

STATEMENT

given by Prof. Teodora Stoycheva Stoeva, PhD, DSc

concerning the PhD Dissertation of Ivailo Panov

on topic: COMPARATIVE SCANNING METHOD (cSM) CAPABILITIES IN ANALYSIS, VISUALIZATION, AND PSYCHOLOGICAL INTERPRETATION OF EXPERIMENTAL 'PREFERENTIAL CHOICE' DATA

1. Relevance and importance of the problem

The presented dissertation is a thorough and innovative theoretical-experimental study of an insufficiently studied range of problems in contemporary psychology. The author consistently reveals the relevance and significance of this issue in the field of psychometrics and convinces the reader, through the results of the empirical validation he has undertaken, that the psychometric comparative Scanning Method (cSM) is a fully adequate tool for both the analysis of psychological data and their visualization. Theoretically, the relevance of the study is substantiated by the introduction of new concepts, those of uniform idiographic distribution and idiographic distribution "crowding", enabling the definition of individual ideal points in the space of demonstrated preferences. In practical terms, the relevance of the research is convincingly defended by the demonstration of the efficacy of the method not only in the field of psychophysics, but also in the problem areas of personality psychology as well as counseling psychology. I am referring to the experiments he implemented to reveal and visualize the reference zones of the value preferences of the entire sample of subjects, and also the locations of now individual ideal points relative to these reference zones. All this highlights the scientific contribution of the development, its high cognitive and applied value.

2. Scientific and methodological justification of the study

The choice of the topic shows a high awareness and thorough research in the field of the issues treated. Although the comparative Scanning Method is an innovative technology, there are still a certain small number of studies in the field, that is why the historiography of the topic is short. The PhD student draws attention to aspects of the problem that have been poorly addressed in research practice, related to the possibility that the method of comparative scanning may serve as an adequate toolkit for integrating into a unified research model tasks that are both nomothetic and ideographic when dealing with data of type "preferential choice". The integration of nomothetic and idiographic approaches has always been a challenge for the researcher due to their opposite orientation: one aimed at patterns valid for the sample as a whole, the other at establishing characteristics inherent to the individual person under study. I will state here that Ivailo Panov is tackling this challenge successfully, responsibly, and promisingly.

The theoretical design of the study is deployed in the direction of conceptualizing the basic constructs of the dissertation related to the method of comparative scanning, the "choice by preference" as a type of experimental data, the approaches to the analysis of these data: nomothetic and idiographic. Interpreting the main merits of these postulates, Panov reaches

the construction of his own authorial position on the problem, connected with the proposal of an extended conception of the method of comparative scanning, which complements in general the paradigm of psychometrics. The starting point of his research quest became the aspiration to increase the possibilities of interpretation of preferential choice type data, which he realized by introducing the concepts of different types of idiographic distribution: "diffuse" and "clustering", providing and upgrading alternative to direct assessment on Likert scales by indirect assessment through results of application of the discussed method. Not surprisingly, in the theoretical model and in the trajectory thus outlined for the study of "preferential choice" as a multi-component cognitive process, Panov also introduces the key construct of "Reference Stimulus", conceptually related to and with great explanatory potential concerning the individual ideal point in the semantic space of preferences. Undoubtedly, the theoretical model thus constructed extends the psychometric paradigm by introducing new measurable, comparable and interpretable concepts into the theoretical base by defining the types of idiographic distributions of individual ideal points, further developing the concept of actual and seeming causes of similar preferences.

The problem of comparative scanning and its aspects the PhD student conceptualizes, relying on the classical theories of Clyde Coombs and Karl Pearson, reaching its modern projections in the works of researchers such as Gerganov, Petkov, and Molenaar. It can be noted that the development of Panov is a direct continuation of the research efforts of his supervisor, aimed at this issue. Thus, it became part of the creation of a tradition, enriching the experience gained so far, which is an undoubted contribution to science. In this regard, it can be noted that the theoretical and methodological achievements of Bulgarian and foreign scientists are taken into account. The scientific representativeness of the theoretical analysis is evidenced by the fact that the doctoral student has referred to genre diverse 86 publications in Bulgarian, Russian, and English.

3. Research Methodology

Methodologically, the empirical investigation reflects the main objective of the study to present the possibilities of the comparative Scanning Method (cSM) in the analysis, visualization, and interpretation of preferential choice data. Panov's research pursuits are tied to tasks primarily aimed at positioning this method and providing empirical evidence for its adequacy within the general framework of methods for analyzing psychological survey data. The setting of the research, the choice of methodology, the interpretation and analysis of the results are directly related to the task of providing evidence for the reliability and validity of the method of comparative scanning. Overall, the empirical part of the dissertation impresses with the organization and conception of the research design, the logic of the presentation of the elements of the research idea, the conceptualization of the author's model to establish the method as a psychometric tool and as a new direction in the development of psychology. Adequately chosen according to the aim and objectives of the study is the research method, namely the experimental method, defined as the most powerful method of research in all areas of scientific knowledge, assuming an active role of the researcher and qualities such as persistence and consistency.

Twelve experiments in three focal areas have been implemented, the organization and conduct of which are distinguished by precision, which in turn is evidence of the high professional input of the experimental methodology. Statistical processing methods adequate to the experimental procedure and to the data obtained have been chosen, transforming these data into empirical results (t-test, correlation and variance analysis). The obtained results are discussed in depth and richly visualized using tables and figures. These results are novel for this scientific field and represent an indisputable scientific contribution to psychology.

Conclusions are drawn both at a high level of generality: regarding the possibility of the method to expand the paradigm of psychometrics and complement in the field of statistics, and in a specifically applied plan: regarding the wide range of possibilities for individual diagnostics in the field of counseling psychology, e.g. by determining the degree of "moving away" from social norms, which phenomenon can have a destructive impact on the mental functioning of the individual. The implications for the practice of the method lie in the possibility of drawing up elements of individual psychological profiles in a number of fields as counseling psychology, family therapy, criminal investigations, etc.

4. Contributions

The contributions mentioned in the abstract show a real self-assessment of the achievements in the PhD thesis, so I will not comment on them further.

5. Dissertation Abstract

The abstract reflects the main parameters of the topic presented in the theoretical analysis and empirical results. It is formatted according to the accepted rules.

A total of 12 publications on the topic have been submitted: 8 independent and 4 co-authored, which indicates high publication activity and can be considered quite sufficient for the results to become visible to the scientific community.

6. Conclusion

The proposed dissertation contains undoubted contributions of scientific-applied and theoretical-analytical character. In the presented dissertation Ivailo Panov demonstrates skills and competences for the implementation of scientific research activities in compliance with the most stringent requirements of modern scientific methodology. My overall impression of the dissertation is that it is an impeccably constructed study with a sound theoretical foundation, reliable experimental procedure, and evidence-based analyses.

There is evidence and grounds to confidently give a positive evaluation of the proposed dissertation and my vote for the award PhD degree to Ivailo Panov.

The STATEMENT is prepared by: