Revista Românească pentru Educație Multidimensională
ISSN: 2066-7329 | e-ISSN: 2067-9270
Covered in: Web of Science (WOS); EBSCO; ERIH+; Google Scholar; Index Copernicus; Ideas RePeC; Econpapers; Socionet; CEEOL; Ulrich ProQuest; Cabell, Journalseek; Scipio; Philpapers; SHERPA/RoMEO repositories; KVK; WorldCat; CrossRef; CrossCheck

2023, Volume 15, Issue 1, pages: 441-462 | https://doi.org/10.18662/rrem/15.1/705
Submitted: June 6th, 2022 | *Accepted for publication:* October 4th, 2022

Social Intelligence as a Factor of Socio-Psychological Adaptation of University Students with Special Educational Needs during Distance Learning due to the COVID-19

Olena STARYNSKA[1],
Liubov SPIVAK[2],
Alimie OSMANOVA[3],
Olena REVUTSKA[4]

[1] Candidate of Psychological Sciences, Associate Professor, Department of Applied Psychology and Speech Therapy, Berdyansk State Pedagogical University, Berdiansk, Ukraine, el.starinskaya@gmail.com, http://orcid.org/0000-0003-4601-4152
[2] Doctor of Psychological Science, Professor, Department of Psychology, Open International University of Human Development "Ukraine", Kyiv, Ukraine, l.spivak.work@gmail.com, http://orcid.org/0000-0002-3653-5432
[3] Candidate of Psychological Sciences, Associate Professor, Head of Department of Psychology, Open International University of Human Development "Ukraine", Kyiv, Ukraine, Uskut_84@i.ua, http://orcid.org/0000-0002-7180-8176
[4] Candidate of Pedagogical Sciences, Associate Professor, Head of Department of Applied Psychology and Speech Therapy, Berdyansk State Pedagogical University, Berdiansk, Ukraine, revutskaya.helena@gmail.com, http://orcid.org/0000-0003-4311-4748

Abstract: The article is devoted to the research of social intelligence as a factor of socio-psychological adaptation of university students with special educational needs during distance learning. Study methods of social intelligence and socio-psychological adaptation are used. The respondents' contingent of consisted of 78 students with special educational needs. The average level of social intelligence was empirically established in part students, which testifies to their ability to understand properly and the ability to behavior in almost half of life situations. Almost a quarter of students have a higher than average level of social intelligence and the same part is lower than average, which confirms their ability to understand and predict other people's behavior in almost three quarters and one quarter of life situations, respectively. Students do not have high and low levels of social intelligence. Most students (almost two-thirds) have an average level of adaptability and mal-adaptability; instead, a minority (almost one third) is at a high level. Adaptability and mal-adaptability, respectively, indicate consistency and inconsistency between the needs of the individual and the requirements of the social environment. Students with a low level of adaptability and mal-adaptability were not found. The defined statistically significant relationship of social intelligence with adaptability (direct) and maladaptive (reverse) shows the influence of social intelligence on the effectiveness of socio-psychological adaptation of students. The results of the research proved that social intelligence is a factor of socio-psychological adaptation of students with special educational needs during distance learning.

Keywords: *social intelligence; socio-psychological adaptation; adaptability; mal-adaptability; university students with special educational needs.*

How to cite: Starynska, O., Spivak, L., Osmanova, A., & Revutska, O. (2023). Social Intelligence as a Factor of Socio-Psychological Adaptation of University Students with Special Educational Needs during Distance Learning due to the COVID-19. *Revista Românească pentru Educație Multidimensională, 15*(1), 441-462. https://doi.org/10.18662/rrem/15.1/705

©2023 Published by LUMEN Publishing. This is an open access article under the CC BY-NC-ND license http://creativecommons.org/licenses/by-nc-nd/4.0/

Introduction

Integration of states into the European socio-cultural and economic space actualizes the training problem of new type competitive specialists during their higher education. The global pandemic (COVID-19) and quarantine restrictions have caused the need to introduce distance learning for students in higher education institutions in many countries, that led to the need to adapt students to new conditions.

The students' distance learning began in spring of 2020 according Letter from Ministry of Education and Science of Ukraine № 1/9-154 (2020) due to COVID-19 pandemic according World Health Organization (2020).

