



IRSTI 15.81.70

Scientific article

<https://doi.org/10.32523/3080-1893-2025-152-3-25-38>

Stress tolerance and resilience as prerequisites for maintaining the health of contemporary university students

L.A. Limasheva*¹, S.K. Berdibayeva², U. Zhamirova³, R. Kerimbayeva⁴, A.O. Spatay⁵

^{1,2}Al-Farabi Kazakh National University, Almaty, Kazakhstan

^{3,4}Taraz Regional University named after M.Kh. Dulaty, Taraz, Kazakhstan

⁵Central Asian Innovation University, Shymkent, Kazakhstan

(E-mail: ¹lyazzat.limasheva@mail.ru, ²berdybaeva_sveta@mail.ru, ³zhamirova_1978@mail.ru, ⁴risti1971@mail.ru, ⁵spatay.aygul@mail.ru)

Corresponding author: ¹lyazzat.limasheva@mail.ru

Abstract: This study examined the levels of stress and resilience among university students in the context of excessive mobile phone use. For the first time within this research framework, attention is drawn to the adverse consequences of overuse of mobile phones for students' emotional well-being, namely elevated levels of chronic stress and diminished resilience. The primary objective was to explore the qualitative and quantitative relationship between chronic stress, resilience, and excessive mobile phone use among students, with the aim of developing a comprehensive socio-psychological support model for students at risk of nomophobia. The significance of this study lies in its identification of measurable changes in stress levels and resilience indicators among students subjected to high levels of mobile phone use. To assess chronic stress, resilience, and excessive phone use, the following standardized instruments were employed: The Leipzig Screening Questionnaire on Chronic Stress (LKCS) (Reschke, K. & Schröder, H., adapted by Garber A., Karapetyan L. 1996), which diagnoses seven indicators of chronic stress as well as an integrated score. These include loss of control, loss of meaning, difficulties in regulating negative emotions and feelings, sleep disturbances, inability to relax, emotionally distressing themes, and insufficient emotional support from the social environment. A total of 176 students. The participants were aged between 18 and 19 years.

Key words: stress, resilience, physical health, mental health.

Introduction

The concept of stress is multifaceted and polysemous. Since the late 1960s, researchers have increasingly focused on examining the symptoms of stress, its underlying causes and consequences, as well as the capacity to manage stress—that is, the ability to respond appropriately to the

Received: 30.04.2025; Revised: 13.05.2025; Approved: 15.08.2025; Available online: 29.09.2025

*the corresponding author

demands of a stressful situation. In his theoretical framework, (Hans Selye, 1974) emphasizes the physiological dimensions of stress, viewing it primarily as an adaptive bodily response. According to his General Adaptation Syndrome (GAS) model, the organism's response is a genetically predetermined pattern that is triggered regardless of the nature of the stimulus. This response, however, varies depending on individual characteristics, as each person possesses a unique threshold of resistance.

In the conceptual framework proposed by (W. Hacker and P. Richter, 2008), stress is examined as a stimulus, emphasizing its emergence in response to various stress-inducing factors (or tension-inducing factors) encountered both in everyday environments and during critical life events. A similar perspective is observed in the theoretical approach developed by (S.-H. Filipp, 2005), where stress is analyzed through the lens of environmental and situational demands.

A synthesis of these two perspectives is reflected in the model introduced by (W. Rohmert and J. Rutenfranz, 1995), which describes stress as the psychological strain resulting from external demands. This model draws attention to the adaptive mechanisms individuals employ to cope with a constantly changing environment.

(Schumacher J, Reschke K. and Schröder H, 1990), in their conceptualization of stress, argue that strain itself refers to external demands and environmental influences, whereas an individual's reaction-whether physical or psychological-depends on their personal traits and coping resources.

(Baizhumanova B, Berdibayeva S., 2024) and other authors suggest that the psychological health of a person belongs to one of the most complex sections of psychological science. Currently, there is no generally accepted understanding and definition of the "psychological health of a person" phenomenon.

According to (Lazarus, R. S, 1981), stress emerges when there is a discrepancy between external demands and individual performance capacity, especially when the demands exceed available coping mechanisms. (Garmezy N, 1991) further characterize such stressful situations as being accompanied by negative emotional responses and a persistent sense of psychological tension, which are typically perceived as discomfort resulting from a negative appraisal of the situation.

Let us now examine the concept of stress in greater detail within the framework of health psychology. In their work, (K. Reschke and Garber A., 2018) conceptualize stress as a mediator between health and illness. According to (H. Schröder, 2016), stress is understood as a response of the human organism that arises when the satisfaction of basic needs-both physiological and psychological-is perceived as being under threat.

