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THE RELATIONSHIP BETWEEN THE LEVELS OF DEVELOPMENT OF SOCIAL INTELLIGENCE AND PERSONAL QUALITIES OF STUDENTS

Abstract.

In science social intelligence has come to be studied in different ways. However, in almost all works the lower level of development of social intelligence, the relationship of social intelligence with various personality problems are the focus of the researchers.

Until now in the literature there are different indicators and measurements that are the basis, prerequisite, determinant of social intelligence. The basis for the study of the features of the development of social intelligence of students, not formulated on the same basis and theoretical and methodological. Therefore, we believe that the theoretical and structural content of the model of development of social intelligence in students clearly reveals the theoretical and methodological foundations of this study.

On the basis of the above-mentioned part of this study we have developed a theoretical-structural model, which allows to identify the features of the development of social intelligence in students. The definitions and theories of social intelligence discussed here, theoretical and methodological directions of psychological and pedagogical research were taken as the basis.

Here, when we say "model of development of social intelligence in students," we describe the internal personal changes, features and their consequences as an impact on the professional pedagogical activity, pedagogical relations. The development model is not created, because we do not set goals and objectives for the development of social intelligence in students. Therefore, the theoretical and structural model does not include pedagogical and psychological conditions to identify the features of the development of social intelligence in students.

Key words: social intelligence, education, psychology, students.

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ВЗАИМОСВЯЗЬ МЕЖДУ УРОВНЯМИ РАЗВИТИЯ СОЦИАЛЬНОГО ИНТЕЛЛЕКТА И ЛИЧНОСТНЫМИ КАЧЕСТВАМИ СТУДЕНТОВ

Аннотация.

В науке социальный интеллект стал изучаться по-разному. Однако практически во всех работах низший уровень развития социального интеллекта, связь социального интеллекта с различными проблемами личности находятся в центре внимания исследователей.

До сих пор в литературе встречаются разные показатели и измерения, являющиеся основой, предпосылкой и детерминантом социального интеллекта. Основы изучения особенностей развития социального интеллекта студентов, не формулировались на одной основе и теоретико-методические. Поэтому мы считаем, что теоретико-структурное

содержание модели развития социального интеллекта у школьников наглядно раскрывает теоретико-методологические основы данного исследования.

На основе вышеуказанной части данного исследования нами разработана теоретико-структурная модель, позволяющая выявить особенности развития социального интеллекта у учащихся. За основу были взяты рассмотренные здесь определения и теории социального интеллекта, теоретико-методологические направления проведения психолого-педагогических исследований.

Здесь, когда мы говорим «модель развития социального интеллекта у студентов», мы описываем внутренние личностные изменения, особенности и их последствия как влияние на профессиональную педагогическую деятельность, педагогические отношения. В нашем исследовании модель развития не создается, так как мы не ставим цели и задачи по развитию социального интеллекта у студентов. Поэтому в теоретико-структурную модель педагогические и психологические условия позволяющие выявить особенности развития социального интеллекта у студентов не включены.

Ключевые слова: социальный интеллект, образование, психология, студенты.

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СТУДЕНТТЕРДЕ ӘЛЕУМЕТТІК ИНТЕЛЛЕКТІНІҢ ДАМУ ДЕҢГЕЙЛЕРІ МЕН ТҮЛҒАЛЫҚ ЕРЕКШЕЛІКТЕРДІҢ ӨЗАРА БАЙЛАНЫСЫ

Аңдатпа

Ғылымда әлеуметтік интеллект көп жағынан зерттеле бастады. Бірақ, барлық дерлік еңбектерде әлеуметтік интеллектің төменгі деңгейдегі дамуы, әлеуметтік интеллект пен тұлғаның түрлі мәселелері арасындағы байланыс зерттеушілердің басты назарында болады.

Қазіргі уақытқа дейін әдебиетте әлеуметтік интеллектіге негіз, алғышарт, анықтауыш болатын көрсеткіштер мен өлшемдер әр түрлі болып табылады. Және студенттердегі әлеуметтік интеллектің даму ерекшеліктерін зерттеудің бірдей негіздегі теориялық-әдіснамалық негіздері тұжырымдалмады. Сондықтан, студенттердегі әлеуметтік интеллектің даму моделін теориялық-құрылымдық мазмұны осы зерттеудің теориялық-әдіснамалық негіздерін айқын ашады деп санаймыз.

Бұл зерттеудегі жоғарыда баяндалған бөлім негізінде студенттердегі әлеуметтік интеллектің дамуындағы ерекшеліктерді анықтауға мүмкіндік беретін теориялық-құрылымдық модельді жобаладық. Мұнда қарастырылған әлеуметтік интеллектің анықтамалары мен теориялары, психологиялық-педагогикалық зерттеу жұмысын жүргізудің теориялық-әдіснамалық бағыттары негізге алынды.

