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RELATIONSHIP OF SOCIAL INTELLIGENCE WITH LOCUS OF CONTROL AND MOTIVATION FOR SUCCESS OF HIGHER EDUCATION STUDENTS

ЗВ'ЯЗОК СОЦІАЛЬНОГО ІНТЕЛЕКТУ З ЛОКУСОМ КОНТРОЛЮ І МОТИВАЦІЄЮ ДО УСПІХУ ЗДОБУВАЧІВ ВИЩОЇ ОСВІТИ

The article is devoted to the research of the relationship social intelligence with the locus of control and motivation to success of higher education students. The research used: social intelligence test (J. Guilford, M. O'Sullivan), methods "Cognitive Orientation (Locus of Control)" (J. Rotter) and "Motivation for success" (Th. Ehlers), Pearson correlation coefficient. The contingent of the respondents was 240 higher education students.

Social intelligence of personality is a integrated complex of its abilities (to understand the manifestations of behavior and verbal and non-verbal behavioral expression of other people; to identify the motives and consequences of their behavior in different situations and to predict her), which ensures that it succeeds in society. The locus of control (internal, external) are strategies by which the individual establishes responsibility for results of activity – his and other people. Motivation to success is a steady personalities' need to succeed in lifeactivity.

In almost half of the tested students empirically revealed the average level of the general indicator of social intelligence, in almost a third – lower than average, in almost one-sixteenth – higher than average and in the twentieth – high. The tested students of these levels distinguish the appropriate ability to properly understand the motives of behavior and manifestations of non-verbal and verbal behavioral expression of other people and to anticipate their further actions in almost half, one or three fourth or all social interactions. Low levels are missing. Most of tested students (almost three fourth) distinguish the average level of external or internal locus of control. The smaller number is low (fifteenth) and high (almost one fifth) levels of external and low (sixth) and high (tenth) levels of internal locus. External factors are used to explain the results (successful, unsuccessful) of their activities investigated with the external locus of control, internal – with internal. Most of the studied distinguishes high (almost half) and the average (almost a third) levels of motivation to success, the minority is low (almost eight). The relationship of social intelligence with the external locus of control and motivation to success of the studied is statistically significant and direct, with the internal – the opposite. It is determined that the locus of control and motivation for success are psychological factors in the development of higher education students' social intelligence.

Key words: social intelligence, ability, locus of control, internal, external, motivation to success, higher education student.

Статтю присвячено дослідженню зв'язку соціального інтелекту з локусом контролю і мотивацією до успіху здобувачів вищої освіти. В дослідженні використано: тест вивчення соціального інтелекту (Дж. Гілфорд, М. О'Саллівен), методик «Когнітивна орієнтація (локус контролю)» (Дж. Роттер) і «Мотивація до успіху» (Т. Елерс), коефіцієнт кореляції Пірсона. Контингент досліджуваних скло 240 здобувачів вищої освіти.

Соціальний інтелект особистості є складним інтегрованим комплексом її здатностей (розуміти прояви поведінки та вербальної й невербальної поведінкової експресії інших людей; визначати мотиви і наслідки їхньої поведінки у різних ситуаціях та прогнозувати її), що забезпечує досягнення нею успіху в суспільстві. Локус контролю (інтернальний, екстернальний) є стратегіями, за допомогою яких особистість встановлює відповідальність за результати діяльності – своєї й інших людей. Мотивація до успіху є стійкою потребою особистості досягати успіху в життєдіяльності.

В майже половини досліджуваних емпірично виявлено середній рівень загального показника соціального інтелекту, в майже третьої частини – нижчий від середнього, в майже шістнадцятої – вищий від середнього і в двадцятої – високий. Досліджуваних із цими рівнями вирізняє відповідна здатність правильно розуміти мотиви поведінки і прояви невербальної й вербальної поведінкової експресії інших людей і передбачати їхні подальші дії майже в половині, одній чи трьох четвертих частинах або усіх соціальних взаємодіях. Низький рівень відсутній. Більшість досліджуваних (майже три четвертих частини) характеризує середній рівень екстернального чи інтернального локусу контролю. Меншість – низький (п'ятнадцята частина) і високий (майже одна п'ята) рівні екстернального та низький (шоста) і високий (десята) рівні інтернального локусу контролю. Зовнішні чинники застосовують для пояснення результатів (успішних і неуспішних) своєї діяльності досліджувані з екстернальним локусом контролю, внутрішні – з інтернальним. Більшість досліджуваних вирізняє високий (майже половину) і середній (майже третю частину) рівні мотивації до успіху, меншість – низький (майже восьму). Зв'язок соціального інтелекту з екстернальним локусом контролю і мотивацією до успіху досліджуваних є статистично значущим і прямим, із інтернальним – зворотнім. Локус контролю і мотивацію до успіху визначено психологічними чинниками розвитку соціального інтелекту здобувачів вищої освіти.