For instance, at the physiological level, this may involve the need for sufficient food intake, while at the psychological level, the focus lies on environmental satisfaction, opportunities for self-regulation, self-actualization, and social integration. Stress manifests as a psychobiological response, which emerges from the interaction between environmental conditions and individual resources. These conditions include the demands placed on the individual, the resources available to meet those demands, and the individual's needs, motives, and values.

In the immediate aftermath of a stressful event, individuals typically experience an acute stress reaction, which may include components that support personal development and adaptive coping. However, if the stress-inducing situation remains unresolved, the tension and perceived burden of the problem may increase over time, eventually resulting in the development of chronic stress.

Methodology

Object of the study:

The phenomena of stress and resilience among contemporary university students in the context of excessive mobile phone use.

Subject of the study:

Quantitative and qualitative changes in stress levels and resilience indicators among students under conditions of excessive mobile phone use.

Research Objectives:

1. To conduct an empirical investigation into the indicators of stress and resilience among students and to examine their relationship with measures of excessive mobile phone use.
2. To explore the phenomena of chronic stress and low resilience as psychological characteristics that may influence students' susceptibility to addictive behaviors and, more broadly, contribute to the disruption of mental well-being.

Research Hypothesis

The central hypothesis of the present study posits that higher levels of chronic stress, whether overall or in specific dimensions, are associated with an increased tendency toward excessive mobile phone use among university students.

Behavioral regulation under conditions of stress is conceptualized as a function of psychobiologic regulation—an adaptive form of response and behavior that emerges in critically challenging situations. This theoretical approach calls for further specification of the genetic, somatic, psychological, and social mechanisms underlying stressful events and their associated effects, with the aim of advancing the understanding of the effectiveness of human self-regulatory functioning. Such an approach represents a promising direction for future research into the psychophysical stability of individuals along the health-illness continuum.

Moreover, the stress construct has shown particular relevance in terms of its practical applicability. This is reflected in two key conceptual developments: first, the recognition of stress as a mediator between health and illness, and second, the reflection on regulatory activity during stressful experiences. To date, comparisons of the negative consequences of psychological overload have often resulted in the conceptual equation of stress with related human states such as fatigue, monotony, frustration, and overstimulation. Coping strategies for psychological strain—depending on its qualitative and quantitative characteristics—are summarized in Table 1 (Schröder, 2016).

When considered through the lens of the core principles of stress theory, its scope of application proves to be significantly broader. This conceptual framework encompasses the entire spectrum of psychophysiological behavioral regulation and offers a valuable interdisciplinary bridge that integrates both theoretical constructs and practical applications.

Recent and relevant advances in medicine, genetics, and psychology can be viewed as integral components of a hierarchically structured bio-psycho-social system of human functioning. These developments include:

- Inflammatory processes at the cellular level resulting from stress, transmitted through endocrine responses within the body, and extending to stress-induced societal development factors;

– Genetic alterations occurring during embryonic development as a consequence of stress, as well as pathological changes in brain structure and the emergence of chronic diseases.

This comprehensive understanding of stress as a multidimensional phenomenon enables the formulation of preventive and health-promoting measures that target various levels of human functioning-from cellular mechanisms to societal dynamics.

Table 1

Coping Strategies for Psychological Strain According to H. Schröder

Forms of mental stress	Methods of overcoming and forms of rest
Overwork "I feel tired and drained"	Replenish energy Passive rest, rest breaks, watching interesting TV shows, reading, sleeping, walking, sauna
Monotony "I'm bored"	Interesting, a breathtaking activity Reading interesting literature, strategy games, internet, solving riddles, sports, gardening, going out
Frustration "I feel hurt, personally affected and limited in my actions."	Nice, pastime, self-indulgence Go out for lunch, do some shopping, "allow yourself to buy something", communicate with loved ones, go to the sauna, get a manicure
Satiation "I don't want anything, it's all the same "	Change of activity Take a break from work and from socializing with people, go on vacation, travel alone, find an interesting activity
Stress "I feel tense, oppressed by the great busyness without any respite"	Working on a solution Problems Reduce external stimuli, talk to good friends, practice muscle relaxation, use psychological, physical and social resources, think through an action plan

Meanwhile, the previously assumed predominant role of traditional risk factors-such as poor nutrition and physical inactivity-in the development of myocardial infarction, arteriosclerosis, obesity, type 2 diabetes, and stroke is increasingly being questioned. Emerging evidence suggests that chronic stress, often referred to as "toxic stress," may play a central role by triggering inflammatory processes in the body as a consequence of its prolonged impact. Whereas earlier studies primarily revealed correlational relationships between stress load and the presence of somatic diseases, recent research highlights causal chains that indicate stress as a primary etiological factor. Acknowledging the role of stress as a mediator between health and illness-both in the fields of healthcare and psychological counseling/psychotherapy-offers promising avenues for the preservation of health in future generations. Moreover, it contributes to the development of both a theoretical framework and practical approaches to addressing the challenge of stress management.