Осы тұста «студенттердегі әлеуметтік интеллектің даму моделі» дегенде біз тұлғалық ішкі өзгерістерді, ерекшеліктерді және оның кәсіби педагогикалық іс-әрекетке, педагогикалық қарым-қатынасқа әсері ретіндегі салдарды сипаттаймыз. Зерттеуде студенттердегі әлеуметтік интеллектің дамыту мақсат-міндеттерін қоймағандықтан, дамыту моделі де құрастырылмайды. Сондықтан студенттердегі әлеуметтік интеллектің дамуындағы ерекшеліктерді анықтауға мүмкіндік беретін теориялық-құрылымдық модельге педагогикалық және психологиялық шарттары кірмейді.

Түйін сөздер: әлеуметтік интеллект, білім беру, психология, студенттер.

Introduction.

In foreign psychology E. S. Thorndike [1] first introduced the concept of "social intelligence" in 1920. A number of foreign authors (G. Eysenck [2], S. Berry, X. Gardner [3], J.

Guilford [4], J. Kilstrom, S. Kosmitsky, N. Kantor, G. Allport, R. Selman, R. Sternberg, J. Forsythe, J. Hadland, J. A. Horward, H. V. Aleshina, M. I. Bobneva, R. K. Wagner, V. M. Villame, G. P. Geranyushkina, E. L. Grigorenko, V. N. Druzhinin, E. A. Elkina, Y. N. Emelyanov, A. B. Karpov, T. N. Karpovich, M. M. Kashapov, H. A. Kudryavtsova, V. N. Kunitsina. A. Labunskaya, N. A. Luzbina, E. S. Mikhailova (Aleshina), M. V. Molokanov, S. A. Rakhmankulova, A. I. Savenkov [5], N. A. Setkova, N. A. Sirota, N. I. Zentsova, P. V. Smirnova, S. A. Snook, E. I. Stepanova, V. I. Suslov, V. A. Poryadin, M. L. Tarasenko, L. I. Umansky, D. V. Ushakov[6], O. B. Chesnokova[7], A. Yuzhaninova and others), it is possible to specify several directions of research on the problem of social intelligence:

- formulation of the concept of "social intelligence" from different scientific positions;
- the study of patterns of development of social intelligence in connection with age differences;
- definition of social intelligence for different types of social roles;
- identification of the features of social intelligence associated with gender differences;
- description of social intelligence in the sphere of leading activity and various forms of activity;
- analysis of the conditions for the development of social intelligence, depending on the level of mental development of the individual;
- explaining the meaning and role of social intelligence in the cognitive sphere;
- study of the state of development of social intelligence by virtue of the personality traits;
- consideration of social intelligence in the sphere of affect;
- mechanisms for the recognition and development of social intelligence related to the social and psychological problems in the life of the individual;
- the manifestation of differences in social intelligence in individuals related to their mental and psychological health;
- identification of psychological features of social intelligence, associated with specific types of professional activity;
- coordination of psychological and pedagogical conditions, rules and mechanisms for the development of social intelligence; and so on.

Social intelligence is a structure of personality. Therefore, social intelligence plays an important role in achieving success in communication and in many situations and activities in many professions. After all, it is their own and others' behavior, verbal and nonverbal means of communication, which must be properly understood and properly used depending on each situation; foresee their consequences; allows you to predict future situations in relationships. Then social intelligence will be a determinant, a mental prerequisite and a mechanism of psychological preparation of the person to improve relationships, activities, its success. However, it is quite possible for a person to have a high psychological readiness to show moral qualities in relations with others. But only thanks to the social intellect he is able to adapt this moral virtue to the real situation, to the needs and ideals of other people, to use it correctly and accurately.

Therefore, social intelligence is considered the highest mental function. Its function is directly related to the structures of human thinking, self-awareness and personality traits necessary for communication. In this regard, according to our position, social intelligence in students is realized and developed in the environment, in joint actions and interaction with people. Consequently, social intelligence in students is a cognitive, consciously realized and realized component of pedagogical communication.

Research materials and methods. One of the main objectives of our research work is to experimentally verify the personality structures that determine the high and low level of social intelligence in students and can be the basis for the development of this social intelligence. The personality structure here is characterized by significant intellectual, emotional-volitional and relational qualities.

Studying the basics of social intelligence we used a multifactor personality questionnaire-test by R. Kettel [8].

