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## **Pedagogical Intuition and Social Intelligence of Pedagogical University Graduates**

**Yuliya Mazitovna Garipova<sup>1</sup>, Venera Radikovna Makhubrahmanova<sup>2</sup>**

### **Abstract**

The article is devoted to the analysis of the relationship between social intelligence and pedagogical intuition. Scientists include into the concept of social intelligence not only the ability of a person to understand their own behavior and behavior of other people, but also their ability to generate hypotheses about future interpersonal events using personal constructions about themselves, other people, and the world as a whole. The majority of scientists believe that social intelligence affects the development of intuitive abilities of a person, including pedagogical intuition, and therefore a focused development of social intelligence contributes to the development of the ability of teachers to quickly make professional decisions. This should greatly facilitate the work of teachers in the context of the availability of a large amount of data and due to lack of time. The ability to determine the reliability and realism of data related to interpersonal relationships is also associated by most scientists with human social intelligence. However, we consider these theoretical considerations only as hypotheses, since they have no empirical justification and are purely speculative in nature. The boundaries between intuitive, quick decision-making and decision-making based on social intelligence are not well understood. We conducted a pilot study of the relationship of intuitive abilities and social intelligence, the results of which do not coincide with the dominant opinion. As a result of our analysis, it was revealed that there is no unambiguous causal relationship between these factors, and therefore, sources of the intuition formation should be sought among other factors.

**Keywords:** Education, teacher, future teachers, social intelligence, pedagogical intuition.

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<sup>1</sup> Teacher of Department of Theory and Methods of Primary and Pre-School Education, Naberezhnye Chelny State Pedagogical University. E-mail: [ulyaamirova@mail.ru](mailto:ulyaamirova@mail.ru)

<sup>2</sup> Teacher of the Department of Biology and teaching methods, Naberezhnye Chelny State Pedagogical University. E-mail: [radik-mah65@mail.ru](mailto:radik-mah65@mail.ru)

## **Introduction**

Pedagogical intuition can develop under the influence of such individual characteristics of a teacher as social intelligence, emotional intelligence, type of self-regulation, professional experience, etc. On the basis of the empirical data, we have received the article deals with one of the aspects of this problem – correlation of social intelligence and pedagogical intuition.

The concept of intuition is often associated with something obscure that can't be studied and proved by science. However, teachers in their professional activity have to make quick decisions based rather on their pedagogical intuition than on their logical reasoning. More often in the future when considering their decisions, teachers usually find the rationale behind them. It confirms the connection between making intuitive decisions and the cognitive sphere.

In a broad sense, intuition is understood by most scholars as an unconscious action, vision, or ability to predict certain events. We consider only one aspect of this phenomenon, i.e. the ability to make decisions quickly interacting with people in the professional sphere. We limit the professional area to the sphere of pedagogical activity of secondary school teachers. In our opinion, it is in these schools, where there exists a goal to improve the efficiency of pedagogical activity and optimize this activity.

Secondary school teachers are in constant interaction with other participants of the educational process. Teacher-student relationships involve close interaction. Teacher-teacher and teacher-principal relationships are also of great importance. It is obvious that the right building of professional relationships will directly influence the teaching quality and, consequently, improve the efficiency of the educational process in general.

The concept of social intelligence is associated with the development or underdevelopment of social relationships in professional, or family, or daily life. Most scientists (E. Thorndike, G. Allport, J. Guilford, M.I. Bobneva, V.N. Kunitsyna, etc.) believe that social intelligence is a set of personal abilities that determine successful social interaction (Filipovskaya, 2012). Moreover, A. Pease (1997) stated that the developed abilities of social intelligence are connected with the "sixth" sense, or intuition, as social intelligence involves one's ability to understand the nonverbal signals and compare them with verbal reactions (Guilford, 1965). This view seems to be contradictory as the authors write about the perception of nonverbal signals but intuitive abilities are unconscious.