The outlined process can thus be interpreted as a pronounced mismatch between increasing demands placed upon the individual and their available coping strategies, which ultimately leads to adverse health outcomes. In this regard, the World Health Organization (WHO) has identified stress as one of the greatest threats to human health in the 21st century. It is projected that by the year 2020, every second medical leave will be associated with stress-related conditions.

Recent advancements in somatic pathology, particularly concerning microprocesses and morphological changes resulting from chronic stress, go far beyond the scope of mental disorders and bring major civilization-related diseases into sharp focus.

Let us briefly consider the distinctions between resilience, hardiness, and coping behavior. To be resilient does not imply immunity to stress or psychological strain. As noted by the American Psychological Association, resilient individuals also experience stress; however, they tend to cope more effectively and constructively with major life challenges.

Resilience should not be equated with hardiness or the use of coping strategies, although these constructs are interrelated. Resilience refers to an individual's capacity to recover and adapt, whereas hardiness is typically associated with personality traits such as commitment, control, and challenge. Coping behavior, in contrast, involves the specific cognitive and behavioral efforts undertaken to manage stressors.

A number of researchers have described intensive mobile phone use as a form of addiction (Conard, M. A., & Marsh, R. F. 2017; D. Madell J. M. Uncher.E; Chóliz, 2010). Unlike problematic use, which is characterized primarily by the presence of negative consequences while the intensive use continues, mobile phone addiction is increasingly being considered as a potential clinical diagnosis. However, in order to classify such use as an addiction, the consequences must meet specific diagnostic criteria.

The extent to which general addiction criteria can be applied to mobile phone use remains highly debated (Billieux, 2012). Although some DSM-5 criteria (American Psychiatric Association, 2013) can arguably be applied to mobile phone usage (see Table 2), certain indicators-such as withdrawal symptoms, loss of control, and the development of tolerance-are particularly controversial.

For instance, so-called withdrawal symptoms may stem from various causes that are not typically associated with addiction. These may include anxiety, such as the inability to contact

emergency services at any moment, or attachment-related concerns, such as the fear of losing continuous contact with others. Such factors complicate efforts to apply classical addiction models to technology-related behaviors.

The question of whether problematic (excessive) mobile phone use should be classified as another form of behavioral addiction remains unresolved given the current state of research on this topic. Despite the presence of preliminary indicators suggesting that each diagnostic criterion may be applicable (see Table 2), the methodological quality of studies in this domain varies considerably.

Paradoxically, the most controversial criteria-such as withdrawal symptoms, tolerance, and craving-have attracted the greatest volume of research, often of higher methodological quality. Nevertheless, findings across these studies remain inconsistent. For example, (Wilcockson et al., 2020) found that after a 24-hour period of smartphone abstinence, participants reported increased levels of craving, but did not exhibit classic withdrawal symptoms such as mood deterioration or elevated anxiety.

Table 2

General Diagnostic Criteria for Addiction According to DSM-IV: Potential Applications to Mobile Phone Use and Supporting Empirical Evidence

DSM-IV	Examples	Research examples
(1) Using more time than expected	A man looks at his mobile phone only to check the clock, sees a news item on Facebook and returns to it again a few hours later	(Körmendi et al., 2016; Roberts et al., 2015)
(2) Desire/unsuccessful attempts to reduce/control use	Efforts are being made to spend less time on your mobile phone (keyword: "digital detox ") using an app [eg Forest (Seekrtech , 2021)] which reinforces this non-mobile phone use - but still it doesn't happen	(K. Kim et al., 2018; Kwon et al., 2013)
(3) A lot of time to use	A large amount of time (a large number of hours) is spent with a mobile phone	(Körmendi et al., 2016; Kwon et al., 2013; Roberts et al., 2014)
(4) Strong desire or strong urge to use (craving)	People are desperate to know what's going on in social media. networks, who may have just written something or are still playing a game on their mobile phone – it is difficult to do without a mobile phone for several hours	(Kuss & Griffiths, 2017; Kwon et al., 2013)

