

*English translation*

## OPINION

under the procedure for acquisition of PhD degree

by Petya Veskova Pandurova,

topic of the dissertation: Psychosocial correlates of overweight and obesity

in professional field 3.2 Psychology,

Department of Psychology,

Sofia University St. Kliment Ohridski,

By Prof. Irina Zinovieva, Dr. Sc.

Sofia University St. Kliment Ohridski, Department of Psychology, professional field 3.2 Psychology in her capacity of Member of the Scientific Jury for awarding the scientific degree "Doctor of Philosophy" (in Health Psychology) following

Order# RD 38-249\_16.5.2023 of the Rector of Sofia University St. Kliment Ohridski

### **General characteristics of the dissertation**

The dissertation contains 223 pages, of which 186 pages are main text, tables and graphics. The literature includes 323 titles, of which 18 titles are in Bulgarian, the rest - in English. The research questionnaire is presented in an appendix. The work is illustrated with 32 tables and 34 graphs.

The dissertation treats overweight and obesity as multicomponent phenomena that have genetic, biological, psychological, socioeconomic, and behavioral correlates. They are based on an energy imbalance between calories consumed and calories expended. From this perspective, nutrition and physical activity levels are key behavioral factors that have an essential role in maintaining weight within healthy limits.

In the first chapter, various perspectives on overweight and obesity are considered - from biological and medical to psychological. The psychological perspective is comprehensively presented, with a detailed analysis of the main theoretical models: psychosomatic theory, external effect theory, cognitive restricted eating theory, spiral model of overweight and obesity, stress-reward model, homeostatic theory and the ecological model of overweight and obesity.

In the second chapter, the methodological framework of the empirical study is presented, with a detailed statement of the purpose, tasks, hypotheses, theoretical model and research instruments.

The third part contains an analysis of the results of an empirical study of the relationships between psychosocial characteristics and eating behavior, physical activity and overweight.

### **Literature overview and theoretical knowledge of the candidate**

Having analyzed a significant number of studies in international scientific journals, the topic has been developed carefully and competently. The Bulgarian literature on the issue is also well reflected. The doctoral candidate presents a thoughtful analysis of the main directions in the treatment of the selected scientific problem, she knows how to analyze complex content and draw adequate conclusions.

The presence of summaries at the end of each part, which synthesize and accurately highlight the main points leaves positive impression as well.

### **Methodology**

The created integrative model has been verified through empirical research. The total number of participants in it is 1274 people. First, a pilot study was conducted with 562 respondents, and subsequently – a main study with 712. To check the psychometric characteristics of the scales, exploratory factor analysis using the method of principal component analysis and the internal consistency of the scales with Cronbach's alpha were used. Whether the necessary conditions to apply factor analysis were met was tested by means of Bartlett's test of sphericity and the measure of sampling adequacy (KMO). The analysis of eating behavior, physical activity and overweight from the perspective of the psychosocial characteristics that are

included in the model is done with: a) a series of one-way ANOVA and t-tests to analyze the effects of demographic factors; b) correlation and regression analysis for the relationships and predictive capabilities of the selected psychosocial variables.

The doctoral candidate shows very good skills in choosing adequate statistical methods, their application and correct and precise interpretation of the obtained results.

In the discussions, the new data obtained and the confirmation of the already existing data are discussed in detail. This lends convincingness to the obtained results, and the in-depth theoretical knowledge contributes to the correctness of interpretations and conclusions.

### **Scientific contributions**

I accept the scientific contributions formulated by the candidate, but I want to add three points:

1. Due to the high importance for society and for the individual, the problems surrounding eating behavior, overweight and obesity, including their psychosocial correlates, have been quite intensively studied and the possibility of conducting original research is limited. Petya Pandurova approaches the question by creating a unique *integrative* methodological framework, based on a thorough review of the literature, and builds her research on this basis.

Included are parameters from different levels - social, individual, group, organizational, with which the phenomenon is attacked from different sides and, as a result, the study achieved very good explanatory power of the investigated combination of characteristics.

Second, together with the supervisor, the PhD candidate creates three new questionnaires that operationalize everyday dietary patterns (healthy and unhealthy eating), social support and contextual factors. These are: a) Questionnaire for eating behavior and physical activity (Pandurova & Karabelova, 2022), which includes the *scales healthy eating, unhealthy eating and physical activity*; b) Questionnaire for social support of a healthy lifestyle (Pandurova & Karabelova, 2022) with two scales (*support from family and friends*). The third questionnaire is the most creative - Questionnaire for supporting a healthy lifestyle from the environment (Pandurova & Karabelova, 2022) with scales *support for a healthy lifestyle from the organizational environment* (measures support for healthy eating and physical activity provided by the school or employer), *support for a healthy lifestyle from the physical environment* (factors of the immediate physical environment associated with maintaining

weight within healthy limits - "Near my home there are sports facilities with free access.") and a scale of *policies supporting healthy lifestyles* ("Where I live, I can walk or bike safely", "I can buy healthy and varied food at an affordable price...").

It is noteworthy that the questionnaires and the scales contained in them are very well grounded in the literature and achieved high psychometric characteristics. Tested in the conditions of the Bulgarian cultural context, they give reason to believe that they can work well in other cultural conditions. It is important that the doctoral candidate, together with the supervisor, continue her work on them and make publications in international journals, so that there is visibility of the questionnaires and opportunities for their dissemination.

Third, dependencies between positive emotions and eating behavior are examined. The typical research approach is to focus attention on role of negative emotions in eating behavior, but in the work of Petya Pandurova, considerable attention is also paid to the positive ones, and interesting results were obtained that can strengthen this relatively new line of research.

### **Evaluation of the quality of the scientific works of the doctoral candidate, related to meeting the minimum national requirements for the scientific degree "Doctor" in professional field 3.2 Psychology**

Petya Pandurova submitted 6 scientific publications - one single-authored and five co-authored. The single-authored publication is in a journal published by the renown international publishing house Springer (not included in Scopus or WoS - 10 points). Two of the other publications are articles co-authored with the supervisor in peer-reviewed international conference proceedings (10 items). The PhD candidate has two other joint publications: one with three co-authors in a peer-reviewed collective publication (2.5 items); the other - with two co-authors in a Bulgarian refereed journal (in NACID) (3.33 points). Currently, a new joint study with the research supervisor, accepted for publication, is expected to appear, which brings another 7.5 points.

The minimum national requirements are met (33.3 points).

## CONCLUSION

After having familiarized myself with the presented dissertation work, abstract and other materials, and based on the analysis of their significance and the scientific and scientific-applied contributions contained in them, I confirm that the scientific achievements meet the requirements of ZRASRB and the Regulations for its application and the relevant Regulations of SU "St. Kliment Ohridski" for acquiring the educational and scientific degree "doctor". In particular, the candidate satisfies the minimum national requirements in the professional field and no plagiarism has been found in the submitted dissertation, abstract and scientific works.

I give my positive assessment of the dissertation work.

Based on the above, as a member of the scientific jury, I believe that there is every reason to award the educational and scientific degree "doctor" in professional direction 3.2 Psychology (Health Psychology) to Petya Veskova Pandurova.

July 24, 2023

Prof. Irina Zinovieva, Dr. Sc.