Anyway, researching the relationships between the components of social intelligence and intuitive abilities will help to better understand the mechanism of intuition. The results of the research might make it possible to develop recommendations for developing the intuitive abilities of future teachers through developing their social intelligence.

## **Materials and methods**

We conducted a pilot research in which 53 students of the Naberezhnye Chelny Pedagogical University participated. Among them, there were four males and forty-nine females aged between 20 and 22. The subtests of "Social intelligence" by J. Guilford and the Rational-Experiential Inventory by S. Epstein were used as research techniques.

The author of the "Social intelligence" technique is Joy Paul Guilford. Owing to him social intelligence has become a measured construct of intelligence. The technique includes four subtests that diagnose four abilities in social intelligence structure: classes, systems, transformations, and behavior. The results of each subtest show the development level of one (or more) abilities of the

behavioral dimension. The result of the test is called the composite rating that shows the overall level of social intelligence development.

Rational-Experiential Inventory (REI) developed by S. Epstein is a psycho-diagnostic technique that helps to diagnose which system for information processing (analytical-rational or intuitive-experiential) is used by people to operate (Epstein, 2003). The REI includes 20 items: respondents should express the degree of their agreement according to 5-point Likert (Wuensch, 2005) scale. The items are grouped in 2 scales: the need for cognition (rational measure) and faith in intuition (experiential measure).

The methodology of our research comprises comparative and personality approaches to studying intuitive factors and social intelligence theories. Thus, the theoretical and methodological basis for our research is:

- the theories on social intelligence (E. Thorndike, G. Allport, J. Guilford, V.N. Kunitsyna, etc.);
- the cognitive-experiential self-theory developed by S. Epstein;
- the theories of S.L. Rubinstein (2008), A.N. Leontyev (1983), L.I. Bozhovich (2008), V.N. Myasishev (1957), C. Jung (1997) on personality structure and development;
- the concepts of subject regulation (Prygin, 2015);
- the ideas of humanistic psychology, in particular, the concepts of self-actualization and self-realization of A.N. Leontyev (1983), A. Maslow (1999), K. Rogers (1994), V. Frankl (2018).

## **Discussion**

The concept of social intelligence was introduced by E. Thorndike, the American psychologist and teacher (1920). In his works, he defines social intelligence as the personality ability to act wisely in human relations. E. Thorndike believes that social intelligence development is of great importance to the ability to understand and manage people. The scientist regards the concept of social intelligence in terms of cognitive and behavioral abilities. According to E. Thorndike, social intelligence is connected with handling human interaction.

Later, in 1933, the Canadian psychologist F. Vernon identified social intelligence as “the ability to deal with people in general, social techniques and freedoms in society; knowledge of social matters; personality sensitivity to the behavior of other group members, as well as to the temporary moods or hidden personality traits of strangers” (Vernon, 1969). Social intelligence, the scientist was also associated with a person's ability to present themselves in society, to understand the mood of a particular social group, as well as the ability to recognize the hidden traits of the personality of people.

The definition of social intelligence that is the closest to the definition of intuitive abilities was given by the American psychologist G. Allport. He believes that the ability to make quick, automatic judgments about people, as well as the ability to predict how people will react in certain situations, is a product of social intelligence. The scientist stresses that the developed social intelligence is a specific gift due to which one becomes more flexible in interpersonal interaction, able to quickly adapt to changing social situations (Allport, 1937).

Later the Russian and foreign scientists began to consider social intelligence in terms of human intellect structure. Thus, the American psychologist J. Guilford developed the Structure of Intellect Model. According to it, the structure of intellect includes three dimensions: the content of thought; thinking operations; and the result of thinking (Guilford, 1965). Moreover, each dimension can include a few more variables, e.g. one of the variables of products dimension is implications.

Implications are regarded as a conscious or unconscious intellectual operation. In the case of unconscious predicting some certain events, the product is produced due to intuitive abilities.