The Law of Ukraine "On Higher Education" (2020) declares the importance of creating and ensuring equal conditions for all applicants for higher education. In higher education institutions, additional support should be provided to those applicants who belong to the category of "persons with special educational needs". It is emphasized that among the category of people with special educational needs, people with disabilities deserve special attention. As the livelihoods of people with disabilities are limited, they need such training and rehabilitation support that will provide free access to the infrastructure of higher education institutions.

The Law of Ukraine "On Education" (2017) states that these persons need to provide additional permanent or temporary support in the process of their training to ensure the right to receive education.

An issue of factors the effectiveness of socio-psychological adaptation of university students with various educational needs in general and with special needs in particular during distance educational process due to restrictions' periods (through epidemics, natural disasters, etc) is urgent to solve in difficult modern conditions. Therefore, psychological aspects of the problem of distance learning university students who have the special needs in educational process require a thorough scientific research.

Literature review

The essence of the phenomena "Socio-psychological adaptation"

The scientific provisions on the psychological essence of the phenomena "Socio-psychological adaptation" became fundamental in the research.

Socio-psychological adaptation of the individual is its adaptation to conditions of social interactions and the result of this process. The

inconsistency of individual needs with the restrictive norms and rules of the social environment leads to conflict and, as a consequence, to increased anxiety and mobilization of personal resources. Emotional experiences and well-being of the individual determine the levels of its adaptation – adaptability or mal-adaptability. The normal level of personality anxiety is associated with adaptability, while elevated and high – with mal-adaptability (Selye, 2002).

Given the above, the socio-psychological adaptation of higher education students can be interpreted as a process of their active adaptation to new conditions of the social environment in general and to distance learning in particular, as well as the result of this process. In other words, the socio-psychological adaptation of students is a process of development and emergence of such competencies that are necessary for the assimilation and observance of new social norms and rules, successful self-affirmation in the new social status and constructive communicative interactions. Because of the inconsistency of students' needs with the restrictive norms and rules of the social environment, conflict arises and, as a result, they increase the level of anxiety and mobilize personal resources. Students' emotional well-being determines the levels and effectiveness of their adaptation: adaptability or mal-adaptability. The absence of anxiety is associated with student's adaptability, while the presence of anxiety is associated with student's mal-adaptability.

The essence of the phenomena "Social intelligence"

The scientific provisions on the psychological essence of the phenomena "Social intelligence" became fundamental in the research too.

Social intelligence is a formation that consists of such personality abilities related to knowledge and positive solution to various questions in communication with other people.

This formation integrates the ability of an individual to notice and analyze the general properties and individual elements of other people's behavior; the ability to identify the purpose, aspirations and consequences of people's behavior in different social situations; the ability to foresee behavior of peoples, the ability to correctly understand their nonverbal and verbal behavioral expression (Goleman, 2021; Guilford, 1982; Hendricks et al., 1969; O'Sullivan & Guilford, 1967; Sternberg, 1987; Ushakov, 2004).

Social intelligence is an important cognitive construct of the communication sphere of the personality, has a significant impact on the success of its communicative interactions and socio-psychological adaptation. Social intelligence affects the success of socio-psychological

adaptation of the personality. Social intelligence provides a cognitive function in relation to the behavior of individual and other people with whom he interacts. Thanks to social intelligence, a personality is able to identify certain elements and meaning of other people's behavior in different situations, determine the general characteristics and properties of behavior in their relationships, understand changes in similar behavior in different situations, and predict the consequences of other people's behavior (Guilford, 1982; Rean et al., 2006).

The essence of the term "Persons with special needs"

It is also important to determine the term "persons with special needs" in our researcher. The term "persons with special needs" in relation to the educational process was used in the texts of the Salamanca Statement and Framework for Action on Special Needs Education (1994) and the World Report on Disability of World Health Organization (2011). The text emphasizes that, according to the Declaration of Human Rights and the United Nations Declarations, the right to receive education is granted to every person, notwithstanding individual differences. It is especially noted that high-quality access of people with special educational needs – people with physical or mental incapacity to get an education is possible only in an inclusive educational environment.

The essence of the term "Distance learning"

At the beginning of the COVID-19 pandemic, distance learning was a great challenge for university students with special educational needs, so they needed to adapt to new conditions and solutions. The big problem was to replace personal interaction with remote means of information technology. Distance learning is implemented at a distance; teachers and students are at a distance from each other and meet at a certain time on schedule (Frumos, 2020). The student must have information-communicative technologies thoroughly for effective distance learning. That is, a student must have an information-communication competence formed. An information-communication competence (IC-competence) is a possession of modern general-purpose information technologies, the ability to use tools and products of general-purpose information technologies, as well as the possession of technologies for search, input, processing and output of information (Morozova, 2012).

