# Formation of Legal Competence of Future Bachelors of Psychological and Pedagogical Education

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**Abstract—**The implementation of gamification in a digital or classroom format is necessary in the professional training of students, despite various assessments of its effectiveness. However, the introduction of classroom gami cation in the field of psychological and pedagogical education in the aspect of legal training with independent student self-government during extracurricular hours without hindering the academic load has not been sufficiently studied. Hence the aim of the study: to develop didactic games for students - future bachelors of psychological and pedagogical education and to experimentally prove the effectiveness of their implementation in extracurricular activities to form their legal competence. The experiment involved 184 undergraduate students. During three academic semesters, students of the experimental sample implemented a set of special diagnostic games. Based on the analysis of various educational technologies for the formation of students' legal competencies, a special set of didactic games has been identified and systematized. The article presents the author's vision of the content and technology of forming the legal competence of future teachers and psychologists, which includes six synergistically interrelated competences: Legislative, regulatory, ethical, social, informational and psychological. The results of the study were statistically confirmed by an increase in the level of formation of legal competence separately for each competence among students.

# 1    Introduction

To date, to ensure the effectiveness of the educational process, the professional activity of a future young specialist in the field of pedagogy and psychology must include planning and organization of legal activity [1], analysis and systematization of information in legislative and regulatory aspects [2]. The Law "On Education", the Federal State Educational Standard of Teachers and the Federal Concept of Spiritual and Moral Development and Education of a Citizen dictate the need to form the personality of a teacher-psychologist in a new legal environment in the education system [3, 4]. Interaction with students and their parents, the administration of educational institutions and representatives of all levels of the education system determines the need to know, understand and apply in professional activities the regulatory framework of the municipal, regional and federal levels [5, 6]. In this regard, in order to increase the efficiency of the educational process at school, it is necessary to prepare the student for the implementation of the new legal space in the process of his professional development [2]. Particular attention should be paid to the formation of the competencies of students - future bachelors of psychological and pedagogical education in the field of legal, legislative, regulatory, ethical, informational, social and psychological activities [4, 6]. Each of these types of activities is necessary to improve the quality of training a modern young specialist, which, due to their synergistic interaction, improves the quality of education and upbringing of the younger generation [7]. Namely, a synergistic combination of all the presented types of activity can fully and effectively form one of the key competencies of a modern successful specialist, namely his legal competence [3, 8].

# 2    Literature Review

## 2.1    Formation of legal competence

The analysis of special scientific and methodological literature [4, 5] showed that legal activity is based on special ethical and social abilities, motives, normative knowledge and information skills, thanks to which a professional resource is created that is distinguished by novelty, originality and individuality. [12]. However, the legal capacity of a specialist in the field of pedagogy and psychology is only one of the forms of professional skill [6, 9]. This is a prerequisite for the improvement of a young specialist, the formation of new forms in her, with the appearance of which there is a change in the forms of legal capacity [8]. Legal competence is manifested in non-standard ways of solving pedagogical problems, analyzing psychological situations and making professional decisions [2, 10]. The results of professional activities based on legal experience and competencies can be in the form of new ideas, laws, concepts, principles, models of psychological and pedagogical technologies [6, 11]. The same legal abilities operate in different combinations and are manifested in different types of professional activity [3].

To increase the level of professional training of students in the field of legal competence, various technologies are used, associated with educational and extracurricular training of bachelors of psychological and pedagogical education and further improvement of their professional qualifications [7]. One of such technologies for the formation of students' legal abilities and competences in the psychological and pedagogical sphere are didactic games [12]. It is gamification with its own autonomy in the process of educational activity on the formation of student's legal competencies that will allow achieving efficiency in comparison with the traditional educational regulatory environment [13]. The use of didactic role-playing games is an effective pedagogical method of professional training of various training profiles in the field of legal direction [6].

