





FEDERAL SCIENTIFIC CENTER
FOR PSYCHOLOGICAL
AND MULTIDISCIPLINARY

Methodological principles for preparing scientific reviews













Dear authors,

The journals of Moscow University Publishing House accept only three types of review papers for consideration¹: systematic review ², meta-analysis, ³ and scoping review ⁴.

A manuscript that is submitted that does not meet the criteria for one of these types will result in the editor rejecting it at the initial review stage. This is necessary to ensure the high scientific quality of our publications and the effectiveness of our work.

Before submitting your manuscript, please:

- 1. Determine which of the three acceptable review types your review falls under.
- 2. Indicate the selected review type in the article title. The review type is indicated after the article's main title, in parentheses or separated by a colon.
- 3. Ensure that the structure and methodology of your work fully comply with the requirements outlined below.

¹ Example: Raitskaya, L.K., Tikhonova, E.V. (2019). Review as a promising type of scientific publication, its types and characteristics. *Scientific Editor and Publisher*, 4(3-4), 131-139. https://doi.org/10.24069/2542-0267-2019-3-4-131-139

² Example: Amor, A.M., Hagiwara, M., Shogren, K.A., Thompson, J.R., Verdugo, M.Á., Burke, K.M., et al. (2019). International perspectives and trends in research on inclusive education: a systematic review. *International Journal of Inclusive Education*, 23(12), 1277–1295. https://doi.org/10.1080/13603116.2018.1445304

Example: Yeganeh, A.J., McCoy, A.P., Schenk, T. (2020). Determinants of climate change policy adoption: A meta-analysis. *Urban Climate*, (31), 100547. https://doi.org/1010.1016/j.uclim.2019.100547

⁴ Example: Doosty, F., Maleki, M., Yarmohammadian, M. (2019). An investigation on workload indicator of staffing need: A scoping review. *Journal of Education and Health Promotion*, 8(1). https://doi.org/10.4103/jehp.jehp_220_18

Comparison table for determining the type of review

	Systematic Review	Meta-analysis	Scoping Review
Main Objective	An unbiassed synthesis of all empirical data on a topic.	Statistical aggregation of research results.	Mapping key concepts and research directions in the field.
Main Question	What is the overall evidence on a specific topic?	What is the pooled effect size?	What research work is being carried out in the selected area?
Key Method	Systematic search, selection of studies, and assessment of study quality.	Quantitative data synthesis (overall effect size).	Systematic search and thematic synthesis without quality assessment.
Required Element	Adherence to the <u>PRISMA</u> guidelines, study characteristics table.	Statistical analysis of heterogeneity, forest plot.	Comprehensive presentation of the area.

Requirements for preparing a review of each type

SYSTEMATIC REVIEW

Systematic Review is a scientific research method that involves a rigorous, structured collection and analysis of existing literature and data on a specific topic or research question.

Objective

The purpose of a systematic review is to provide an objective, structured, and comprehensive summary of the available scientific evidence on a specific topic. Its primary objective is to provide evidence-based conclusions.

Terms of application

A systematic review is used to consolidate, analyse, and synthesise a large body of scientific data on a specific problem to form an evidence base.

Key requirements for the manuscript:

- Following PRISMA guidelines.
- Providing a PRISMA flow chart.
- Detailed description of the criteria for inclusion in, and exclusion from, the study.
- Table with characteristics of the studies that are included.
- Assessing the risk of bias in the studies that are included.

Structure and content

When preparing a systematic review as an independent scientific publication, the PRISMA guidelines (https://www.prisma-statement.org/) are used to assess the quality of the selected sources. The structure of the systematic review corresponds to the main IMRAD sections.

In the **Introduction** section, it is necessary to justify the feasibility of preparing a systematic review, formulate the purpose and research questions. In the **Materials and Methods** section, methods used to assess the quality of the selected sources should be indicated (see the <u>PRISMA guidelines</u>). Where appropriate, a full list of search queries, PRISMA diagram, tables with characteristics of the studies included, databases used, inclusion and exclusion criteria, as well as

the selection procedure and relevance testing steps are provided. The **Results** section provides not only thematic analysis and key findings, but also a summary of the identified studies and the steps of their selection (including a PRISMA diagram⁵). The **Discussion** section includes an interpretation of the results in the existing literature, a comparison of the identified trends with previously published data, and an indication of future research directions. The **Conclusions** section presents a brief summary of the results, their relationship to the study's objective, as well as practical implications and recommendations. The **References** include a complete list of all sources used to write the review, formatted in accordance with the journal's requirements.

