

*Modern Psychology Scientific Bulletin, 2023, 2(13)*

P-ISSN 2579-2504

E-ISSN 2738-2664

**ԱՐԴԻ ՀՈԳԵԲԱՆՈՒԹՅՈՒՆ**  
**ԳԻՏԱԿԱՆ ՀԱՆԴԵՍ**

**MODERN PSYCHOLOGY**

**SCIENTIFIC BULLETIN**

**АКТУАЛЬНАЯ ПСИХОЛОГИЯ**

**НАУЧНЫЙ ВЕСТНИК**

**ԵՐԵՎԱՆ 2023, №2 (13)**

## PSYCHOLOGICAL FACTORS OF THE CREATIVITY MANIFESTATION OF MODERN MANAGERS

*The work was supported by the Science Committee of RA, in the frames of the research project №21T-5A103*

*Sona Poghosyan (Public Administration Academy of RA, Yerevan, Armenia)  
sona.poghosyan@paara.am*

*Received: 15.09.2023*

*Revised: 09.10. 2023*

*Accepted: 13.10.2023*



The psychological factors of creativity manifestation and their study results are shown in this article. The aim of this article is to show the psychological factors of the creativity of the modern manager and their correlation. The survey was conducted among 260 middle managers in the private and public sector. Questionnaire, testing and correlation extraction methods were used for the research. F. Williams creativity discovery methods (tests of divergent thinking and personal qualities), Cattel's 16-factor questionnaire, Potemkin's test of "social-psychological positions of a person in the motivational-demand sphere" were used. Among the managers, the average high level of creativity is combined with the average level of self-esteem, the striving for self-improvement and self-development, the freedom to express thoughts, the ability to develop and improve ideas, the spark of new ideas, the fear of making mistakes, ordinary thinking and giving in to the opinion of the majority are important contributing factors. We conclude that the manager's creativity is determined by psychological factors and their unique correlation. We can state that the education and training of modern managers can receive new content, taking into account the importance of creativity as a systemic quality and the specifics of its manifestation.

**Keywords:** *creativity, psychological factors, modern manager, personal qualities, motivation, correlation.*

## ПСИХОЛОГИЧЕСКИЕ ФАКТОРЫ ПРОЯВЛЕНИЯ КРЕАТИВНОСТИ СОВРЕМЕННЫХ МЕНЕДЖЕРОВ

Сона Погосян (Академия Государственного Управления Республики Армения,  
Ереван, Армения)

В статье представлены результаты исследования психологических факторов проявления креативности.

Целью данной статьи является исследование психологических факторов креативности современного менеджера и их соотношение. Исследование проводилось среди 260 менеджеров среднего звена частного и государственного сектора. Для исследования были использованы методы анкетирования, тестирования и корреляционного анализа. Использовали методики Ф. Вильямса (тесты дивергентного мышления и личностных качеств), 16-факторный опросник Кеттеля, тест О.Потемкина «социально-психологических установок личности в мотивационно-потребностной сфере». У менеджеров средневысокий уровень креативности сочетается со средним уровнем самооценки, из способствующих факторов для проявления креативности важными являются стремление к самосовершенствованию и саморазвитию, свобода выражения мыслей, способность развивать и совершенствовать идеи, поощрение новых идей, барьерами являются однотипное (шаблонное) мышление, уступка мнению большинства. Можно заключить, что проявление креативности менеджера определяется психологическими факторами и их своеобразным соотношением. Подготовка и переподготовка современных менеджеров могут получить новое содержание с учетом значимости креативности как системного качества и специфики ее проявления.

**Ключевые слова:** креативность, психологические факторы, современный менеджер, личностные качества, мотивация, взаимосвязь.

## ԺԱՄԱՆԱԿԱԿԻՑ ԿԱՌԱՎԱՐԻՉՆԵՐԻ ՍՏԵՂՃԱՐԱՐՈՒԹՅԱՆ ԴՐՍԵՎՈՐՄԱՆ ՀՈԳԵԲԱՆԱԿԱՆ ԳՈՐԾՈՆՆԵՐԸ

Սոնա Պողոսյան (Հայաստանի հանրապետության պետական կառավարման  
ակադեմիա, Երևան, Հայաստան)