J.F. Kihlstrom and N. Cantor (2000) consider social intelligence to be a cognitive competence. Like J. Guilford (1965), scientists connect social intelligence with creative abilities. According to scientists, one of the six criteria of creative abilities comprising social intelligence is a divergent production of behavioral implications: the ability to predict the most possible things in the environment. Social intelligence is also discussed by R. Sternberg (2000). According to his concept, social intelligence is referred to the practical component of intelligence. The main factors of social intelligence are adaptation, internal choice, and design. D. Wechsler, the American psychologist and psychiatrist, also recognized that social abilities enhance activity success. He distinguished two main areas of intelligence: verbal and performance (non-verbal) scales. According to his opinion, social intelligence is a non-verbal component of intellect and its product is the degree of personality adaptation to social life (Wechsler, 1943). Thus, most scientists consider social intelligence to be a component of human intellect. So, the therapist H.Yu. Eysenck (1995), discussing the complexity of the concept, thinks that social intelligence is one of the three interrelated components in the overall intelligence structure: biological, psychometric and social intelligence.

The concept of social intelligence as the personality ability to adapt to society, to understand and predict people's behavior, can be also found in the works of Russian scientists. N.A. Aminov & M.V. Molokanov (1992) argue that the ability to understand the behavior of others and recognize deviations in their behavior relates to facilitation that is a supporting style of social relations. The scientists also believe that social intelligence is associated with resistance and sensitivity to the contradictions and problems. In the works of M.I. Bobneva (1979), social intelligence is regarded as the result of human socialization. N.V. Kunitsyna considers that social intelligence is a global ability developed due to intellectual, behavioral, and communicative personality characteristics. In her opinion, social intelligence includes social-perceptual abilities, social imagination and social techniques of communication (Kunitsyna, 1995). We identify social imagination with social behavior predicting that relates to intuition.

Thus most scientists connect the concept of social intelligence not only with the ability to understand people's behavior, but also with the ability to construct, reason, and predict future interpersonal events based on the social interaction experience. Prediction involves intuitive abilities and their utilizing. Thus it can be concluded that the developed components of social intelligence involve the developed intuitive abilities.

Pedagogical intuition as one of the important professional qualities has recently become a research subject. Intuition is usually associated with an irrational, unintelligible phenomenon. However, most researchers argue against this approach and believe that the unconscious is not something irrational that cannot have certain mechanisms of information processing (V.I. Vernadsky, 1960, V.M. Allakhverdov, 2009). A.S. Carmin (2009) defines intuition as the ability to gain some knowledge so that it appears in one's mind as if by itself. However, the scientist emphasizes the importance of rational knowledge for intuition. L.R. Danakari (2012) considers intuition to be the ability to comprehend the truth using direct discretion without justification through evidence. N.I. Klimova & I.V. Mikityuk (2018) regard pedagogical intuition as constructive, specific abilities, which involve predicting when constructing the pedagogical process in accordance with its goals and objectives.

In the 1970s-1980s, the concept of pedagogical intuition was also studied by the Russian and foreign researchers. L.L. Gurova, A.N. Sokolova & N.I. Zinkina (1979) studied intuition and logic within the psychological structure of problem-solving, distinguishing between the objective-logical and psychological structure of problem-solving, focusing on the role of intuition in searching for

solutions. The scientists found out that intuitive and discursive processes interact in problem-solving: the choice of a strategy for solving a complex problem based on a “one-moment” judgment on the search area is due to intuition provided that the figurative logic of solving such problems is pre-formed.

According to R. Chmelyuk (1970), pedagogical intuition is one of the pedagogical abilities that are important for professional orientation and training students at pedagogical universities. The scientist points out that there are often situations that make a teacher quickly act without having sufficient information, facts, and thinking time. Thus the scientist finds pedagogical intuition an important professional ability.

A.N. Leontyev (1983) considers pedagogical intuition as well as any other one to be a result of interiorization which has become a trait of a personality. He describes this activity as a process in which conscious facts in the form of rules have transferred to the internal subconscious mechanism. Following the ideas of L.S. Vygotsky, he thinks that this mechanism works differently due to differences in characters, temperaments, personality types (Leontyev, 1984).