(5) Obligations cease to be performed due to use	A man looks at his mobile phone instead of looking after his little one with my daughter on the playground	(Körmendi et al., 2016; Kwon et al., 2013; Y.-H. Lin et al., 2014)
(6) Continued use, despite interpersonal problems	Your partner starts complaining that you “ only spend time on your mobile phone” and “don’t have time for him” – he threatens to break up	(Körmendi et al., 2016; Kwon et al., 2013; Y.-H. Lin et al., 2014)
(7) Decrease or refusal to act	The man really wanted to do something, but but again spent too much time on the mobile phone and now it's too late to do it	(Körmendi et al., 2016; Kwon et al., 2013)
(8) Use in situations where when it is physically dangerous	A person is driving to work and just wants to check what a friend has written to him - a person uses his mobile phone while driving on the road (or in a traffic jam)	(Haigney et al., 2000; Törnros & Bolling, 2005; Treffner & Barrett, 2004)
(9) Continued use despite physical/psychological consequences	Man Feels Depressed Over Instagram Use - 'Why Is Everyone So Depressed' "I have a perfect life, but I don't have one?" - but still scrolls through the feed further	(Demirci et al., 2015; Knoll et al., 2005; Korpinen & Pääkkönen, 2009; Kwon et al., 2013; Lup et al., 2015)
(10) Development of tolerance	You need to spend more and more time on your mobile phone to feel "relevant", to belong to a group or accepted into a "guild" (in the game)	(Y.-H. Lin et al., 2014; Y. H. Lin et al., 2015)
(11) Withdrawal symptoms	If a person forgot his mobile phone at home, he feels cut off from the world and anxious, nervous, and his thoughts revolve around the device	(Cheever et al., 2014; Clayton et al, 2015; Y.-H. Lin et al, 2014)

The study was conducted **offline throughout the year 2024**. A total of **176 university students** participated in the research, including **132 female students (75.9%)** and **42 male students (24.1%)**. The **mean age** of participants was **18.67 years** (SD = ±0.648 months). When disaggregated by gender, the **mean age of female participants** was **18.58 years** (SD = ±0.567 months), and the **mean age of male participants** was **18.93 years** (SD = ±0.808 months). Participants were enrolled in various academic disciplines at **several universities in Almaty, Kazakhstan**, including **education, biology, geography, computer science, television, and**

directing. As such, the sample included students from a broad range of academic domains- **humanities (especially pedagogy), natural sciences, creative arts, and technical fields.**

All participants reported using **mobile phones**, with the majority (83.2%) owning **smartphones**, predominantly **iPhones** and **Redmi devices**. Only **29 students (16.8%)** reported using **basic Samsung mobile phones**.

When asked about their psychological dependence on mobile phones:

- **11 students (6.4%)** stated that they **cannot imagine their life without a mobile phone**;
- **45 students (26%)** reported that they **struggle to imagine life without a mobile phone**;
- **91 students (52.6%)** indicated that although they **could envision life without a mobile phone**, it would come with **significant difficulties**;
- **26 students (15%)** reported that they could **easily imagine life without a mobile phone**.

Thus, the sample encompassed students with **diverse levels of perceived dependence** on mobile phone usage.

To assess the levels of chronic stress, resilience, and excessive mobile phone use, the following tests and questionnaires were employed:

To diagnose the level of chronic stress, the Leipzig Screening Questionnaire on Chronic Stress (LKCS) was used (Reschke, K. & Schröder, H., adapted by Garber A. and Karapetyan L., 2018). This instrument evaluates seven indicators of chronic stress as well as an overall composite score. The indicators include: loss of control, loss of meaning, regulation of negative emotions and feelings, sleep disturbances, inability to relax, persistent emotionally negative themes, and insufficient emotional support from the social environment.

To measure resilience, the Resilience Scale (RS-25) developed by (G.M. Wagnild and H.M. Young, 2015) was applied.

To assess personality traits and behavioral activity, the Big Five Inventory (Russian version) was used. This version, originally developed by R. McCrae and P. Costa, was validated and standardized on a Kazakh-speaking sample by (Zholdassova, M.K., Borbasova, G.N., Matthews, D., and Kustubayeva, A.M., 2019). The questionnaire measures five traits: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience.

– To diagnose excessive mobile phone use, several questionnaires were employed:

Test of Mobile Phone Dependence brief (TMD brief).

Scale PUMP: Problematic Use of Mobile Phone – The Problematic Use of Mobile Phone Scale.

27-item Mobile Phone Problem Use Scale (MPPUS-27)- developed by Bianchi & Phillips, translated into Russian by A. I. Garber.

Statistical analysis was conducted using the SPSS 23.0 software package.

Results and Discussion

To test the first hypothesis, a Spearman correlation analysis was conducted (N=174). Statistical analysis was performed using the SPSS 23.0 software package.

In addressing the main research question and the first hypothesis, particular attention was given to examining the relationship between the tendency toward excessive mobile phone use and the experience of loneliness, as well as the presence of personality traits such as extraversion,

agreeableness, conscientiousness, neuroticism, and openness to experience. These variables were measured using the UCLA Loneliness Scale and the Big Five Inventory.