Սույն հոդվածի նպատակն է ուսումնասիրել ժամանակակից կառավարչի ստեղծարարության դրսևորման հոգեբանական գործոնները և դրանց հարաբերակցությունը: Հետազոտությունն իրականացվել է մասնավոր և պետական ոլորտի միջին օղակի 260 կառավարիչների շրջանում: Հետազոտության համար կիրառվել են հարցարանի, թեստավորման և կոնեյպցիոն վերուժության մեթոդները: Կիրառվել են Ֆ. Վիլյամսի ստեղծարարության բացահայտման մեթոդիկաները (դիվերգենտ մտածողության և

անձնային որակների թեստերը), Կետտելի 16 գործոնային հարցարանը, Օ. Պոտյոմկինի կողմից մշակված՝ «Մոտիվացիոն-պահանջմունքային ոլորտում անձի սոցիալ-հոգեբանական դիրքորոշումների» թեստը: Կառավարիչների մոտ ստեղծարարության միջին բարձր մակարդակը զուգորդվում է ինքնագնահատման միջին մակարդակով, նպաստող գործոններից կարևորվում են ինքնակատարելագործման և ինքնազարգացման ձգտումը, մտքերն արտահայտելու ազատությունը, գաղափարը մշակելու և կատարելագործելու ունակությունը, նոր մտքերի գաղափարների խրախույսը, խոչընդոտող գործոններ են դիտարկվում սխալվելու վախը, միատեսակ մտածողությունը և մեծամասնության կարծիքին զիջելը: Կարող ենք եզրակացնել, որ կառավարչի ստեղծարարության դրսևորումը պայմանավորված է հոգեբանական գործոններով և դրանց յուրահատուկ հարաբերակցությամբ: Ժամանակակից կառավարիչների ուսուցումն ու վերապատրաստումը կարող են ստանալ նոր բովանդակություն՝ հաշվի առնելով ստեղծարարության որպես համակարգային որակի կարևորությունը և դրսևորման առանձնահատկությունները:

**Հանգուցային բաներ՝** սրեղծարարություն, հոգեբանական գործոններ, ժամանակակից կառավարիչ, անձնային որակներ, մոտիվացիա, համահարաբերակցություն:

**Introduction.** Modern socio-economic changes impose new requirements on the management system. The paradigm of management has changed, where the manager must present himself with new qualities, a new combination of them. In the context of these changes, based on the set of psychological qualities presented to the manager, the psychological portrait of the modern manager is drawn up. The creativity of a person is one of the important qualities in that psychological portrait which is a challenge of new times and an opportunity to propose alternative, new solutions in uncertain and complex situations. It is undeniable that creativity is one of the psychological qualities that guarantees person's life and activities' improvement. And as Funke legally notes quoting Simonton's words creativity is present in all fields of human activity Funke [6, p.11]. Then it goes on to emphasize the importance of creativity for the continuity of the world and emphasizes the need to develop it.

The need of creative thinking is beyond doubt if one thinks about the continuation of this world. Even though some products of creativity can be used by humanity for self-destruction, creative human activity is vital for its survival. Due to the creative processes we have the whole history of humankind. Therefore, it is important not only to explore the conditions of creative activities but also the development creative thinking [6, p.18-19].

However, person's creativity studies are being done under different concepts and various parts are being studied. Meanwhile as Amabile and Kurtzberg note J.

P. Guilford's 1950 address to the American Psychological Association inspired the now-thriving field of creativity research. Guilford defined the intriguing notion of creativity according to distinct constructs that define individual creative thinking. These constructs included fluency, flexibility, novelty, synthesis, analysis, reorganization and redefinition, complexity, and elaboration [8, p.285].

There is no doubt that J. Guilford's approach is the basis of the psychometric approach to creativity and allows creativity to be measured. However, the field of creativity research is open not only due to the presence of different approaches to it, but also due to the scarcity of measurement tools.

In the study of creativity one of the issues is its manifestation in the activity of managers, after that comes another question which level of manifestation guarantees the effectiveness of the activity.

However, the topicality and understudied nature of the issue of manager's creativity calls for proposing and developing a new concept for its study. This new concept is based on the premise that managers' creativity is a systemic quality and its manifestation is determined by the presence and interrelationship of a number of psychological factors. We consider personal qualities, motivation, as well as contributing and hindering factors as psychological factors of creativity manifestation. These psychological factors are included as components in the model of creativity research and development proposed by us, and the model has the following structure: the level of creativity, standards, creativity self-evaluation and personal qualities, contributing and hindering factors, motivation and their correlation.