The study of relationship with social intelligence and socio-psychological adaptation of university students who have the special needs in distance educational process in time learning during quarantine

restrictions in connection with COVID-19 did not attract the proper attention of scientists over the past two years.

Research problem

Despite the variety of studied aspects of the distance learning problem of students of higher education institutions during the COVID-19 pandemic, outside the scientific attention of scientists, the question of socio-psychological adaptation to the conditions of distance learning of university students who have the special needs in distance educational process remains, in view of their capabilities. After all, the successful solution of this issue confirms the effectiveness of the social sphere of each state. Therefore, the study of the main factors of socio-psychological adaptation of these university students to distance learning is urgent for modern psychological science and pedagogical practice.

Scientists experimentally studied that the success of socio-psychological adaptation of university students with special educational needs first of all depends on their sociability, its interactions with other students, etc. The social inclusion contributes to the socio-psychological adaptation of these university students needs to the system of social interactions in general, and to educational interactions in particular (Afanasenko et al., 2021). The social integration of students with special educational needs is related to their social role and social interactions (Bossaert et al., 2012; Khusheim, 2022). In our opinion, these factors of social adaptation students with special educational needs are related to their social intelligence.

According to the scientific position on the relationship between intelligence and adaptation (Piaget, 1985; Nisser, 1981; Wertheimer, 1987), the impact of intelligence on the effectiveness of adaptation (Burlachuk, 1989), the impact of social intelligence on the success of adaptation (Rean et al., 2006; Sternberg, 1987), the peculiarities of students with special educational needs' social integration and their participation in social interactions (Khusheim, 2022; Koster et al., 2010), the relationship between mental health and social intelligence of students who have the special needs in education development during these education in time COVID-19 (Starynska et al., 2021) a link between social intelligence and socio-psychological adaptation of these university students in the conditions of this learning is assumed.

The **purpose** of this research: empirically studying the impact of university students with special educational needs' social intelligence on their

socio-psychological adaptation during distance learning. Achieving this purpose the following **tasks** were set: 1) to study empirically university students with special educational needs' social intelligence; 2) empirically research the main indicators of these university students' socio-psychological adaptation to distance learning (adaptability and mal-adaptability); 3) to establish the impact of university students with special educational needs' social intelligence on their socio-psychological adaptation during distance learning.

Methodology

Methods. The "Social intelligence test", developed by Guilford and Sullivan and adapted by Mikhailova (Aleshina) (2001), was used to establish respondents' social intelligence levels.

This test aims to study social intelligence, which consists of the personality's ability to correctly analyze the other people's actions.

Namely:

- The personality's ability of the individual to properly analyze and establish verbal expressive behavioral manifestations and non-verbal expressive behavioral manifestations of other people in different social situations (formed personal knowledge of human actions and human behavior);
- The personality's ability of the individual to correctly analyze the different social interactions and actions of other people and to summarize their general properties in the flow of expressive or situational information about behavior (the presence of sufficient personal knowledge of behavioral classes);
- The personality's ability of the individual to understand relationships (formed personal knowledge of the relationships between behavioral manifestations of different people);
- The personality's ability of the individual to correctly analyze and identify the logic of the development of holistic situations of human interaction and the importance of their behavior in these situations (formed personal knowledge of behavioral systems);
- The personality's ability of the individual to understand the change of verbal and non-verbal importance of such behavior in different situational contexts (formed personal knowledge of human behavior's possible transformations of);

- The personality's ability to predict the result of other people's behavior by analyzing available information (formed personal knowledge of the most likely results of human behavior).

The test consists of four subtests. The first subtest "Stories with the end" contains pictures depicting life situations that occur with the character of Barney. The second subtest "Expression groups" contains pictures with images of poses, gestures and facial expressions – expressive movements that represent the human condition. The second subtest "Verbal expression" contains phrases that one person says to another and three different communication situations. The fourth subtest "Stories with additions" pictures with images of life situations that occur with the character Ferdinand. In each subtest, the subject must choose one option and mark it on the answer sheet. The levels of respondents' social intelligence are determined by the results of all answers. Respondents had to choose one answer from the suggested. We enrolled first point to the respondent for each coincidence of his answer with the key to the test. The level of respondents' social intelligence was determined by the number of points they scored. Namely, 1-12 points is a low level, 13-26 points is a lower than average level, 27-37 points is an average level, 38-46 points is a higher than average level, 47-55 points is a high level.

