

STATEMENT

by Assoc. Prof. Katya Koycheva Vangelova, PhD

Head of the Department of "Health at Work", NCPHA

according to order No. R-109-169/25.03.2025

of the MEDICAL UNIVERSITY "Prof. Dr. Paraskev Stoyanov" - Varna

Regarding dissertation: "Assessment of the Psychoemotional Tension Levels in Managers and Options for Stress Control through an Active Physical Programme"

with author Tatiana Boykova Mateva, MD

for awarding the educational and scientific degree "Philosophy Doctor"

Field of higher education 7: "Healthcare and Sports"

Professional direction 7.1: "Medicine"

Scientific specialty Hygiene (Incl. Occupational Medicine)

Research Supervisor: Prof. Teodora Dimitrova Dimitrova, MD, PhD

Professional biography and career development

Tatiana Boykova Mateva obtained a master's degree in medicine at the Medical University of Varna in 1992, in the period 2008-2012 she specialized "Occupational Medicine" at the same university and in 2016 she obtained a specialty "Occupational Medicine". This was followed by a specialization in "Nutrition and Dietetics", which was successfully completed in 2020. Dr. Mateva began her work as a resident physician in 1992, in the period 1994-99 she worked as a head of health service, and from 2000 to the present she has been the head of medical development at Boaron Bulgaria, and since 2006 she has also been a resident physician at the Occupational Health Service at the Medical Center "Mladost Varna". Dr. Mateva is a member of the Bulgarian Medical Association, scientific societies, and speaks French and Russian.

Relevance of the dissertation

The topic of the presented dissertation is extremely relevant, as it is aimed at assessing the relationship between the levels of psycho-emotional stress and physical activity, presented through an active physical program in management staff.

Structure and content of the dissertation

The dissertation is presented comprehensively and precisely on 126 pages and is illustrated with 34 tables, 27 figures and 8 appendices, has the usual structure with a comprehensive literature review, formulated goal, tasks and methods, results and discussion. In accordance with the

results obtained, 5 conclusions and 5 recommendations are formulated. The bibliography includes 172 references, of which 2 in Cyrillic.

The literature review shows the broad awareness of the doctoral student on the topic. Modern concepts of the physiological and pathophysiological models of occupational stress are clearly and consistently presented. Psychosocial stressors and resources at the workplace and sources of stress in management staff are presented. The benefits of physical activity in terms of somatic and mental health are clearly outlined, namely the impact on the reproductive axis, the growth axis, the thyroid glands, metabolism, the immune system, the digestive system and the importance of promoting good physical activity.

The purpose of the dissertation is clearly and precisely formulated and is directly related to the topic. 6 tasks have been set, which logically follow the purpose and are the basis for conducting the study. The working hypotheses are well developed based on the presented literature review and the set goal.

The studied subjects are clearly defined and well described. The exclusion criteria are described and are based on objective methods for assessing the health status of the subjects. The study design and the methods used are precisely described and appropriate for achieving the set goal.

The results of the study show that gender among managers is a significant factor in attitudes towards practicing an active physical program, with the relative share of men being higher than that of women. The predominance of women in the target group can be interpreted as a trend of feminization of management positions. The assessment of professional stress using the Four-Dimensional Symptom Questionnaire (4DSQ) shows that participants have mostly moderate levels of distress and somatization and few of them exhibit symptoms of anxiety and depression, with no significant differences between groups by gender, age, and physical activity.

Stress among managers affects attention and the ability to focus on work tasks, and the Bourdon-Wiersma test is a reliable tool for assessing attention. Overall, the indicators associated with high levels of stress did not differ significantly between the two genders and the two groups by physical activity, but a significant difference in reaction time after the days off was registered in all studied groups by gender and physical activity. The doctoral student correctly explained the established faster reactions after rest with the restoration of cognitive resources and a decrease in work fatigue. After a two-day rest, the doctoral student established a statistically significant difference between physically active and physically inactive individuals in the studied sample, with the reaction time being lower in physically active individuals compared to that in physically inactive individuals. The fact that the reaction time after the weekend is lower in the group of managers with an active sports program is explained and confirmed by other authors with the positive influence of physical activity on stress levels and improvement of cognitive functions. Reaction time after rest, in addition to being an important indicator of overall stress levels, can also be considered as a significant individual factor in assessing the productivity of the individual, in particular in "managerial staff".

The abstract reflects the dissertation and contains the most significant results and conclusions from the study, and also includes recommendations for the prevention of health risks in managers. Six contributions of a scientific-applied and methodological nature are presented. Four publications are presented in relation with the dissertation /one in the Web of Science/, and the doctoral student is the lead author of the four publications. The results have been

presented at five scientific events. Appendices to the dissertation are also presented, including permission from ethical commission, a declaration of informed consent, information for the participants, methods used, list of publications and participation in scientific events in relation with the dissertation.

I have no critical remarks about the dissertation.

CONCLUSION: My assessment of the presented dissertation: "Assessment of the Psychoemotional Tension Levels in Managers and Options for Stress Control through an Active Physical Programme" is positive. The dissertation is up-to-date, carried out in accordance with the requirements of a serious scientific study. The results obtained and the significance of the conclusions and contributions give me a reason to confidently state that the work of Tatiana Boykova Mateva, MD meets the requirements of the Act on the Development of the Academic Staff of the Republic of Bulgaria for the acquisition of the educational and scientific degree "Philosophy Doctor".

Based on the above, I recommend that the Honorable Members of the Scientific Jury make a decision to award the educational and scientific degree "Philosophy Doctor" to Tatiana Boykova Mateva, MD.

15.05.2025

Sofia

Signature:

Заличено на основание чл. 5,
§1, б. „В“ от Регламент (ЕС)
2016/679

(Assoc. Prof. Katya Vangelova, PhD)