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**CONDITIONS FOR THE DEVELOPMENT OF SOCIAL  
INTELLIGENCE IN FUTURE EDUCATIONAL PSYCHOLOGISTS**

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***Abstract***

Social intelligence is a relatively new concept in social psychology, which is still developing and needs clarification and verification. Regarding features of the educational psychologist's professional activity and requirements imposed on it, social intelligence can be considered as the necessary prerequisite for psychologist's successful professional activity. Creation of pedagogical conditions needed for the development of social intelligence as a professionally significant aspect in training of future teachers and psychologists is of particular importance. The purpose of this article is to experimentally test the efficiency of the developed pedagogical conditions for the development of social intelligence in future educational psychologists and confirm the efficacy of the training program developed on its basis. The main research methods used are pedagogical experiment, observation, testing, conversation and statistical methods of research results processing. The experiment involved 156 students. Participants of the experiment demonstrated statistically significant improvements as a result of the introduction into the educational activities of the developed pedagogical conditions for the formation of social intelligence. Well-proven pedagogical conditions, as well as the developed program can be used by high school teachers and educational psychologists to design the educational process.

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**Keywords:** Social intelligence, intelligence, social competence, pedagogical conditions.



## 1. Introduction

Educational psychologist identity plays the most essential role in their successful professional activity. At the same time, the problem of social intelligence with regard to the professionally significant qualities of an educational psychologist identity has not been thoroughly studied neither by Russian or foreign scientists.

Social intelligence stands out as a meaningful ability that determines the effectiveness of social interactions and adaptation. It is considered as an important ability of a person, necessary for understanding people's behavior and actions, speech production mechanisms and non-verbal reactions (Anurin, 1997).

## 2. Problem Statement

The term social intelligence is relatively new in the field of social psychology and is still being developed, conceptualized and verified. The concept of 'social intelligence' was first introduced in 1920 by Thorndike, who used it to refer to far-sightedness in interpersonal relations and compared it with the ability to act wisely in human interactions (Thorndike, 1920). In 1937, Allport attributed to social intelligence the ability to express quick, almost automatic judgments about people, to predict their probable responses. Social intelligence, according to Allport, is a special 'social gift' that gives smoothness to people's interaction, which is a social tool but not the depth of understanding (Allport, 2002).

In 1987, Cantor published the book 'Personality and Social Intelligence', in which the author compared social intelligence with cognitive competence allowing people to perceive the events of social life with a minimum of surprises and maximum personal benefit. Nancy Cantor examined social intelligence in terms of cognitivism (Cantor & Kihlstrom, 2000). The existing works in the national psychology deal with the problem of social intelligence mainly in the aspect of communicative competence and describe the proposed structure and functions of social intelligence.

Russian scholars expressed a particular interest in the study of social intelligence phenomenon over the last two decades. Social intelligence can be studied as a special field of psychological research due to its relative autonomy and complexity, which determines the success of social cognition, social interaction and social adaptation.

Emelyanov (1985) was first to define social intelligence. He closely associated it with the concept of 'social sensitivity'. Emelyanov believed that through intuition a person develops individual 'heuristics' to make conclusions about interpersonal interaction. They are reliable and have a strong predictive effect (Emelyanov, 1985). Aminov and Molokanov (1992) studied the relationship between social intelligence and professional bias. The authors are convinced that professionalism of a psychologist depends on special abilities such as social intelligence.

Social intelligence facilitates accumulation of personal experience in acquiring and mastering socialization and contact skills. According to Kunitsina's research, people with developed social intelligence are well integrated into good social relations; they are active and flexible and, as a rule, are more satisfied with life. They know how to fit into new social structures and conditions, to manage stress and they have better chances for an active, long and socially beneficial life (Kunitsina, Kazarinova, Pogolsha, 2001). In the works devoted to social competence and social intelligence Kunitsina made a clear

division between these concepts. In her opinion, social intelligence acts as a means of cognition of social reality, and social competence – as a product of this cognition (Kunitsina *et al.*, 2001).