META-ANALYSIS

Meta-analysis is a statistical method used to combine and quantitatively analyse the results of independent studies addressing the same scientific problem.

A meta-analysis is an extension of a systematic review. The manuscript should include all the steps typical of a systematic review, supplemented with a statistical synthesis of the data.

Objective

The purpose of meta-analysis is to combine the results of several independent studies to obtain more accurate and generalised conclusions.

Terms of application

Meta-analysis is used to summarise the results of several independent studies aimed at solving a similar research problem.

Key requirements for the manuscript:

- Following PRISMA guidelines.
- Providing a forest plot.
- Statistical analysis of heterogeneity (I², Q-statistics).
- Description of the software used for statistical analysis.

Structure and content

When preparing a meta-analysis as an independent scientific publication, the quality of the selected sources is assessed using <u>PRISMA</u> guidelines.

The **Introduction** explains the purpose and necessity of the meta-analysis and provides a brief description of the relevance of the problem. The Materials and Methods section for a metaanalysis includes: a detailed description of the research methods (type of participants, study design, results); a mandatory list of databases and other sources (e.g. <u>PubMed</u>, <u>Scopus</u>), used to search for relevant studies; the methods used to assess the validity and quality of the included studies (e.g. using scales); the methods of data synthesis and an indication of the software used for statistical analysis, (e.g. SPSS Statistics, Microsoft Excel etc.). The Results section of a meta-analysis includes: presentation of key information about the included studies (authors, year of publication, design, sample size, participant characteristics, and other key data); an assessment of the quality of the included studies and consideration of potential risks of bias; an assessment of interstudy variability and its impact on the overall result; a graphical presentation of the results using diagrams; the results of additional analyses aimed at identifying the impact of specific testing factors and the robustness of the results. The **Discussion** section includes an interpretation of the results, a comparison with other studies, and the limitations of the meta-analysis. A summary of the key findings of the study should be presented in the **Conclusion** section. The list of **References** should include all sources of information (publications) used for the meta-analysis. Sources used as research materials (archival, regulatory, or official documents, etc.), if any, should be listed in the Appendix or referenced in the main text.

SCOPING REVIEW

Scoping Review is a research method used to study understudied or very broad topics and allows to determine the scope, volume, content, and main directions of research in a given area of interest without delving into a detailed critical analysis and assessment of the reviewed research quality. A scoping review is especially useful when the topic is understudied or very broad.

Objective

The aim is to structure key information in a particular field of knowledge or on a research topic. It involves assessing the volume of available literature on the topic, reviewing key research approaches, analysing the extent to which the problem has been elaborated, and clarifying the scope of future research.

Terms of application

It is used when it is necessary to understand which aspects of a topic have already been studied and which require additional attention.

Key requirements for the manuscript:

- Following the PRISMA-ScR guidelines.
- Rationale for the need to conduct this type of review.
- Systematic search strategy.
- A diagrammatic or tabular representation of the key concepts of a field.

Structure and content

A scoping review is an analytical text, covering the systematic study, analysis, and synthesis of information on a specific area of knowledge, aimed at identifying key trends, problems, and development prospects. When preparing a scoping review as an independent scientific publication, guidelines PRISMA-ScR are used to assess the quality of the selected sources. The **Introduction** begins with a description of the importance of the chosen subject area, the key issues it covers, and the benefits of conducting the review. The review's aims and objectives are then outlined to highlight key approaches, challenges, and knowledge gaps, as well as to assess advances. A brief description of the sources used and the selection criteria applied (e.g., academic articles, monographs, reports, studies) is provided. The **Body** of the text describes the evolution of the subject field, the main stages of its establishment and development. The main theories and approaches existing in this field are examined. The current state of research is analysed: where the main efforts are focused, what problems have been solved or remain relevant. Existing shortcomings, gaps, and contradictions in the accumulated knowledge are identified. The application of the knowledge obtained to practice, technology, and everyday life (where possible) is analysed. Prospects and areas for further research that require development are mentioned. The Conclusion/Findings are based on the review results. The References include a complete list of all sources used to write the review, formatted in accordance with the journal's requirements.