In order to determine the indicators of socio-psychological adaptation of students with special educational needs in the conditions of distance learning, the socio-psychological adaptation' diagnostics method by Rogers and Diamond used (Fetyskin et al., 2009). This method contains statements about a personality, about his lifestyle: feelings, thoughts, habits, style of behavior. For example, "I put great demands on myself", "I often feel humiliated", "I have a warm, good relationship with others" and other. Students were asked to read each statement, compare it with their own way of life, habits and evaluate the extent to which it concerns them. Use the following answer scale to evaluate: "0" – this does not concern me at all; "1" is not like me; "2" – I doubt that it can be attributed to me; "3" – I do not dare to take it to myself; "4" is like me, but there is no confidence; "5" – it's like me; "6" is exactly about me. Students of all statements of this method were allowed to determine of adaptability and mal-adaptability, which are characterized by the levels of their socio-psychological adaptation in terms of distance learning.

Psychological diagnosis of students with special educational needs was performed online.

Statistical methods. The Pearson's r correlation coefficient used in the study. The computer software packages of statistical software SPSS 19.0 used for mathematical and statistical processing of research results.

Participants. The empirical study, conducted during distance learning during 2021, in the conditions of quarantine restrictions due to the COVID-19 pandemic, involved 78 university students with special educational needs from Kyiv and Berdyansk. An average age of the surveyed was 18.9 years old. All respondents agreed to use obtained experimental results for scientific publications and with confidentiality.

Let's describe the respondents in more detail.

As noted above, a group of people with special educational needs also include those who have physical disorders or disabilities (Law of Ukraine "On Education" № 2053-VIII, 2017; The Salamanca Statement and Framework for Action on Special Needs Education, 1994; World Report on Disability of World Health Organization, 2011).

The groups of university students with special educational needs (with physical disorders or disabilities) are presented in Figure 1.

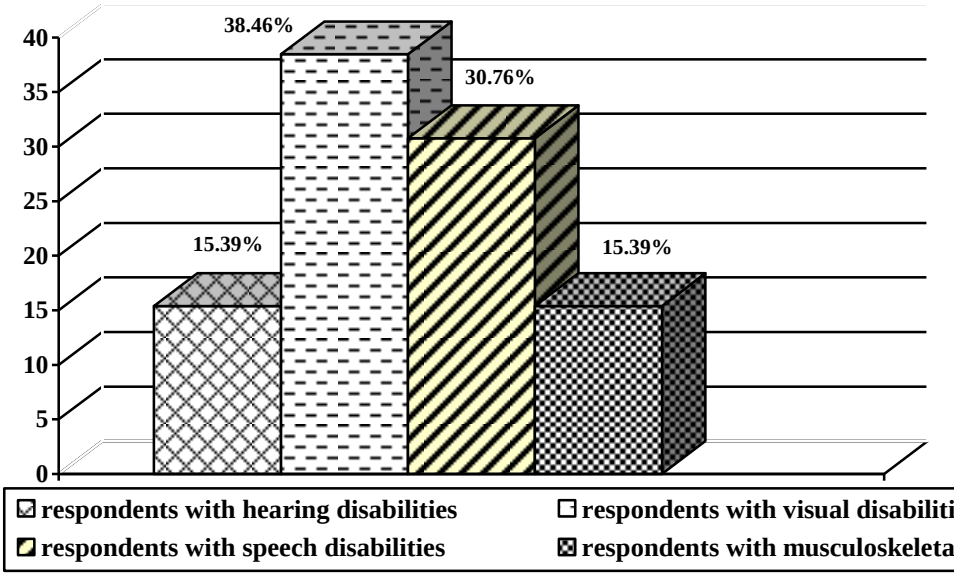


Figure 1. The groups of university students with disabilities or disorders who have been investigated
Source: Author's own conception

Figure 1 show that among surveyed students with disabilities or disorders were 15.39% of respondents with hearing disabilities; 38.46% of respondents with visual disabilities; 30.76% of respondents with speech disabilities; 15.39% of respondents with musculoskeletal disorders.