Social intelligence and social competence share the following features:

- they provide an opportunity to adapt adequately in the context of social change;
- they ensure adequate assessment of the situation, making inerrable decisions and making them work;
- they have quantitative characteristics, levels, and can be measured (Zeer, 2005).

The difference is in the functions, mechanisms, substantive characteristics and means of improvement; the latter is manifested by the fact that the improvement of social competence goes through study, expansion of knowledge and accumulation of experience. Social intelligence develops through formation of socially desirable personal and communicative properties, improvement of mechanisms of mental regulation, self-control and self-regulation (Mel, 1995).

Social intelligence encompasses individual propensities, abilities, traits facilitating development of abilities and skills of social actions and contacts through personal experience. Social intelligence contributes to a person's ability to envisage the development of social interactions, heighten intuition, foresight and provides psychological endurance. A distinctive characteristic and a feature of a person with a high level of social intelligence is sufficient social competence in all its aspects (Bashirov, 2005). The structure of social intelligence of prospective psychologists includes such components as cognitive, emotional, communicative and behavioral, which are disclosed through the following functions: communication; analysis and forecasting of situation development; emotional penetration into the context of the situation; adaptation to the changing conditions of interaction; development of a specialist through interpersonal communication (Bashirov, 2005).

Proponents of social intelligence development claim that it is necessary to conduct special trainings aimed at the development of this skill (Anurin, 1997).

A psychologist is developing as a person and a professional in the course of training, education and socialization. Consequently, the process of formation of social intelligence in future educational psychologists can be more successful and effective if the educational process provides realization of necessary pedagogical conditions. Vygotsky (1983) argued that it is necessary 'to create the conditions needed for the development of appropriate mental qualities in advance, although they are still 'not ready' for independent functioning'.

Tukhman (2005) distinguishes both active forms and methods of training, and formation of value-semantic self-determination of students in relation to future activities, humanization of the learning process and education, ensuring the influence of teachers and mentors' identities, organization of flexible structures of vocational education management among the conditions necessary for the development of professional competence of future specialists. Verbitsky (2004) developed the concept of the contextual approach to professional education on the basis of active forms of education, which is a holistic, methodically developed and tested in the two universities system of educational process, involving a combination of conventional, though transformed, and active teaching methods.

### **3. Research Questions**

What are the effective ways of developing social intelligence in future educational psychologists?

### **4. Purpose of the Study**

As part of our study, in order to improve the efficiency of social intelligence formation in future teachers and psychologists in the course of the educational process, we put forward the following pedagogical conditions since the conditions of social intelligence formation have not been studied and analyzed in the psychological and pedagogical literature:

– inclusion of information on social intelligence, social relations, social interaction results forecast into the psychological courses syllabus;

– design of a training program comprising a variety of forms and methods of training aimed at the development of cognitive, motivational and behavioral components of social intelligence: lectures, conversations, debates, practical trainings with the use of simulation methods, group interviews (Parygin, 1994). The training aimed at the development of social intelligence increases socio-psychological experience of its participants and results in a positive change in their personalities (Burnard, 2001).

The considered features of social intelligence development in prospective psychologists formed the basis for the development of the training program. Its purpose was the development of social intelligence in future educational psychologists.

### **5. Research Methods**

A total of 156 students took part in the experiment. In accordance with the study objectives, the following methods were used: methods of theoretical analysis of psychological, pedagogical, methodical literature; empirical methods: ‘Guilford’s test aimed at identifying the level of social intelligence’ (Guilford, 1965; Nemov, 1995). This test was chosen as we claim the results of this test to fully reveal the formation of intellectual-gnostic indicator of social competence. Guildford, the author of this technique, viewed social intelligence as a system of intellectual abilities, independent of the factors of general intelligence and associated primarily with the knowledge of behavioral information. This test consists of four sub-tests: ‘Story with a conclusion’, ‘Expression Group’, ‘Verbal Expression’, ‘Supplemented story’. The general level of social intelligence development is determined through a composite assessment of four sub-tests; experimental methods; statistical methods of data processing (mathematical statistics, quantitative and qualitative comparative analysis).