The purpose of this article is to study the psychological factors of the creativity of the modern manager and their correlation.

We put forward the following hypothesis, according to which the manifestation of creativity of a modern manager is determined by a unique correlation of psychological factors, where personal qualities and motivational orientation play a unique role.

**Methodology.** The methodological basis of the research is the systemic approach and the principle of development, which assume that creativity is studied and the development process is provided through the system, we consider creativity as a systemic quality that can be developed continuously.

The R. Sternberg and T. Lubart's creativity investment theory, Amabil's creativity approach were served the methodological basis for the research, as well as F. Williams' psychometric approach that identifies dimensions and allows to measure the creativity. The works of M. Nelke and A. Maslow served as a scientific and methodological basis for creating a questionnaire of creativity barriers, and P. Meusburger (2009), A. Cropley (2006), Frensch and Funke (1995) for contributing factors.

The research sample. The survey was conducted among 260 middle managers in the private and public sector.

Questionnaire, testing and correlation extraction methods were used for the research. F. Williams creativity discovery methods (tests of divergent thinking and personal qualities), Cattel's 16-factor questionnaire, Potemkin's test of "social-psychological positions of a person in the motivational-demand sphere" were used [3; 12;13].

Questionnaires were compiled the barriers and contributing factors creativity, each of which included 19 statements about the studied factor (contributing or hindering), the importance of which was assessed by the participant on a scale of one to six points (the higher the score, the more important the given factor is).

#### Review of the literature

There are many theoretical approaches about creativity, but we have singled out those that especially emphasize the need for environmental factors to develop creativity.

We agree with a point that creativity needs to be improved, and to guarantee this improvement we need to consider the factors that determine the manifestation of creativity. In this case, Funke's point is remarkable that creative performance cannot be prescribed so we need to develop creativity in schools and universities. While there are a lot of problems in today's life, creativity can help to concentrate our forces on positive goals [6, p.21].

Creativity is influenced by certain cultural and social conditions as well as psychological dispositions and motivations [9, p.77].

According to the investment theory, creativity requires a set of six resources, which are distinct, but interrelated: intellectual abilities, knowledge, styles of thinking, personality, motivation, and environment. Although levels of these resources depend on the individual differences, often the decision to use a resource is a more important source of individual differences [11, p.28].

Creative individuals have a number of psychological characteristics, including a well-developed sense of imagination; advanced problem-solving skills; the ability to construe new structures and find regularities quickly in seemingly chaotic situations; a willingness to challenge traditional assumptions, standards, and norms; and the production of surprising visualizations [1, p. 58].

According to the componential theory, the influences on creativity include three within-individual components: domain-relevant skills (expertise in the relevant domain or domains), creativity-relevant processes (cognitive and personality processes conducive to novel thinking), and task motivation (specifically, the intrinsic motivation to engage in the activity out of interest, enjoyment, or a personal sense of challenge). The outside component is the surrounding environment – in particular, the social environment.

The theory notes, that creativity requires a confluence of all components. Creativity should be highest when an intrinsically motivated person with high domain expertise and high level of creative thinking skills works in an environment, which highly supports creativity. [2].

Meusburger summarizing the approaches of a number of authors and notes, that Shalley (1995) reported that the highest levels of creativity occurred when individuals had a creativity goal while working alone and expecting to be evaluated [10, p.124]. Collectively, authors have mentioned that the results of the scientists are creative when they have freedom, encouraged rather than controlled by their supervisors, have opportunities to influence important on the decisions and choose the processes of evaluation, have the permission to ask new or controversial questions, and suggest unusual solutions.

The supervisors can influence other prerequisites of creativity, for example open interaction between supervisor and subordinates, participatory management and decision-making, fair and supportive assessment of new ideas, reward and recognition of creativity, diversity in team members' knowledge bases (disciplinary background), the degree of open information flow across departments, mutual receptiveness to other domains or disciplines [10, p.126].

These theoretical approaches prove once again that the manifestation of a person's creativity is determined by a number of factors, and based on our research, we have singled out those factors that are most correlated with creativity.