Since the fall of 2020 and at this time, students who have the special needs in distance education have become more suitable for thanks to university teachers' efforts. Also, studied students with special educational needs were characterized by their levels of information-communication competence.

Through the application of the program of monitoring the IC-competence of students during their professional training in educational classes in pedagogy and psychology (Morozova, 2012) the levels IC-competence of respondents were established (are presented in Figure 2).

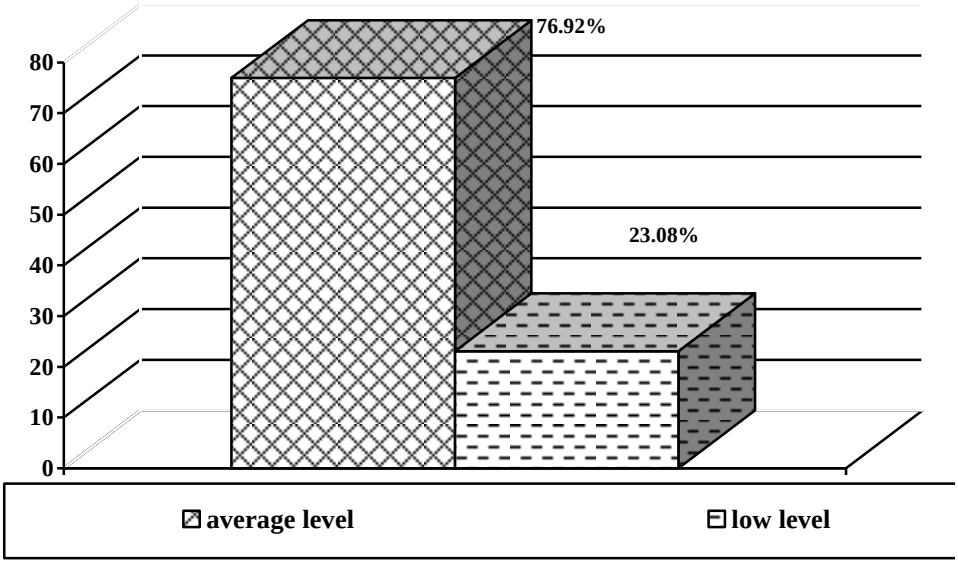


Figure 2. Levels of respondents' information-communication competence
Source: Author's own conception

Figure 2 shows that in most university students (76.92%), the average level of IC-competence was found. The respondents have modern general-purpose information technology at an average level. They are able to use tools and products of public information technology at an average level. And they have the technology to search, enter, process and output information at an average level. Students with an average level show an

unstable desire to use ICT in their studies. They use ICT at the request of other people (one of the parents, relatives). They are able to adapt the acquired knowledge about working with technological support to certain conditions. They also have the appropriate skills to work with different ICT, but they are not enough to use them confidently and creatively, both for educational and leisure purposes.

The slightly less of respondents (23.08%) are characterized by the low level of their IC-competence. The respondents have modern general-purpose information technology at a low level. They are able to use tools and products of public information technology at the low level. And they have the technology to search, enter, process and output information at the low level. Students with a low level show indifference to using of ICT during their professional training. Their cognitive independences level is reproductive. They have some skills in working with ICT, but do not know how to rationally and appropriately use the latest tools for educational purposes.

Thus, the studied students with special educational needs are characterized by medium and low levels of information and communication competence, which allows them to implement distance learning solutions.

Results

Results of research of social intelligences levels of university students with special educational needs

The levels of respondent's social intelligence were established (Figure 3).