Organized and conducted an experimental study of Kettel's multifactor personality questionnaire-test. Two groups of research levels of social intelligence were formed. The number

of subjects who participated in an experimental study of the development of social intelligence and self-awareness using the Guilford-Sullivan method, due to the time of students, leaving for teaching practice and other reasons, had a high level of social intelligence and wanted to participate in the study at their own will, was 42. Because organizing and administering the R. Kettel multifactor personality questionnaire-test and processing its results is a complicated procedure, although the number of students in the next group was more than 300, we reduced the experimental sample. Therefore, 42 subjects were randomly selected from students with insufficient social intelligence.

Research results and their discussion. According to the results of the 16-factor Kettel personality questionnaire-test, students were able to make average profiles of high and insufficient levels of social intelligence. And, according to the results of the experiment, the "raw" scores of the students of the two groups of subjects were "standardized" by factor. Table 1 shows the average values of Kettel's scores on the high and low level of social intelligence in students.

As can be seen from the table, both groups of examinees have marginal regional values with normal indicators. However, values close to the indicators in the peripheral zone also require attention. Therefore, according to Kettel's methodology, we group the data from the two groups into factors with high, overestimated, underestimated, low, and normal (or average) values.

Table 1. According to Kettel's method, factor averages for high and low (insufficient) levels of social intelligence in students

| Factors | Description of factors | Low social intelligence | High social intelligence |
|----------------|---------------------------|-------------------------|--------------------------|
| A | openness in communication | 3,74 | 8,65 |
| B | Intelligence | 6,91 | 7,49 |
| C | emotional stability | 8,13 | 5,56 |
| E | Dominance | 4,65 | 7,03 |
| F | Expressiveness | 5,79 | 5,81 |
| G | is normal behavior | 4,12 | 8,4 |
| H | social courage | 5,56 | 5,33 |
| I | Sensitivity | 6,47 | 8,12 |
| L | Skepticism | 8,34 | 6,95 |
| M | Business | 7,18 | 7,00 |
| N | Politeness | 5,65 | 5,48 |
| O | self-confidence | 7,11 | 6,29 |
| Q ₁ | Radicalism | 5,35 | 3,87 |
| Q ₂ | conformity | 6,93 | 6,55 |
| Q ₃ | self | 4,05 | 7,36 |
| Q ₄ | -control tension ego | 3,26 | 4,72 |
| F1 | anxiety | 6,6 | 6,68 |
| F2 | extraversion | 5,73 | 7,19 |
| F3 | emotional | 5,33 | 5,65 |
| F4 | independence | 6,25 | 6,43 |

- Let's group and show the factors revealed in subjects with a high level of social intelligence:
- Factors A (openness in relationships), B (intelligence), E (dominance), G (normative behavior), I (sensitivity), M (awkwardness), Q₃ (self-control) and F2 (extraversion) had high values.
 - There is upward neutrality in the values of factors L (skepticism), O (self-confidence), Q₂ (conformism), F1 (anxiety), and F4 (independence).
 - The score on factor Q₄ (ego-stress) indicates a tendency to underestimate.
 - The lower value of factor Q₁ (radicalism) is known.
 - The value values of factors C (emotional stability), F (expressiveness), H (social courage), N (politeness) and F3 (emotionality) can be described as normal or average.

Due to the differences in the indicators of the factors in the subjects with insufficiently developed social intelligence consider:

- High values of factors C (emotional stability), L (skepticism), M (businesslike) and O (self-confidence) are known.
- Factors B (intelligence), I (sensitivity), Q2 (conformity), and F1 (anxiety) have an upward bias.
- Scores on factors E (dominance), G (normative behavior), and Q3 (self-control) show an underestimation.
- The values of factors A (openness in relationships) and Q4 (ego-restraint) are known to be low.
- The value values of factors F (expressiveness), H (social courage), N (politeness), Q1 (radicalism), F2 (extraversion), F3 (emotionality) and F4 (autonomy) can be described as normal or average.

Let us analyze the results of the factor by a qualitative comparison of quantitative indicators related to subjects with high and underdeveloped social intelligence. And the statistical method is used to preserve the principle of objectivity in the comparison. For this purpose, Student's test for independent variables was chosen. Its formula:

$$t = \frac{|M_1 - M_2|}{\sqrt{\frac{\delta_1^2}{n_1} + \frac{\delta_2^2}{n_2}}}$$

Here M_1 and M_2 are the average values of quantitative indicators obtained by the Kettel method factors in subjects with high and underdeveloped social intelligence. And n_1 and n_2 are the number of students in the test groups. In this experimental section, as mentioned above, the number of students in both groups was equal and consisted of 42 test subjects. And δ_1 and δ_2 are the squares of deviations of indicators equal to the average value obtained from the experiment in the two test groups.