In his research proved that pedagogical intuition plays a significant role in the complex, dynamic professional activity of a teacher. The scientist points out that the importance of pedagogical intuition is that it helps young professionals to compensate for the lack of experience and information, as well as to rightly direct their activity, to predict the course of the pedagogical process, etc. When solving different pedagogical problems, teachers have to make both logical and intuitive decisions; therefore, when teachers use their intuition, it does not exclude logical conclusions, but only complements them (Gilmanov, 1990).

A.K. Markova regarded pedagogical intuition as one of the important professional qualities along with pedagogical erudition, pedagogical goal-setting, pedagogical thinking, pedagogical improvisation, pedagogical observation, pedagogical resourcefulness, pedagogical foresight, and pedagogical reflection. She defines pedagogical intuition as quick pedagogical decision-making involving the prediction of the further development of pedagogical situations without a detailed conscious analysis. Pedagogical intuition is an intuitive way of thinking that is necessary due to the limited time (Markova, 1990).

In 1999 P.F. Kapterev referred intuition to professionally important qualities along with empathy, the need for social interaction, observation, and resourcefulness.

The works of L.A. Aneeva written in the 2000s-2010s proved the necessity of developing pedagogical intuition. The scientists consider pedagogical intuition to be an internal mechanism of pedagogical improvisation, believing that it is the starting point of improvisation. L. A. Aneeva (2013) points out that the level of pedagogical intuition development among teachers is higher than the level of the teachers engaged in creative activities. She explains these results of her research by the fact that for teachers engaged in creative activities, pedagogical activity is not the main one, and they especially need to purposefully develop pedagogical intuition.

A.A. Vlasova (2002) considers pedagogical intuition to be one of the indicators of competitiveness of future teachers. According to A.A. Vlasova, pedagogical intuition can be developed through psychological and pedagogical training. N.N. Cherkasov (2004) argues that pedagogical intuition is one of the ways of pedagogical influence that provide student motivation and adaptation. O.V. Yudin (2006) believe that pedagogical intuition is one of the psychological qualities comprising the psychological culture of the teacher’s personality along with such qualities as pedagogical erudition, pedagogical goal-setting, pedagogical forecasting, pedagogical improvisation, pedagogical observation, pedagogical optimism, pedagogical facilitation, pedagogical reflection.

L.A. Kornilova connects the development of pedagogical intuition with the development of perceptual pedagogical abilities within professional and pedagogical training at the university. The scientist defines perceptual pedagogical abilities as a synthesis of skills, abilities and personal qualities that are appropriate for the pedagogical activity and its success. According to L.A. Kornilova, pedagogical abilities can be regarded as the integrity of four interrelated structural components: communicative, emotional, cognitive, and motivational-personal. Moreover, pedagogical intuition is part of each component of the structure and at the same time characterizes the level of their development (Kornilova, 2002).

Pedagogical intuition within the communicative unit helps to quickly handle the communication situation: identify the partner's ability to make contact, interrupt the contact, anticipate the partner's reaction, understand the partner's attitude to the content of the communication, choose or change the technique, tactics, and strategy of communication. Pedagogical intuition within the emotional structural unit provides intuitive awareness of the emotional state of students, emotional insight, an emotional response to the students' feelings, pedagogical foresight. Pedagogical intuition within the cognitive unit is an intellectual and creative intuition that allows the teacher to develop new methods and techniques. This will include the ability to predict the behavior of students and the development of relationships. Pedagogical intuition within the motivational and personal unit serves the altruistic, humanistic purposes in relation to students. We agree with L. A. Kornilova that the main motive for understanding the student's inner world is the belief in the students' capabilities, the motive for actualization, and the rejection of manipulation.

Pedagogical intuition is considered to be an integral attribute of perceptual pedagogical abilities due to variability, uncertainty, dynamism, and intensity of pedagogical activity. According to the scientist, the variability and uncertainty of the teacher's professional activity can be explained by the probabilistic nature of the pedagogical laws, as well as by the incomplete and approximate information when analyzing the situation and making a decision.

