## SOFIA UNIVERSITY "ST. KLIMENT OHRIDSKI" DEPARTMENT OF PSYCHOLOGY

#### REVIEW

### From Prof. Sonya Karabeliova, PhD, DSc

on the topic of a doctoral thesis:

# "SOCIAL COGNITION AND ALEXITHYMIA IN SEVERE MENTAL DISORDERS"

for the attainment of the educational and scientific degree of 'Doctor' in the field of 3.2 'Psychology' (Clinical Psychology)

#### Author of the doctoral thesis: Julia Arhondis Kamburidis

## 1. Relevance and Significance of the Developed Scientific Problem

The dissertation presented to me for review is dedicated to a relatively new topic in both the field of clinical psychology and the sphere of health psychology in the Bulgarian context. The topic is relevant because alexithymia is relatively underexplored in severe mental disorders, which contributes to a deeper understanding of it. The significance of the issue under investigation is heightened by the fact that the emphasis in the dissertation is on the social cognition of schizophrenia and its relationship with emotional regulation, which reflects on satisfaction and quality of life.

### 2. Understanding of the Problem

The work presents numerous theoretical concepts regarding the analyzed constructs, demonstrating that the doctoral candidate is well-versed in existing perspectives on the developed topic. This is supported by the bibliography of the dissertation, which includes 340 literary sources, 332 of which are in English and 8 in Bulgarian. The in-depth and critical analysis of the theoretical material on the topic demonstrates the candidate's ability to

research, analyze, synthesize, and draw conclusions regarding the key concepts relevant to the work.

## 3. Research Methodology

The methodology used for the empirical research correspond to the aims and objectives of the dissertation. The following scales and questionnaires were used:

- A methodology consisting of 8 computerized tests for investigating affective experiences (Haralanova & Haralanov, 2016),
  - Scale for assessing the sense of threat,
  - Scale for dissatisfaction in neutral social scenes,
- Toronto Alexithymia Scale (TAS-20, Bagby, Parker & Taylor, 1994), Bulgarian version by Popov (2016),
  - Emotion Regulation Questionnaire (ERQ, Gross & John, 2003),
- Scale for negative emotional states associated with depressive symptoms, anxiety, and stress (DASS-21, Lovibond & Lovibond, 1995), adapted and standardized for the Bulgarian socio-cultural context by Karabeliova et al. (Karabeliova et al., 2016),
- Satisfaction with Life Scale (SWLS) by W. Pavot and E. Diener (Pavot & Diener, 1993), adapted for the Bulgarian socio-cultural environment by Ivanova et al. (Ivanova et al., 2013),
- Questionnaire on attitudes towards healthcare professionals (psychologist and psychiatrist) and the effectiveness of their medication treatment, which includes six author-constructed questions.

The carefully selected instrumentation includes gathering data on the sociodemographic characteristics of the participants. This is of crucial importance as socio-demographic data can provide context and shed light on the results of the study, allowing for a better understanding of the interaction between the various factors and constructs being studied. All of this contributes to a reliable and comprehensive assessment of the issue and the achievement of the research goals.

# 4. Characterization and Evaluation of the Dissertation Work and Contributions

The title of the dissertation is precisely formulated and fully corresponds to the researched problems. In a concise manner, it describes the thematic framework of the study. The doctoral candidate has gathered data that are part of the planned research area.

The work is structured into an introduction, theoretical and empirical parts, conclusion, and bibliography.

The conceptualization of each category begins with a historical perspective and continues with an analytical tracing of various theoretical approaches, supported by an analysis of numerous specific studies.

The dissertation is developed within 206 standard pages and comprises an introduction, three main chapters structured from the perspective of theoretical and empirical research on the issue, conclusion, and bibliography. The literature sources used are relevant to the researched problem. Most of them are from the last 10-15 years, which further contributes to the high assessment. The dissertation includes 30 tables and 22 figures.