Student test takers with highly developed social intelligence had a high value of Factor A. Its value was 8.65 points. This indicates that test students with highly developed social intelligence are open in communication and can show emotional closeness in interpersonal interaction. This characteristic feature of the factor A(+) determines the richness of students' emotional expressions in communication, their ability to cooperate. Inadequate level of social intelligence corresponded to the low value of factor A, equal to 3,74 points. This result determines the low level of social intelligence in the students who took part in the study and is the basis for its low level. The low value of the factor A means that subjects with insufficiently developed social intelligence have reactive, affective behavior and personality traits in communication with others. Thus, while in students with high social intelligence, factor A is on the positive pole, in the second research group it is directed to the negative pole. The statistical significance of the difference between the average values of Factor A between the two groups of subjects was high. Reason: $t_e=7.22$, and $t_e \geq t_k=3.538$; $p \leq 0.001$.

For factor B, subjects with high social intelligence showed high results. On average they scored 7.49 points. This average value characterizes the tested future teacher as a person with high intellectual development, mature logical thinking, broad outlook. At the same time, the value of this factor shows that such cognitive processes as concentration, stabilization and memorization, and reproduction are also highly developed. On the other hand, subjects with underdeveloped social intelligence showed an inflated result on the B-factor. The average value obtained from them was 6.91 points. This is a good score. Then, although social intelligence is insufficient, we can consider that the intellectual development of the subjects is at a high level. That is, cognitive phenomena, such as their mental field, attention and memory processes, are formed according to age features. The difference between the average values of factor B between these two experimental groups is not statistically significant: $t_e=0.853$, $t_e \leq t_k=2.018$; $p \leq 0.05$.

Among the subjects with a high level of social intelligence, the average C-factor score was 5.56. This test shows that students are able to keep their emotions and moods in communication and actions. At the same time, the average value of the C-factor was high in students with

insufficiently developed social intelligence. Their C-factor averaged 8.13 points. This factor characterizes the subjects' restraint in their emotions and moods. And the difference between the students with high and underdeveloped social intelligence according to the indicator of emotional stability (factor C) is statistically significant: $t_e=3.78$, $t_e \geq t_k=3.538$; $p \leq 0.001$.

In the studied group of students with a high level of social intelligence, factor E came out with a high average value. In these examinees, the value of factor E averaged 7.03 points. From this we can see that the students who participated in the study tend to show themselves as a priority before others, to show leadership abilities. The result of the experiment showed that students with high social intelligence are often able to solve their problems independently. However, although students with underdeveloped social intelligence had a normal value of Factor E, its skewness toward the downside was determined. In this group of students the value of factor E was on average 4.65 points. It is clear from this that students with insufficiently developed social intelligence do not want to show themselves to others and show leadership abilities. They often tend to find their comfort zone only in the presence of others who are stronger, more active, more powerful, and leaders than they are. The difference between the mean values of factor E between the two groups of subjects was statistically significant: $t_e=3.50$ and $t_e \leq t_k=2.698$; $p \leq 0.01$.

In both test groups a value is obtained, which is a normal indicator of factor F. In subjects with highly developed social intelligence $G=5.81$ points. At the same time, the F factor showed an average value of 5.79 points in subjects with underdeveloped social intelligence. These scores show that seriousness and activity in the personality characteristics of the subjects are relevant depending on the living conditions and social environment. The difference between the mean values of the G-factor between the two groups of examinees is statistically unreliable: $t_e=0.03$, and $t_e \leq t_k=2.018$; $p \leq 0.05$.

The G-factor, equal to 8.4 points, was obtained in subjects with highly developed social intelligence. This indicator characterizes the behavior of students who participated in the study in accordance with social norms. As a result, the subjects of this group are distinguished by such characteristics as responsibility, observance of moral principles in leadership, manifestation of spiritual qualities in the social environment. A high index of the form G determines the permanent formation of a sense of shame in subjects with a high level of social intelligence. They are distinguished by their ability to follow and act according to the rules accepted in the social environment. At the same time, the G-factor value of 4.12 points is considered normal for subjects with insufficiently developed social intelligence. However, despite the fact that the behavior of the examinees in this group is within the social norm, there is a decrease in the value obtained for factor G. As a result, the value of factor G shows the danger of manifestation of such negative traits as laziness, irresponsibility, moral instability, in subjects with insufficient social intelligence. The difference between the mean values for factor B between the two experimental groups has high statistical significance: $t_e=6.29$, and $t_e \geq t_k=3.538$; $p \leq 0.001$.