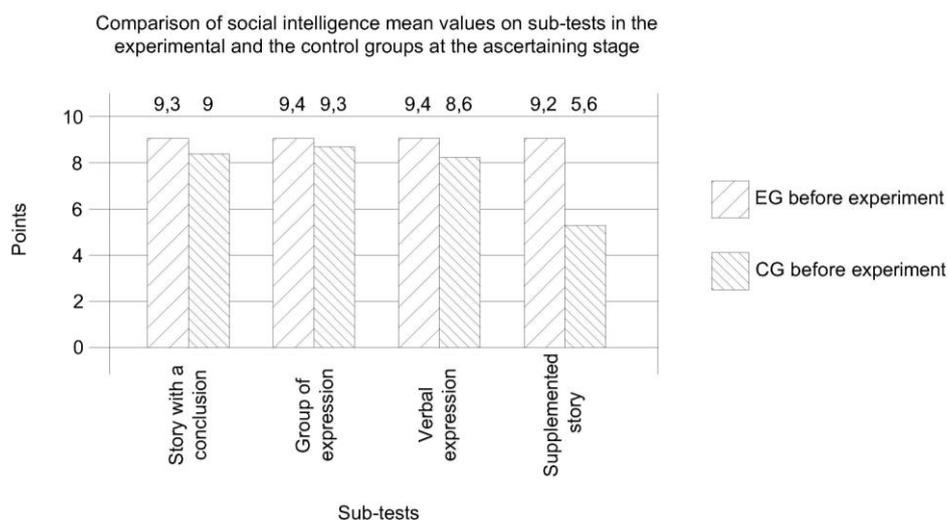
### **6. Findings**

The pedagogical experiment was carried out in three stages:

- 1) at the stage of ascertaining experiment social intelligence indicators in experimental and control groups on sub-tests ‘Story with a conclusion’, ‘Group of expression’, ‘Verbal expression’, ‘Supplemented story’ were revealed;
- 2) at the forming stage of the experiment pedagogical conditions for social intelligence formation in students of the experimental group were tested;
- 3) at the control stage of the experiment the dynamics of changes in social intelligence in two groups for each of the sub-tests were revealed and the effectiveness of the developed pedagogical

conditions was checked.

Experimental groups (EG) involved 78 students – prospective educational psychologists enrolled in the first and third years of studies at the Institute of Psychology and Education. The Control Group (CG) consisted of 78 first and third-year part-time students, majoring in ‘Pedagogics and Psychology’. The difference between the EG and the CG was that learning in the control groups was based on the standard program, while for the experimental groups special pedagogical conditions were introduced. We obtained the following empirical data as a result of the study of intellectual-gnostic indicator following the method of J. Guilford:



**Figure 01.** Comparison of social intelligence mean values on sub-tests in the experimental and the control groups at the ascertaining stage