Ключові слова: соціальний інтелект, здатність, локус контролю, інтернальний, екстернальний, мотивація до успіху, здобувач вищої освіти.

Formulation of the problem. The intensification of Ukraine's integration process into the European Union actualizes the problem of social intelligence as an important factor in the social adaptation of an individual. The issue of the social intelligence development of higher education students in connection with their academic mobility deserves special attention, and its significance is emphasized in the Law of Ukraine "On Higher

Education". The outlined proves the importance of the psychological factors research of social intelligence development of higher education students in domestic psychological science and practice by scientists.

Analysis of recent research and publications. The latest scientific publications of psychologists were devoted to the study of some aspects of the social intelligence development problem of higher education students.

In foreign psychology [2], the influence of social intelligence on the personality development of higher education students was studied. The connection between the components of their social intelligence was empirically determined. A strong and direct connection in the tested students was established between the following components: the ability to notice and understand the emotions and behavior of other people and the ability to understand the manifestations of their non-verbal behavioral expression; the ability to notice and understand the emotions and behavior of other people and the ability to predict their behavior in the future; the ability to understand manifestations of non-verbal behavioral expression of other people and the ability to predict their further behavior.

In domestic psychology [1], the peculiarities of the social intelligence development of higher education students during the quarantine restrictions period were empirically studied. Thus, during the quarantine restrictions period, the majority of the tested students were distinguished by low and average levels of social intelligence, whereas in the pre-quarantine period – high, higher and lower than average levels. In the quarantine restrictions period, the average and below-average level of ability to understand various situations of social interactions was determined in most of the tested students, in the period before the quarantine – high and above-average level. During the quarantine restrictions period, most of the tested students were found to have average and low levels of ability to understand non-verbal behavioral expression of other people, in the pre-quarantine period – with a higher than average level. During the quarantine restrictions period, the majority of tested students were found to have higher than average and lower levels of the ability to understand the verbal behavioral expression of other people, in the pre-quarantine period – with high, average and low levels. During the quarantine restrictions period, the majority of tested students were found to have average and low levels of the ability to predict the behavior of other people, in the period before the quarantine – with high, higher and lower than average levels.

Selection of previously unresolved parts of the general problem. As a result of the analysis of the latest scientific researches and publications, it was determined that the question of psychological factors in the social intelligence development of higher education students remained beyond the scientific interest of psychologists. According to our hypothesis, such factors are the locus of control and motivation to success in higher education students. Verification of this hypothesis required appropriate empirical study and correlation analysis.

The purpose of the article: to highlight the results of an empirical study of the connection between social intelligence and the locus of control and motivation to success in higher education students.

Presentation of the main research material. First, the psychological essence of the concepts "social intelligence", "locus of control" and "motivation to success" is revealed. In our opinion, social intelligence is a complex integrated set of personality abilities related to cognition and problem solving, which contribute to the success in their communication and interaction with other significant people [1]. A number of abilities are integrated into the social intelligence of an individual: to notice and understand the general characteristics and manifestations of actions, behavior, verbal and non-verbal behavioral expression of other people; identify the purpose, motives and results of the behavior of other people in joint interactions with them; predict the actions and deeds of other people [4].

According to the definition of J. Rotter [5], the locus of control is such strategies of an individual they establish responsibility with for the results of their activities, both personal and of other people. The external locus of the personality control appears in their determination of responsibility for the results of activities to such external factors as circumstances, fate, luck, etc. Instead, the internal locus of control is presented in determining the individual's responsibility for the results of activities to such internal factors as their aspirations, motives, efforts, abilities, etc.

According to Th. Ehlers [3], motivation to success is a persistent need of an individual to succeed in various types of activities. Motivation to success is related to the individual's tendency to be proud of themselves and be satisfied with the achievement of a certain result.