#### Results

The results of the creativity survey of managers show that their level of creativity is above average  $M=72$ , (according to the test, 131 is considered a high score of creativity). Indicators of fluency ( $M=11$ , according to the test, 12 is considered a high score of fluency), flexibility ( $M=6$ , according to the test, 11 is considered a high score of flexibility), originality ( $M=26$ , according to the test, 36 is considered a high score of originality) are high, elaboration ( $M=14$ ) is low, creative use of speech is low ( $M=16$ , according to the test, 36 is considered a high score of elaboration and naming). Self-assessment of creativity is above average ( $M=53$ , the test norm is 100).

According to the managers, among the factors contributing to creativity are the striving for self-improvement and self-development  $M=5.4$ , the freedom to express thoughts  $M=5.3$ , the ability to develop and improve the idea  $M=5.3$ , the spark of new ideas  $M=5.2$ , among the least contributing factors is taking creative breaks  $M=3.9$ , risk-taking  $M=4.2$ . We find, that managers do not value creative pauses in their activities, and considering risk taking and creative pauses less conducive factors is due to misconceptions about the true nature of creativity.

It is interesting to mention, that the dimension of risk-taking is defined as the tolerance of uncertainty and ambiguity exposed in the workplace. In the high risk-taking cases completely new initiatives can be taken even when the outcomes are

unknown. People feel as though they can risk on some of their ideas and put it forward. In a risk-avoiding environments people are cautious, hesitant and try to be on the safe side. They create committees and cover themselves in many ways before making a decision [7, p.177].

The barriers of creativity were observed: yielding to the opinion of the majority  $M=3.1$ , fear of making mistakes  $M=3.0$ , uniformity, template thinking  $M= 3$ , and reward  $M=2.3$ , competition  $M= 2.2$  and self-confidence  $M=2.3$  were considered the lowest. It turns out that the modern manager shows his creativity when he is confident, rewarded and there is competition. And as for yielding to the majority opinion, managers consider an obstacle, then if we compare our data with the research data presented by P. Meusbarger, it turns out that most often during group discussions, a new idea, point of view can be rejected and the person gives in to the opinion of the majority. Meusbarger summarizing the approaches of a number of authors and notes, that group discussion can lead group members to copy each other's responses. In a study on the effects of prior group discussion on individual creativity, for example, Andre, Schumer, and Whitaker (1979) found that the number of different responses produced by the group is lower than the ones produced by individuals, who work alone. It appears as though "conformity within small groups inhibits individual creativity. Group discussion acts not as a catalyst to individual divergent thinking but merely allows individuals to adopt the different ideas of other individuals"[10, p. 122].

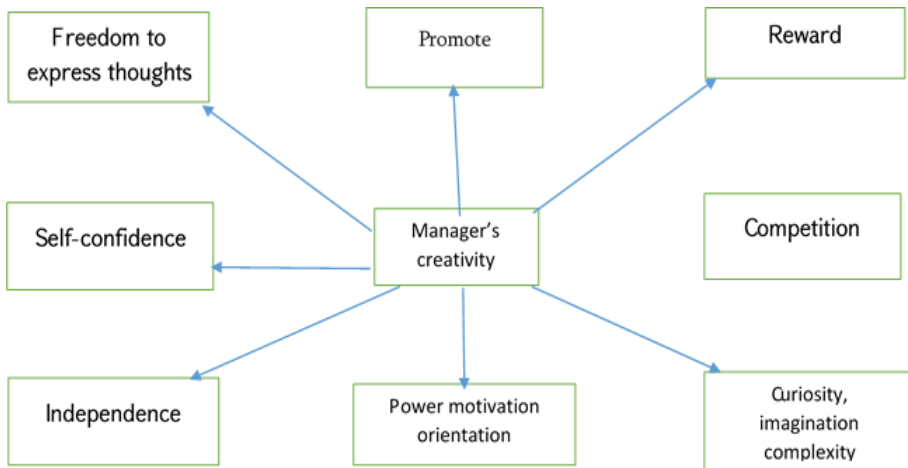
The results of the research on the motivational orientation of managers showed that they are oriented to the result  $M=7$ , altruism  $M=7$ , freedom  $M=7$ . The results egoism  $M=4$ , power  $M=4$ , money  $M=2$  are low. If we combine it with the contributing factors, they see that expressing free thoughts and freedom orientation is a typical motivational orientation of managers.