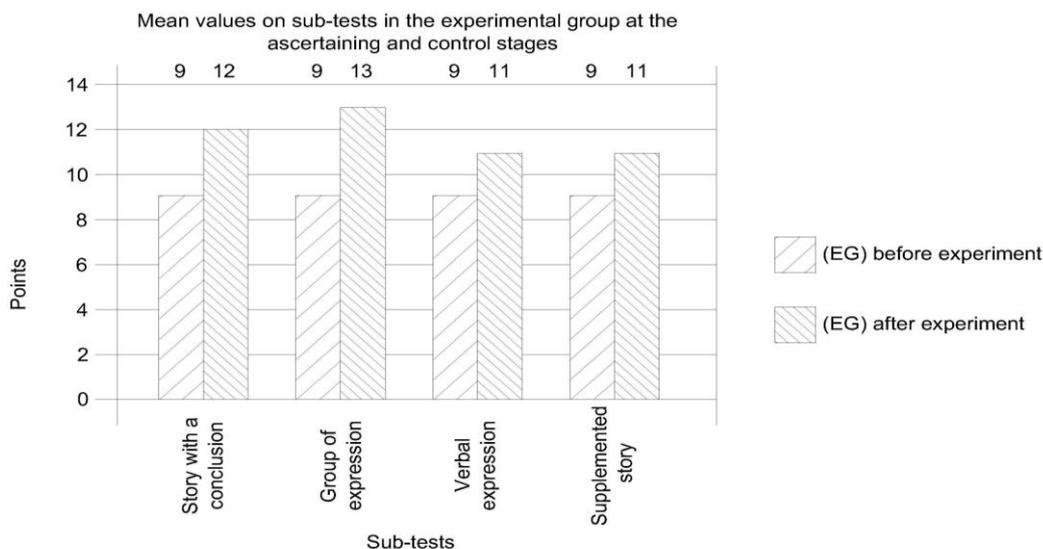
The graphic shows that the both groups have approximately the same average results in four sub-tests. The validity of the results was tested by Student's t-criterion. Since  $T_{emp} < T_{cr}$ , sub-tests ‘Story with a conclusion’ and ‘Group of Expression’, the difference between mean values in both groups were not verified but it proved to be reliable for the ‘Verbal Expression’ and ‘Supplemented Story’ sub-tests.

It can be concluded that the students of the EG and the CG feel confident when it comes to non-verbal reactions; they are able to find the right tone of communication with any partners in different types of interactions. The revealed low level in the CG in the sub-test ‘Supplemented Story’ suggests that these students have difficulties in analyzing situations of interpersonal interaction and, as a consequence, are poorly adapted to all kinds of relationships with people.

The general level of social intelligence development is determined through accumulation of scores for each sub-test. As a result of data processing for each sub-test, we obtained the following indicators of composite social intelligence assessment in EG groups (37 points), CG (33 points). Indicators of composite assessment in both EG and CG correspond to 3 levels of social intelligence. The third level demonstrates the average level of social intelligence.

At the control stage of the experiment, the effectiveness of pedagogical conditions for social intelligence formation in future educational psychologists was assessed. The following empirical data were

obtained from the second study of social intelligence level on J. Guilford's test. Bar chart (Figure 2) shows the dynamics of changes of the average values by subtests before and after the experiment.



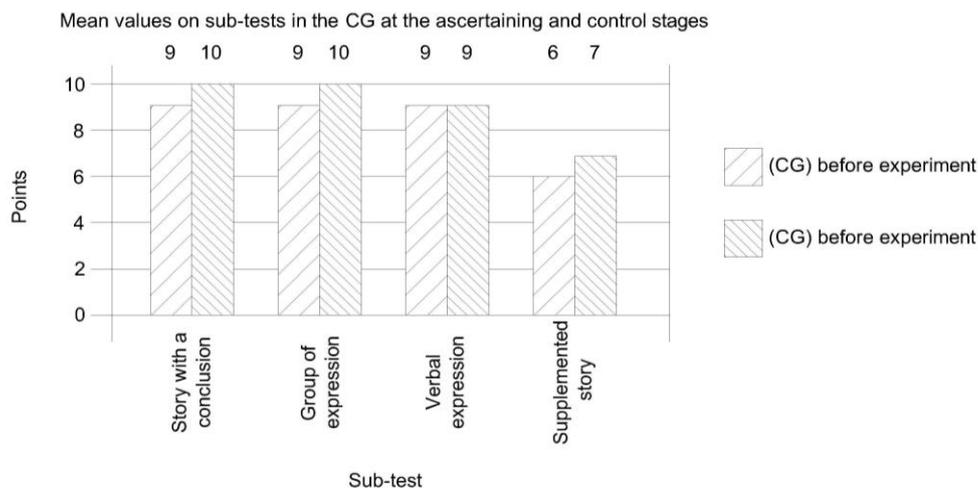
**Figure 02.** Mean values on sub-tests in the experimental and the control groups at the ascertaining and control stages

