS scale treat the resulting scale as a measure of unidimensional generalized social advantage, both economic and cultural (Bottero and Prandy 2003). They argue in favour of using the scale instead of a traditional class approach. On the contrary, Chan and Goldthorpe follow the Weberian distinction between class and status and interpret their scale as a measure of social status in contrast to social class. According to them, social class is relevant for economic life-chances of individuals, while status matters for life-styles and cultural consumption.

Another difference between the scales is that CAMSIS scales have two separate sets of scores for men and women. On the contrary, in Chan and Goldthorpe's status scale scores are common for both sexes. While CAMSIS scales take several hundred occupations as units of analysis, status scales in most cases deal with more aggregated occupational groups.

A CAMSIS scale exists for Russia (Prandy 2003). It was constructed with data from two waves of the Russia Longitudinal Monitoring Survey (RLMS), for 1992 and 1995. In an attempt to increase the sample size Prandy and his colleagues analyzed not only married couples, but all cross-gender couples found in the same household. However, the analytical sample still included only 4,800 pairs, which is a relatively small sample for this type of analysis, especially if undertaken at the level of detailed occupational groups. Given these limitations, the CAMSIS scale for Russia is probably less reliable than for other countries.

In this chapter I do not intend to resolve the difference between the interpretations given to the social status and CAMSIS scales. It is not possible on the basis of the analysis that I undertake. The aim is to construct a scale for Russia and compare it with other possible scales. I leave aside the question of whether this scale can indeed be used along with social class in the social stratification research or whether it represents the same dimension of social inequality as social class.

3. Data and methods

There are several requirements for data that can be applied to construct relational scales. First, the data must have detailed information on the occupations of respondents and their alters (either partners or friends). Second, the sample size must be large enough to allow for a meaningful statistical analysis of the contingency table of occupations of respondents and friends or partners.

The RLMS that has been used for constructing the CAMSIS scale for Russia satisfies the first condition, but does not satisfy the second. As the RLMS is a panel study, pooling samples across the waves would not considerably increase the sample size.

As an alternative to the RLMS in this study I use the Russian part of the International Social Survey Programme (ISSP).[3] The ISSP is an annual cross-national survey that currently includes more than 40 countries. Russia has been taking part in the ISSP since 1992. A nationwide stratified sample is used, and the average annual sample size is of about 2,000 individuals. Occupation in the ISSP is coded according to the four-digit level of ISCO88, an international occupational classification developed by the ILO. Data on occupation are available for respondents and their spouses. To increase the sample size I pool the data for 15 years, from 1992 to 2006, and the final analytical sample size is 8,016 couples.

[3] The RLMS is used for validation purposes in section 5.

To construct a scale from the data on occupations of spouses I use the statistical technique known as Goodman's RC type II model (Goodman 1979, Powers and Xie 2000). This is a log-multiplicative model that assumes that categories in both rows and columns are ordered, but their ordering is unknown to the analyst. The model assigns scores to rows and columns that describe the association between them in the best possible way. Alternatively, the model can be described as Poisson regression with the multiplicative row-column interaction term. In its most general form the model can be formally expressed as

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + \beta\phi_i\varphi_j \qquad (1)$$

where F_{ij} is a frequency in the ij-cell of a contingency table, μ is a grand mean effect, μ_i^R and μ_j^C are marginal effects of rows and columns respectively, β is an association parameter and ϕ_i and φ_j are row and column scores (that we are mainly interested in).

To estimate this model we have to set normalization constraints. All RCII models in this paper were first estimated in lEM (Vermunt 1997) and the following constraints were applied: $\sum\phi_i = 0$, $\sum\varphi_j = 0$, $\sigma_\phi = 1$, $\sigma_\varphi = 1$. However, lEM cannot estimate standard errors for the parameters in the multiplicative interaction term. This can be done in the *gnm* package in R (Turner and Firth 2007). *gnm* uses other conventions to overcome the identification problem. In the final model that was estimated in R, I identified the coefficients and standard errors, setting the coefficient for the reference group (army officers) to zero.

The input for an RCII model in our case is a contingency table where occupations of men are row categories and occupations of women are column categories. In all subsequent analysis, the categories for occupations of men and women are the same and input tables are square. The frequency in the ij-cell (F_{ij}) represents the number of married couples, where a husband is in the occupational group *i* and a wife is in the occupational group *j*.