In the first chapter, a thorough and critical analysis is conducted, systematically organizing the main definitions of the researched objects, the history of schizophrenia as a disease, the clinical picture of the condition, and the diagnostic criteria. The major etiological theories explaining schizophrenia are presented in detail, covering biological, psychological, and integrative perspectives. Significant attention is given to psychoanalytic theories of object relations for the paranoid-schizoid and depressive positions, as well as models of insecure attachment as a risk factor for the onset of schizophrenia in adolescence and the specifics of delusional formation. The contribution of cognitive psychology and psychotherapy to understanding the positive and negative symptoms of schizophrenia is emphasized, supported by genetic vulnerability and the stressful influences of the environment. A section is dedicated to cognitive deficits in the social dysfunction of schizophrenic patients. Contemporary and modern research in neuroscience and neurobiology related to the problematic functioning of metacognition and cognitive insight in the "social brain" are extensively described. Additionally,

modern theories of the "Mind" are presented, shedding light on specific disturbances in early-stage social interactions and mentalization in the premorbid personality.

Furthermore, the doctoral candidate presents numerous contemporary scientific studies on the disruptions in social cognition in schizophrenia. An analysis of the latest research in affective neuroscience and deficits in social cognition in schizophrenia is also conducted, which is compared with disruptions in bipolar and autistic disorders, dementia. The focus is placed on the dimensional approach in affective neuroscience, where specific brain structures, hormonal influences, and neural circuits are linked to various emotional states, their regulation, or disruptions in schizophrenia. This paragraph extensively cites contemporary studies by Bulgarian and foreign authors. All of this demonstrates the progress in uncovering the causes and mechanisms of the onset and progression of emotional disorders in psychosis, as well as the unresolved questions and goals for the future. It is precisely this area that is linked to the goal of the scientific research in the dissertation.

In a separate paragraph, the doctoral candidate accurately describes the objectives of the empirical study, based on a rich overview of the emergence and unfolding of alexithymia, its psychological, neuroanatomical, and neuropsychological descriptions. Additionally, the impact of early psychotrauma in development, the integration of alexithymia into psychosomatics and endogenous mental illnesses, viewed from the perspective of differences between schools and authors, provides further justification for the research purpose. Main scales for studying alexithymia are extensively presented. The construct is examined in the context of schizophrenia and the relationship between alexithymia, social cognition, and schizophrenia.

The detailed review presented supports the ideas of the doctoral candidate, upon which the theoretical and empirical model of the study is built. In this sense, it can be said that this provides the opportunity to derive a theoretical framework from key concepts, the relationship between which is thoroughly discussed.

The literature review content aligns with the research theme and presents perspectives on the essence of the analyzed concepts and the reported results in the literature regarding their interrelationships. The chosen structure of the exposition demonstrates a detailed and in-depth understanding of the topic.

The empirical part of the dissertation is conditionally divided into two chapters. The second chapter of the dissertation presents the setup, organization of the empirical study, and the rationale for the theoretical model of the research. Here, the aim, objectives, hypotheses, and methods of the dissertation are included. The aim and objectives are clearly formulated. Five main hypotheses are raised regarding the relationships between the analyzed constructs.

The doctoral candidate has approached the resolution of the set tasks with scientific rigor, selecting an appropriate approach. The goals and objectives set in the study, as well as the nature of the assumed dependencies between the constructs under investigation, determine the statistical methods applied in data processing. These methods include descriptive and deductive statistical techniques used to establish the variation of the phenomena studied among different respondents and their relationships.

In this section of the dissertation, the questionnaires and scales used for the empirical investigation are accurately described, along with the methodology and procedure of the study. A separate paragraph presents the pilot and main study, detailing the samples and instrumentation. Additionally, the psychometric properties of the questionnaires and scales are thoroughly presented based on the results of factor analyses and tests for internal consistency. Furthermore, for the purposes of comparative analyses, independent samples t-tests, correlation analysis, and regression analysis have been applied.

