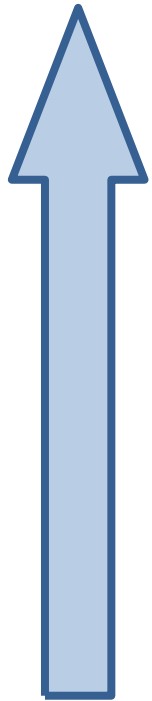# Online Data Collection:
Validating the COPSOQ Questionnaire

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Labor Intensity

❑ Competition in enterprises

❑ Increased quality requirements

❑ Increased service delivery speed

❑ Increased volume of information

❑ The need to develop new competencies

Psycho-emotional Overloads

2

Causes of Increased Stress and Tension at the Workplace

- New forms of labor organization
  - Aggregator companies (e.g., Yandex.Go, SberHealth)
  - Marketplaces (e.g., OZON, WildBerries)
- Features of the workspace (Open space, remote work)
- New Information and Communication Technologies (ICT)
  - Software tools for planning and control
  - (e.g., JIRA, Outlook)
  - State and regional information systems
  - Widespread use of mobile communication
  - Monitoring programs (employee monitoring systems)

Burnout and Depression

Meta-analysis

69 studies

examining the relationship between burnout and depression

46 191 participants

Results: Similarities between burnout and depression found

Meier ST, Kim S. Meta-regression analyses of relationships between burnout and depression with sampling and measurement methodological moderators. J Occup Health Psychol. 2022 Apr;27(2):195-20. 6. doi: 10.1037/ocp0000273. Epub 2021 Mar 29. PMID: 33779198

Depression at Work

Work-related stress can provoke clinical depression in employees.

Preventative measures regarding psychosocial factors at the workplace are necessary to preserve mental health.

Niedhammer I, Coindre K, Memmi S, Bertrais S, Chastang JF. Working conditions and depression in the French national working population: Results from the SUMER study. J Psychiatr Res. 2020 Apr;123:178-186. doi: 10.1016/j.jpsychires.2020.01.003.

Madsen IEH, Nyberg ST at al , IPD-Work Consortium. Job strain as a risk factor for clinical depression: systematic review and meta-analysis with additional individual participant data. Psychol Med. 2017 Jun;47(8):1342-1356. doi: 10.1017/S003329171600355X.

25 977 workers surveyed
PHQ-9 questionnaire used

120 221 participants examined
982 episodes of depression reported

Key Regulatory Documents in Russia

GOST R 55914-2013 "Risk management. Guidelines for psychosocial risk management at the workplace"

GOST R ISO 31000-2019 "National Standard of the Russian Federation. Risk management. Principles and guidelines"

For practical research, these documents suggest using a number of foreign methodologies. Currently, in Russia, **there is no legislation that mandates organizations to conduct an assessment of psychosocial risk**. Without such requirements, most organizations do not consider it necessary to perform such assessments.

Assessment of Psychosocial Risks in Russia

- Lack of awareness about psychosocial risks

- Stigmatization of mental health issues

- Absence of standards and <u>validated tools for assessing workplace stress</u>

Insufficient awareness of the importance of these issues leads to stressors remaining unrecognized and unmanaged!

Konovalova, V.G. "Mental Health at Workplaces: A New Level of Problems and Their Solutions." Personnel and Intellectual Resources Management in Russia. – 2022. – T. 11, № 6. – C. 5-13. https:// doi.org/10.12737/2305-7807-2022-11-6-5-13.