Table 3

Correlation Matrix of Total Resilience Score, Loneliness, Personality Traits, and Indicators of Excessive Mobile Phone Use Among Students (Spearman's Rho)

Indicators	TMD_ AZ	TMD_ ST	TMD_ TZ	TMD_ KV	TMD_ Σ	PUMP_ Σ	MPPUS_ Σ
Resilienz_Summe	-,048	,085	-,048	-,056	-,021	-,148	-,148
	,522	,261	,525	,459	,798	,051	,051
Loneliness	,115	,208**	,016	,054	,142	,138	,168*
	,135	,007	,844	,464	,065	,076	,025
Extraversion	-,057	-,139	-,093	-,088	-,133	-,236**	-,185*
	,463	,071	,226	,242	,085	,003	,014
Agreeableness	-,168*	-,155*	-,158*	-,105	-,202**	-,185*	-,300**
	,025	,044	,038	,165	,008	,015	,000
Conscientiousness	-,062	-,131	-,098	-,116	-,160*	-,239**	-,275**
	,424	,088	,194	,132	,035	,001	,000
Neuroticism	,322**	,173*	,175*	,198**	,297**	,337**	,389**
	,000	,022	,021	,009	,000	,000	,000
Openness	,026	-,037	-,052	-,046	-,052	-,159*	-,110
	,734	,630	,499	,543	,498	,036	,148

As shown in Table 3, there is a tendency toward a negative association between low levels of resilience and excessive mobile phone use, observed at a marginal level of statistical significance – specifically, at the 10% significance level – for the total scores of both the PUMP and MPPUS scales.

Significant correlations were also identified between the experience of loneliness and the “abuse” indicator on the TMD test, as well as the total score on the MPPUS scale. The PUMP scale showed a correlation with loneliness at the 10% significance level, which also indicates a meaningful relationship between the experience of loneliness and excessive mobile phone use.

Furthermore, statistically significant correlations at the 1% and 5% levels were found across all variables measured by the Big Five Inventory. In particular, excessive mobile phone use was positively associated with high levels of neuroticism and negatively associated with low levels of agreeableness (except for the “loss of control” indicator, which did not show a significant relationship).

Extraversion and conscientiousness were also found to be negatively correlated with the total scores for excessive mobile phone use, suggesting that lower levels of these traits are linked to a stronger tendency toward problematic use.

Regarding the personality trait “openness to experience,” only one significant negative correlation was found-specifically with the total score on the PUMP scale. This suggests that

openness to experience, along with resilience, is among the least strongly associated traits related to the tendency toward excessive mobile phone use in the current sample.

Conclusion

The first hypothesis received partial confirmation, specifically: the higher the level of resilience, either overall or for certain subcomponents, the lower the tendency toward excessive mobile phone use among students. Resilience was found to be significantly correlated with only one indicator of excessive phone use-"negative impact on other activities". In addition, resilience was indirectly associated with time-related factors in mobile phone use; namely, lower resilience levels were related to a greater likelihood of using the phone for longer than intended or spending excessive time on the device in general.

A more detailed analysis of this finding reveals that only certain dimensions of resilience were significantly associated with indicators of excessive mobile phone use. The "negative impact on other activities" indicator was negatively correlated with all resilience indicators at the 5% level of statistical significance.

Several latent factors were identified that characterize the core features of the relationship between resilience and nomophobia in students. These factors, listed in descending order of factor loadings, are as follows:

1. Excessive mobile phone use is primarily defined by spending more time on the phone than planned or an overall large amount of time spent on the device (factor loading: 18.17%).
2. The development of withdrawal symptoms associated with mobile phone use (factor loading: 16.56%).
3. Continued mobile phone use despite physical or physiological problems (factor loading: 13.40%).
4. Resilience is not significantly associated with indicators of excessive phone use among students prone to nomophobia (factor loading: 12.66%).
5. The increasing need to extend usage time in order to feel satisfied (factor loading: 7.88%).

Thus, in the analysis of latent factors that exert the greatest influence on excessive mobile phone use, resilience appears to be largely unrelated. The resulting latent factor follows a unidirectional vector comprising only resilience-related characteristics.

Among students, excessive mobile phone use is most strongly associated with using the device for longer than planned or with generally high time consumption. This finding highlights an interesting aspect of the relationship between resilience and time spent on mobile phones: the relationship is indirect-resilience remains at an average level, while excessive mobile phone use negatively affects other activities, many of which are essential for the development of higher resilience.

