

**Review of the book by E.V. Volkova & I.O. Kuvaeva
“Coping intelligence: differentiation and integration approach”
M.: Publishing House “Institute of Psychology RAS”, 2023**

Khazova S.A. ^{a*}

^aKostroma State University, Russian Federation,
ORCID iD: 0000-0002-3657-0086

Abstract: The book is devoted to the develop a new approach to the understanding of Coping Intelligence. Coping Intelligence is defined by the authors as a special form of organizing the mental experience of overcoming difficult life situations. There is no doubt that this is one of the most promising areas of research on stress and coping, which unites the efforts of researchers from different branches of science working in this problem area (physicians, psychologists, psychophysicologists, biochemists, culturologists, linguists, etc.), and will make it possible to critically rethink the huge amount of empirical data on stress and coping, including the influence of culture and context, maintaining health, personality development, well-being, and, perhaps, will lead to the creation of a unified theory of Stress & Coping from the standpoint of the systems approach.

Keywords: Coping Intelligence, Experience of Overcoming Stress, Stress & Coping System

The book is devoted to the problem of the role of intelligence in the implementation of the human's coping behavior as one of the key factors in the productivity of human life. Despite the attention of researchers to this issue and its undoubted promise, it still remains poorly developed. The theoretical importance and the novelty of the ideas presented in the book are also related to the fact that, *firstly*, the authors develop a new approach to the understanding of Coping Intelligence (the term was proposed by A. V. Libina more than 10 years ago, but has not received proper theoretical development) as a special form of organization of mental experience and a measure of the effectiveness of the subject's Stress & Coping System, *secondly*, Coping Intelligence is viewed from the perspective of the Differentiation & Integration theory.

The structure of the book is designed to help the authors solve the problems and consider the phenomena under study at both the theoretical, methodological, and empirical levels. The book consists of two parts, divided into nine chapters.

The first part of the book is devoted to a theoretical analysis of basic concepts and the development of a Theory of Coping Intelligence. Based on the P. K. Anokhin's theory of functional systems, the authors introduce and develop the concept “Stress & Coping System” as a complex of components selectively involved in the coping process:

- (1) Subsystem Stress, providing the construction of the image of the situation,
- (2) Subsystem Coping, carrying information about the ways of action in a particular situation.

Fundamental dimensions of the Stress & Coping System are also addressed, such

*Corresponding author: Khazova S.A. E-mail address: hazova_svetlana@mail.ru
doi: 10.38098/nsom_2023_03_01_07

as (1) the causes leading to stress; (2) stress state; (3) consequences; (4) process, i.e. duration, intensity and stages of development of a stressful situation; (5) management of stressful situations and stressful conditions.

The authors analyzed through the prism of these ideas the most influential stress theories of H. Selye (Selye, 1956), R. S. Lazarus (Lazarus, 1985), Paul T. P. Wong (Wong (1993), and the Jan Strelau's theory of temperament (Strelau, 1996). An interesting illustration authors' idea is the manifestation of the fundamental dimensions of the Stress subsystem in a professional and organizational context. Very promising are the ideas about the sensitive periods of formation of the Stress & Coping System and its level organization, according to B. F. Lomov (Lomov, 2021), from the micro level to the level of the Collective Subject. The ideas of M. A. Kholodnaya and S. A. Khazova about the conceptualization (Kholodnaya & Khazova, 2017) of the stressful situation experience are being developed in the book. The verbal and semantic level of stress regulation is also considered.

The authors pay attention to the analysis of the biochemical level of the Stress & Coping System, namely, the biochemical and neuronal changes that occur during a stressful situation. Obviously, the Coping Intelligence Theory would be incomplete without the analysis of functional aspects of the Stress & Coping System. The authors emphasize the balance (equilibrium) of the interaction between various body systems based on a significant number of the newest sources. Based on a significant number of the latest sources, the authors identify such functions of the biological level of the Stress & Coping System as (1) balance of the interaction of various body systems, (2) plasticity, (3) maintenance of rhythm, (4) accumulation of experience (immunological memory of stressor), (5) reappraisal of experience, and (6) emotional regulation. Future research tasks are also outlined here: empirical testing of the neurochemical dynamic model of Coping Intelligence (in terms of

the rate of restoration of neurochemical balance when overcoming stressful situations) taking into account individual differences.

The second and third chapters are devoted to the Coping Intelligence itself, which is defined as a measure of the organization of mental experience of overcoming stressful situations and as a measure of the productivity of the subject's behavior in stressful situations. We believe that the authors' ideas formulated in these chapters are of great interest and are undoubtedly new and original. It is rather difficult to enumerate all authors ideas. For example, the importance of generalizing and highlighting criteria for the productivity of coping behavior is emphasized, which include both traditional flexibility and variability, as well as congruence of resources and requirements of the situation, and innovative ones: the orientational basis of coping, the transfer of successful models of behavior to new situations, selectivity, and optimal rate of coping depending on the complexity of the stressor. In addition, the reader may be interested in Chapter 4 that discusses the influence of culture on the perception and understanding of stress. There is no doubt that this is one of the most perspective directions of research, even though studies on this topic that confirm the role of the sociocultural context of stress and coping are not new in Russian psychology, in particular, eight years ago there was published a monograph by T.L. Kryukova, T.V. Gushchina "Culture, Stress and Coping: Sociocultural Constructualization of Coping Behavior" (Kryukova & Gushchina, 2015). Nevertheless, empirical data on the perception of stress and its coping in different cultures, reflected in real language practice, will be of great interest and use to a great number of readers.