The results of the study of personal qualities showed that managers are characterized by conscientiousness Rule-Consciousness  $M=10$ , Self-Disciplined  $M=9$ . Manager's self-evaluation is adequate  $M=10$ , but if we combine it with the creativity self-evaluation, they do not rate themselves highly in the case of creativity.

Correlational analysis was conducted between creativity dimensions, level, personality qualities and motivational orientation indicators ( $n=85$ ).

The analysis showed that there are significant correlations between flexibility and egoism ( $r=.266$ ,  $P < 0,01$ ), altruism and curiosity ( $r=.218$ ,  $P < 0,01$ ), power and curiosity ( $r=.267$   $P < 0,01$ ), imagination ( $r=.246$ ,  $P < 0,01$ ) creativity self-esteem ( $r=.252$ ,  $P < 0,01$ ), flexibility and doubt ( $r=.220$ ,  $P < 0,01$ ), independence and complexity ( $r=.214$ ,  $P < 0,01$ ) negative relationship between work and flexibility ( $r=-.264$ ,  $P < 0,01$ ). By combining the research results, we can conclude that the manager's creativity is determined by psychological factors and their unique correlation(see Figure 1.).





**Figure 1.** Psychological factors of the manifestation creativity.

These connections show that the more the managers tend to think in different categories, they are flexible, the more they care about themselves, independent, cautious people, the work is not interesting for them. The more curious managers are, the more altruistic they are, the more attentive they are to other people. With a motivational orientation to rule, they are curious, imaginative, and value their creativity. The connection between independence and complexity is particularly interesting, which means that managers tend to solve complex problems in case of independence, which if get combined with the factors contributing to the possibility of free expression of thoughts, it is clear that a person needs independence and freedom when solving creative, complex problems.

These research results shed new light on the characteristics of creativity and emphasize the unique combination of psychological factors.

#### Conclusion

By comparing the research results, we can conclude that the manager's creativity is determined by psychological factors and their unique correlation.

Among the managers, the average high level of creativity is combined with the average level of self-esteem, the striving for self-improvement and self-development, the freedom to express thoughts, the ability to develop and improve ideas, the spark of new ideas, the fear of making mistakes, ordinary thinking and giving in to the opinion of the majority are important contributing factors.

In case of high resilience scores, they care more about themselves, and work is less important. In case of a dominant motivational orientation, they value their

creativity, are curious, imaginative, and in case of independence, they tend to solve complex problems.

If we generalize the model, then the freedom to express thoughts, drive, reward, competition, self-confidence, independence from personal qualities, ruling from motivational orientations are important for the manifestation of creativity of a modern manager, the presence of which contributes to the manifestation of their curiosity, imagination, ability to solve complex problems.

Based on all this, we can state that the education and training of modern managers can receive new content, taking into account the importance of creativity as a systemic quality and the specifics of its manifestation.

### References

1. **Abel, G.** (2009). The riddle of creativity: Philosophy's view. In P. Meusburger, J. Funke, & E. Wunder (Eds), *Milieus of creativity. Knowledge and space*, vol. 2, pp. 53-73, Dordrecht: Springer. [https://doi.org/10.1007/978-1-4020-9877-2\\_5](https://doi.org/10.1007/978-1-4020-9877-2_5)
2. **Amabile, T.M.**, (2012). Componential Theory of Creativity. In: Kessler, E.H., Ed., *Encyclopedia of Management Theory*, Sage Publications, London, 134-139. <http://dx.doi.org/10.4135/9781452276090.n42>
3. **Cattell, H. E. P., & Mead, A. D.** (2008). The Sixteen Personality Factor Questionnaire (16PF). In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment*, Vol. 2. Personality measurement and testing, pp. 135-159). Sage Publications, Inc. <https://doi.org/10.4135/9781849200479.n7>
4. **Cropley, A.** (2006, July). In praise of convergent thinking. *Creativity Research Journal*, 18(3), 391-404. [https://doi.org/10.1207/s15326934crj1803\\_13](https://doi.org/10.1207/s15326934crj1803_13)
5. **Frensch, P. A. & Funke, J.** (1995). Definitions, traditions, and a general framework for understanding complex problem solving. In P. A. Frensch, & J. Funke (Eds.), *Complex problem solving: The European perspective* (pp. 3-25). <https://doi.org/10.4324/9781315806723>
6. **Funke J.** (2009). On the Psychology of Creativity, *Milieus of Creativity An Interdisciplinary Approach, to Spatiality of Creativity*, 11-25. [https://doi.org/10.1007/978-1-4020-9877-2\\_2](https://doi.org/10.1007/978-1-4020-9877-2_2)
7. **Isaksen S.** (2009) . Exploring the Relationships Between Problem-Solving Style and Creative Psychological Climate, p.169-188. :10.1007/978-1-4020-9877-2\_9
8. **Kurtzberg T., Amabile, T.** (2001) From Guilford to Creative Synergy: Opening the Black Box of Team-Level Creativity, *Creativity Research Journal* 13(3):285-294, *Creativity Research Journal* 13(3):285-294,:10.1207/S15326934CRJ1334\_06.