According to L. A. Kornilova (2002), the dynamism of pedagogical activity is due to the limited time that teachers have to make a decision, choose the method of interaction with students in a particular pedagogical situation. Since the analysis of the pedagogical situation takes time, the intuition-based solution of the pedagogical problem is the most optimal one. Therefore, the success of the decision depends on the teacher's ability to foresee (Kornilova, 2002).

K. Kazaryantz (2006) relates pedagogical intuition to the unconscious, unintended influence of the teacher on students. Intuition functions along with the conscious which is a substructure of pedagogical interaction.

I.Yu. Kulagina connects the concept of pedagogical intuition with tact. According to her, pedagogical intuition is "a quick understanding of the main thing in the personality of a particular student and the situation in class". In her opinion, a teacher with developed pedagogical intuition does not look weak and naïve. It is difficult to deceive such a teacher, so a teacher commands the respect of students, especially of adolescents (Kulagina, 2011). Such a teacher well handles each new pedagogical situation in the classroom. Pedagogical intuition in combination with love for children and justice helps a teacher to win the respect of students.

## **Results**

Our analysis of literary sources showed that the aforementioned authors theoretically assume that there is a causal relationship between social intelligence and pedagogical intuition. However, our research, based on empirical evidence, does not support these conclusions. We calculated the Pearson correlation coefficient between the values of each scale in the "Social

Intelligence” technique by J. Guilford and the values of the scales in the Rational-Experiential Inventory by S. Epstein.

The first scale of the values using the “Social Intelligence” technique is the results of the first “Stories to Complete” subtest. Here, each test-taker had to complete the story given in the pictures, taking into account the feelings and intentions of the characters. The values of this scale are first compared with the values of the scale of intuitive abilities, and then with the values of the scale of intuition use. The following indicators are obtained:  $r_{xy} = -3,9$  and  $r_{xy} = -4,8$ .

Since  $r_{cr} = 0,27; 0,35$ ,  $r_{xy} < r_{cr}$ , the correlation between these scales is not statistically significant. It proves that the ability to predict the consequences of this or that behavior of people, as well as the ability to predict further actions of people or further events, based on understanding the feelings, thoughts, and intentions of communicators, is not connected with intuitive abilities and intuition.

As a result of calculating the correlation coefficient between the values in the second subtest of the “Social Intelligence” technique by J. Guilford and the scales of the Rational-Experiential Inventory by S. Epstein, the following is obtained:  $r_{xy} = -4$  and  $r_{xy} = -4,92$ . Since  $r_{cr} = 0,27; 0,35$ ,  $r_{xy} < r_{cr}$ , the correlation between these scales is not statistically significant. The negative value obtained when calculating the correlation coefficient between the values scale within the second subtest also shows that there is no relationship between the indicators.

The second subtest of the “Social Intelligence” technique by J. Guilford makes it possible to measure people’s ability to correctly assess states, feelings, and intentions of other people in non-verbal forms. The results of our pilot research show that the above-mentioned ability is not connected with intuition and intuitive abilities either.

The calculations using the scales within the third subtest of “Social Intelligence” technique by J. Guilford and the scales of the Rational-Experiential Inventory by S. Epstein also prove the negative relationship between the measured indicators. We have obtained the following:  $r_{xy} = -2,4$  and  $r_{xy} = -2,9$ . Since  $r_{cr} = 0,27; 0,35$ ,  $r_{xy} < r_{cr}$ , the correlation between these scales is not statistically significant.

Based on these calculations we can conclude that high sensitivity, which quickly and correctly helps us to understand what people say to each other in the context of certain situations and relationships, is not related to intuition and intuitive abilities.