## 2.2    Gamification in learning

To date, researchers and specialists in the field of psychological and pedagogical education are concerned that students are bored and lack motivation in the implementation of traditional forms of education [14]. On the other hand, experts in the field of practical implementation of gamification in teaching prove that a properly organized learning game environment promotes the activation of educational activities and an increase in the internal involvement of young people in this process [15, 16]. Empirical studies show that in groups in which teaching is focused on gamification, the percentage of students leaving early education is significantly lower than in groups with a traditional form of education [17]. On the basis of statistical evidence, many researchers emphasize the fact that with the implementation of special gaming technologies, the educational and upbringing process becomes more effective in academic terms [18].

In terms of the form of activity and impact, didactic games used in the process of professional training are divided into digital games on mobile devices and computers [19] and classroom games with direct contact interaction of participants [13, 20]. Experts, based on empirical research, prove the effectiveness of digital gamification through the creation of a creative and free way of thinking that encourages students to try new things and not be afraid of gaming failures in the learning process [21]. Nevertheless, they emphasize that digital gamification should be used primarily as a starting point for learning to inspire and motivate, or to complement other effectively supported technologies of educational and educational interaction [22]. In turn, researchers of the second direction associate the main effect in the implementation of contact gamification in education with the skills of teamwork, which is especially necessary in today's world [15, 23]. Various types of contact didactic games are proposed and empirically substantiated, for example, quests focused on the formation of students' skills of social thinking and a sense of cooperation and urgency [24].

## 2.3    Theoretical framework

In terms of its content structure, gamification has three main methodological advantages for the involvement of students in the learning process: An adversarial com-

ponent, unexpected variability of the process, and a final encouragement or reward [25]. The theoretical model of gamification in higher educational institutions is based on the concept of problem-oriented learning using game technologies combined into a synergistic educational space [26, 27]. Through playful constructive cooperation, the introduction of this model makes it possible to increase the level of critical and operational thinking of students [28], thereby solving the problem of lack of interest and motivation in certain subjects on the part of student youth [18]. In this direction, the implementation of this model has an advantage in a lower level of stress, compared with the traditional space [14], which in some cases can cause mental illness of students [29]. As studies in the physiological and psychological aspect show, gaming technologies in higher education increase physical and mental stability and social intelligence through counteracting the fear of failure and avoiding unreasonable risk and other negative aspects of performativity [29, 30].

Thus, didactic games are widely used in training at the highest level for various spheres of modern society [31]. This game technology, in terms of its content and setting of tasks, belongs to the sphere of innovation, means and methods of vocational training [32]. The main direction of the inclusion of didactic games in the professional training of students is the search for opportunities to include students in independent legislative, normative and ethical activities within the framework of a collective form of education [33]. It is in the implementation of these technologies that the possibility of the most effective combination of all educational and extra-curricular practical situations with an emphasis [34], first of all, on the situation of controlled legal activity [35], is manifested. Studies show that the implementation of didactic games in a digital or classroom format is necessary in the professional training of the legal direction, despite different assessments of effectiveness [22, 27]. However, the implementation of classroom gamification in the field of legal education with independent student self-government during extracurricular hours without hindering the academic load has not been sufficiently studied.

## 2.4    Hypothesis and purpose of the study

In this regard, the study formulated a hypothesis: If you develop and systematically introduce classroom didactic games for students in extracurricular activities, you can significantly increase the effectiveness of professional training of students of psychological and pedagogical faculties in the legal aspect of the education system. Thus, the purpose of the study is to develop didactic games for students - future bachelors of psychological and pedagogical education and experimentally prove the effectiveness of their implementation in extracurricular activities to form their legal competence.