Overall, the time factor-how long the phone is used-emerges as a critical component. It can be concluded that resilience only indirectly influences excessive mobile phone use, unlike chronic stress, which shows a clear association with loss of control, neglect of responsibilities, and direct negative impacts on other activities due to phone overuse.

Withdrawal symptoms were the second most significant latent factor associated with both chronic stress and resilience, further underscoring the severity of the problem. The presence

of withdrawal symptoms suggests that the phenomenon represents not just excessive use, but potentially a new form of behavioral addiction-nomophobia.

In the context of the first hypothesis, we also examined the associations between the tendency toward excessive mobile phone use, feelings of loneliness, and specific personality traits: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience.

Significant correlations were found between loneliness and various indicators of excessive mobile phone use.

In addition, all indicators of excessive use were significantly associated with high levels of neuroticism and low levels of agreeableness, with the exception of the "loss of control" indicator, which showed no significant correlation.

Several significant negative correlations were also found between extraversion and conscientiousness and the overall scores for excessive mobile phone use, indicating that lower levels of these traits are linked to greater risk of excessive use.

The trait of openness to experience, like resilience, showed the weakest correlation with excessive mobile phone use among the personality dimensions assessed, suggesting that these traits play a limited role in predisposing students to problematic usage patterns.

Authors` Contributions

Limasheva L. – analysis of sources and conducting a literature review, preparation of the text of the article;

Berdibayeva S. – critical review of the content; approval of the final version of the article for publication;

Zhamirova U. – translated the main text.

Kerimbayeva R. – author of the collection of material on the theoretical part.

Spatay A. – collecting respondent data.

References

1. Selye, H. (1981). Geschichte und Grundzüge des Stresskonzepts. In J. R. Nitsch (Ed.), *Stress- Theorien, Untersuchungen, Maßnahmen* (pp. 163–187). Bern, Stuttgart, Wien: Huber.
2. Hacker, W., & Richter, P. (2008). *Belastung und Beanspruchung: Streß, Ermüdung und Burnout im Arbeitsleben*. Heidelberg: Asanger.
3. Filipp, S.-H. (Ed.). (2005). *Kritische Lebensereignisse* (3., erw. Aufl.). München & Weinheim: Psychologie Verl.-Union; Beltz Psychologie-Verl.-Union. Retrieved from <http://www.gbv.de/dms/hebis-mainz/toc/045704767.pdf>
4. Rohmert, W., & Rutenfranz, J. (1995). *Arbeitswissenschaftliche Beurteilung der Belastung und Beanspruchung an unterschiedlichen industriellen Arbeitsplätzen*. Bonn.
5. Schumacher, J., Reschke, K., & Schröder, H. (Hrsg.). (2002). *Mensch unter Belastung – Erkenntnisfortschritte und Anwendungsperspektiven der Stressforschung*. Frankfurt am Main: VAS – Verlag für Akademische Schriften.
6. Baizhumanova, B., Berdibayeva, S., Arzymbetova, S., Garber, A., Duanayeva, S., & Kulzhabayeva, L. (2024). Role of stress and resilience in the psychological health of students studying abroad. *Open Psychology Journal*, 17. <http://dx.doi.org/10.2174/0118743501309040240430064925>

7. Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford: University Press.
8. Garmezy, N. (2001). Resilience in children's adaptation to negative life events and stressed environments. *Pediatrics*, 20, 459–466.
9. Reschke, K., & Garber, A. (2019). Программа СЭП- Резильентность. Алматы.
10. Schroeder, P. (2016). Will solar PV create a wave of toxic battery waste in rural Africa? IDS Blog. Retrieved from www.ids.ac.uk/opinion/will-solar-pv-create-a-wave-of-toxic-battery-waste-in-rural-africa. Accessed 12 January 2018.
11. Conard, M. A., & Marsh, R. F. (2014). Interest level improves learning but does not moderate the effects of interruptions: An experiment using simultaneous multitasking. *Learning and Individual Differences*, 30, 112–117. <https://doi.org/10.1016/j.lindif.2013.11.004>
12. Madell, D., & Uncher, J. M. (2004). E litore rediit, sed telephorum pendens: habitus et experientia eleifend anglica ad communicationes mobiles et Interrete. *Cyberpsychologia morum*, 7, 359–367.
13. Cholz, M. (2010). Mobile phone addiction: A point of issue. *Addiction*, 105(2), 373–374. <https://doi.org/10.1111/j.1360-0443.2009.02854.x>
14. Billieux, J. (2012). Problematic use of the mobile phone: A literature review and a pathways model. *Current Psychiatry Reviews*, 8(4), 299–307. <https://doi.org/10.2174/157340012803520522>
15. Wilcockson, T. D. W. (2020). Corrigendum to 'Digital detox: The effect of smartphone abstinence on mood, anxiety, and craving' [Addictive Behaviors, 99, 106013]. *Addictive Behaviors*, 104, 106265. <https://doi.org/10.1016/j.addbeh.2019.106265>
16. Garber, A., Karapetyan, L., & Reschke, K. (2018). *Optimistisch den Stress meistern*. Göttingen: Cuvillier Verlag.
17. Zholdassova, M.K., Borbasova, G.N., Matthews, G., & Kustubayeva, A. M. (2020). Adaptation of the Kazakh version of "Big Five" questionnaire. *Bulletin of Psychology and Sociology Series*, 67(4), 124–133. <https://bulletin-psysoc.kaznu.kz/index.php/1-psy/article/view/883>