In both test groups a normal value of the H factor was obtained. In subjects with highly developed social intelligence the H factor was 5.33 points. Meanwhile, in subjects with underdeveloped social intelligence, the H factor showed an average value of 5.56 points. These indicators show that the subjects are able to be tolerant in solving problems arising in relationships and activities, and are also characterized by shyness that does not openly display their courage. The difference between the mean values of factor H between the two groups of examinees is statistically unreliable: $t_e=0.338$ and $t_e \leq t_k=2.018$; $p \leq 0.05$.

Factor I had a high value in subjects with a high level of social intelligence. The average value of this factor was 8.12 points. And in subjects with insufficiently developed social intelligence, Factor I also tended to increase. The average value of this factor was 6.47 points. The score obtained on factor I characterizes that examinees of both groups are sensitive, inclined to kindness, easily attached to each other, not always accepting harshness and severity. However, the difference between students with high and underdeveloped social intelligence on factor I is statistically significant: $t_e=2.427$, and $t_e \geq t_k=2.018$; $p \leq 0.05$. This shows that students with a high level of social intelligence have an advantage in the formation of more sustainable qualities of

sensitivity and sensitivity, as well as their desire to communicate with others, compared with students with an underdeveloped level of social intelligence.

Tested students with a high level of social intelligence showed a positive result on the L-factor. On average, they scored 6.95. If so, this means that despite the high level of social intelligence of the test takers, they tended to be more cautious in trusting others with their doubts and suspicions. Meanwhile, subjects with underdeveloped social intelligence clearly had an excessive value of the L factor. In this group, the L factor was equal to a high value of 8.34 points. This factor characterizes skepticism, mistrustfulness, and uncertainty in the personal development of the subjects. Moreover, the difference between the mean values of factor L between the two groups of examinees is statistically significant: $t_e=2.044$ and $t_{e \geq k}=2.018$; $p \leq 0.05$. While this shows that the subjects are skeptical and do not immediately adapt to others and other environments, it also shows that students with underdeveloped social intelligence have jealousy in their personality structure and that they are not always used to feeling comfortable in social environments.

Tested students with high levels of social intelligence scored an average of 7.00 on the M factor and had a value at the upper end of the marginal zone. This test shows that students have a high level of imaginative process development, but an average level and that they behave somewhat inconsistently. At the same time, subjects with underdeveloped social intelligence scored 7.18 on the M factor, which is slightly above the marginal zone. This test shows that students have a rich imagination, are able to dream about the future rather than real life in the present, and are able to think creatively. However, the difference between students with high and underdeveloped social intelligence on factor M was not statistically significant: $t_e=0.265$ and $t_{e \leq k}=2.018$; $p \leq 0.05$.

Both subject groups had a normal value of factor N. The subjects with highly developed social intelligence had $N=5.48$ points. At the same time, factor N showed an average value of 5.65 points in subjects with underdeveloped social intelligence. These scores show the politeness of the subjects in the environment; shows that he/she seeks to find logic and meaning in different situations and events, his/her own and others' behavior, emotional reactions, is able to combine principles with manners in interpersonal interactions. The difference between the mean values of factor N between the two groups of examinees is statistically unreliable: $t_e=0.25$ and $t_{e \leq k}=2.018$; $p \leq 0.05$.

The average value of the O-factor corresponded to 6.29 points on the betalis for the subjects with a high level of social intelligence. Then there is a volatility of the emotional sphere of the subjects with high social intelligence. According to this indicator, subjects show a tendency to worry, to blame themselves, to compare themselves with others, and to worry about shortcomings. Therefore, it is possible that some of the subjects with a high level of social intelligence have their own thoughts, do not actively participate in the social environment and are not always confident in themselves. In the same way, a positive pole value of 7.11 was calculated for subjects with underdeveloped social intelligence. From this we can see that subjects with insufficiently developed social intelligence are restless, they are driven by negative thoughts in communication, actions and finding solutions to various problems. At the same time it is noted that these subjects underestimate their knowledge, experience and abilities. In both groups involved in the study, the O-factor score was high, and although their characteristics were consistent, statistical analysis did not show that the difference between them was reliable: $t_e=1.206$, and $t_{e \leq k}=2.018$; $p \leq 0.05$. This proves that students with underdeveloped social intelligence have a significantly lower level of self-confidence than students with high social intelligence.

