

**Cross-Cultural Comparison of Work-Related Stress and Satisfaction
Determinants: Models for Five Countries**

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The objective of the current research is to test different determinants of work-related stress and satisfaction in organizations, comparing them in cross-cultural context and mapping Russian Federation among five countries (Japan, USA, Germany, Great Britain, representing relatively different cultural clusters). It's necessary to mention, that work-related stress and satisfaction are closely related with work commitment, being one of the central factors, influencing organizational behaviour and effectiveness (short/long-time orientation) as an outcome. This phenomenon can have a complex structure, being a resulting factor of the whole set of different work-related characteristics and personal work orientations, with the stress/satisfaction having different type of emotional responses ("active"/"inert" response to satisfaction and "positive"/"negative" response to stress). Present analysis included: choice and classification of variables in groups, choosing categorical-data (ISSP, [1]) compatible modeling techniques, and testing models for stress/satisfaction (as resulting factors) for each country.

Methodologies used in organizational studies can significantly vary, ranging from pure qualitative to quantitative methods. Here, time the qualitative character of data (nominal and ordered categorical variables), poses a certain set of limitations, as the assumptions of multivariate normality and linearity may not hold. Taking into account data set characteristics and the absence of mathematically predetermined model type two methods were chosen for the analysis: Bayesian classification modeling (B-Course, [2]), designed to analyze discrete categorical variables, by searching for the best predictors for group memberships and testing for class similarity, or estimating the probability that variable belongs to the certain class [3,4]) and ordered models. Thus, the models (2x2x4) were estimated using parametric (logit, probit) and non-parametric techniques, with the aim to combine different approaches to problem's mathematical formulation.

Set of work-related stress/satisfaction influencing factors can have a multilayer structure. Here, we test two groups of variables: direct factors (two sub-groups) and "realization" factors (desired/real level of certain characteristics). First sub-group included "external" characteristics: job-related (income, advancement, interesting job...), organization-related (relations colleagues/management/employees), workplace-related, socio-demographic (age, sex, position). The factors of the second sub-group cannot be omitted, as the degree of stress/satisfaction of a person can depend as well on the personal (internal) factors, reflecting personal attitudes (work as a "part of life") and working habits, influencing thus the degree of "stress-resistance". Finally, the factor of "realization" has been computed, as considering only the "presence" of a certain job characteristics (for example "possibility to work independently") can lead to inconsistent findings, if the current factor is of small personal importance. In total, about 40 independent variables were tested in models.

The results can be summarized as follows: modeling of satisfaction variable was more problematic (caused, probably, by chosen model structure or the nature of the phenomenon, causing biased estimations). Common determinants for both models included work climate characteristics, interesting job and components of personal attitude to work, being among the most significant determinants. Differences in the nature of the relationship concerned the following variables: relations between management and employees, attitude “the job as a way of earning money”, flexibility of working time (for example: preference for the fixed working hours in Japan). Socio-demographic variables were relatively significant for modeling both stress/satisfaction, with the men mainly less satisfied and more stressed at work, higher positions associated with the higher degree of stress, with satisfaction increasing and stress decreasing with the age.

The results of cross-cultural comparison can be summarized as follows: in satisfaction models, about 20 factors were significant for 1 or 2 countries, 7 factors significant for 3 countries and only 2 factors were common for 4 or 5 countries (relations between management and employees, “interesting work”). In the sample for Russian Federation the determinants of satisfaction from work in the organization were: relations management/employees and between colleagues (first more important) (second factor important also for Japan, USA), interesting work and realization, income (as well for Germany, Japan) and the importance of this factor (negative dependency – as well for Japan). Determinants of less significance are: possibility to work independently, stress and fatigue variables, age (satisfaction increasing with age, as well as for Japan), and advancement at work (as well as for USA). In stress models: 21 variables significant for 1 or 2 countries, 10 for 3 countries and 2 for 4-5 countries. The model for Russia included following determinants: attitude “do my best at work” (as well for USA, Germany), dangerous conditions, pride (type of work), relations between colleagues and management/employees. Less important determinants: importance of good advancement possibilities (ambitiousness, as well for Germany), working hours (more flexibility lowering degree of stress, as well for USA, for Great Britain relationship inverse), position (higher position - higher degree, as well as for Germany and Great Britain), wish to help other people is associated with the higher degree of stress, job security (as well as for USA and Germany). Detailed results can be obtained from the author by request.

Литература

1. ZA Online Study Catalogue, Zentralarchiv für Empirische Sozialforschung un der Universität zu Köln, ISSP WO: <http://zacad.gesis.org>.
2. B-Course tool: <http://b-course.cs.helsinki.fi>.
3. Myllumäki, P., Silander, T., Tirri, H., Uronen, P. (2002), B-Course: A web-based tool for Bayesian and Causal Data Analysis // International Journal of Artificial Intelligence Tools, Vol 11, No 3, pp. 369-387.
4. Nokelainen, P., Silander, T, Ruohotie, P., Tirri. H. (2004), Investigating the Number of Non-linear and Multi-modal Relationships between Observed Variables Measuring Growth-Oriented Atmosphere// Quality and Quantity, Vol. 41, No 6, pp. 869-890.