# 3 Materials and Methods

## 3.1 Research design

The study was conducted at K.G. Razumovsky Moscow State University of Technologies and Management (The First Cossack University) for 17 months from February 2018 to June 2019. The experiment was attended by 184 full-time, part-time and evening students from 20 to 27 years old, regardless of gender. All research participants are studying for a bachelor's degree in the field of psychological and pedagogical education. Each participant in the experiment gave written consent to participate in the experimental work. Before the start of the study, on the basis of a random sample, the focus group (n = 184) was divided into experimental (n = 94) - the EG and the control (n = 90) groups - CG. During three academic semesters, the students from the EG implemented a complex of special diagnostic games (1-2 times a month) in extracurricular activities with full-time education. The didactic games were implemented in the format of independent self-government on the basis of the student research society under the Council of Students and the Center for Student Scientific Initiatives. During the experiment, these games were not repeated and were carried out each time in a new modification. On the basis of a random sampling method, the CG included students of correspondence and evening departments who did not implement the complex of didactic games. Due to the fact that they are engaged in professional activities outside school hours and are already working in the system of general and additional education, as well as in the organizations of social and psychological services. However, the tasks achieved in the course of didactic games were offered to them to solve independently in the course of continuous professional activity or special work with young people.

## 3.2 Measurement instrument

The formation of students' legal competence was assessed according to the standard funds of assessment tools (pedagogical design, special tests, case method, implying the implementation of practice-oriented tasks) at three levels: Low or threshold, intermediate or basic, high or advanced. Testing is based on the classification table for B. Bloom's taxonomy in the author's interpretation [34]. The procedure was carried out on the basis of special testing of three levels of complexity for three days (1 level of testing per day):

Level 1 - Knowledge: Students were tested memorizing and reproducing the studied material in the context of various types of content - from specific facts to holistic theories on legal topics. A common feature of this category is the recall of the relevant information of the normative-legislative direction in the field of education.

Level 2 - Understanding or comprehension: The ability of students to transform material from one form of expression to another was determined. The ability to interpret the material by the student (explanation, summary) or the assumption about the further course of phenomena, events (prediction of consequences, results) were used

as an indicator of understanding. The student must understand the facts, rules and principles of legal law in the educational system; interpret verbal material; convert verbal material into mathematical expressions; presumably describe the future consequences of the available data.

Level 3 - Application: The ability of students to use the studied material in specific conditions and in new situations was revealed based on the application of rules, methods, concepts, laws, principles, theories. Appropriate learning outcomes require a higher level of proficiency in the material than understanding. The student must be able to use concepts and principles in new situations in practice; apply laws, theories in specific practical legal situations; demonstrates the correct application of a method or procedure.

Testing consisted of three parts: Level 1 - 60 questions (choosing the correct answer from 3 - 4 options); level 2 - 30 questions (offering your answer or choosing the correct answer from 3 - 4 options with a mandatory justification for the chosen answer); level 3 - 15 questions (practical demonstration of acquired legal knowledge in the education system). The processing of the results was carried out on the basis of the summation of the points scored as a result of the testing according to the following scheme: $X = A + B * 2 + C * 4$, where "A" is the number of correct answers for level 1, "B" is the number of correct answers for 2 level, "C" - the number of correct answers for the 3rd level. Test results: high level - more than 145 points (inclusive) - the student has all 3 levels of development of legal competence (knowledge, understanding and application); average level - more than 85, but less than 144 points (inclusive) - the student has 2 levels of knowledge development in the field of legal direction (knowledge and understanding), level 3 (application) is poorly or not at all learned; low level - less than 84 points (inclusive) - the respondent has 1 basic level (knowledge), 2 level (understanding) is poorly represented or not mastered at all.

### 3.3 Analyzing data

The statistical significance of the obtained values was carried out on the basis of the information method SPSS Statistics 20. For comparative difference or correspondence of the obtained numerical data by groups, the statistical method chi-square ($X^2$) was used at $p < 0.05$. Statistical processing was carried out in groups at three levels: High, medium and low. The statistical research was carried out between the data from the EG and the CG obtained in the course of the research in each area of legal competence in the education system proposed in the research, before the introduction of didactic games (February 2018) and after the implementation of the author's development (June 2019).

