

OPINION

by prof. Encho Gerganov

for the scientific works of assist. prof. Evgeniya Hristova, PhD

submitted for the competition for the academic position of associate professor in Professional area 3.2. Psychology, announced in State Gazette 5/16.01.2024

Dr. Evgenia Hristova presented the monograph "Life vs Life. Moral dilemmas in allocating limited medical resources. New Bulgarian University Publishing House. ISBN 978-619-233-251-8. 2023". In the monograph and in the papers submitted for the competition, 5 main research topics are explored, which I will briefly consider:

1. Moral judgment and allocation of limited medical resources

The author has conducted a number of studies on the problems associated with moral dilemmas related to the allocation of limited medical resources. She has primarily explored support for various utilitarian and egalitarian principles. The main results of this series of studies are as follows. Utilitarian principles and related rules in the allocation of limited medical resources receive the greatest support. Although utilitarian choices are the most supported, the possible decision to use the order of admission as a selection criterion also receives a lot of support. As a general result of all studies, it is found that there is low support for random allocation even though it is theoretically assumed to be the most egalitarian of all decision rules in such situations. In these studies, the author also found that the allocation and re allocation of medical resources are not perceived as equivalent by the public. These results are presented both in the above mentioned monograph and in two papers, one of which is in English.

2. Moral judgment in "Trolley problem"-like dilemmas

Empirical studies have been carried out on this topic, which has a bearing on moral judgment in dilemmas of the "Trolley problem" type. Various factors that are expected to influence moral judgment are included in the research designs.

The results show that the factors "presence of physical contact", "inevitability of death", "instrumentality of harm" have significant effects on utilitarian choices in dilemmas of this type.

The author also investigated the relationship between emotional processing and moral judgment using skin conductance recording. This method made it possible to make an objective registration of affective processes. This type of research is new for Bulgaria and is rarely used on a global scale. Moral judgment has also been studied in people practicing helping professions. These studies have found that there is less support for utilitarian action in these dilemmas and there is a different role for the factors listed above compared to typical samples of students and young adults. Moral judgment regarding the actions of artificial cognitive agents has also been investigated. The results show that utilitarian actions performed by such agents are perceived as more morally acceptable than the same actions performed by a human. The experiments on that topic are published in 6 articles, 5 of which are in English.

3. Cooperation in the Prisoner's Dilemma game

To study this problem, the author once again conducted a series of experiments, through which she tracked the processes of decision-making and cooperation in the Prisoner's Dilemma. In some of these experiments, she used eye-tracking equipment for the first time to analyze players' attention and access to game-related information, to investigate the so-called "disjunctive effect" and to test different explanations for this effect. In addition, the author proposes a model of Prisoner's Dilemma decision-making based on selective attention and reinforcement learning (SARL) that shows good agreement with experimental data. Experiments have been conducted in which, for the first time, the theory of relational models is connected to various cooperative games. By manipulating the way the winnings are distributed and assigning different roles to the players, the gameplay and the level of cooperation are changed.

The results of research on this topic have been published in 7 articles – all of them are in English.

4. Use of the eye tracking method to study cognitive processes

This series of studies used eye-tracking equipment to investigate attention and information processing in various cognitive processes. This research is presented in 6 articles in English, in which examples of the application of the method in the study of cooperation in the game "Prisoner's Dilemma" and the disjunctive effect (for the first time worldwide), perception and evaluation of works of art, reading of children with dyslexia (for the first time for the Bulgarian language).

5. Use of physiological data in the study of emotions related to cognitive processes

In the research on this topic, the author, for the first time in Bulgaria, used equipment for recording physiological data (e.g. skin conductivity) in the study of affective reactions in moral judgment, decision-making and cooperation, interaction with artificial agents. In this way, objective information was obtained about subjective experiences. These studies were published in 4 articles in English.

In conclusion, the main contributions of the monograph and the above-mentioned articles, according to Dr. Evgenia Hristova, which I fully accept, are the following:

- Highlighting of the topic of moral judgment in allocation of limited medical resources and the need for empirical research on the topic.
- Systematic examination of the topic from different points of view - from a theoretical (ethical) point of view, from the point of view of medical standards and practices, and from a psychological point of view.
- Presentation of results of empirical studies of moral judgment in dilemma situations where there is a shortage of medical resources and there is a conflict between utilitarian rules and the order of admission.
- Inclusion of a large number of participants in empirical studies.
- Exploring the role of context and the presentation of the dilemmas by varying the type of limited medical resources.
- Investigating the role of the realism of the situation in which moral judgments are made by varying the context of the events that led to the shortage of medical resources.

- Empirical findings of attitudes of strong support for utilitarian principles and related actions in the allocation of limited medical resources. At the same time, fairly high support is found for using the first-come, first-served rule for the allocation of limited resources, as well as extremely low support for the possibility of random allocation.
- Discovering that the attitudes are less supportive of utilitarian criteria in situations of reallocation compared to situations of allocation of limited medical resources.
- Presentation of data on the stability and reproducibility of the obtained results in a culture other than the Bulgarian one.
- Discussing the results obtained with a focus on compliance and their divergence with theoretical views and recommended medical practices and standards.

Dr. Evgenia Hristova participates in the competition for associate professor with 57 articles, most of which are in English, one single-authored monograph - habilitation thesis, 2 books co-authored with Maurice Grinberg. In terms of volume, this is enough production for an associate professor. In terms of quality, all this scientific creativity fully satisfies the criteria for habilitation.

I propose to give the academic title ASSOICIATE PROFESSOR in Professional Area 3.2. Psychology, competition announced in State Gazette no. 5/16.01.2024, to assist. prof. Evgenia Hristova, PhD.

Sofia

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