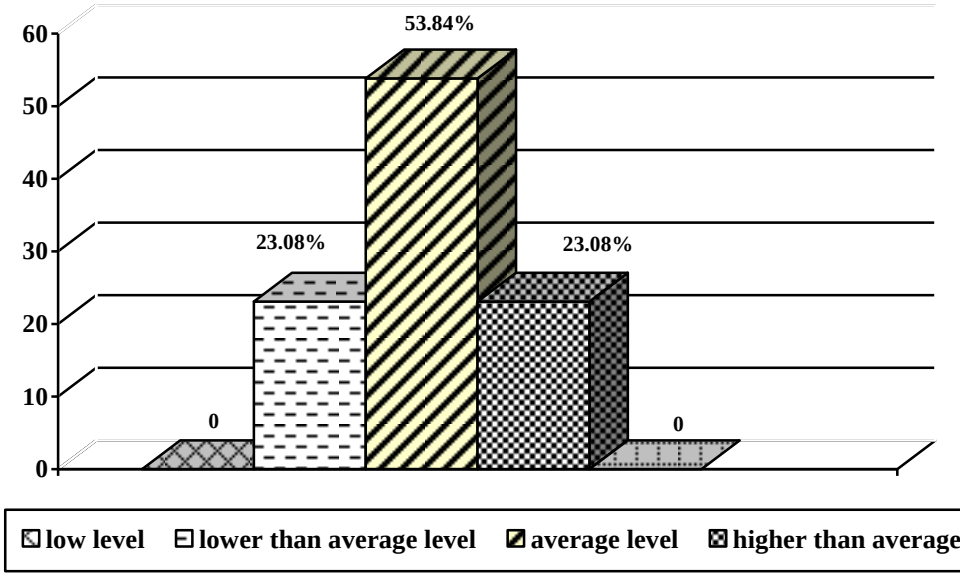


Figure 3. Levels of university student's social intelligence
Source: Author's own conception

Figure 3 shows that most respondents (53.84%) are characterized by the average level of social intelligence. Students with this level have the opportunity to analyze other people's actions and positive results in solving almost half of different social situations. They can to predict almost half of human behavior's results, as well as their subsequent actions. This is facilitated by the ability of students to analyze different communication situations of other people.

Students with average level of social intelligence understand clearly the thoughts, motives and emotions of other people in about half of communication interactions, and therefore they are able to predict the same number of future events. Under a condition of the atypical behavior of other people involved in communicative interactions, they may make mistakes. Students with this level achieve a certain goal in almost half of the situations, because they clearly construct their life strategy. Proper understanding of the verbal and nonverbal reactions of other participants in communication presents their ability to navigate in almost half of life situations. It is important for students with this level to increase the amount of personal knowledge of social norms, behavioral rules and stereotypes, as well as about models for imitation that provide positive results of human behavior.

Respondents with average level of this intelligence in half of social interactions life situations properly assess the emotions, emotional states and intentions of others, paying attention to their non-verbal reactions, facial expressions and gestures. However, respondents do not compare of nonverbal expressive and verbal expressive reactions of other people's behavior, which allows students with this level to understand them correctly in only half of the communicative interactions. In almost half of social situations, students correctly understand the human relationships' nature and nuances, which contributes to the correct and rapid understanding of the manifestations of verbal behavioral expression of others. Students with this level are characterized by the ability to change their roles and tone of talk in almost half of social interactions with other people.

Respondents with an average level have the ability to properly analyze and understand the change of almost half of the complex other people's social interactions. These students are able to notice a change in the content of communicative interactions if other people join them. These respondents are able to predict the purpose, motives and results of other people's further actions in almost half of their social interactions.

Higher and lower than average levels of social intelligence were found in the same number of students with special educational needs – 23.08% each. This number is twice less than the number of average-level students.

Students with higher than average level have the ability to learn the other people's behaviors that contribute to successful solution of problems in three-quarters of their communicative interactions. They are able to analyze properly the desires and emotions of other people in various communicative interactions, which allow them to predict both the further behavior of these people and its consequences. The ability of students to build clearly their own strategy of activity and behavior allows them to achieve their life goals.

These respondents are able to understand correctly the other people's verbal and nonverbal reactions involved in joint social interactions. Therefore, respondents are able to properly navigate in these interactions, show role flexibility and choose the tone of interactions with other people. Students with this level know a lot about the norms, rules and role models that regulate the behavior of people in society. They are able to properly analyze and understand the dynamics of complex communicative interactions between other people. They notice a change in the content of communicative interactions, provided other people join them. They have the

ability to predict correctly the purpose and aspirations of other people's actions in many social situations.

Students with a lower than average level of social intelligence are characterized by such abilities to know the behavior of other people that allow them to successfully solve problems only in the third part of their communicative interactions. It is quite difficult for them to analyze the motives and emotions of other people in different communication situations, which hinder the development of their ability to predict the subsequent behavior of these people and its results.

Students with this level are not able to construct clearly their own life strategy, and therefore they achieve their goals only in a third of situations. They do not always correctly understand the other people's verbal and nonverbal reactions involved in social interactions. As a result, they are not always able to properly navigate in such interactions, show flexibility and choose the tone of talk with other people. Students with this level do not have enough knowledge about the norms, rules and role models of social behavior regulation. It is very difficult for them to analyze and understand the dynamics of complex interactions between people. They do not notice how the content of communicative interactions changes, as new participants join them. It is difficult for them to predict the purpose, motives and results of other people's further behavior in many of their social interactions.