# 4 Results

## 4.1 Theoretical analysis results

On the basis of theoretical analysis and generalization of specialized scientific literature, various substantive directions of the formed legal competence of students were studied [1, 5]. Being a synthesis of legislative and normative knowledge and practical skills in the field of social and psychological communications, legal abilities embody information, ethical and psychological-pedagogical aspects of their activities and act as various competencies that make up the content of the student's legal competence [3, 4]. The content of the pedagogical process for the formation of legal competence can be represented in the following model "see Figure 1".
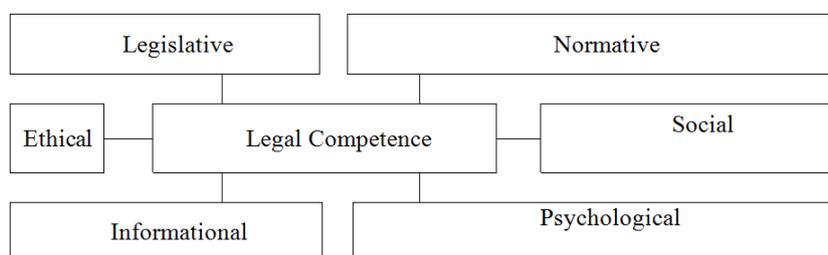


**Fig. 1.** The system model of competencies that form the
basis of student legal competence

## 4.2 Types of didactic games

In turn, a theoretical analysis of the implementation of didactic games in the process of educational and extracurricular activities of students of various profiles [12, 35] made it possible to develop differentiation according to target, long-term and structural characteristics "see Figure 2".
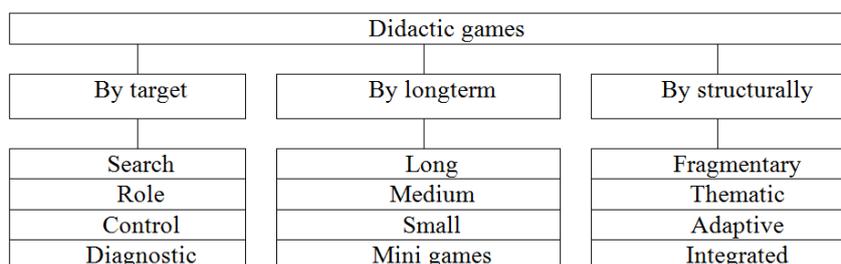


**Fig. 2.** Classification of didactic games in the process of training students

On the basis of the presented classification of didactic games for the study, a special gamification system was developed together with the assets of students [31, 35].

Each didactic game included three completed modules or three stages. Due to the fact that the complex of didactic games and its descriptive content are numerous, for demonstration this study is one of the didactic games "Legal competence" conducted by students during the experimental period. By the target sign, the game is exploratory, by the long sign - medium, by the structural feature - adaptive. Before the start of the game, students were given a preliminary task to study the legal experience of any teacher. The game participants had a goal: To learn how to analyze legal experience, to creatively define the merits and demerits of this experience, to evaluate it according to the formulated criteria.

### 4.3 The structure and content of didactic games "Legal competence"

Participants in the didactic game were divided into the following roles: Presenter, expert, critic, researchers, experts, leaders and organizers in groups. "See Table 1" the 1st stage of the didactic game "Legal competence".

