ANNOTATION

of the dissertation submitted for the degree of Doctor of Philosophy (PhD) in the specialty "8D03107 – Psychology" by Lyazzat Limasheva
Topic: "Studying the stress level and resilience of students in conditions of excessive use of mobile communications"

Relevance of the Research Problem. Mobile phones are among the most widely used digital devices that constantly accompany us. The convenience provided by smartphones is undeniable, yet this very convenience generates dependence among many users, leading to excessive use. A number of authors in the psychology of addictive behavior describe this phenomenon as "nomophobia" or smartphone addiction (from the English term nomophobia – no mobile-phone phobia), meaning the fear of being without a mobile phone or being far from it. This refers to a state of anxiety or even panic experienced by a person who, for various reasons, loses access to their smartphone (A.L. King, A.M. Valenca, A.E. Nardi).

Numerous modern studies worldwide demonstrate that excessive use of smartphones has negative effects on many important aspects of life. Of particular concern is the increase in excessive smartphone use among students in Kazakhstan, which adversely affects their physical and psychological well-being. Students who constantly focus their attention on smartphones experience decreased academic performance, lower learning productivity, and deterioration in interpersonal relationships.

Purpose of the Research.

The aim of this study is to identify the nature of the relationship between chronic stress, resilience, and excessive mobile phone use in order to develop early diagnostics for detecting risk groups of students prone to excessive smartphone use.

To achieve this goal, the following tasks were set:

• Conduct a theoretical analysis of studies on excessive mobile phone use and factors that contribute to or prevent its development in student age.

• Analyze the consequences of excessive mobile phone use in student age for students' mental health.

• Reveal the phenomena of chronic stress and resilience as psychological risk and protective factors influencing the tendency toward excessive smartphone use.

• Conduct an empirical study of students' stress and resilience indicators and their relationship with indicators of excessive smartphone use.

• Interpret and generalize the research results. Develop the foundations for early diagnostics of risk groups of students prone to excessive

smartphone use and justify the need for regulating smartphone use during university educational processes.

General and Specific Hypotheses.

The general hypothesis assumes that there is a relationship between chronic stress levels, resilience indicators, and the tendency toward excessive smartphone use, which makes it possible to create early diagnostics for identifying at-risk student groups based on their social and psychological characteristics. It was detailed in the following specific hypotheses:

– The higher the overall level of chronic stress or its individual indicators, the stronger the tendency toward excessive smartphone use among students.

– The higher the level of students' resilience or its indicators, the lower the tendency toward excessive smartphone use.

– Gender and academic profile significantly influence the degree of inclination toward excessive smartphone use: female students are likely to show a higher tendency, while students in technical fields are expected to show a lower tendency.

– Based on the developed interview questionnaire, it is possible to identify risk groups of students prone to excessive smartphone use.

Theoretical and Methodological Framework.

The research is based on scientific concepts linking excessive smartphone use with personal and social characteristics of students through major theoretical frameworks: theories of stress (R.S. Lazarus, H. Schröder & K. Reschke, S. Sendatzki & K. Rathmann), theories of resilience (Fergus S. & Zimmerman M.A., Garmezy A. & Masten N., A. Antonovsky), and theories of excessive smartphone use (Billieux J., Yang K., Graben K., Sheinov V.P.).

A salutogenic approach was applied, considering pathogenic (risk) factors (chronic stress, high neuroticism, loneliness) and protective factors (resilience, agreeableness, conscientiousness), as well as gender differences and academic profile (humanities vs. technical fields).

The dissertation is grounded in modern international and domestic theoretical and empirical studies, which helped identify specifics of how excessive smartphone use interacts with chronic stress, resilience, and a number of personal and social characteristics of students.

Participants.

The study involved 174 students, including 102 female and 72 male participants. The average age was 18.67 ± 0.648 months. Among females: 18.58 ± 0.567; among males: 18.93 ± 0.808.

Students represented both humanities and technical academic profiles.

All students used mobile phones, most frequently iPhones and Redmi smartphones (83.2%). Only 29 students (16.8%) used basic Samsung devices.