Tested students with a high level of social intelligence showed a low average value only for factor Q1. In this group of examinees, the score of factor Q1 corresponded to 3.87 points. The result shows that the examinees are cautious in their relationships and are willing to compromise; always observes the rules and norms established in the social environment. In addition, low values of this factor mean that examinees are resilient in difficult life situations. At the same time, subjects with insufficiently developed social intelligence have $Q1=5.35$ points. Although this is a normal

or average value, according to Kettel's standardized methodology, subjects are characterized by general traits in the 0-6 score range. If yes, then subjects with underdeveloped social intelligence exhibit a skeptical attitude toward new ideas and rules; they focus only on specific actions. Therefore, they sometimes have psychological problems, such as internal personality tension. And this factor can lead to the fact that the subjects do not dare to solve their problems in a new way and always use the methods they are accustomed to. However, in the two groups that participated in the study, there were two indicators for the Q1 factor - low and normal levels. Thus, statistical analysis showed that the difference between them is reliable: $t_e=2.177$ and $t_{e \geq t_k}=2.018$; $p \leq 0.05$. This indicates that students with a high level of social intelligence are more thorough, tend to observe traditions and never forget moral principles in communication than students with an insufficient level of social intelligence.

Tested students with high and low levels of social intelligence scored 6.55 and 6.93, not reaching the marginal zone, but slightly higher on the Q2 factor. These scores show that the subjects in the research groups strive for individuality, nonconformism, independence; characterized by the ability to make decisions independently and implement these decisions. However, students with underdeveloped social intelligence may not need cooperation in activities with others than students with high social intelligence. However, statistical analysis of factor Q2 in both groups participating in the study showed that the difference between them was not reliable: $t_e=0.559$ and $t_{e \leq t_k}=2.018$; $p \leq 0.05$.

For factor Q3, the average value was 7.36 points for subjects with a high level of social intelligence. That is, the indicator of the factor Q3 had a high value. Hence, the students who took part in the study express features of observing order, politeness in communication, regulation of their words and behavior in accordance with morals, social norms, various tasks and requirements in life at the expense of self-control. In addition, the high value of the factor Q3 indicates the formation of willpower in the subjects. At the same time, students with underdeveloped social intelligence also had an average value of 4.05 points on factor Q3. Then, students with underdeveloped social intelligence tended to decrease the value of factor Q3. From this we can see that the students who took part in the study do not always strive to set goals, lack of self-control of their words and behavior, lack of willpower. Consequently, the difference between the mean values of factor Q3 between the two groups of subjects is statistically significant: $t_e=4.868$ and $t_{e \geq t_k}=2.698$; $p \leq 0.001$.

The decrease in factor Q4, equal to 4.72 points, is negative for subjects with a high level of social intelligence. As a result, these subjects may sometimes show indifference to their failures and successes, characterized by weakness in communication and actions. And the low score of factor Q4 of 3.26 points indicates dissatisfaction with themselves among subjects with underdeveloped social intelligence, their reactions to anger, resentment, anger in relationships and in various social situations. And statistical analysis of the results of the factor Q4 in the two groups involved in the study showed that the difference between them is significant: $t_e=2.147$ and $t_{e \geq t_k}=2.018$; $p \leq 0.05$.

The test students with high and low levels of social intelligence had mean values equal to 6.68 points and 6.6 points on factor F1. These were up. Statistical analysis showed that the difference between students with high and underdeveloped social intelligence on factor F1 is not significant: $t_e=0.118$ and $t_{e \leq t_k}=2.018$; $p \leq 0.05$. Here the obtained value means that the subjects in the research groups sometimes feel uncomfortable in the social environment and do not feel free, it is difficult for them to adapt quickly to new situations.

The F2 factor had a high value in subjects with a high level of social intelligence. This indicator is equal to 7.19 points. The high value of this factor indicates that the subjects are able to communicate closely with those around them. They are characterized as extroverts by their open, confident, sensitive, bright personality and traits in interpersonal interactions. At the same time, $F2=5.73$ in subjects with insufficiently developed social intelligence. The test takers in this group scored an index of normal value on the F2 factor. Test takers with underdeveloped social intelligence are then prone to extroverts. In the two groups involved in the study, there were two

F2 factor scores - normal and high. And statistical analysis showed that the difference between them is reliable: $t_e=2.147$, and $t_{e \geq t_k}=2.018$; $p \leq 0.05$.

Similarly, the values of factors F3 and G4 showed no statistical significance in both studied groups. The values of factor F3 were 5.33 and 5.65 in subjects with high and underdeveloped social intelligence ($t_e=0.47$, $t_{e \leq t_k}=2.018$; $p \leq 0.05$). The normal value of the factor F3 means that the examinee is able to regulate the emotional sphere of students. It can be considered that the average value of factor F4 is higher in subjects with high and underdeveloped social intelligence. In the studied groups, the factor F4 was 6.43 points and 6.25 points ($t_e=0.265$, $t_{e \leq t_k}=2.018$; $p \leq 0.05$). This factor characterizes the propensity of the examinees to choose independence.

As a result of Kettel's 16-factor questionnaire-test, we compare and analyze the difference in factors between the subjects of students with high and insufficient levels of social intelligence. For this purpose we created a personality profile of the subjects with high and insufficient level of social intelligence on the average factor indicators of the two experimental groups (Fig. 1).