The social intelligence test of J. Gilford and M. O'Sullivan [4] in the adaptation of O. Mykhaylova (Alyoshina) was used for the empirical study of the social intelligence of higher education students. The test consists of the following subtests: "Stories with completion", "Groups of expression", "Verbal expression", "Stories with addition". The obtained empirical results made it possible to determine the levels of social intelligence of the tested respondents. Namely, its general indicator is which integrates the ability of the tested students to notice and correctly understand the properties of behavior and manifestations of non-verbal and verbal behavioral expression of other people, to predict their behavior in social interactions.

Empirical study of the locus of control (external, internal) of higher education students was carried out using the method "Cognitive orientation (locus of control)" by J. Rotter [5] adapted by O. G. Shmelov. The methodology contains 29 pairs of statements that reveal opposing views of the individual on various problematic issues in society. The tested students were asked to choose only one statement, which they agree with to the greatest extent. According to the key, the values of indicators of the external and internal locus of control of the tested students were calculated.

Empirical study of the motivation to success indicator was facilitated by the application of the "Motivation to Success" method by Th. Ehlers [3] in adaptation by

M. A. Kotyk. The method consists of 41 statements. The tested students were asked to read each statement and mark their agreement or disagreement. The value of the motivation to success indicator was calculated by the key.

Connections of the general indicator of social intelligence with indicators of the locus of control and motivation to success of the tested students were determined using the Pearson correlation coefficient r.

The empirical study, which involved mandatory compliance with ethical standards, was conducted during 2021-2023. The contingent of the tested students was 240 higher education students aged 17-22 with equal representation by gender. Empirical study was conducted based on higher education institutions in the cities of Kyiv, Kamianets-Podilskyi, and Berdyansk (at this time temporarily moved to the city of Zaporizhzhia).

Quantitative data on the general indicator levels of social intelligence of higher education students are presented in figure 1.
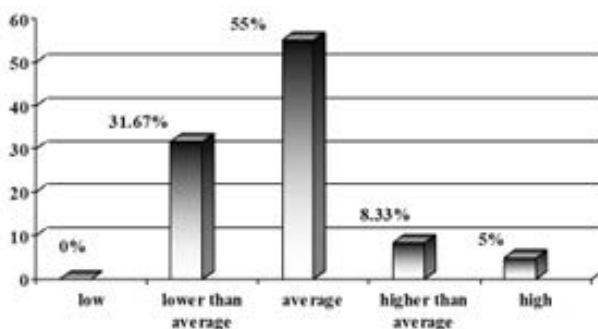

Fig. 1. Levels of the general indicator of social intelligence of higher education students

Figure 1 shows that the largest number of higher education students (55%) is characterized by an average level of the general indicator of social intelligence, a slightly smaller number (31.67%) has a lower than average level, a much smaller number (8.33%) has a higher than average level and the smallest number (5%) – high level. The tested students do not have a low level.

Tested students lower than average, average, higher than average, and high levels, respectively, are able to correctly analyze and predict the behavior of significant others and successfully solve tasks in almost one-fourth, one-second, three-fourths, or all social interactions. According to the identified levels (lower than average, average, higher than average and high), they are able to correctly understand the motives of other people's behavior, thus they can predict their further behavior in almost one fourth, one second, three fourths or all situations of interactions with them.

If other people behave atypically, then they, pursuant to the detected levels (lower than average, average, higher than average, and high), accordingly make mistakes in almost one fourth part, one second part, three fourth parts or all situations of interactions with them. The partial clarity of constructing one's own life strategy allows the tested students, according to the determined levels (lower than average, average, higher

than average, and high), respectively, to achieve the set goal in almost one fourth part, one second part, three fourth parts or all interactions with other people.

