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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии

საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman** (**Кириллица**), для текста на грузинском языке следует использовать **AcadNusx.** Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform_requirements.html
В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or compu-ter-printed on a single side of standard typing paper, with the left margin of **3** centimeters width, and **1.5** spacing between the lines, typeface - **Times New Roman** (**Cyrillic**), print size - **12** (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf
In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

ავტორთა საყურადღებოდ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx.** შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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MANIFESTATION OF CREATIVITY AMONG MODERN MANAGERS AS A FACTOR IN PROMOTING PERSONAL MATURITY AND MENTAL HEALTH

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Abstract.

The purpose of this article is to investigate the manifestation of creativity levels and criteria, conditioned by the ratio of personal qualities, motivational orientation, and contributing and hindering factors. These elements are regarded as pivotal factors in ensuring mental health and socio-psychological maturity. The study involved 300 managers from the private and public sectors of the Republic of Armenia. The research contributes to the academic discourse by introducing novel correlations between scientific concepts of creativity, enriching the theoretical foundations of creativity and motivation, creativity and personal qualities, and creativity and its contributing and hindering factors. Findings suggest a high level of creativity among managers, characterized by fluency, flexibility, and originality. Notably, power and altruism emerge as significant motivational orientations within the manager's psychological profile. Moreover, modern managers do not perceive reward or competition as hindrances to creativity. Essential factors conducive to creativity include dominance, competition, reward, freedom of thought, and a willingness to take risks in decision-making. The proposed creativity research and development model holds promise for informing a scientific approach to the psychological selection and training of managers.

Key words. Creativity, manifestation, personal qualities, power, manager.

Introduction.

In the modern management paradigm, the psychological qualities attributed to the manager's personality have undergone a transformation. Within a multipolar world, contemporary managers operate within a novel management framework characterized by creativity. This framework is directed towards addressing managerial challenges, fostering creative teams, and nurturing individual creativity within teams and organizations. Creative management entails devising innovative solutions to managerial problems, making bold decisions amidst uncertainty, demonstrating agility, and exhibiting constructive behavior in conflict situations. Within this context, prominent qualities in the psychological profile of a modern manager include tolerance for uncertainty, autonomy, decisiveness, flexibility, and creativity.

Creativity enables individuals to generate novel ideas, break away from conventional patterns and repetitive behaviors, approach problems from diverse perspectives, and propose alternative solutions. As such, creativity can yield social benefits while fostering personal development and self-improvement. These outcomes contribute to personal growth, socio-psychological maturity, and mental well-being. The realization of creative potential empowers individuals to adapt to their environment and modify behavior, thereby impacting various facets of life positively. Consequently, creativity plays a pivotal role in enhancing individual quality of life and overall health.

Thus, it is unsurprising that the importance of creativity, creative individuals, and creative professionals is emphasized across diverse domains.

The multifaceted nature of personal creativity and the broad array of scientific inquiries in which it is examined underscore the necessity of constructing a comprehensive model to propose and develop new concepts.

This new conceptual framework is predicated on the notion that the creativity model of managers comprises structural components, including levels and criteria, personal qualities, self-evaluation of creativity, and factors contributing to or hindering its manifestation, such as motivation and personal attributes. Notably, motivation assumes a pivotal role within this framework, given its significant influence on the manifestation of creativity. Considering that creativity is influenced by both environmental facilitators and obstacles, it is crucial to discern the motivational forces driving an individual's creative expression. Specifically, this entails investigating whether creativity emerges solely in response to external stimuli or requires internal motivational drivers.

Additionally, it is pertinent to explore how internal motivational forces may be shaped by personal qualities, and particularly which attributes are correlated with motivation. Moreover, an inquiry into the interplay between the level of creativity, motivational orientation, and personal qualities is essential to understanding how these factors manifest.

The contemporary significance of this fundamental inquiry lies in the imperative for organizations to adopt a scientifically informed approach to selecting modern managers. Achieving this objective hinge upon cultivating an understanding of the psychological underpinnings of creativity and their development through managerial preparation and training. Consequently, the aim of this article is to elucidate the manifestation of creativity levels and criteria, elucidating how they are influenced by the interplay of personal qualities, motivational orientation, and contributing and hindering factors.