Part II reviews the methodological aspects of the study and presents the results of empirical research. The authors propose original tools for studying the conceptualization of stressful events, as well as analyze in detail the existing methods of research on coping behavior.

The authors present an extensive empirical data set that allows verifying the hypotheses and confirming the main provisions of the Coping Intelligence theory. In particular, the authors obtained significant data on the role of the measure of differentiated experience of coping with stressful situations in the expansion of the repertoire of coping strategies and their greater consistency, as well as on the influence of a person's ethno-cultural background on the peculiarities of conceptualization of stressful situations and coping.

One of the important applied results is the further development of methodological aspects of the study of stress and coping based on the achievements of modern psychological science, as well as a detailed description of the BARS Coping Intelligence method developed by the authors, which can become a convenient and reliable tool for predicting human behavior in real stressful situations, developing recommendations for managing stress and preventing stress-related disease risks. The material presented in the appendices is also extremely useful in practical terms: Atlas of the visual representation of stress (Appendix 3) or a description of the expert assessment method for studying the conceptualization of stressful situations (Appendix 2).

It is necessary to note the evident advantages of the book and the authors' conception presented therein, which attempts to integrate within a single theory the data of various sciences, and analyze the studied phenomena of intelligence from the perspective of both the psychology of stress and coping behavior, and the recent data of psychophysiology, biochemistry, medicine, as well as the ideas of culturology and linguistics, that, in turn, testifies in favor of the interdisciplinary approach of the authors. The study covers a variety of empirical material obtained by the authors themselves, that proves the viability and significance of their ideas, as well as a meta-analysis of studies on the subject, which is a valuable gift for aspiring

researchers and all scientists working in these problem field. Finally, the authors share with the reader a great deal of their ideas, speculations, and opinions, though this fact has its downside: not all the ideas are sufficiently theoretically justified, and sometimes it seems to be a "sketch", an outline for the further development of theoretical propositions.

Like any other new conceptions, the ideas formulated in the book "Coping Intelligence: a Differentiation and Integration Approach" are likely to cause doubt and even disagreement among readers. For example, it seems that the very concept of "Coping Intelligence" is not entirely strictly scientific, but rather a successful, rather vivid metaphor; and the definition given by the authors (p.4) provokes new questions:

(1) If Coping Intelligence is a special form of organizing the mental experience of overcoming difficult situations, are there probably other, "non-special" forms of its organization?

(2) Can there be "Non-Coping Intelligence"? If we refer to the studies of the authors who worked on the problem (Khazova, 2014; Kholodnaya & Aleksapolsky, 2010; Kholodnaya & Khazova, 2017; Kornilova, 2016), there is not much clear evidence, consistent data on the relationship between intelligence and productivity (e.g., flexibility) of coping.

(3) If Coping Intelligence is an ability, as follows from the text of the monograph, then, probably, it is the subject who copes? It is the subject that perceives and processes information, builds an image of the situation and regulates his or her own behavior, in relation to the requirements of the situation and his or her own capabilities?

Further, there is some misunderstanding the list of attributive properties of Coping Intelligence, some of which in the authors' formulations can be attributed to the subject (for instance, "quality" or "subjectivity"), and some characterize the Stress & Coping System, for example, "substantiality" or "metricity".

However, if the Stress & Coping System is the substratum of Coping Intelligence, as the authors state, then, in our opinion, this does not mean that all its properties are also properties of Coping Intelligence.

It should be noted that the reader finds it difficult to understand how the main concepts are related to each other "Mental Experience of Coping", "Coping Intelligence", and "Stress & Coping System". On the one hand, as the authors say, Coping Intelligence is a measure of the organization of the mental experience of overcoming stressful situations, on the other hand, it is also a measure of the productivity of the subject's behavior in a stressful situation, i.e., the higher it is, the higher the productivity of coping, and finally, on the other hand, it controls the Stress & Coping System. Probably, the authors believe that they have a consistent picture of the relationship between all with everything. The reader needs some help with it, for example, in the form of a scheme. In the conclusion the authors make a rather successful attempt to present their views in a systematic way. Finally, the theoretical propositions suggested by the authors need strict empirical verification, which is certainly a perspective of the research, despite the empirical material provided.

Perhaps, at the first reading we did not manage to "grasp" and appreciate all the ideas, and in some ways our views differ. Nevertheless, as a conclusion, it is important to emphasize that the difference in scientific views is especially useful and important because it provides the grounds and food for thought, reflection, and discussion. What is hoped is that it, in its turn, will unite the efforts of authors who work in this problem field, and will give an opportunity to critically rethink a huge amount of empirical data on human perception of stress, including the influence of culture, its course in a particular context, on coping with it from the standpoint of health preservation, development of human vitality and life productivity, and, possibly, will lead to the creation of a unified theory of Stress &

Coping from the standpoint of the system approach.