The ability to notice and correctly understand the manifestations of verbal and non-verbal behavioral expressions of other people contributes to the orientation of the tested students, according to the revealed levels (lower than average, average, higher than average and high), respectively, in almost one fourth part, one second part, three fourth parts or all interactions in society. According to the defined levels (lower than average, average, higher than average and high), respectively, they are able to recognize the nature of almost one fourth part, one second part, three fourth parts or all situations of social interactions, which allows them to understand the verbal behavioral expression of other people. According to the established levels (lower than average, average, higher than average, and high), respectively, they have the ability to choose an appropriate tone of conversation and show role flexibility in almost one fourth part, one second part, three fourth parts or all interactions with other people. According to the determined levels (lower than average, average, higher than average, and high), the tested students are distinguished by the ability to analyze and predict the dynamics of the next development of almost one fourth part, one second part, three fourth parts or all complex social interactions. Their amount of knowledge about the norms and stereotypes that regulate the behavior of people in society, according to the identified levels (lower than average, average, higher than average, and high), is insufficient, not quite complete, sufficient or almost complete, respectively.

Therefore, the average level of the general indicator of social intelligence was determined in the largest number of tested students, in a slightly smaller number – lower than average, in the smallest – higher than average and high level.

Quantitative data on the levels of external and internal locus of control of higher education students are presented in figure 2.
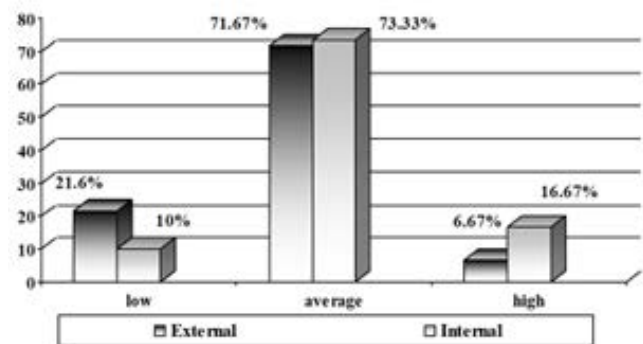

Fig. 2. Levels of external and internal locus of control of higher education students

From figure 2, it is noticeable that the average level of external (71.67%) or internal (73.33%) locus of control was found in a larger number of tested students. On the other hand, high (21.6%) and low (6.67%) levels of external and high (10%) and low (16.67%) levels

of internal locus of control were determined in a much smaller number of tested students.

Tested students with average, high, or low levels of external locus of control explain the successful and unsuccessful results of their activities by appealing to external factors (luck, circumstances, fate, etc.) in almost half, in many, or only in some life situations, respectively. In their opinion, success depends on a convenient opportunity that a person should notice. According to their beliefs, a person should not make plans in advance, because their implementation can largely depend on external circumstances. They believe that most people cannot significantly influence the events that take place in the world. They are sure that most people do not understand that their lives largely depend on random circumstances. According to their ideas, they have almost no influence on what happens to them. They think that sometimes events in their lives happen independently of them.

Tested students with average, high, or low levels of internal locus of control interpret successful and unsuccessful results of their own activities with the help of internal factors (abilities, motives, efforts, etc.) in almost half, in many, or only in certain life situations, respectively. They are convinced that a person should not hope for luck, but must work hard to achieve success. They are always confident that they can implement the plans they construct. According to their beliefs, if a person takes an active part in the social life, then they will be able to influence the events that take place in society and the world. They believe in the absence of such a phenomenon as luck. In their opinion, fate or some incident cannot significantly affect their lives. They believe that the events in their lives often depend on themselves.

Therefore, the average level of external and internal locus of control distinguishes a larger number of higher education students; much smaller – high and low levels of external and internal locus of control.

Quantitative data on the motivation to success levels of higher education students are presented in figure 3.
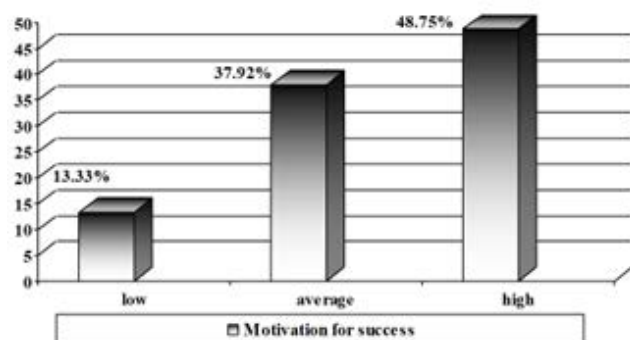