The **scientific novelty** of this research lies in its incorporation of novel correlations between scientific concepts of creativity,

thereby enhancing the theoretical underpinnings of creativity and motivation, creativity and personal attributes, and creativity and its contributing and hindering factors. These correlations contribute to the enrichment of existing theoretical frameworks and hold potential for informing the development of research strategies. Among these strategies, a pivotal focus is on the investigation and cultivation of managerial creativity as a determinant of mental health outcomes.

In the examination of the theoretical foundations of creativity, a brief overview of the components of the proposed model will be provided. However, motivation warrants a closer examination.

Theory section.

Creativity is approached through various conceptual frameworks, each offering unique perspectives on its essence. Presently, scholarly interest in creativity remains robust, driving the emergence of novel approaches and ideologies. E. Landau, A. Maslow, O. Dosnon, M. Runko, R. Sternberg, and J. Guilford's approaches will be examined. E. Landau views creativity as a stance that enables individuals to uncover novelty within the familiar while encountering the unknown, thereby synthesizing new wholes from existing elements [1].

Similarly, O. Dosnon posits that creativity constitutes a set of innate traits facilitating flexible, independent, and imaginative thinking, asserting its universality across individuals [2]. Landau also posits that fostering creativity is a fundamental aim of education and psychotherapy [1]. A. Maslow aligns with Landau's perspective, asserting that creativity is integral to mental health, and self-actualization is intertwined with creative expression. Maslow further suggests that interest in creativity transcends psychology and psychiatry, asserting its significance as a political imperative [3].

It is also acknowledged that the expression of an individual's creativity provides them with the opportunity to lead a healthy lifestyle and engage in professional activities. These aspects are intertwined with the socio-psychological maturity of the individual. Professional development and success are intricately tied to personal growth. L. Petrosyan identifies several criteria for socio-psychological maturity, including focus, practical reliability, emotional balance, determination, realism, responsibility, stability, and self-knowledge, all of which contribute to the success of a specialist's professional endeavors [4].

Creativity is an inherent aspect of human existence, necessitating the mobilization of resources, knowledge, skills, and life experiences [5].

Creativity is defined as a systemic quality that enables individuals to perceive novel perspectives, break free from cognitive constraints, propose innovative solutions, take risks, make independent decisions, and adapt to environmental conditions.

In the study of creativity, J. Guilford's seminal work identified four foundational dimensions, subsequently expanded to six:

- The ability to identify and formulate problems.
- The capacity to generate numerous ideas.
- Flexibility in generating diverse thoughts.
- Originality.
- The ability to enhance objects by adding details.
- Problem-solving proficiency [6].

Considering our reliance on the psychometric approach in our research and the utilization of F. Williams' methodology as a research tool, it is pertinent to examine the criteria of creativity. Fluency entails generating a multitude of ideas, facilitated by relinquishing entrenched stereotypes acquired through experiential assimilation. Notably, discerning unique ideas from the plethora generated is effortless.

Referring to flexibility, it facilitates divergence from repetitive patterns, exploration of varied categories, redirection of observations, and proposal of alternative solutions. Experimental research suggests that this relationship is complex, as a substantial amount of knowledge does not always contribute to the generation of new ideas and may even impede it. T. Lubart defines flexibility as the ability to consider the same subject or idea from various perspectives, exhibiting sensitivity to changes and the capacity to explore new avenues [7]. L. Echeverria posits that respect and freedom foster flexibility, which is indispensable for generating new ideas, addressing vital needs, and exploring alternative approaches [8].

A similar perspective is offered by E. de Bono, who asserts that flexibility is a key characteristic of new ideas [9].

It is often emphasized that the development of flexibility is not solely dependent on experience but also on the method of mastery—that is, the approach taken. It is often emphasized that the development of flexibility is not solely dependent on experience but also on the method of mastery—that is, the approach taken. Adopting a different perspective when tackling a problem enables the proposal of alternatives, increasing the likelihood of problem improvement. This implies that the greater the number of alternatives offered, the greater the opportunities for improvement, the proposal of new ideas, and their implementation.