4. Selection of the model

Model 1 can be modified in several ways. First, people in the same occupational group may have a higher probability of marrying within the group than predicted by model 1. In social mobility research, the main diagonal of mobility tables usually requires special treatment. In our case we can model this effect as well:

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + \alpha_{ij}\delta_{ij} + \beta\phi_i\varphi_j \qquad (2)$$

where $\delta_{ij} = 1$ if $i = j$ and $\delta_{ij} = 0$ if $i \neq j$ and α_{ij} is a parameter for the effect of the main diagonal.

Models 1 and 2 assume two separate sets of scores for rows and columns, in other words, different status scores for men and women in the same occupation. As we have a square table with the same occupational units in rows and columns, we can constrain scores for men and women to be equal. That would yield model 3:

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + \alpha_{ij}\delta_{ij} + \beta\phi_i\phi_j \qquad (3)$$

In all these models we assume that the solution is unidimensional. Model 3 can be extended to the RC(M) model that does not make this assumption.

$$\log F_{ij} = \mu + \mu_i^R + \mu_j^C + \alpha_{ij}\delta_{ij} + \sum_m \beta_m\phi_{im}\phi_{jm} \qquad (4)$$

Substantively model 4 implies that the association between the occupations of husbands and wives can be explained by several uncorrelated factors (dimensions).

Which model should we choose? I have fitted all the models for a 34x34 contingency table of occupations of husbands and wives.[4] The results are presented in Table 1.

Table 1. Model fit for model 1-4

No	*dim*	*diag*	*equal*	*df*	L^2	*BIC*	Δ
1	1	No	No	1024	1811	-7394	0.14
2	1	Yes	No	990	1181	-7719	0.11
3	1	Yes	Yes	1022	1220	-7967	0.11
4	2	Yes	Yes	990	1137	-7762	0.10

Note: dim – the number of dimensions, diag – the effect of the main diagonal, equal – row and column scores are equal, Δ - dissimilarity index (the proportion of incorrectly classified cases).

To choose the best model I use the Bayesian Information Criterion (BIC) (Raftery 1995). A smaller BIC indicates a better model fit. Table 1 shows that the models with the diagonal effect (2, 3 and 4) fit the data better than the models without it (1) and the models with equal scores for

[4] 34 occupational groups mainly correspond to the two-digit ISCO88 groups. I also fitted the models for the classifications with 86 and 133 occupational groups and compared different classifications by correlating them with the variables indicating subjective social class, occupational education and self-placement on the 10-point social hierarchy scale. The classification with 34 groups showed the best fit. Details are available on request.

men and women (3) and (4) should be preferred to the models with different scores (1 and 2).[5] The one-dimensional solution (3) is statistically better than the two-dimensional (4). Substantively, this means that adding another dimension of occupational stratification does not add much to the explanation of the observed pattern of the interaction between occupational groups. Therefore, model 3 should be preferred to others.

5. Properties of the occupational scale

The final version of the scale for Russia is presented in Figure 1.[6]

In their study of the occupational status order in the UK (Chan and Goldthorpe 2004) described two characteristics of their occupational scale. First, non-manual occupations rank higher than manual, while occupations of mixed non-manual/manual character are in the middle part of the scale. Second, within the non-manual part of the status scale professionals rank higher than managers.

(Figure 1 about here. File scale.eps. Caption: Relational occupational scale for Russia. The estimates plotted with 95% comparison intervals)

An examination of the Russian scale confirms both results. There is a clear tendency for non-manual occupations to rank higher than manual.[7] Professionals rank higher than general and corporate managers.

In previous research on relational occupational scales, occupational scores were produced without confidence intervals. The recently created *gnm* package for R allows us to estimate

[5] The scale based on the model with equal scores for men and women also correlates better with subjective social class, occupational education and self-placement on the scale of perceived social stratification.

[6] The precise scores for occupational groups are available on request.

[7] The statistical technique that I use does not indicate which end of the scale is ``higher" or ``lower". However, it is reasonable to assume that university professors have higher social status than agricultural labourers.

uncertainty around the status scores. Figure 1 shows the estimates with 95% comparison intervals. To overcome the problem of the reference category in the presentation of the results, I use quasi standard errors, as suggested by Firth (2003).