**Table 1.** Preliminary organizational stage of the didactic game "Legal Competence"

| Stage | Content |
|---|---|
| 1. Preliminary organizational | *I. Information block:*<br>Definition of the concept of "Legal competence". Statements of famous educators about legal competence. Types of legal competence and their distinctive features.<br>Handouts specially prepared for her were used in this part of the game.<br>2. Virtual mobile competitions and e-sports.<br>*II. Organization Block:*<br>The game participants were divided into groups of 4-5 people. A larger number in the groups was not practical, as the discussion process would be more complicated. In each group, the leader and organizer of the group was chosen. The leader oriented the group towards the solution of assigned tasks. The organizer solved various organizational issues, including providing operational communication with the host.<br>*III. Preliminary work in groups:*<br>After familiarizing the group with the studied legal competence of teachers, it was revealed what is common between them and what is distinctive and individual. Based on a preliminary assignment, it is determined which teacher's competence is the most interesting and can be recommended for distribution. Work in the group began with the fact that each participant talked about the competence of the teacher he studied. Its strongest points and those advantages that may be of interest to other teachers were noted.<br>*IV. Preliminary teamwork:*<br>The tasks set at the previous stage were preserved, but their solution was carried out at a different level. Each group reported the legal competence of the teacher, which she chose as the best. An exchange of views took place, issues of common features, differences, individual characteristics of legal competence were discussed and conclusions were drawn. The host gradually led the discussion participants to the fact that criteria for the subsequent stages of the didactic game should be formulated to assess legal competence. |

At the first stage, the project group of students determined the competence of which teacher is of the greatest interest and can be proposed for further collective discussion. At this stage, an option is possible: not to consider the competence of one teacher, but to choose the best in the work of different teachers. After the reports of all members of the project team, a discussion took place: Common features in the competence of different teachers and distinctive, individual characteristics characteristic of

each of them were identified. The result of this stage was the formulation of preliminary criteria and theoretical foundations for the subsequent stages of the didactic game.

**Table 2.** Search engine main stage of the didactic game "Legal Competence"

| Stage | Content |
|---|---|
| 1. Search engine main | *I. Search work in groups:*<br>The search for criteria, their formulation to a certain extent was prepared by the previous group and collective work. There were many difficulties at this stage, and the success of the activity began to depend to a large extent not only on the practical, but also on the theoretical preparedness of the participants in the game. Nevertheless, the host had his own version of the criteria for assessing legal competence and, if necessary, could help the participants to reach the next level. The participants of the game independently found creative and interesting diagnostic approaches.<br>*II. Search teamwork:*<br>The tasks set at the previous stage were preserved, but their solution was already carried out on the basis of a discussion. Groups reported results. After this, a discussion was implemented in which minor options were excluded, additions were made, and the wording was clarified. As a result of the discussion, the participants proposed an original system of criteria. In the discussion, the participants in the game made separate clarifications. In general, this system of criteria for assessing legal competence was adopted.<br>*III. The main work in groups:*<br>At this stage, an assessment of the legal competence of well-known teachers was implemented taking into account the formulated criteria. When implementing the discussion in the group, it was determined in the groups that their legal competence could be taken into service in future professional activities. In making judgments, students relied on their knowledge of the legal competence of well-known educators. Each group performed an individual task, in which, in accordance with the tasks set, it was necessary to consider the legal competence of one of the leading Russian or foreign teachers. Using the ideas of each participant about a specific legal competence through the transfer of their individual elements into their practice, conclusions were drawn. The group weighted the advantages and disadvantages, jointly assessed by criteria and determined the most valuable in the implementation of legal competence.<br>*IV. The main teamwork:*<br>At this stage, students continue to solve the problems posed in the previous stage. The results that the groups came to when analyzing the legal competence of well-known educators were reported and actively discussed. Particularly important for the participants in the game was the identification of what can be taken from this legal competence for their future professional activities. It was necessary to avoid mistakes and rise to a higher level of legal didactic generalization. Nevertheless, the mechanical transfer by students to their practice of any techniques, means, and even more so the technology of organizing the legal process could give negative results and, as a result of this, cause a negative attitude to a particular legal competence. The right orientation in this matter was helped by students at this stage in the previously formulated system of criteria for assessing legal competence. |