Fig. 3. Levels of motivation to the success of higher education students

As can be seen from figure 3, high (48.75%) and average (37.92%) levels of motivation to success were determined in a larger number of tested students, and low (13.33%) in a smaller number. A higher level of motivation to success reveals a more persistent need of

the tested students to achieve success in various types of life activities. High-achieving tested students attempt to perform most tasks completely and become anxious when they fail. They are more likely to blame themselves if they refuse to perform a difficult task, because they know that they could succeed. The presence of obstacles increases their desire to implement the decision. They work a lot. Tested students with an average level try to perform tasks, but do not get irritated if they notice that they are not able to perform them completely. They are not characterized by remorse if it is possible to refuse a difficult task. Obstacles often hold back their willingness to follow through on a given decision. They alternate work with very frequent rest. Low-level tested students try to avoid many of the specified tasks. If a difficult situation arises, they are the last to make a decision. They do not condemn themselves, refusing to perform a difficult task, because they are not sure of their success. Existing obstacles significantly weaken their desire to implement the decision. They usually pay little attention to their own achievements.

Therefore, the majority of the tested students have high and average levels of motivation to success, the minority – low.

The use of the Pearson correlation coefficient r contributed to the identification of a statistically significant direct and fairly strong connection between the general indicator of social intelligence and the external locus of control of the tested students ($r=0.129$; $p \leq 0.05$). This connection testifies to a rather significant influence of the external locus of control on the development of the social intelligence of the tested students. A statistically significant inverse and strong connection between the general indicator of social intelligence and the internal locus of control of the tested students was also determined ($r=-0.127$; $p \leq 0.05$). The determined connection proves that the internal locus of control to a certain extent interferes with the development of their social intelligence. The connection between the general indicator of social intelligence and the motivation to success of the tested students is statistically significant, direct and quite strong ($r=0.129$; $p \leq 0.05$). The determined connection confirmed the influence of motivation to success on the development of the social intelligence of the tested students.

Therefore, the correlational analysis carried out allows us to conclude that locus of control and motivations to success are psychological factors in the development of social intelligence of higher education students. Thus, a higher level of ability to achieve success in social interactions is characteristic of tested students with high and average levels of external locus of control. Tested students with high and average levels of internal locus of control have a lower level of ability to achieve success in social interactions. A higher level of the ability to achieve successful results in social interactions distinguishes tested students with high and average levels of motivation to success.

Conclusions. The conducted empirical study and the obtained results confirmed our assumption and the achievement of the set goal, which was to study

the connection of social intelligence with the locus of control and motivation to success of higher education students.

Social intelligence is a complex integrated set of personality abilities (to notice and analyze the general properties and manifestations of other people's behavior; to determine the purpose, aspirations and consequences of their behavior in various life situations; to understand the manifestations of non-verbal and verbal behavioral expression of other people and to predict their behavior), which contributes to learning and solving a number of tasks that determine the success of their interactions with other people. A person's locus of control is such strategies that help them determine responsibility for the consequences of their activities (their own and others). Motivation to success is a persistent need of an individual to achieve success in various activities, which is associated with their tendency to be proud of themselves.

Empirically, it was found that the largest part (almost half) of the tested students has an average level of the general indicator of social intelligence, a slightly smaller one – lower than average (almost a third), the smallest – higher than average (almost one-sixteenth) and high (twentieth) levels. Tested students with these levels are characterized by the ability to notice and understand behavioral manifestations, verbal and non-verbal expression of other people, determine motives and predict their behavior in almost one second, one fourth,

three fourths or in all social interactions, respectively. There is no low level.

The average level of external or internal locus of control was determined in most of the tested students (almost three fourths). In a smaller amount is high (almost one-fifth) and low (fifteenth) levels of external and high (tenth) and low (sixth) levels of internal locus of control. Tested students with an external locus of control explain the successful and unsuccessful consequences of their activities with the help of external factors, with an internal locus of control – internal ones.

High (almost half) and medium (almost a third) levels of motivation to success were found in a larger number of tested students, and low (almost an eighth) in the smallest. The higher the level of motivation to success is the stronger the need of the tested students to achieve success in society.

A statistically significant and direct connection was established between the general indicator of social intelligence, external locus of control and motivation to success, and a statistically significant and inverse connection with the internal locus of control. Locus of control and motivation to success are psychological factors in the development of social intelligence of higher education students.

The **prospects** for further scientific research consist in the empirical study of the psychological mechanisms of the social intelligence development of higher education students.

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