The first four positions on the scale are occupied by professionals: university lecturers, scientists, lawyers and medical doctors. These are traditional intelligentsia professions, also ranked at the top of the social hierarchy in the prestige scales of the 1960s. These are followed by a group of occupations whose scores on the scale are very close: a heterogeneous group of professionals in information services (such as librarians, archivists, journalists and artists), general and corporate managers, engineers, senior officials (note large comparison intervals). The next group consists of accountants and economists (the latter are mid-level business professionals rather than scholars in Russia), armed forces officers and school teachers, followed by bookkeepers, administrative secretaries and other associate professionals. All occupations in the top half of the scale are non-manual, with a clear division between professionals and managers.

The middle part of the scale (from quality inspectors and technicians to personal and protective services workers) consists of occupational groups that have a mixed, both non-manual and manual, character. The only exceptions are health and life science professionals who mainly live in the countryside (agronomists and veterinarians). Skilled and non-skilled manual workers are in the bottom part of the scale.

Comparison intervals allow us to visually examine the uncertainty in the differences between groups. While the exact order of the groups should be taken with caution, in general the scale is reliable. However, the comparison intervals around smaller groups are quite large. This is an argument against using a more detailed occupational classification, at least with relatively small sample sizes.

The scale is very well correlated with occupational education (r=0.94)[8], subjective social class measured as the proportion of people who consider themselves middle class or higher (r=0.95) and self-placement on the 10-point scale of perceived social stratification (r=0.81). Correlation with occupational income is weaker (r=0.5 for men and r=0.72 for women). Even a simple bivariate analysis suggests that assortative mating in Russia is primarily driven by educational and cultural rather than material resources (cf. Kalmijn 1994). In fact, correlation between occupational status and the proportion of people with higher education in Russia (as well as in other countries) is so high that it would be reasonable to suggest that educational homogamy is the main driving force for occupational assortative mating.

A question arises as to why the relational status scale cannot be replaced with a much simpler scale constructed on the basis of occupational education (for instance, the proportion of people with a university degree). Indeed, such a scale would be a useful proxy for occupational stratification (and, in fact, would be close to the ISEI). However, for several reasons, it would not be a perfect approximation. First, there are occupational groups that are quite different in terms of education (as defined by the proportion of people with a university degree), but close on the occupational stratification scale (for example, engineers and general managers). Second, it is hard to find a variable that summarizes occupational education well. While occupational groups at the top half of the status scale are clearly different with regard to the proportion of people with a university degree, low status occupational groups do not substantially differ on this variable, probably because vocational education is more relevant for them than higher education. Using the mean number of years spent in education does not solve the problem as it is less reliable and fails to distinguish between different educational tracks. Third, because of

[8] In other countries, correlation between relational occupational scales and occupational education is also strong, ranging from 0.78 in the UK to 0.96 in the USA (Chan 2010).

educational expansion in the 20th century, there are more people with a university degree in the recent cohorts. This can bias a status scale that is based solely on educational achievements.

In general, high correlations of the occupational stratification scale, education and subjective class confirm the validity of the scale.

A *prima facie* comparison of the Russian scale and the scales previously produced for other countries does not give any evidence of major differences between Russia and Western countries. A more formal comparison is impossible, as the occupational classifications used for the construction of national scales are different. To overcome this problem I constructed a scale for the USA using exactly the same analytic procedures as for the Russian scale, with the data from the pooled General Social Survey for 1988-2008. Correlation between the Russian and USA scales is 0.91. The differences are minor, and it is difficult to find substantive interpretation for them.

6. The relational occupational scale and other occupational scales

In this section I compare the produced scale with three other scales well-known in stratification research. The SIOPS is an international scale of occupational prestige, the ISEI is an international socio-economic scale and the CAMSIS-Russia is a relational scale constructed using the data from the RLMS.

Table 2 shows correlations between four scales at the four-digit ISCO88 level. Table 3 demonstrates how the scales are related to some validation variables in the ISSP data.

Table 2. Pearson correlations for the constructed relational scale, ISEI, SIOPS and CAMSIS-Russia

	our scale	ISEI	SIOPS	CAMSIS (male)	CAMSIS (female)
our scale	1				
ISEI	0.90	1			
SIOPS	0.83	0.88	1		
CAMSIS (male)	0.82	0.79	0.74	1	
CAMSIS (female)	0.77	0.73	0.65	0.70	1

Note: scales compared at the four-digit ISCO88 level.