M. Runco asserts the presence of originality in creativity. One point of consensus is that creativity entails originality. However, this does not suggest that creativity is solely a form of originality; while originality is necessary, it is not sufficient for creativity [10]. Originality encompasses the introduction of new and unexpected ideas, which can manifest in various aspects of an individual's cognition, behavior, communication, and activities.

Many scholars regard originality as a primary attribute of creativity and a defining characteristic of gifted individuals [11]. For creative individuals, the pursuit of novelty holds significant importance, often providing more satisfaction than the actual outcome of creation. In their quest for the new and unknown, they continually explore their surroundings, setting themselves creative challenges to uncover the original.

Elaboration involves refining ideas to enhance their appeal. Originality and elaboration represent two poles of creativity. In this context, creators can be tentatively categorized into two groups: those who effortlessly generate original ideas and those who develop them further. These represent various avenues for realizing the creative personality [12]. The presentation of creative ideas is spontaneous and unprogrammed, accompanied by emotional experiences, facilitating discoveries, and enabling the reconstruction of knowledge, thereby allowing individuals to perceive the obvious in a new light. F. Williams also developed a test for identifying personal creativity traits, which we adapted

into Armenian. According to Williams' test, personal creativity traits include the ability to take risks, curiosity, complexity, and imagination [13]. It should be noted that creativity is demonstrated by all the mentioned criteria, not solely by a high level of originality or flexibility, but by the presence and high level of all of them.

When discussing the factors hindering and contributing to the manifestation of creativity, it should be observed that it is more acute in the case of group and teamwork, where individuals do not always demonstrate their creativity.

The importance of individual creativity in groups is undeniable, but its manifestation is not straightforward or linear; there are numerous obstacles. However, creativity can be easily manifested in well-organized and knowledgeable groups and is a prerequisite for the creation of creative teams.

It is noteworthy that not all authors have an unequivocal approach to creative groups. If we consider E. In De Bono's works, it becomes evident that he does not consider the group a necessary condition for creative thinking. Based on his experience, he notes that an individual is capable of generating more ideas than a group. In teams, individuals may need to spend considerable time to be heard, as they have to listen to many people. An individual is capable of generating a large number of ideas and choosing new directions, whereas the group may refine an idea already created by the individual by exploring a variety of options [9]. From such an interpretation, it becomes evident that De Bono emphasizes the superiority of individual creativity over the group, albeit without disregarding the role of the group. Nonetheless, in contemporary organizations, the significance of group creativity is increasingly emphasized, with the utilization of group-based creative methods such as brainstorming and synectics. In contrast to this perspective, D.V. Ushakov contends that modern creativity is less centered on the individual and more on collectives, organizations, and networks. Notably, not only the innovative output of organizations but also new scientific discoveries are attributed to groups of individuals. Creativity extends beyond individual activity and transcends the boundaries of human existence. Analogous to development, where novelty emerges, creativity forms the cornerstone of the world, representing a universal pattern [14]. When considering contemporary reality alongside these perspectives, it is evident that creative outcomes are predominantly achieved in both organizational and scientific teams.

Turning to other contributing factors, we must consider personal qualities and motivation. According to the investment theory, creativity necessitates the convergence of six distinct yet interconnected resources: intellectual abilities, knowledge, thinking styles, personality, motivation, and environment [15].

Sternberg and Lubart propose an intriguing perspective on the relationship between creativity and personal qualities. They suggest that creativity entails more than a simple summation of an individual's proficiency in each component; instead, high levels of intelligence and motivation, for example, may multiplicatively enhance creativity [16].

Furthermore, it is plausible that a skill or trait, initially perceived as general, may actually be specific to certain domains or tasks. Motivation, in particular, may exhibit specificity in relation to particular tasks within domains [17].

Traditionally, creativity has been regarded as a cognitive process, embodied in the insights of individuals. Consequently, past psychological research on creativity has predominantly focused on the cognitive processes, emotions, and motivations of individuals who generate novelty—the "creative personality" [18].

To foster creativity, individuals should develop a strong intrinsic motivation within a specific domain and refrain from becoming captivated by extrinsic motivators, such as monetary rewards, as they may compromise creativity. Ultimately, the motivation for creative endeavors should originate from within the individual [19].