Issues with Identifying Psychosocial Risk and Lack of Clarity in Definition
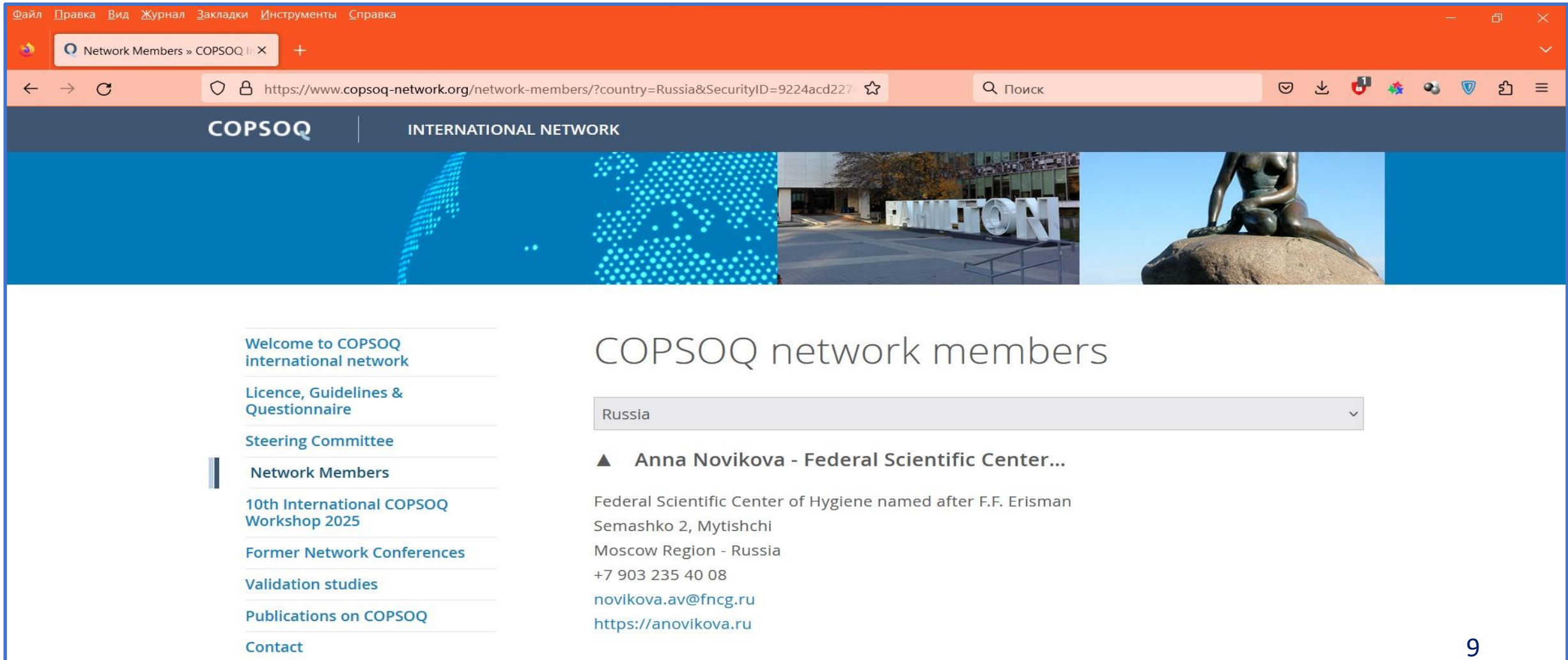
The concept of "psychosocial risk" encompasses a broad range of factors:

- Structure of work processes

- Work schedules and labor intensity

- Organizational culture

- Interpersonal relationships

- Conflict between personal and work time

- Job satisfaction

Assessment of Psychosocial Factors at the Workplace

Language and Cultural Adaptation of COPSOQ III

- Direct translation of all questions (146 items) from COPSOQ from English to Russian.

- Creation of two independent versions of the direct translation and formation of a preliminary Russian-language version of COPSOQ.

- Back-translation of the preliminary version and harmonization of translations.

- Discussion and formation of national versions of COPSOQ III (short, medium, and long).

- Creation of a test medium (standard) version of COPSOQ in Russian.

- Surveying and interviewing employees of Rospotrebnadzor institutions to test the COPSOQ.

- Approval of the final version of COPSOQ III in Russian.

Validation of the Russian-Language Version of COPSOQIII

Data Processing of 3129 Respondents Working in Various Professional Fields:

- Creation of an online survey

https://www.surveymonkey.com

https://www.testograf.ru

https://forms.yandex.ru

- Survey procedure and data collection
- Mathematical data processing

surveymonkey.com

surveymonkey.com

+

The most popular system in the world, available in a Russian version.

Final statistics, tables, graphs, and printout of charts are available.

Many functional settings for editing surveys and creating custom designs.

All data is accessible in a personal account with the ability to export data in multiple formats.

The service is integrated with Open AI (allows for the creation of surveys using AI).

−

The service is not available within the territory of the Russian Federation.

Access to the personal account is only possible via VPN.

Payments from Russian bank cards are not possible.

Does not meet Russian Federation legislation requirements for personal data processing; data is stored in the USA.

Yandex Forms

Yandex Forms

+

Data stored on Russian territory.

Simple interface.

Free use without limitations on the number of questions.

Mobile-friendly design

The system allows for customization of the survey design: choosing colors and fonts.

–

Insufficient number of web forms.

Pre-set templates are difficult to customize for specific user requests.

Inability to enter numeric values for responses.

Lack of analytics; more suitable for quick, simple surveys.

Testograf.ru

Testograf.ru

+

Servers located in Russia; compliant with Federal Law 152-FZ; registered in the domestic software registry.

Adaptive service with a large number of web forms, offering more than 30 types of questions.

Data available in various formats including CSV, XLSX, and PDF; analytics and statistics on the results obtained.

–

Fully paid service; one-time license fee of 7990 RUB for two months.

Interface is somewhat overloaded and requires some time to get accustomed to.

Unable to enter numeric values for responses.

Computer Program: Purpose

The program converts textual responses from respondents into numerical values.

Original Data Format

Как часто вы имеете право голоса при выборе, с кем вы будете работать?	Можете ли вы влиять на объем назначаемой вам работы?
Никогда/очень редко	Всегда
Иногда	Иногда
Иногда	Часто
Часто	Редко
Редко	Иногда
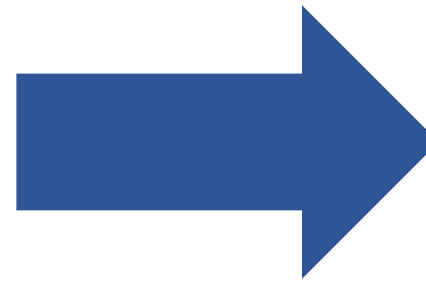
Target Data Format

ED	ED	ED
ED1	EDX2	ED3
50	50	25
25	50	50
75	75	100
75	75	75
75	0	75

Computer Program: Survey Model

- The computer code fully reflects an abstract data model.

- The model contains:

- 146 objects for each survey question

- 45 objects for groups of questions

- 16 objects for rating scales

- 3 objects for sections of questions in the survey

- The program allows for processing any combination of questions selected for inclusion in the national version of the survey.

- The composition of questions can be changed without the need to modify the program code.

Computer Program: Grouping of Responses

- The program simplifies the merging of data obtained from different studies and sources.

- The order of questions in the input data can be arbitrary.

- In the final file, the questions always follow in the same order.

- The first line contains alphanumeric codes of the survey scales.

- The second line contains the question codes in an international format.

- Each subsequent line contains the numerical responses of a specific respondent.

- The order of lines in the final file corresponds to the order in the input file, allowing for the combination of numerical COPSOQ data with information about age, position, and other details.

Specialized Information System for Managing Psychosocial Risks

1. Analysis of the experience of using the Copenhagen Psychosocial Questionnaire at the international level and communication with colleagues from the COPSOQ committee.

2. Development of a unified specialized information system for collecting, processing, and storing data on psychosocial factors in the work environment.

3. Development of a methodology for analyzing psychosocial factors based on the Russian-language version of COPSOQIII, utilizing information technology including artificial intelligence technologies.

Copsoq.ru: Advantages of the Information System

Unified National Database

This will allow the development and implementation of **standardization criteria** across different professional groups at the national level.
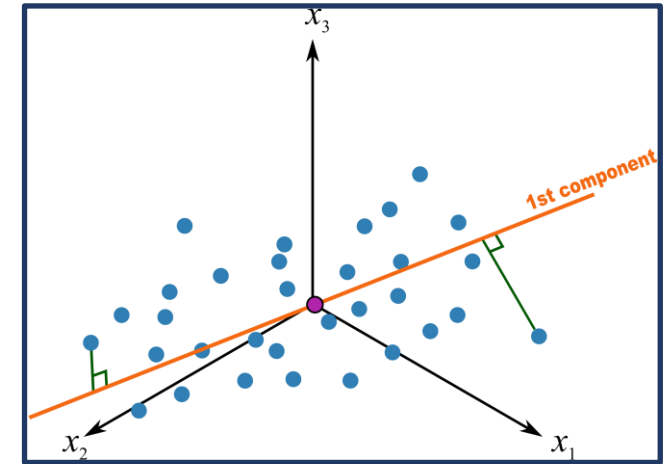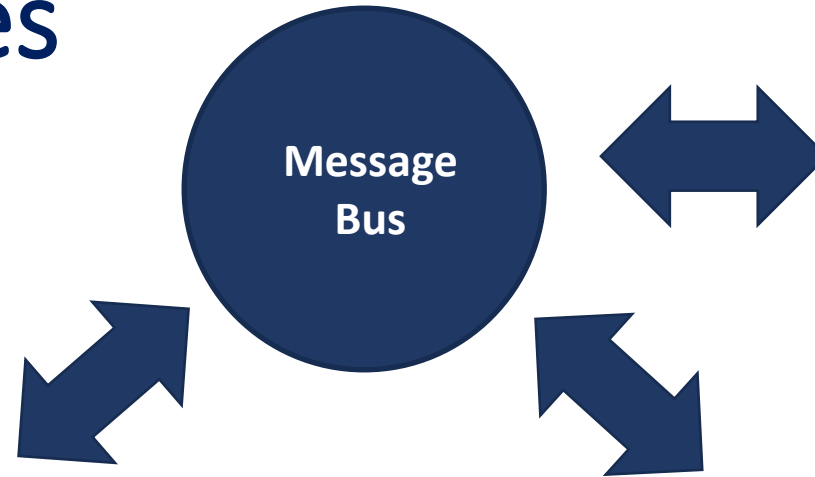
Factor Analysis

It will help identify **the leading causes of stress at the workplace** and determine directions for prompt improvement of the psychosocial environment in organizations.

Data Backup of Previous Research

It will enable the assessment of **the effectiveness of measures** taken within a specific organization.

System Modules
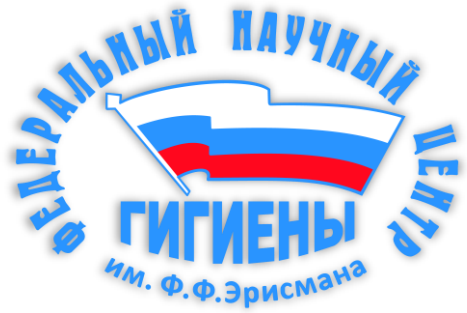
Main Capabilities of the Information System

> Implementation of an information system for monitoring psychosocial risks at the workplace.

> Timely conduct and evaluation of the effectiveness of measures to improve the psychosocial conditions of the work environment.

> The creation of a unified national database will enable data analysis across various dimensions (region, gender, age, years of experience, type of professional activity).

Thank You!

https://med-erisman.ru/