After analyzing the results of the mean values in the EG before and after the experiment, we noticed that the results have changed significantly. In the sub-test 'Story with a conclusion' the points scored changed from 9 to 12. This may show the formedness of students' ability to anticipate further actions that other people might take. It indicates that students can firmly build the strategy of their own behavior in order to achieve their goals. The increased index of the sub-test 'Group of Expression' proves that a student is able to correctly assess state, feelings, intentions of other people by their non-verbal manifestations, facial expressions, poses, gestures. Also, there was a positive change in other sub-tests' indicators. It suggests that students have learned to recognize the structure of interpersonal situations in dynamics; they are able to analyze complex situations of human relationships.

In order to verify the validity of differences in mean values in the EG before and after the experiment, we used Student's t-test. Critical values:  $t_{cr} = 1,98$  (with  $p < 0,05$ ),  $t_{cr} = 2,62$  (with  $p < 0,01$ ).

At the subsequent stage, on the basis of the composite rating, which is done through comparative analysis of the four tests' results, we determined the overall level of social intelligence in the EG after the experiment. After analyzing the data, according to the composite assessment, we noticed that the social intelligence level in the Experimental Group increased from 3 to 5, which indicates a high level of social intelligence. People with a high social intelligence level are able to extract maximum information about behavior of other people, to understand language of non-verbal communication, to show foresight in relation to others, which contributes to their successful social adaptation. All these characteristics are significant for the professional activity of the educational psychologist.

The second study on the basis of J. Guildford's test was also conducted in the CG.



**Figure 03.** Mean values on sub-tests in the EG at the ascertaining and control stages

The analysis of the bar chart based on the mean values of the sub-tests before and after the experiment allows to conclude that there were almost no changes in the indicators. To identify differences of the mean values in the CG before and after the experiment, we used Student's t-test (the results are represented in the table). Critical values:  $t_{cr} = 1,98$  (at  $p < 0,05$ ),  $t_{cr} = 2,62$  (at  $p < 0,01$ ).

After defining the general level of social intelligence in the CG after the experiment, we noticed that the level of social intelligence remained at the same level (level 3). The comparative analysis of social intelligence level in the two groups showed that implementation of the pedagogical conditions in the CG during the experiment prompted in increasing the level of social intelligence of the student and, therefore, we can assume that the pedagogical conditions we introduced proved to be effective.

## 7. Conclusion

During the research the content of social intelligence concept of educational psychologists has been clarified and specified. Social intelligence is considered as a multi-component special ability to perform adequate analysis and foresee the development of the professional interaction, ability to emotionally feel its personal and socio-psychological context, to find solutions to professional challenges on the basis of a congruent strategy (goals, methods, means). The results at the ascertaining stage of the experiment indicate the average level of social intelligence, which suggests that students have difficulties in analyzing situations of interpersonal interaction. As a result of introduction of the pedagogical conditions into educational process significant positive changes were identified in every of the sub-tests and in the general indicators of a composite assessment of social intelligence. The authors obtained the reliable results of the influence of the created conditions and conducted training sessions on the formation of social intelligence.

Social intelligence belongs to the group of social abilities, refers to personal education and may not be associated with the level of general intelligence. Development of social intelligence makes it possible to acquire subject-subject knowledge, which ensures success in relationships, understanding one's own self and behavior of others, prompts in solving practical problems of adaptation. As a part of the conducted experiment we have empirically confirmed the effectiveness of the pedagogical conditions for the development of social intelligence in future educational psychologists.

The theoretical analysis systematizes the ideas about psychological and pedagogical conditions of social intelligence development as a professionally significant quality of educational psychologist in the process of education, where group training, interpersonal knowledge, social activity, competence approach, purposeful step-by-step formation of each component are considered as the most important.

Successive addressing of the tasks and targeted use of the scientific and psychological methods allowed to explore the problem of the study, select necessary psychological and pedagogical conditions for the development of social intelligence in future educational psychologists in the process of professional education and design an effective training program.

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