We do not get the positive correlation when calculating it between the values of the fourth subtest of “Social Intelligence” technique by J. Guilford and the scale values of the Rational-Experiential Inventory by S. Epstein:  $r_{xy} = -2,15$  and  $r_{xy} = -2,66$ . Since  $r_{cr} = 0,27; 0,35$ ,  $r_{xy} < r_{cr}$ , the correlation between these scales is not statistically significant.

Accordingly, we can conclude that the ability to recognize the structure of interpersonal situations in dynamics, the ability to analyze complex situations of human interaction, understanding the logic of their development, the ability to feel changes are not related to intuitive abilities and their use.

The comparison of the values of the general level of social intelligence development with the scales of intuitive abilities and intuition do not give the positive correlation when calculating its coefficient. We have obtained the following:  $r_{xy} = -3,05$  and  $r_{xy} = -3,7$ . Since  $r_{cr} = 0,27; 0,35$ ,  $r_{xy} < r_{cr}$ , the correlation between these scales is not statistically significant.

The comparison of the values of each scale of the “Social Intelligence” technique by J. Guilford with the values of the scales of the Rational-Experiential Inventory by S. Epstein, as well as

the calculation of the correlation coefficient (Pearson) do not give statistically significant results. Thus, the connection between intuitive abilities and the ability to anticipate the consequences of one's behavior, as well as with the ability to anticipate further actions of people based on real communication situations, the ability to predict events based on understanding the feelings, thoughts, intentions of communicators is not proved. In addition, the ability to correctly assess one's state, feelings, intentions judging by non-verbal signals is not connected with intuition and intuitive abilities.

The most unexpected result is the lack of connection between intuitive abilities and high sensitivity to the nature and shades of human relationships. High sensitivity helps quickly and correctly to understand what people say to each other in the context of certain situations and relationships. It would seem that this ability makes it possible to trust one's intuition, to make intuition-based decisions quickly.

The lack of connection between intuition and the ability to recognize the structure of interpersonal situations, the ability to analyze complex situations of human interaction and understand the logic of their development do not seem surprising. In our opinion, these abilities are the opposite. Analyzing complex situations of human interaction involves a person's conscious desire to understand the situation in detail, to build causal relationships. It cannot be connected with the quick, inexplicable decision-making.

Summing up the findings of our research, we can say that neither the general level of social intelligence development nor its individual characteristics are connected with intuition, intuitive abilities or their development. Thus, social intelligence development and its individual characteristics cannot be regarded as one of the aspects of pedagogical intuition development. Developing teachers' social intelligence through practicing can be a separate objective when training future professionals.

### **Conclusion**

The finding of our pilot research is that the theory-based connection between intuitive abilities and social intelligence development is not confirmed. It would seem that predicting the consequences of behavior in certain social situations should involve using both conscious and unconscious social experiences which provide a basis for making an intuitive decision. Probably, this finding is due to the fact that there is no generally accepted understanding of the phenomenon of intuition and its interpretation. Supporting some scientists, we also think that intuition is part of a person's cognition, and others consider intuition to be a person's characteristic that is not related to the intellect operation. The findings obtained make us take the point that intuition is not connected with the abilities of social intelligence. There is a possibility to obtain partially different from the presented findings when conducting the same study on a larger sample.

According to the findings, it is possible to argue that intuition is an independent personal characteristic, as it is not related to social intelligence development. Moreover, at the moment we have made a new assumption that social intelligence and intuition are opposing personal characteristics. In other words, it is assumed that people with developed intuitive abilities do not use the capabilities of their social intelligence due to the lack of the need to use it. It should be pointed out that Jung discussed such a type of personality, the so-called intuitive type, whose behavior is most often guided by intuitive feelings (Jung, 1997).

There is a need for further intuition research through studying its relation with other personal characteristics. In our opinion, intuition can help teachers significantly reduce time spent on making appropriate decisions. In the future, we will continue our work at studying professional intuition in order to find out the connection between this phenomenon and the abilities of emotional



intelligence, style of decision-making, self-regulation type, and other characteristics. The findings can be used when developing training exercises and case studies on decision-making development for future teachers.

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