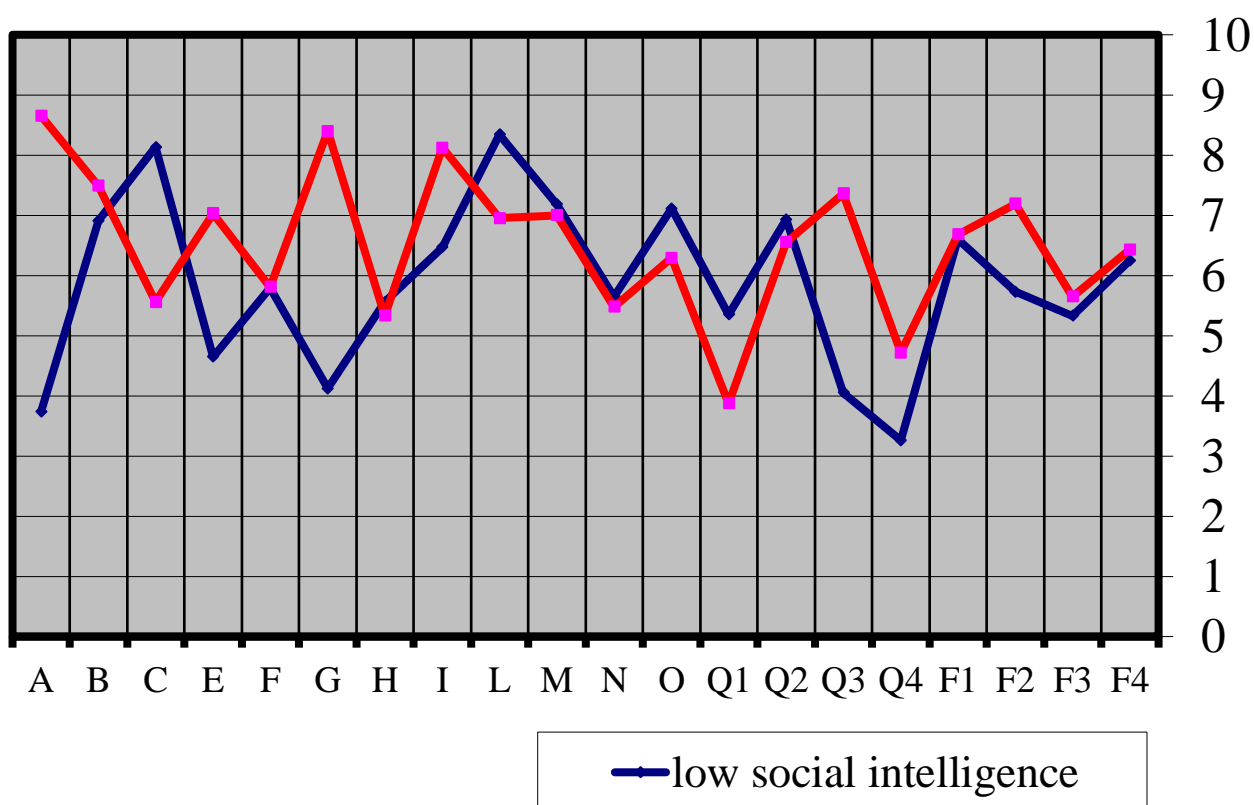


Figure 1. Personality profiles for high and low (insufficient) level of social intelligence in students according to Kettel's methodology

Let us formulate a qualitative analysis of the profiles drawn in the picture.

So, according to the results of the Kettel methodology, tested future teachers with highly developed social intelligence are generally characterized by the following traits:

- be open in communication, be able to express emotional closeness in interpersonal interaction; qualities that are significant in interactions and interactions with others, based on the richness of their emotional manifestations in relationships, on their ability to cooperate;
- high level of intellectual development on the index of intelligence; development of logical thinking; breadth of mind; ability to concentrate, stabilize and memorize, reproduce;
- tendency to keep our emotions and moods in the same state in communication and actions;
- desire to show oneself as a priority before others, to show leadership abilities; we are able to solve our problems independently;
- relevance of sobriety and activity depending on living conditions and social environment;
- behavior in accordance with social norms, responsibility, observance of moral principles, manifestation of spirituality in the social environment; formation of shame;