At the second stage "see Table 2", the project team was tasked with formulating criteria for assessing legal competence. When working with students well-trained in theory, another task was set: To establish the weight coefficients of the legal and legislative significance of these criteria. As a result of the discussion by the research participants, the following system of criteria was proposed: Stability of high results, representativeness or evidence, compliance with didactic and methodological requirements, optimality or rationality of activities, the presence of a promising legal idea, the presence of a promising legal idea. the novelty of the proposed methods, the creation of an integrated legal competence from individual elements of the existing legal competence of other teachers and the availability of dissemination. During the

discussion, the participants of the game made separate explanations. Relying on them, the students analyzed the legal competence of well-known teachers in a rather generalized and legally competent manner, found in it a new and relevant one. And then we collectively thought about how a valuable idea could be put into practice, taking into account the conditions and capabilities of each student.

**Table 3.** The reflective creative stage of the didactic game "Legal Competence"

| Stage | Content |
|---|---|
| 3. Reflective creative | *I. Summing up the activities of participants in a didactic game:*<br>The host summed up the activities of each group individually and the team as a whole. Both substantive and procedural aspects were important; the competitive aspect was actively included. For this, during the preparation and conduct of the game, a number of organizational issues were quite fully resolved. The winning group was determined collectively by voting. However, it should be noted here that the competitive aspect was only of secondary importance in the implementation of the game.<br>*II. Information and creative block:*<br>A natural continuation of the previous stage was the leader's brief information on two main issues: in the field of the formation and generalization of the legal competence of leading scientists and the peculiarities of legal competence as one of the foundations of the student's legal skills - the future employee of the general and additional education system.<br>*III. Tasks for subsequent independent work:*<br>Based on the existing knowledge and criteria system, the students analyzed the features of the legal competence of various leading scientists identified during the game. Their advantages and disadvantages are noted, further ways of improvement in this direction are outlined. It should be noted that not all participants in the game had the necessary knowledge for a competent analysis of their legal competence. Nevertheless, many saw the possibilities of a creative approach to enriching their practical activities. The leading students were aimed at finding ways to improve their level of legal professionalism.<br>*IV. Reflection:*<br>This final stage completed the didactic game. Each student comprehended what happened during the game. At the stage, two periods were identified. The first is organizational reflection, when the discussion was implemented on what was succeeded or failed to be done and for what reason, who and what remained satisfied or dissatisfied, etc. The opportunity to speak was provided to everyone. The second is an independent reflection, when everyone focused on himself: how he came to the game and how he left it, how he carried out various types of activities and what role was successful, and which one failed and why. |

In stage 3 "See Table 3", the project team was tasked with assessing and reflecting. Reflection was realized: was each student active enough at different stages of the game, how he communicated with the group members, as well as with the team as a whole, what he is happy with and what he is dissatisfied with, what conclusions he made for himself for the future. After setting the time for self-reflection, individual participants in the game were given the opportunity to express their thoughts aloud.

## 4.4 Validation results

To identify the influence of the implementation of didactic games in extracurricular activities on the formation of legal competence of students, all students of the experimental group were tested, and for comparison, diagnostic monitoring of the control sample was carried out. It should be noted that before the experimental work (February 2018), in each direction, the mathematical-static unreliability of differences

(p<0.05) between the EG and CG data for the groups of levels was registered. Beyond one area - regulatory competence. For this competence, the reliability of the difference (p>0.05) towards higher indices in the CG compared to the EG was recorded. This can be explained by the fact that this group is already engaged in professional practice and is focused on the independent formation of normative competencies. The results of this preliminary comparison confirm the uniform distribution of students in the sample, which allows obtaining reliable results of the intervention after the experiment. The summary results of the experiment in all areas of creative and pedagogical development of students "See Table 4".