Life without a mobile phone was unimaginable for 11 students (6.4%); 45 students (26%) found it almost impossible; 91 students (52.6%) reported they could imagine life without a phone but with significant difficulties; and only 26 students (15%) stated they could easily imagine life without a phone.

Thus, the sample included diverse groups with different perceptions of life without mobile phones.

The study was conducted offline throughout 2024.

Theoretical Significance.

A detailed analytical review was conducted on the relationship between excessive smartphone use and students' personal and socio-psychological characteristics, as well as the negative consequences for their physical and mental health.

For the first time in Kazakhstani psychology, the concept of excessive smartphone use was thoroughly analyzed and differentiated. Additionally, the research introduced new empirical data on stress psychology in the context of mobile communication, addressing issues such as loss of control and concepts related to smartphone overuse, such as nomophobia and mobile phone addiction.

Theoretical criteria for early diagnostics of excessive smartphone use were developed, taking into account chronic stress, resilience level, socio-psychological, and personal characteristics.

These findings can guide future research and inform the use of the developed interview questionnaire.

Practical Significance.

A special interview questionnaire for early diagnostics of students at risk of excessive smartphone use was developed. A new international psychodiagnostic toolkit for diagnosing excessive smartphone use was piloted in Russian (Kazakh adaptation planned). The findings can support cross-cultural studies in Kazakhstan and form the basis for prevention of excessive smartphone use among students.

The results can be used by university psychological services, advisors, and curators in designing interventions aimed at minimizing excessive smartphone use.

The dissertation materials may be used in courses such as “Psychology of Stress,” “Health Psychology,” and “Personality Psychology in Digital Environments.”

Overall, the results may support the development of a safe digital environment for Kazakhstani students and inform student well-being programs and preventive efforts throughout university education.

Scientific Novelty.

For the first time in Kazakhstan, the problem of students’ tendency toward excessive smartphone use is studied through a salutogenic lens—chronic stress as a risk factor and resilience as a protective factor.

1. The problem of excessive smartphone use among students is studied comprehensively, considering stress, resilience, gender, and academic profile, providing a basis for identifying risk groups and developing university regulations for smartphone use.

2. A comprehensive psychodiagnostic toolkit was developed, covering various aspects of excessive smartphone use—from clinical manifestations to integrated indicators. The TMD brief test and MPPUS-27 scale were translated and adapted into Russian (Kazakh planned).

3. A latent factor structure was revealed, showing key characteristics of the relationship between chronic stress and excessive smartphone use, highlighting obligation failure, negative impact on other activities, withdrawal symptoms, and loss of control.

4. Resilience was found to have no significant protective effect, emphasizing the need to identify other protective factors.

5. Key pathogenic predictors of excessive smartphone use were identified: loneliness, high neuroticism, low agreeableness, low conscientiousness, and low extraversion.

6. An author-developed interview questionnaire was created, defining key criteria for identifying risk groups.

Theses for Defense:

1. The developed theoretical and empirical foundations synthesize a broad range of concepts from personality psychology, health psychology, and stress psychology, revealing the protective or pathogenic role of stress and resilience under excessive smartphone use.

2. Identifying at-risk students requires considering chronic stress indicators such as loss of control and emotionally intense negative themes. Loneliness, neuroticism, and low agreeableness, conscientiousness, and extraversion are significant pathogenic predictors. Resilience does not significantly reduce excessive smartphone use.

3. The author-designed questionnaire identifies risk groups based on criteria including: (a) frequency and importance of phone functions (internet and camera); (b) inability to imagine life without a phone; (c) keeping the phone close at night; (d) strong negative emotions when losing access; (e) lack of awareness/ignorance of health risks; (f) individualized use patterns; (g) the importance of phone cost/appearance.

Structure of the Dissertation.

The dissertation consists of 185 pages and includes an introduction, three chapters, a conclusion, a list of references, and appendices. It contains 46 tables and 34 pictures and is supplemented with appendices.