Creativity undoubtedly arises from specific cultural, social conditions, and particular psychological dispositions and motivations [20].

Amabile formulates the important notion that individuals are most likely to exhibit creativity when they are primarily motivated by intrinsic factors such as interest, satisfaction, and the challenge inherent in the work, rather than by external pressures [21].

The findings from Amabile's research on creativity, as presented in Gorden Torr's book, demonstrate that individuals with higher internal motivation tend to be more creative and original [22]. The influence of motivational orientation on an individual's creative activity and the manifestation of creative potential is also acknowledged by B. Hennessey. He discusses research that illustrates how cultural and self-understanding variables can moderate the impact of external constraints on motivational orientation and creativity [23].

Therefore, the significance of motivation in creativity is underscored when considering environmental factors, namely, contributing and hindering factors. Reward holds a unique position in fostering creativity, serving as a motivating factor in the external environment, or, as Nelke suggests, potentially acting as a hindrance [24].

Methods.

Participants: The research involved 300 managers from both the private and public sectors of the Republic of Armenia. Before participating, they were provided with an "Information and Consent Sheet" and gave their consent to participate in the research. The consent form also indicated their agreement to participate in a training program. Given Armenia's small size, this sample size is considered to provide an objective overview of manager creativity features. The sample was ensured to have territorial and gender-age distribution, with 134 female and 166 male participants.

Research methodology and methods: The research is grounded in a systemic approach and the principle of development, which posit that creativity is studied and developed through a systemic process, considering creativity as a systemic quality that can be continuously developed.

The creativity investment theory by R. Sternberg and T. Lubart, Amabil's [25,26] creativity approach, and F. William's psychometric approach were used as methodological foundations for the research. Additionally, the works of M. Nelke and A. Maslow served as a scientific and methodological basis for creating a questionnaire on creativity barriers. The approaches

of P. Meusburger (2009), A. Cropley (2006), and Frensch and Funke (1995) were employed for creating a questionnaire on creativity contributing factors.

The research utilized questionnaires, testing, and correlation extraction methods. F. Williams' creativity discovery methods (tests of divergent thinking and personal qualities), Cattell's 16-factor questionnaire, and Potemkin's test of "Social-psychological positions of a person in the motivational-demand sphere" were utilized [27].

These research methods were chosen for their validity and credibility in scientific research, and F. William's selection of methods for creativity stems from his belief that creativity comprises a specific set of thinking and personal qualities conducive to creativity manifestation [28,29].

The William's Divergent Thinking Test is based on images that do not need adaptation. However, for the other methods, adapted Armenian versions were utilized.

With the aim of identifying external and internal factors that may facilitate or impede a person's creativity, we compiled questionnaires designed to assess the manifestation of creativity and its contributing and hindering factors.

These factors were determined through theoretical-methodical in-depth analysis and content analysis. Each questionnaire pertaining to contributing and hindering factors consisted of 19 factors, with participants rating their importance on a scale of one to six points (with higher scores indicating greater importance). The questionnaires, developed based on theoretical-methodical analyses, formed the foundation for our research strategy [30].

Among the statistical analysis methods, Pearson correlation coefficient (PCC) was used, that measures linear correlation between two sets of data, as well as the Student's t-test to test whether the difference between the response of two groups is statistically significant or not.

The results of the research were analyzed using SPSS-23 mathematical-statistical software.

Results and Discussion.

Regarding the findings of the creativity research among managers, it is noteworthy that creativity levels are above average, with a mean score (M) of 75 (131 is considered a high score of creativity). Indicators of fluency (M=11), flexibility (M=7), and originality (M=26) are high, while elaboration (M=14) and naming (M=17) are comparatively low. This suggests that managers offer new and unique ideas but do not consistently improve upon them. It is important to highlight that while many innovations originate from creative ideas, a significant number of highly creative ideas are never implemented or adopted. Often, creative individuals fail to act on their ideas due to a lack of resources or interest in further development [31]. Managers' self-assessment of creativity is at an average level (M=54, with the test norm being 100), while curiosity (M=15) and risk-taking (M=15) are typical.