Table 3. Occupational scales correlated with validation variables (ISSP)

	individual level		group level	

	educ.	subj. class	self-plac.	educ.	subj. class	self-plac.
our scale	0.57	0.45	0.19	0.91	0.94	0.61
ISEI	0.56	0.43	0.18	0.92	0.90	0.62
SIOPS	0.54	0.40	0.17	0.86	0.84	0.53
CAMSIS	0.51	0.40	0.16	0.87	0.84	0.55

Note: At the individual level, education measured as a number of years spent in educational institutions, subjective class measured on the six-point scale, from "Lower" to "Higher", treated as continuous, self-placement measured on the ten-point scale of perceived social stratification, from "Lowest" to "Highest". At the group level, education measured as a proportion with a university degree, subjective class as a proportion of middle class and higher, self-placement as a proportion with self-placement > 4. At the group level correlations were calculated with 86 groups.

For the ISSP data the constructed scale and the ISEI outperform the SIOPS and the CAMSIS. The differences between our scale and the ISEI are very small, although our scale is better correlated with subjective social class.

As the scale was constructed with the ISSP data, it is cross-checked against the data from Round 15 of the RLMS (2006). The constructed scale, the SIOPS and the ISEI showed very similar

correlations with the validation variables, although with the RLMS data correlations for the SIOPS and the ISEI are slightly higher.[9]

(Figure 2 about here. File isei.eps. Caption: "Relational scale vs. ISEI (34 groups, r=0.9)")

Figure 2 examines substantive differences between the constructed scale and ISEI, at the level of 34 occupational groups. Correlation between the scales is very high (r=0.9). There are only minor discrepancies. University lecturers (HET) and science and IT professionals (SIT) rank higher on the relational scale than on the ISEI. The same is the case for general managers of small enterprises (MSE), a group that in post-Soviet Russia probably includes many self-employed entrepreneurs who started new businesses after the collapse of the state socialist system. In contrast, life science and health professionals (LSP, a group consisting mainly of veterinarians and pharmacists) are lower on the relational scale than would be expected from their ISEI. This can probably be explained by the fact that many people in this group live in the countryside.

Overall, despite very different approaches and data sets used to construct both scales, the relational scale for Russia and the ISEI are surprisingly close to each other. This suggests that the ISEI may serve as a proxy for the relational scale in Russia. It is unlikely that the actual differences between these two scales will lead to different conclusions if the scales are used as the measures of occupational stratification in substantive research.

7. Discussion

The analysis shows that the relational occupational scale for Russia is similar to the scales previously constructed for Western industrial countries. If we compare the Russian scale with the scale for the USA, only idiosyncratic differences can be found. This finding is trivial and surprising at the same time. After Treiman's (1977) influential book that showed similarity of

[9] Details are available on request.

occupational prestige in different parts of the world, it is hard to expect striking differences in occupational stratification between Russia and Western countries. However, Treiman did point out some differences in occupational prestige in capitalist and socialist countries, including the USSR. In the latter manual occupations ranked higher. Both in the USSR and post-Soviet Russia the economic position of some occupational groups (for instance, professionals) relative to other groups has been very different from Western countries. Russian professionals, especially employed in the public sector, rarely enjoy the level of earnings and economic stability of their Western colleagues. Besides, there is a perceived common feeling both in Western countries and Russia that Russia is a very specific society with a social structure different from Western countries.

This paper shows that this is not the case, at least when it comes to occupational stratification. This can be explained by the fact that the patterns of interaction between occupational groups is likely to be driven by occupational education rather than income. Educational requirements for different occupations are similar in different countries, hence the similarity in occupational stratification orders.

There are several limitations to the findings presented in this chapter. Due to a relatively small sample size, I was forced to aggregate occupations into larger occupational groups. Therefore, the constructed scale can barely say anything about the position of several occupations that are not well represented in the sample (e.g. senior officials[10] , financial and management consultants, managers of large international firms).

As mentioned earlier, to increase the sample size I pooled the ISSP data sets for 15 years. Due to the nature of the existing data the strategy chosen has certain flaws. Occupational stratification in Russia may have changed in the last 15 years, years marked by rapid economic and political

[10] "Senior officials'" occupy the modest ninth position on the scale; however, they are more likely to be middle-level government officers, mainly in Russian regions, rather than top-level federal officials.

developments. A comparison of occupational stratification in the late USSR and post-Soviet Russia would be of clear sociological interest; however, we lack data to conduct such a test. I conducted a reliability test and compared the scales for two halves of the sample, 1992 to 1999 and 2000 to 2006. Two scales correlate with r=0.91; no substantially interpretable differences were found. However, given the limited sample size and large uncertainty in estimates, it is hard to come to any definite conclusion with the present data. The labour force survey conducted by the Russian Federal Statistical Office has a sample size that is large enough to create an occupational scale without aggregating occupations into larger groups and would allow us to compare scales for different years. Unfortunately, at the moment neither these data nor micro-data from the Russian census are available for public use.