In the third chapter of the dissertation, the results of the empirical investigation are presented, showing differences in the studied constructs depending on the demographic characteristics examined, as well as the relationships between the phenomena. Factor analyses are described in detail, conducted in addition to the Bulgarian standardization of the scale for alexithymia and the differences from Popov's studies during the

standardization of the test. A structural organization of the questionnaire for emotion regulation strategies is also outlined. Descriptive and inferential statistics for the experimental and control groups are presented in a separate paragraph regarding subjective emotional experiences, scales for neutral social scenes, and perceptions of threat. Additionally, significant differences between patients and healthy controls are presented based on gender, perception of threat, dissatisfaction ratings, levels of alexithymia, and emotion regulation strategies. Furthermore, the relationships between the individual constructs and differences in attitudes toward health services provided by specialists are accurately described.

It is important to note that the results of the applied statistical analyses are described accurately and at a high professional level. The presented tabular and graphical material is of good quality and highly useful.

In a separate paragraph in the third chapter, a presentation and summary of the obtained results are made, with detailed discussion on the verification of the hypotheses raised. Additionally, the application of the obtained results to practice is discussed, emphasizing the need to consider the results in ongoing therapeutic work. At the same time, specific therapeutic techniques for psychotherapeutic work with these disorders are recommended.

The positive evaluation of the obtained results can be recognized through the following analyses and summaries of the conducted study:

- a. Appropriate questionnaires and scales have been selected, whose psychometric characteristics meet the research standards. Some of the methodologies are applied for the first time in the Bulgarian socio-cultural context.
- b. The empirical approach provides data for establishing causal relationships and dependencies, allowing hypotheses to be tested with high reliability.
- c. I believe that the summaries and comparative analyses with data from other studies are adequate and have specific practical applicability in consultancy practice.

In the conclusion of the dissertation, the main results are briefly summarized, discussing their application in consulting practice. Suggestions are made for future research to expand the study in the direction of how patients perceive neutral social stimuli and other parameters of social cognition. The limitations of the Toronto Alexithymia Scale are accurately identified, as well as the need to distinguish subgroups of patients with negative and positive symptoms. Furthermore, it is recommended to conduct more in-depth future research on the relationship between alexithymia and depression. Specific recommendations are also given to psychotherapists and clinical psychologists for their work with patients with schizophrenia when specific manifestations of alexithymia in the social context are diagnosed.

The main contribution of the dissertation is the in-depth critical and comparative analysis of the obtained data with similar studies. The conclusions drawn are relevant to the objectives and objectively reflect the results of the study. They demonstrate Julia Kamburidis's competence to analyze and interpret results from empirical research and to draw conclusions for practice. All of this is an indicator of a profound research interest in the addressed issues.

The contributions are clearly formulated and well-supported with arguments, objectively reflecting the achievements of the dissertation. The presented contributions could be further expanded in terms of practical applicability of the overall development.

#### 5. Critical Remarks

My critical remarks are mainly technical in nature and do not diminish the significance of the dissertation research.

### 6. Abstract

I believe that the abstract reflects the main parameters of the topic, presenting both theoretical analyses and experimental results. The text fully meets the requirements.

Julia Kamburidis presents 3 publications in scientific journals, 5 reports, and 2 posters at international scientific conferences.

7. Recommendations

My recommendations to the doctoral candidate involve continuing and

deepening the research. Based on the obtained results, I suggest creating a

handbook for the used instruments, which could serve as a quick screening

and diagnostic tool in the work of specialists.

**CONCLUSION** 

Julia Kamburidis's dissertation work represents a comprehensive and

in-depth study of a current scientific topic, with the obtained results having

potential applications in consultancy practice. The dissertation and its related

publications meet the requirements and bibliometric criteria of the Law on

Academic Staff Development in the Republic of Bulgaria and the Regulation

for its implementation for awarding the educational and scientific degree of

"Doctor."

Considering the relevance of the dissertation's topic, the in-depth

theoretical analysis of the research data, and the successfully conducted

study, I confidently give my positive evaluation and recommend that the

members of the Academic Jury vote positively for awarding the educational

and scientific degree of "Doctor" to Julia Arhondis Kamburidis in the

professional field 3.2. Psychology (Cloinical Psychology).

07/05/2024

Reviewer:

Sofia

(Prof. Sonya Karabeliova, PhD, DSc)