Л.А. Лимашева¹, С.К. Бердибаева², У. Жамирова³, Р.К. Керимбаева⁴, А.О. Спатай⁵

^{1,2}КазНУ имени аль-Фараби, Алматы, Казахстан

^{3,4}Таразский региональный университет имени М.Х. Дулати, Тараз, Казахстан

⁵Центрально-азиатский Инновационный университет, Шымкент, Казахстан

Стрессоустойчивость и резильентность как предпосылки сохранения здоровья современных студентов

Аннотации: В ходе исследования изучался уровень стресса и резильентности студентов в условиях чрезмерного использования мобильной связи. Впервые в рамках исследования поднимается вопрос о негативных последствиях чрезмерного использования мобильного телефона для эмоционального состояния (высокого уровня хронического стресса) и низкого уровня резильентности у студентов. Целью исследования было выявление характера качественной и количественной взаимосвязи хронического стресса, резильентности и чрезмерного использования мобильного телефона студентами для разработки комплексной социально-психологической модели сопровождения студентов группы риска по номофобии. Ценность проведенного исследования количественные и

качественные изменения уровня стресса и показателей резильентности у студентов в условиях чрезмерного использования мобильной связи. Для диагностики уровня хронического стресса, резильентности и чрезмерного использования мобильного телефона применялись следующие тесты и опросники: - для диагностики уровня хронического стресса применялся Лейпцигский экспресс-тест на хронический стресс - The Leipzig Screening Questionnaire on Chronic Stress - LKCS (Reschke, K. & Schröder, H., в адаптации Garber A., Karapetyan, L.); Тест диагностирует 7 показателей хронического стресса и интегральный показатель: потеря контроля, потеря смысла, управление негативными эмоциями и чувствами, нарушения сна, неспособность отдохнуть, эмоционально негативно окрашенная тема и недостаточная эмоциональная поддержка социума. В исследовании приняли участие 176 студентов. Возраст составлял 18-19 лет.

Ключевые слова: стресс, резильентность, физическое и психическое здоровье.

Л.А. Лимашева¹, С.К. Бердібаева², У. Жамирова³, Р.К. Керімбаева⁴, А.О. Спатай⁵

^{1,2}*Әл-Фараби атындағы Қазақ Ұлттық университеті, Алматы, Қазақстан*

^{3,4}*М.Х. Дулати атындағы Тараз аймақтық университеті, Тараз, Қазақстан*

⁵*Орталық Азия Инновациялық университеті, Шымкент, Қазақстан*

Қазіргі студенттердің денсаулығын сақтаудың алғышарттары ретінде стресске төзімділік пен резильенттілік

Андатпа: зерттеу барысында студенттердің стресстік деңгейі мен резильенттілігі ұялы байланыстың шамадан тыс пайдаланылуы жағдайында зерттелді. Зерттеу барысында алғаш рет ұялы телефонды эмоционалды жағдайға (созылмалы стресстің жоғары деңгейі) және студенттердің резильенттілігінің төмен деңгейіне шамадан тыс пайдаланудың жағымсыз салдары туралы мәселе көтерілді. Зерттеудің мақсаты номофобия бойынша тәуекел тобындағы студенттерді сүйемелдеудің кешенді әлеуметтік-психологиялық моделін әзірлеу үшін студенттердің созылмалы стресстің, резильенттіліктің және ұялы телефонды шамадан тыс пайдаланудың сапалық және сандық байланысының сипатын анықтау болды. Зерттеудің құндылығы ұялы байланысты шамадан тыс пайдалану жағдайында студенттердегі стресс деңгейі мен резильенттілік көрсеткіштерінің сандық және сапалық өзгерістері. Созылмалы стресс деңгейін, резильенттілікті және ұялы телефонды шамадан тыс пайдалануды диагностикалау үшін келесі сынақтар мен сауалнамалар қолданылды: - созылмалы стресс деңгейін диагностикалау үшін созылмалы стресс үшін Лейпциг экспресс-тесті қолданылды - the Leipzig Screening Questionnaire on Chronic Stress - Lkcs (Reschke, K. & Schröder, H., Garber A., Karapetyan бейімделуінде, L.); Тест созылмалы стресстің 7 көрсеткішін және интегралды индикаторды анықтайды: бақылауды жоғалту, мағынаны жоғалту, жағымсыз эмоциялар мен сезімдерді басқару, ұйқының бұзылуы, демалуға қабілетсіздік, эмоционалды теріс боялған тақырып және қоғамның эмоционалды қолдауының жеткіліксіздігі. Зерттеуге 176 студент қатысты. Жасы 18-19 жасты құрады.

