

JURY'S MEMBER OPINION

by DSc. Manol Nikolov Manolov – Associate Professor, Paisii Hilendarski University

of a dissertation for the award of educational and scientific degree "**doctor**"

in field of higher education 3. Social, economic and legal sciences,

professional field 3.2. *Psychology*

doctoral program *Educational and developmental psychology*

Author: *Antonia Georgieva Traykova*

Title: *AGGRESSION AND ANXIETY IN ADOLESCENTS WITH PROBLEMFUL INTERNET USE*

Scientific supervisor: *prof. Kirilka Simeonova Tagareva, PhD, Paisii Hilendarski, University of Plovdiv*

1. General presentation of the procedure and the doctoral student

With Order ПД-22-1495 from 23 June 2025 of the Rector of Plovdiv University "Paisii Hilendarski" (PU) I have been appointed as a member of the scientific jury for ensuring a procedure for the defense of a dissertation on the topic of Research on the AGGRESSION AND ANXIETY IN ADOLESCENTS WITH PROBLEMFUL INTERNET USE for the acquisition of the educational and scientific degree "doctor" in the field of higher education 3. Social, economic and legal sciences, professional field: 3.2. Psychology, doctoral program Educational and developmental psychology. The author of the dissertation is Antonia Georgieva Traykova - **PhD** student at the Department of Psychology with scientific supervisor **prof. Kirilka Tagareva**, PhD from the University of Paisii Hilendarski.

Antonia Georgieva Traykova possesses diverse qualifications that combine pedagogy, law, and psychology. Between 1991 and 1995, she obtained a master's degree in Primary Pedagogy at Plovdiv University "Paisii Hilendarski." From 2002 to 2007, she completed a master's degree in law at Veliko Tarnovo University "St. St. Cyril and Methodius," acquiring legal capacity from the Ministry of Justice. In the period 2017–2019, she further enriched her professional profile by earning a master's degree in applied psychology at Plovdiv University "Paisii Hilendarski."

Her professional path has passed through various fields—ranging from commerce and law to administrative and pedagogical positions. Since 2018, Antonia Traykova has dedicated her professional focus entirely to psychology and work with children and adolescents. She served as a school psychologist at Secondary School "Dimitar Matevski" in Plovdiv (2019–2023), as a psychologist at the private school "Talantite" (2018–2019), and, since 2024, she has been working as a psychologist

at the kindergarten “Svetla” in Plovdiv. In her professional practice, she has gained rich experience in counselling and supporting children at risk, students with special educational needs, as well as in the prevention of emotional and behavioral difficulties.

The doctoral candidate demonstrates active research activity directly connected with the topic of her dissertation. In 2022, she published an article in the journal *Doctoral Research* on the theme “Exploring Optimism in Child Athletes with High Sports Achievements and Child Athletes Experiencing Sports Injuries.” In the same year, she presented a paper at a scientific forum dedicated to aggression in middle school children. In 2023, she took part with her own paper at a student scientific forum at Plovdiv University on the topic “Problematic Internet Use among Teenagers.”

2. Relevance of the topic and actuality

The doctoral dissertation is dedicated to a highly relevant issue, addressing the relationships between aggression, anxiety, and problematic internet use among adolescents. The topic fits within contemporary directions in psychology and educational sciences, which explore the mental health of young people in the context of a digital society. Its scientific relevance is linked to the fact that aggression and anxiety are established as key predictors of psychosocial difficulties in adolescence, while problematic internet behavior emerges as a new form of behavioral addiction that threatens psychological well-being and social adaptation.

The scientific and applied significance of the problem relates to its practical consequences for both the school and the family environment. The growing prevalence of anxiety disorders, along with reported cases of cyberbullying and excessive digital engagement, highlights the urgent need for empirical studies and intervention strategies.

On a socio-practical level, the topic is of exceptional importance because it directly concerns children and adolescents—a vulnerable group in the process of personal and social development.

Thus, the relevance of the dissertation can be considered simultaneously on three levels: scientific, as a contribution to the advancement of psychology on aggression, anxiety, and internet addiction; scientific-applied, as a foundation for intervention programs and strategies for working with adolescents; and socio-practical, by providing support to the school community and families in addressing some of the most pressing problems of the digital generation.