Our examination of factors contributing to and hindering creativity reveals an intriguing pattern. The highest contributing factors include the desire for self-improvement and self-development (M=5.5), freedom to express thoughts (M=5.4), sparking of new ideas (M=5.3), ability to develop and improve an idea (M=5.3), inspiration for generating new ideas (M=5.2), enthusiasm (M=5.2), constant and flexible communication, relationships (M=5.2), presence of individuals fostering creativity within the organization (M=5.2), and the manager's willingness to accept and implement new ideas (M=5.2). As observed from the results, the maximum number of contributing factors pertains to one's own capabilities, followed by the role of colleagues, supervisors, and relationships.

In this context, we can infer a correlation between intrinsic and extrinsic motivation in these data. Interestingly, taking creative breaks is not considered a significant contributing factor to creativity (M=3.9). Among the contributing factors, risk-taking is the least considered (M=4.2).

Managers identify template thinking (M=3.6), avoidance of responsibility for decision-making (M=3.6), inability to make independent decisions (M=3.5), and conformity to majority opinion (M=3.5) as hindering factors. Conversely, factors such as competition (M=2.3), self-doubt (M=2.5), reward (M=2.8), fear of appearing foolish (M=2.7), and rejection by the group (M=2.8) are least likely to hinder creativity. The analysis of factors contributing to and hindering the manifestation of creativity reveals a combination of internal, personal characteristics, and external environmental factors that influence creativity.

The research findings on the motivational orientation of managers indicate a focus on results (M=7), altruism (M=7), and freedom (M=7). When combined with contributing factors, it suggests that expressing free thoughts and having a freedom-oriented mindset are typical motivational orientations among managers.

The study on personal qualities shows that managers exhibit conscientiousness (Rule-Consciousness, M=10), trustworthiness (M=4), and self-discipline (M=9). While managers' self-evaluation appears adequate, their self-assessment in terms of creativity is not high. Drawing from research indicating that individuals with high creativity levels possess a combination of personal qualities [32], we segmented the data into groups with high (n=150) and average to above-average (n=130) creativity scores. Managers (n=20) scored low on creativity.

Upon segregating the data of those with high and average to above-average creativity indicators, it is evident that individuals with high creativity scores demonstrate superior levels of creativity, fluency, flexibility, and originality (with significant differences according to the Critical Values of the Student's t Distribution, $p<0.001$), albeit with lower elaboration and above-average naming (see Table 1).

As observed, individuals with high creativity indicators exhibit a high score in the name index, indicating a significant difference and a tendency to use words more creatively. This finding aligns with H. Lenk's observation, suggesting that highly creative individuals often employ metaphors in language, particularly in metaphoric imagination, which reflects deeper cognitive processes. Lenk further asserts that the creative formulation of new metaphors enhances imagination when employing unconventional combinations [20].

Regarding motivational orientation indicators, there is a notable difference in the case of power and money, both of which are higher among individuals with high creativity indicators (see Table 3).

Table 1. *Separation of Data for Individuals with High, Average, and Above Average Levels of Creativity.*

Indicator	High level of creativity (n=150)	Average and above average level of creativity(n=130)	t Value
Fluency	12	11	-
Flexibility	7	6	3,48
Originality	30	21	3,36
Elaboration	17	11	6,47
Name	19	15	4,02
Creativity	86	64	8,43

Table 2. *Separating the data of those with high and average and above average indicators of personal creativity.*

Indicator	High level of creativity (n=150)	Average and above average level of creativity(n=130)	t Value
Curiosity	15	15	-
Imagination	9	11	1,58
Complexity	15	13	1,84
Risk-taking ability	16	15	1,07
Self-assessment of creativity	54	53	0,29

Table 3. *Separation of Data for Individuals with High, Average, and Above Average Levels of Personal Creativity.*

Indicator	High level of creativity (n=150)	Average and above average level of creativity(n=130)	t Value
Process	6	5	2,37
Result	7	7	-
Altruism	7	7	-
Egoism	4	4	-
Work	5	6	1,83
Freedom	7	7	-
Power	4	3	2,00
Money	3	2	2,80