**Table 4.** The results of the experiment for each competence of the formation of legal competence of students

| Direction | Stage | Number of respondents | | | | | | $X^2$ | P* |
| | | High Level | | Average Level | | Low Level | | | |
| | | EG | CG | EG | CG | EG | CG | | |
| Legislative | February | 7 | 8 | 39 | 44 | 48 | 38 | 3.24 | > 0.05 |
| | June | 16 | 10 | 69 | 51 | 9 | 29 | 6.12 | < 0.05 |
| Normative | February | 11 | 18 | 38 | 52 | 45 | 20 | 7.76 | < 0.05 |
| | June | 20 | 19 | 62 | 60 | 12 | 11 | 2.38 | > 0.05 |
| Ethical | February | 13 | 17 | 62 | 66 | 19 | 7 | 3.75 | > 0.05 |
| | June | 23 | 15 | 70 | 67 | 1 | 8 | 8.22 | < 0.05 |
| Social | February | 9 | 10 | 38 | 40 | 47 | 40 | 2.57 | > 0.05 |
| | June | 45 | 16 | 45 | 51 | 4 | 23 | 8.89 | < 0.05 |
| Informational | February | 17 | 13 | 50 | 49 | 27 | 28 | 4.06 | > 0.05 |
| | June | 32 | 19 | 59 | 50 | 3 | 21 | 8.11 | < 0.05 |
| Psycholo-gical | February | 15 | 18 | 58 | 50 | 21 | 22 | 2.16 | > 0.05 |
| | June | 21 | 25 | 49 | 52 | 24 | 13 | 4.62 | > 0.05 |

P*: P >0.05 - $X^2$<5.991; P<0.05 – 9.21>$X^2$>5.991.

As a result, after the experiment (June 2019), the statistical reliability (p <0.05) between the EG and the CG was revealed for the majority of formed legal competencies of students. The experimental work had a positive impact on the legislative competence (p<0.05), ethical competence (p<0.05), social competence (p<0.05) and information competence (p<0.05) of students. The impact of didactic games manifested itself among students in normative competence. Before the experimental work, there was the significance of the difference, and after the statistical equality. Despite the revealed positive results, the experiment did not have a significant effect (p>0.05) on the increase in the psychological competence of students (p>0.05). The registered inaccuracy is possible due to the fact that the formation of psychological competence should take place under the clear guidance of specialists. Or, a longer experimental period is needed to confirm more accurate results. Nevertheless, the data obtained confirm the effectiveness of the introduction of legal didactic games to increase the indicators of legal competence of students - future bachelors of psychological and pedagogical education.

### 4.5 Limitations

The presented research results were limited to a sample of K.G. students. Razumovsky Moscow State University of Technologies and Management (the First Cossack University), who studied in pedagogical and psychological professional areas of undergraduate studies. The stated sample of students does not allow covering the entire target audience, since the research was conducted at only one university. In connection with this limitation, the conclusions of the study can be fixed as preliminary, and for the subsequent more differentiated analysis, it is necessary to conduct an empirical experiment in several universities in Moscow. A large sample of study participants will provide statistically reliable information about solving the problem identified in the study.

## 5 Discussion

The revealed experimental results complement psychological and pedagogical studies [9, 13], which prove that the implementation of gamification in higher education increases the effectiveness of professional training and contributes to the formation of certain groups of cultural and professional competencies [2, 31]. It is the gaming environment that increases the motivation for students to acquire new competencies, thereby significantly increasing their academic performance [15, 18]. Some of them emphasize that digital gamification should be used primarily as a starting point for training or as an addition to other educational and upbringing technologies of educational and upbringing interaction [16, 17]. Nevertheless, in the current conditions of increasing the informatization of education, the main emphasis in research is on digital gamification [21]. However, as the present study shows, legal non-core practice for teachers and psychologists should be focused on contact extracurricular activities, thereby justifying the need to implement classroom gamification.