Acknowledgment:

The author thanks assistant editor N.E. Volkov for translation and preparation of the manuscript for publication.

CRedit author statement:

The author has read and approved the final version and bear responsibility for all aspects of the publication.

Highlight:

▪ The criteria for the productivity of coping behavior are:

- (1) flexibility and variability of coping,
- (2) congruence of resources and requirements of the situation,
- (3) the orientational basis of coping,
- (4) the transfer of successful models of coping behavior to a new situation,
- (5) selectivity of coping,
- (6) optimal rate of coping.

▪ Functions of the biological level of the Stress-Coping System are:

- (1) balance of the interaction of various body systems,
- (2) plasticity,
- (3) maintenance of rhythm,
- (4) accumulation of experience (immunological memory of stressor),
- (5) reappraisal of experience,
- (6) emotional regulation.

Reference

1. Khazova, S. A. (2014). The role of intelligence in the coping behavior of adolescents with different personality traits. *Bulletin of Cherepovets State University, No. 1*, 120-123. [Khazova, S. A. (2014). Rol' intellekta v sovladayushchem povedenii podrostkov s razlichnymi svoystvami lichnosti. *Vestnik Cherepovetskogo gosudarstvennogo universiteta* 2014, № 1, s. 120-123].
2. Kholodnaya, M. A. & Aleksapolsky, A. A. (2010). Intellectual abilities and coping strategies. *Psychological Journal*, 31(4), 59-68. [Kholodnaya, M. A., Aleksapol'skiy, A. A. (2010). Intellektual'nyye sposobnosti i strategii sovladaniya. *Psikhologicheskiy zhurnal*, 31(4), s. 59-68].
3. Kholodnaya, M. A., Khazova, S. A. (2017). The phenomenon of conceptualization as the basis of the productivity of intellectual activity and coping behavior. *Psychological Journal*, 38(5), 5-17. [Kholodnaya M. A., Khazova S. A. Fenomen

kontseptualizatsii kak osnova produktivnosti intellektual'noy deyatelnosti i sovladayushchego povedeniya // Psikhologicheskiy zhurnal. 2017. № 5. S. 5–17].

4. Kornilova, T. V. (2016). Coping with uncertainty: Links with emotional intelligence, risk-taking, and rationality. In the collection materials of the IV International Scientific Conference “Psychology of stress and coping behavior: resources, health, development”, Kostroma, September 22-24, 2016, Kostroma: Nekrasov KSU Publishing House, volume 1, abstracts, p. 37-39. [Kornilova T.V. (2016). Sovladaniye s neopredelennost'yu: svyazi s emotsional'nym intellektom, gotovnost'yu k risku i ratsional'nost'yu. v sbornike Materialy IV-y Mezhdunarodnoy nauchnoy konferentsii «Psikhologiya stressa i sovladayushchego povedeniya: resursy, zdorov'ye, razvitiye», g. Kostroma, 22-24 sentyabrya 2016 g, izdatel'stvo KGU im. N.A. Nekrasova (Kostroma), tom 1, tezisy, s. 37-39].

5. Kryukova, T. L. & Gushchina, T. V. (2015). *Culture, Stress, and Coping: Sociocultural Constructualization of Coping Behavior*. Kostroma. [Kryukova T.L., Gushchina, T.V. Kul'tura, stress i koping: sotsiokul'turnaya kontekstualizatsiya sovladayushchego povedeniya

– Kostroma, 2015].

6. Lazarus R. S. (1985). The psychology of stress and coping. *Issues in mental health nursing*, 7(1-4), 399–418. <https://doi.org/10.3109/01612848509009463>

7. Lomov, B. F. (2021). Systems Approach and the Problem of Determinism in Psychology. *Natural Systems of Mind*, 1(1), 109-119. doi: 10.38098/nsom_2021_01_03_12

8. Selye, H. (1956). *The Stress of Life* (Revised ed., 1976). New York: McGraw-Hill.

9. Strelau, J. (1996). The regulative theory of temperament: current status. *Personality and Individual Differences*, 20 (2), 131-142. [https://doi.org/10.1016/0191-8869\(95\)00159-X](https://doi.org/10.1016/0191-8869(95)00159-X).

10. Volkova, E. V. & Kuvaeva, I. O. (2023). Coping intelligence: differentiation and integration approach. Moscow: Publishing house “Institute of Psychology of the Russian Academy of Sciences” [Volkova Ye.V., Kuvayeva I.O. Sovladayushchiy intellekt: differentsionno-integratsionnyy podkhod, 2023 Moskva: Izd-vo «Institut psikhologii RAN», 2023].

11. Wong, P. T. P. (1993). Effective management of life stress: the resource-congruence model. *Stress Medicine*, Vol. 9, pp. 51–60. <https://doi.org/10.1002/smi.2460090110>