3. Knowing the problem

It is evident from the dissertation that the author possesses an in-depth knowledge of the state of the problem, presenting a systematic theoretical overview of aggression, anxiety, and problematic internet use in adolescence. She discusses both classical concepts (Freud, Lorenz, Bandura, Eysenck, Dollard & Miller) and contemporary studies and authors from Bulgarian and international literature (Stamatov, Kriviradeva, Ivanova, Boncheva, Crick & Dodge, Berkowitz, among others).

In this sense, the dissertation demonstrates the ability to trace the development of the conceptual framework in a historical perspective and to highlight contemporary trends in the analysis of these phenomena.

Antonia Traykova does not limit herself to a mechanical presentation of different theories but compares them and places them in context. For example, in her discussion of aggression she juxtaposes the psychoanalytic and cognitive-behavioral approaches, emphasizing their differences in terms of the role of inner instinctual drives versus social learning. A similar analytical perspective is found in her examination of anxiety—ranging from classical psychodynamic explanations to contemporary clinical categories in DSM-5 and ICD-10.

The doctoral candidate also manages to highlight the gaps in Bulgarian literature, where research on the interrelations between aggression, anxiety, and internet use remains scarce, and she positions her own study precisely within this space. This demonstrates a creative engagement with the literature, in which it is not merely reproduced but employed to outline new directions for research.

4. Research methodology

The methodological design is well justified and consistent with the aims and objectives of the study. The doctoral candidate clearly defines the subject of the research - the relationships between aggression, anxiety, and problematic internet use among adolescents - and formulates specific hypotheses aimed at identifying regularities and profiling the examined individuals.

The instruments used include standardized and widely recognized psychodiagnostic methods for measuring anxiety, aggression, and internet behavior. This approach ensures the reliability and validity of the results, as it relies on scales and questionnaires that are well established in scientific practice. The operationalization of the core concepts further provides precision in interpretation and comparability of the data.

The applied statistical analyses - psychometric analysis, factor analysis, correlation and regression analysis, as well as cluster analysis—are appropriate and correspond to the stated objectives. Thanks to these, the author succeeds in identifying different profiles among the adolescents studied, which directly fulfills the central aim of the dissertation. The inclusion of cluster analysis is a particularly suitable choice, as it allows the empirical delineation of meaningful groups with different combinations of anxiety, aggression, and internet behavior - something that would not have been possible with descriptive statistics alone.

The methodology is selected in such a way as to encompass not only the measurement of the individual phenomena but also their interactions. In this way, it adequately addresses the research questions posed and allows the conclusions to have both theoretical significance and practical applicability.

5. Characterization and evaluation of the dissertation work and contributions

The dissertation is clearly structured and logically consistent, comprising a theoretical overview, a methodological design, and an empirical analysis of the results. In the theoretical section, the author demonstrates knowledge of both classical and contemporary concepts of aggression, anxiety, and internet addiction, critically presenting various perspectives (psychoanalytic, cognitive-behavioral, social learning, biological, etc.).

The empirical part was carried out with a sample of 399 adolescents from different high schools in Plovdiv, thereby ensuring the social and cultural heterogeneity of the data. Standardized instruments were used - *The Revised Children's Manifest Anxiety Scale* (RCMAS, adapted by Kalchev), *The Multidimensional Aggression Scale* (MSA, Kalchev) - along with an author-designed questionnaire on internet behavior. This combination of established psychometric tools with an innovative instrument provides both reliability and originality in the analysis of problematic internet behavior.

In analyzing the results, the author applies an appropriate statistical apparatus - correlation and regression analysis as well as cluster analysis. The latter allows for the delineation of different profiles among the adolescents, depending on their levels of aggression, anxiety, and internet behavior.

Among the main scientific achievements and contributions of the dissertation, the following can be highlighted:

- Formulation and substantiation of a new research problem - the interaction between aggression, anxiety, and internet behavior in adolescence, examined within an integrative framework. While these phenomena have been studied individually, their systematic correlation within a single model is novel for Bulgarian scientific practice.
- Creation of an author-designed tool for measuring internet behavior, based on international concepts of behavioral addictions and adapted to the Bulgarian school context.
- Empirical confirmation of the links between aggression, anxiety, and problematic internet use, including the identification of distinct clusters of students who display specific profiles of risk behavior.
- Enrichment of scientific literature with new findings, revealing specific characteristics of adolescents in the Bulgarian context - particularly in relation to social anxiety, cyber-aggression, and the comorbidity between anxiety symptoms and internet behavior patterns.
- Scientific-applied contributions - the results of the study can be implemented in the work of school psychologists, pedagogical counselors, and teachers through programs aimed at preventing internet addiction, reducing aggressive behavior, and supporting anxious students. The practical value of the dissertation is further enhanced by the proposed recommendations for interventions in school and family settings.