9. **Lenk, H.** (2009). Creativity: Multidimensional Associative or Chaotic Process? Methodological Comments on Creative Processes and Metaphors in Aesthetics and Innovation. In: Meusburger, P., Funke, J., Wunder, E. (eds) Milieus of Creativity. Knowledge and Space, vol 2. Springer, Dordrecht. p.73-95, 10.1007/978-1-4020-9877-2\_6.
10. **Meusburger, P.** (2009). Milieus of creativity: The role of places, environments, and spatial contexts. In P. Meusburger, J. Funke, & E. Wunder (Eds), Milieus of creativity. Knowledge and space (Vol. 2, pp. 97-155). Dordrech: Springer. [https://doi.org/10.1007/978-1-4020-9877-2\\_7](https://doi.org/10.1007/978-1-4020-9877-2_7)
11. **Sternberg, R.** (2009). Domain-Generality Versus Domain-Specificity of Creativity, Milieus of Creativity An Interdisciplinary Approach, to Spatiality of Creativity, p.25-38, 10.1007/978-1-4020-9877-2\_3.
12. Практическая психодиагностика. Методики и тесты. Учебное пособие. / Ред. и сост. Райгородский Д. Я., Самара, 2001, -672с.
13. **Туник Е.** Лучшие тесты на креативность. Диагностика творческого мышления, Питер: СПб, 2013,- 320 с.

**ԲՈՎԱՆԴԱԿՈՒԹՅՈՒՆ \* СОДЕРЖАНИЕ \* CONTENTS**

<b>ANNA SAMOKHVALOVA, ELENA TIKHOMIROVA, OKSANA VISHNEVSKAYA, NATALYA SHIPOVA, MARIA SMOLINA</b> METHODS OF PREVENTION OF PSYCHOLOGICAL DISEASE OF YOUTH STUDENTS.....	3
<b>AREVIK HEBOYAN</b> INFORMATION SOURCES OF TRADING DECISION MAKING AS DETERMINING FACTORS FOR COGNITIVE BIASES.....	16
<b>ASYA BERBERYAN, ALINA TUMASIAN</b> INTERCONNECTION BETWEEN PERSONALITY SELF-ATTITUDE AND FACTORS INFLUENCING THE CHOICE OF FORMAL AND INFORMAL ADDRESS: PSYCHOLOGICAL AND LINGUISTIC ASPECTS .....	25
<b>ARMEN AVETISYAN</b> WAYS TO PREVENT THE NEGATIVE SOCIO-PSYCHOLOGICAL IMPACT OF MISLEADING INFORMATION .....	37
<b>SONA POGHOSYAN</b> PSYCHOLOGICAL FACTORS OF THE CREATIVITY MANIFESTATION OF MODERN MANAGERS.....	46
<b>SRBUHI GEVORGYAN</b> THE PROBLEM OF CHILDHOOD IN THE CONTEXT OF MODERN CHALLENGES IN THE EDUCATION SYSTEM .....	56
<b>VARDUHI PAPOYAN, ALINA GALSTYAN, DIANA SARGSYAN, MILENA KARAPETYAN</b> CHARACTERISTICS OF THE COMPETENCIES OF THE PEDAGOGICAL STAFF IN THE CURRENT CRISIS SITUATION .....	69
<b>VICTORIA GAVRILOVA, SVETLANA IVASHKO</b> EMDR AS A WAY TO CORRECT THE ACTUAL MENTAL STATES OF STUDENTS DURING THE EXAMINATION SESSION .....	79
<b>ZHEYU SONG</b> A REVIEW OF HOW THE USE OF CHATGPT IN LEARNING AFFECTS STUDENT WELL-BEING .....	89