In studies of this kind it is hard to separate the effect of marital choice based on educational and status homophily, and the effect of structural constraints of the choice. Some occupational groups are spatially segregated and have relatively low chances for social interaction with each other. For example, this is the case with urban and agricultural occupations. I tried to control for structural constraints adding to the model separate terms for the cells on the main diagonal (i.e. cases where a husband and a wife came from the same occupational group and, therefore, had higher probabilities of getting married). However, admittedly this is not a satisfactory solution to this problem.

It should also be noted that the studies of occupational stratification look at the group rather than individual characteristics. In fact, occupation may be only one of the factors that affect a person's status, other factors being race and ethnicity, family background and personal characteristics (also see Gould (2002) for a formal model of individual status).

Despite all these limitations, the occupational scale that has been constructed for Russia displays good validity and reliability and can be used in further empirical research.

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Figures

Figure 1

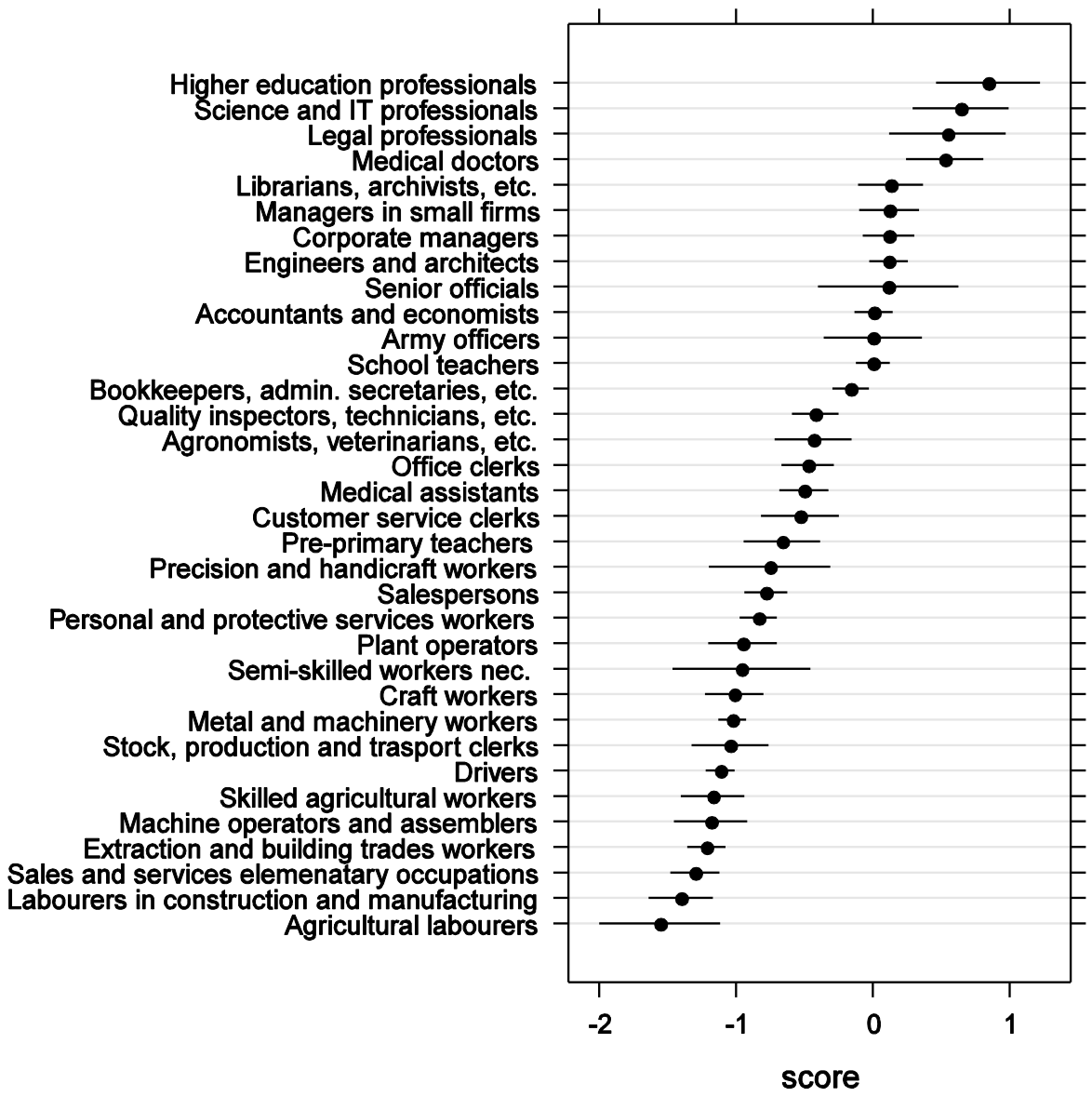
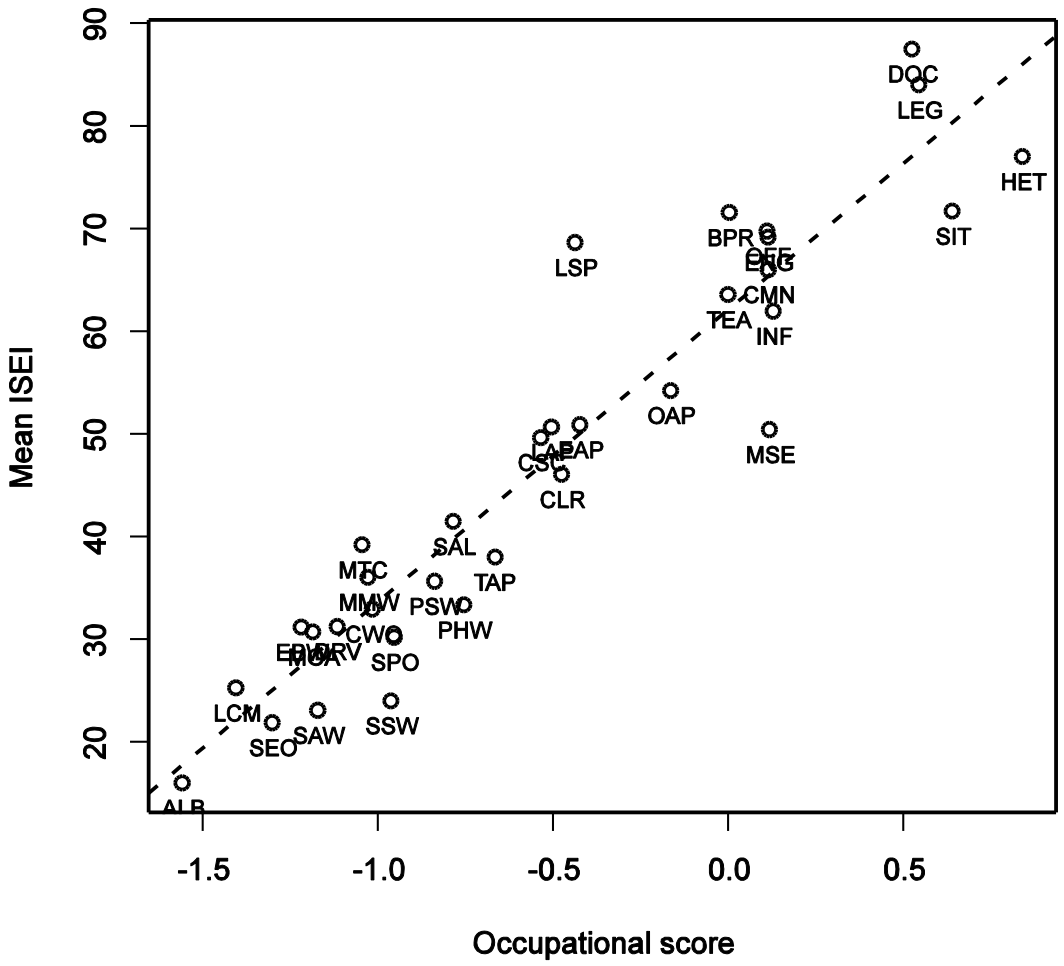


Figure 2


Mean ISEI
Occupational score
90
80
70
60
50
40
30
20
-1.5
-1.0
-0.5
0.0
0.5
DOC
LEG
HET
SIT
BPR
LSP
CMN
TEA
INF
OAP
MSE
CLR
SAL
MTC
TAP
PSW
PHW
CWO
SPO
LCM
SEO
SAW
SSW
ALB