Experts empirically record that in the higher education system, teachers are limited mainly to the creation and use of role-playing games in the educational process [12, 32]. This use of didactic games is ineffective for the professional training of students - future bachelors of psychological and pedagogical education [20, 35]. As shown, the experiment, which was developed and implemented outside the classroom on the basis of students 'self-management, a special set of didactic games turned out to be reliably ($p<0.05$) effective for increasing students' legal literacy. Students studying in pedagogical and psychological professional areas statistically ($p<0.05$) increased their knowledge of the legislative, ethical, social, informational and normative competencies of students. The presented set of competencies corresponds to the systematization of the role-playing games used, in turn, is the main characteristic and feature of a teacher and a highly qualified psychologist.

The experiment being implemented is consistent with the results of scientific works aimed at the formation of the legal competence of future specialists in the system of professional human-to-human interaction using innovative approaches [1, 2]. Only with the correct application of the innovative method with careful attention to the elimination of potential negatives in the implementation of gamification can a positive

result be achieved in the process of professional training [21]. It is in the mainstream of generalization and systematization of methodologies and tools that would allow students to adopt this approach with substantiation of the positive results obtained, that this study was carried out. The model of game learning presented in the work, based on the design of game problem-oriented learning [28], satisfies the real social needs of modern students in learning.

In the direction of legal competence, previous studies on the formation of a system of normative and legislative skills and the development of the ethical and informational potential of students with the help of didactic games only fragmentarily or occasionally cover the implementation of this process outside school hours [6, 7]. Scientific work is mainly aimed at the experimental confirmation of external system-forming factors through the dominant activity of the psychologist in this professional activity [3, 5]. In this direction, it is a specialist in the field of psychological and pedagogical education who presents to students the subject of his activity in the form of a system of legal tasks and cases [4]. It is in this study that an original approach to the implementation of internal system-forming factors for the systemic and complex formation of legal competence is implemented.

Thus, the obtained reliable results improve the quality of professional training of future teachers and psychologists in the field of legal literacy. The main result is an experimental substantiation of the need for a holistic formation of legal competence through independent assimilation of legal experience through the integration of educational and extracurricular activities. In the study, based on a comparative experiment, a practical basis was created for improving professional pedagogical and psychological education by adjusting the content, structure and self-control in extracurricular activities, as well as creating new psychological and pedagogical situations for the formation of legal competence. As the results of the experiment showed, the orientation towards the independent activity of students in the implementation of special didactic games as active participants allows to achieve the most positive results in the legal formation of students - future bachelors of psychological and pedagogical education. The original educational technology of classroom gamification, tested in the study, can serve as an indicative basis for the development of curricula for the design and research activities of students of pedagogical and psychological training profiles.

## 6 Conclusion

Thus, the experimental study represents the author's paradigm of systematization and classification of the competencies of future educational psychologists in the field of legal activity. The content of legal competence presented in the model includes six synergistically interrelated competences: Legislative, regulatory, ethical, social, informational and psychological. In turn, each competence is classified according to three levels of formation of students - future bachelors of psychological and pedagogical education. The author's system of gamification is presented in detail on the basis of a complex of didactic games for the development of students' legal competence from the point of view of target, temporal and structural characteristics. The statistical

data obtained in the course of the study confirm the need for gamification in the educational process of teachers and psychologists. Only if a variety of didactic games are introduced in the extracurricular time of students in the mode of independent control of the process can the legal competence of students be fully formed.

For psychological and pedagogical science in the theoretical direction, this study serves as a new scientific justification and methodological basis for improving the quality of professional training of future teachers and psychologists in the field of legal competence. The theoretical value of the idea is based on the need for the holistic formation of legal competence through the independence of assimilation of legal experience through the integration of educational and extracurricular activities. The practical significance of the research is determined by the extensive use of the experience accumulated by the author in the implementation of classroom gamification in the learning process. The practical results of the research create the basis for modernizing professional pedagogical and psychological education, improving the content, structure and self-control, creating new psychological and pedagogical situations for the formation of legal competence in the education system. Original approaches to the design of the content of didactic games can serve as an indicative basis for the development of curricula for professional training in the field of project and research activities of students.

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