Түйін сөздер: стресс, резильенттілік, физикалық және психикалық денсаулық.

Авторлар туралы мәлімет:

Лимашева Л.А. – хат-хабар үшін автор, Әл-Фараби атындағы Қазақ Ұлттық университеті, 3 курс Phd докторанты, Алматы қаласы, Масанчи 39, 050000, Қазақстан. e-mail: Lyazzat.limasheva@mail.ru

Бердибаева С.К. – Әл-Фараби атындағы Қазақ Ұлттық университеті, Философия және саясаттану факультеті, Психология ғылымдарының докторы, профессор. Масанчи 39, 050000, Алматы, Қазақстан. e-mail: berdibayeva.sveta1@mail.ru;

Жамирова У. – п.ғ.к., қауымдастырылған профессор (доцент), М.Х.Дулати атындағы Тараз аймақтық университеті, Сүлейменов көшесі 7, Тараз қ. 080000, Қазақстан. e-mail: zhamirova_1978@mail.ru

Керимбаева Р.К. – п.ғ.к., доцент, М.Х.Дулати атындағы Тараз аймақтық университеті, Сүлейменов көшесі 7, 080000, Тараз, Қазақстан. e-mail: risti1971@mail.ru

Спатый А.О. – PhD, қауымдастырылған профессор м.а., Орталық Азия Инновациялық университеті, Байтурсынов көшесі 80, 160000, Шымкент, Қазақстан. e-mail: spatay.aygul@mail.ru

Сведения об авторах:

Лимашева Л.А. – автор для корреспонденции, Докторант Phd, 3 курса отделения психологии КазНУ имени аль-Фараби, Масанчи 39, 050000, Алматы, Казахстан. e-mail: Lyazzat.limasheva@mail.ru;

Бердибаева С.К. – доктор психологических наук, профессор, Факультет философии и политологии КазНУ имени аль-Фараби, город Алматы, Масанчи 39, 050000, Казахстан. e-mail: berdibayeva.sveta1@mail.ru;

Жамирова У. – к.п.н., ассоциированный профессор (доцент), Таразский региональный университет имени М.Х.Дулати, ул.Сүлейменова 7, 080000, Тараз, Казахстан. e-mail: zhamirova_1978@mail.ru

Керимбаева Р.К. – к.п.н., доцент, формирование google-формы, сбор, анализ. Таразский региональный университет имени М.Х.Дулати, г.Тараз, ул.Сүлейменова 7, 080000, Казахстан. e-mail: risti1971@mail.ru

Спатый А.О. – PhD, и.о. ассоциированного профессора, Центрально-азиатский Инновационный университет, ул.Байтурсынова 80, 160000, Шымкент, Казахстан. e-mail: spatay.aygul@mail.ru

Information about authors:

Limasheva L. – corresponding author, PhD student, 3 st year of Psychology Department of Al-Farabi Kazakh National University, Almaty, Masanchi street 39, 050000, Republic of Kazakhstan. e-mail: Lyazzat.limasheva@mail.ru;

Berdibayeva S. – Doctor of Psychological Science, Professor Al-Farabi Kazakh National University, Department of Philosophy and Political Science, Almaty city, Masanchi street 39, 050000, Kazakhstan. e-mail: berdibayeva.sveta1@mail.ru

Zhamirova U. – candidate of pedagogical sciences, associate Professor (dotsent), M.H.Dulati Taraz Regional University Taraz city, Suleimenova St.7, 080000, Kazakhstan. e-mail: zhamirova_1978@mail.ru

Kerimbayeva R. – candidate of pedagogical sciences, dotsent, google form formation, collection, analysis. M.H.Dulati Taraz Regional University Taraz city, Suleimenova St.7, 080000, Kazakhstan. e-mail: risti1971@mail.ru

Spatay A. – PhD, acting associated professor, Central Asian Innovation University, Shymkent, 80 Baitursynova St, 160000, Kazakhstan. e-mail: spatay.aygul@mail.ru