- tendency to be patient in solving problems arising in relationships and activities, and shyness, not openly showing their courage;
- sensitivity, a tendency to show kindness, to be easily attached, to be influenced and resistant to characteristics, not to accept harshness and severity every time;
- skepticism, suspiciousness, distrust in relationships and actions;
- fantasy, dreaminess, inconsistent behavior, driven by dreams;
- politeness; the desire to find logic and meaning in different situations and phenomena, behavior and emotional reactions of themselves and others, the ability to combine integrity with etiquette in interpersonal communication;
- Emotional instability; tendency to worry, blame yourself, compare yourself to others, worry about shortcomings; be guided by negative thoughts in relationships, actions and finding solutions to various problems; underestimate your knowledge, experience and abilities;
- be careful in relationships and be ready for compromise; always follow the rules and norms that have developed in the social environment and be able to be firm in difficult situations; thoroughness, the desire to preserve traditions, the observance of moral principles in communication
- desire for individuality, non-conformism, independence; ability to make a decision independently and implement this decision;
- desire to maintain order at the expense of self-control; politeness in communication; regulation of speech and behavior in accordance with morality, social norms, various responsibilities and the requirements of life and the formation of willpower at the necessary level;
- sometimes showing indifference to his failures and successes, succumbing to weakness in communication and actions;
- sometimes being in a bad mood in a social environment and not being able to feel free; difficulty in direct social and psychological adaptation in new situations;
- ability to communicate closely with others; manifestation of extroversion through open, confident, empathetic, bright character and qualities in interpersonal interaction;
- ability to regulate the emotional sphere.

Thus, on the basis of Kettel's methodology cognitive processes in the subjects with highly developed social intelligence; spiritual, moral and personal qualities; It is determined that the qualities important in the relationship are formed to the necessary extent. However, it is necessary to show the necessary level of such structures as empathy, reflection, socio-psychological adaptation, which are important in pedagogical relations and pedagogical activity, and to avoid some internal personal tensions. For this purpose, in our opinion, it is necessary to carry out special psychological and pedagogical work in and out of the classroom with future teachers with highly developed social intelligence.

In addition, as a result of applying the Kettel methodology, the tested future teachers with underdeveloped social intelligence can be generally characterized by the following traits:

- Reactivity in communication with others, affective behavior, and character traits;
- formation of cognitive phenomena such as mental field, processes of attention and memory in accordance with age features;
- keeping one's emotions and moods under control;
- lack of clear desire to present themselves in front of others, to show leadership qualities; desire to find a comfort zone only in the presence of others who may be stronger, more active, powerful, leaders than themselves;
- relevance of sobriety and activity depending on living conditions and social environment;
- sometimes manifestation of such negative qualities as laziness, irresponsibility, moral instability;
- a tendency to be patient in solving problems arising in relationships and activities, and shyness, not openly showing his courage;
- sensitivity, a tendency to be kind, easily attached, swayed, not accepting harshness and severity every time;

- skepticism, mistrustfulness, inability to adapt immediately to another environment, jealousy and inflexibility to keep oneself constantly in a social environment;
- sadness; imagination, dreaminess, and ability to think creatively;
- politeness; the desire to find logic and meaning in different situations and phenomena, behavior and emotional reactions of themselves and others, the ability to combine integrity with etiquette in interpersonal communication
- Emotional instability; tendency to worry, blame oneself, compare oneself with others, worry about shortcomings; be guided by negative thoughts in relations, actions and finding solutions to various problems; underestimate one's knowledge, experience and abilities;
- formation of a skeptical attitude towards new ideas and rules; taking only direct action; not daring to solve their problems in a new way, always seeking to use familiar methods;
- striving for individuality, non-conformism, independence; the ability to make a decision independently and implement this decision; not requiring cooperation in action with others;
- not always thoroughly achieve their goals; lack of self-control of words and behavior; incomplete formation of volitional agreements;
- dissatisfaction with oneself; in relational situations, in various social situations there are reactions of anger, resentment, rage;
- sometimes being in a bad mood in a social environment and not being able to feel free; difficulty of direct social and psychological adaptation in new situations;
- tendency to be extroverted through a sensitive, bright character and qualities;
- ability to regulate the sphere of anger and emotions.

Conclusion. Thus, on the basis of Kettel's methodology cognitive processes in subjects with underdeveloped social intelligence; spiritual, moral and personal qualities; revealed insufficient formation of qualities important in communication, pedagogical communication and pedagogical activity. Therefore, it will be necessary to carry out special psychological and pedagogical classroom and extracurricular work with future teachers with underdeveloped social intelligence.

In addition, the development of social intelligence underlies the formation of important personal qualities of future specialists of pedagogical relations and pedagogical activity. And the important personal qualities in pedagogical relations and pedagogical activity are defined as the main criteria and parameters in the development of social intelligence in students.

In this part of the experimental study if distinguish levels of development of social intelligence of students, cognitive processes of students; spiritual and moral and personal qualities; It became known that the important qualities in communication are defined by specific features and are the basis and influence the development of social intelligence.

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