The significance of the dissertation can be assessed at several levels. On a scientific level, it expands knowledge of the interaction between three key psychological constructs in adolescence and offers a conceptual framework that can be further developed in future research. On an applied level,

it provides concrete data and methodological approaches useful for school practice and for the development of policies in the field of child and adolescent mental health.

6. Assessment of the doctoral student's publications and personal contribution

The candidate Antonia Georgieva Traykova has demonstrated active scientific engagement while preparing her dissertation. Her publications meet the required minimum. She has published an article in the journal *Doctoral Research* (2022), dedicated to optimism in child athletes, as well as two papers presented at scientific forums—one on aggression among middle school students (2022) and another on problematic internet use in adolescence (2023). These publications are directly related to the dissertation topic and reflect the consistent development of her scientific interests.

Her personal contribution lies in the creation of an author-designed questionnaire on internet behavior, the application of an integrative approach to studying the interrelations between aggression, anxiety, and internet use, as well as the empirical delineation of specific adolescent profiles through cluster analysis. These achievements demonstrate independent work, analytical capacity, and an orientation toward practically applicable results.

7. Autor's abstract

The abstract of Antonia Georgieva Traykova has been prepared in accordance with the requirements of Plovdiv University “Paisii Hilendarski” and the applicable regulations for the preparation of materials for the defense of a doctoral degree. The document contains all the mandatory elements—introduction, characterization of the research problem, formulation of aims, objectives and hypotheses, presentation of the methodological design, summary of results, scientific and applied contributions, as well as a bibliographic reference list.

The content of the abstract accurately reflects the structure and logic of the dissertation, presenting in a concise form the main results of the theoretical review, the empirical study, and the derived conclusions. An academic style has been employed, ensuring clarity and consistency. Particularly important is the emphasis on the contributions—both scientific and practical—including the creation of an original tool for studying internet behavior and the identification of specific adolescent profiles through statistical analysis.

The abstract demonstrates the ability to produce an analytical summary that balances sufficient detail with synthesis. In this way, it fulfills its purpose - to present, in an accessible yet scientifically rigorous manner, the results and significance of the dissertation to the academic community.

8. Recommendations for future use of the dissertation contributions and results

The scientific and theoretical conclusions can be further developed through large-scale studies at the national level, involving broader and more diverse samples of adolescents. This would allow for a more in-depth validation of the identified interrelations between aggression, anxiety, and problematic internet use, as well as the refinement of the author-designed questionnaire through standardization and psychometric improvement.

In practical and applied terms, the contributions of the dissertation should be reflected in the development of preventive programs in the school environment. School psychologists, pedagogical counselors, and teachers can use the empirically established profiles of students with different levels of anxiety, aggression, and internet behavior for targeted interventions. Particularly useful would be programs that integrate techniques for self-regulation, social-emotional learning, and digital hygiene.

The results can also be implemented in the training of psychology and pedagogy professionals through their inclusion in academic courses and workshops related to the mental health of children and adolescents in a digital environment. They may also support the development of policies for digital literacy and the prevention of internet addiction among young people.

A further perspective for application lies in the creation of multidisciplinary programs bringing together psychologists, educators, and IT specialists to develop digital resources (mobile applications, training modules) aimed at preventing risky internet behavior.

CONCLUSION

The PhD dissertation contains scientific and applied contributions that represent an original input to the field of science and fully comply with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), its Regulations for Implementation, and the corresponding Regulations of Plovdiv University “Paisii Hilendarski.”

The dissertation demonstrates that the candidate, Antonia Georgieva Traykova, possesses the necessary theoretical knowledge and professional competencies, and shows the qualities and skills required for carrying out independent scientific research.

For the reasons outlined above, I confidently give my positive evaluation of the conducted research. I propose to the esteemed academic jury to award the educational and scientific degree of Doctor to Antonia Georgieva Traykova in the field of higher education: 3. Social, Economic, and Legal Sciences; professional field 3.2. Psychology; scientific specialty, Doctoral Program in Educational and Developmental Psychology.

2025, 31 August

Prepared the opinion:

assoc. prof. Manol Manolov, PhD