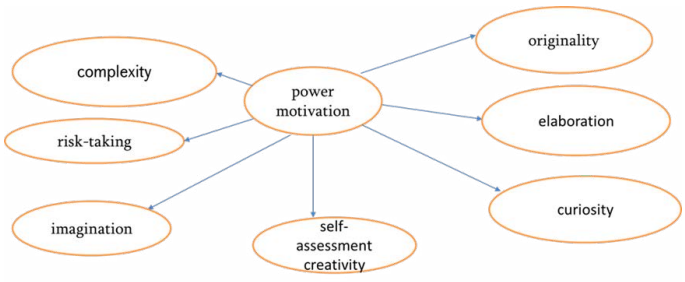

Figure 1. *The correlation between power motivation and creativity.*

It is also noteworthy to explore the relationships between a person's motivational orientation, personality qualities, and creativity indicators. Correlation analysis (n=300) reveals a significant relationship between power motivation and various creativity indicators, including originality (r=0.288), elaboration (r=0.228, p<0.001), curiosity (r=0.390, p<0.001), imagination (r=0.350, p<0.001), complexity (r=0.228, p<0.001), risk-taking (r=0.327, p<0.001), and self-assessment of creativity (r=0.417, p<0.001) (see Figure 1).

This connection indicates that the more managers lean towards exercising authority, the more likely they are to propose unique ideas, develop them, take risks, solve complex problems, imagine, exhibit curiosity, and highly value their creativity. The presence of this correlation reaffirms that modern managers do not perceive competition as a hindrance to creativity. Moreover, when they possess power and influence over others, they demonstrate their creativity. Conversely, if they exhibit flexibility, they tend to be more self-centered (correlation with flexibility and egoism r=0.274, p<0.001). Additionally, in terms of personality traits, they display suspicion (r=0.352, p<0.001) and anxiety (r=0.259, p<0.001) and are less work-oriented (negative correlation with work and flexibility r=-0.242, p<0.001).

In other words, the higher the flexibility of managers, the less job satisfaction they experience. Regarding creativity, they are process-oriented (correlation with creativity and process r=0.275, p<0.001), elaboration (correlation with elaboration and process r=0.263, p<0.001), and name (correlation between name and process r=0.295, p<0.001); managers derive satisfaction from the process as they propose innovative solutions, develop ideas, and use words creatively. Noteworthy connections include managers being communicative, adept at forming interpersonal relationships, process-oriented (correlation with Warmth and process r=0.251), altruistic with Warmth and altruistic (r=0.396, p<0.001), non-egoistic (r=-0.256, p<0.001), and not money-oriented (r=-0.316, p<0.001).

Their altruism and concern for others are associated with liveliness (correlation with altruism and liveliness r=0.342, p<0.001), and liveliness and work orientation (r=0.395, p<0.001), conscientiousness, guided by a sense of duty and responsibility (correlation with altruism and Rule-Consciousness r=0.317, p<0.001, and correlation with Rule-Consciousness and work orientation r=0.269, p<0.001). Furthermore, the more work-oriented they are, the more insightful and radical they become (correlation with work orientation and privateness r=0.383, p<0.001, and openness to Change r=0.428, p<0.001). Increased proposal of unique ideas, improvements, and varied problem-solving approaches is associated with higher emotional stability (correlation with emotional Stability and originality r=0.309, p<0.001, elaboration r=0.294, p<0.001, and creativity r=0.308, p<0.001).

The more managers exhibit creativity, propose diverse problem-solving approaches, and use language creatively, the more challenging it becomes to control their behaviour (negative correlation with Self-Disciplined and creativity r=-0.262, p<0.001), and name (r=-0.287, p<0.001), indicating how curious, flamboyant, cheerful, flexible in communication, and potentially emotional they can be as leaders in groups (correlation with curiosity and liveliness r=0.256, p<0.001). Additionally, the more managers tend to solve complex problems, the more independent they become, tend to express their opinions, and tend to assume dominant positions in groups (correlation with Complexity and Self-Reliance r=0.266, p<0.001).

Based on our research findings, we assert that creativity as a systemic attribute encompasses sociability, skepticism, anxiety,

and independence among personal qualities. Considering the correlations between creativity results and motivational orientation, we deduce that the motivational orientations conducive to creativity are process, altruism, egoism, with power being the predominant motivational orientation. Hence, the requisite qualities for managers to exhibit creativity encompass sociability, independence, insight, conscientiousness, skepticism, anxiety, with the primary motivational orientation being power and process.

Comparing the correlations of creativity, its standards, personal qualities, self-evaluation, motivational orientation, and personal goals between individuals with high and low creativity indicators, we observe significant associations among those with high indicators (n=150) towards power orientation and originality ($r=0.365$, $p<0.001$), curiosity ($r=0.437$, $p<0.001$), imagination ($r=0.525$, $p<0.001$), risk-taking ($r=0.316$, $p<0.001$), and creativity ($r=0.444$, $p<0.001$). Among those with medium to medium-high indicators (n=130), significant correlations exist between power orientation and originality ($r=0.241$, $p<0.001$), curiosity ($r=0.402$, $p<0.001$), imagination ($r=0.278$, $p<0.001$), complexity ($r=0.307$, $p<0.001$), risk propensity ($r=0.245$, $p<0.001$), and self-assessment of creativity ($r=0.396$, $p<0.001$). Hence, among individuals with high and above-average creativity scores, power orientation is correlated with originality, curiosity, imagination, risk-taking, and creativity self-assessment, while among those with average and above-average scores, it is also associated with complexity, indicating that they are more inclined to assert power as they tackle complex problems. These correlations contribute to a deeper understanding of the role of motivation in managerial creativity and inspire further research. The motivational inclination towards authority closely aligns with the components of managers' creativity and personal qualities, thus emphasizing the psychological profile of a contemporary manager and the specificity of their role.

Among those with high creativity scores, a negative relationship between work orientation and flexibility ($r=-0.292$, $p<0.001$) was observed, indicating that the more flexible they are and the more they think across different categories, the less interested they become in their work. Additionally, among personal qualities, there is a correlation between Self-Reliance and complexity among individuals with high creativity ($r=0.369$, $p<0.001$) and above average ($r=0.281$, $p<0.001$).

This connection demonstrates that individuals are independent when addressing complex problems, as stated by N. Berdyaev, who suggests that creative work necessitates a person's self-sufficiency, independence, and detachment from the world rather than conformity to it [33]. Consequently, it is imperative to create conducive conditions and provide encouragement for those with high creativity scores. In line with H. Lenk's perspective, fostering high creativity is crucial for opening new developmental avenues and stimulating creative potential, thus necessitating the provision of opportunities and motivation for creative expression [20]. Günter Abel emphasizes the significance of such encouragement, noting that highly creative individuals, more than others, may be overwhelmed by stimuli but have the capacity to channel chaos productively into their output [34].

Conclusion.

The research findings have delineated a psychological profile of modern managers, wherein creativity emerges as a systemic attribute intertwined with personal qualities such as sociability, independence, insight, and conscientiousness. While managers exhibit high levels of creativity, characterized by fluency, flexibility, and originality, they display reluctance in refining and enhancing their ideas. Notably, power and altruism occupy prominent positions among their motivational orientations, with managers not perceiving rewards or competition as hindrances to creativity. Factors conducive to their creative expression include dominance, competition, reward, freedom of thought, and risk acceptance.

The manifestation of managers' creativity is contingent upon a unique blend of personal qualities and motivational orientations. Particularly, a motivational orientation toward power correlates with originality, curiosity, imagination, complexity, risk-taking, and a heightened appreciation of creativity. Managers exhibit independence in tackling complex problems and demonstrate reduced interest in work as their flexibility increases. Moreover, a greater orientation toward work corresponds to heightened insight and radical thinking. Emotional stability is notable when proposing novel ideas and solutions. These correlations enhance our understanding of the determinants of creativity manifestation and are instrumental in organizing managerial activities.

Hence, our model integrating creativity levels, standards, personal qualities, hindering and contributing factors, as well as motivation, can serve as the foundation for managerial training and development, fostering differentiated and targeted training approaches to enhance mental health and socio-psychological maturity. Addressing factors influencing creativity becomes instrumental in facilitating managers' self-realization. Developing managers' creative abilities is vital for preserving mental health, thus serving as a protective factor against professional burnout. This model for researching and fostering creativity can underpin a scientific approach to promoting mental health and psychological maturity among managers.

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