High and low levels of social intelligence were not found in students with special educational needs.

Thus, almost half of respondents are characterized an average level of social intelligence, almost a quarter – a higher than average level and the same, almost a quarter – a lower than average level. Low and high levels of university student's social intelligence have not been recorded.

Results of research levels of university student's socio-psychological adaptation: adaptability and mal-adaptability

The results of the task of the research that is the empirical study of adaptability and mal-adaptability, which show the respondent's socio-psychological adaptation levels in terms of distance learning, are contained in Figure 4.

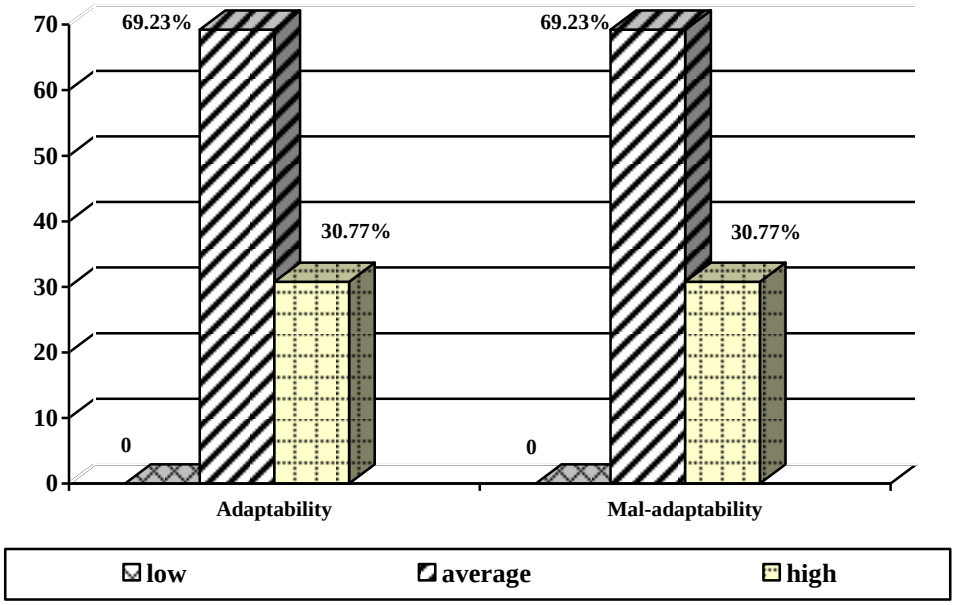


Figure 4. Levels of adaptability and mal-adaptability of university students with special educational needs in terms of distance learning
Source: Author's own conception

Figure 4 shows that the largest numbers of respondents are characterized by an average level of adaptability and mal-adaptability, almost twice as many – a high level of adaptability and mal-adaptability. Students with a low level of adaptability and mal-adaptability were not found.

Students with an average level of adaptability (69.23%) do not set enough high requirements, but rarely blame themselves for what they have done. Their relationship is not good with all the people around them. They are not sociable enough and cannot always communicate with other people. Students with this level are not always responsible – they do not follow made decision in all situations. They accept almost half of social norms and rules, are not always balanced, prone to impulsive actions, able to control their own emotions, actions and deeds only in some situations of communicative interactions.

Students with an average level of adaptability show optimism and satisfaction in almost half of life situations. Not all acquaintances have a positive attitude to their personal qualities. Students with this level do not perceive all people as they are. They are not always self-confident and self-satisfied, do not consider themselves mature and independent enough, often

worry, do not always show initiative and activity, and do not strive to succeed in all situations. They do not have enough strength and ability to solve the tasks they face in their life.

Students with a high level of adaptability (30.77%) make great demands on themselves, and therefore often blame themselves for their actions and deeds. They are sociable, easily establish good relationships with other people; perceive other people as they are; openly express their emotional attitude towards them. They first consider their own actions. Students with this level are responsible – they follow their decision. They generally accept most of the established social norms and rules, are balanced and capable of self-government in most situations of communicative interaction. They are optimistic, happy with everything and most of the acquaintances have a positive attitude towards them as a person. Students with this level are characterized by sufficient adulthood, independence, self-confidence, positive attitude, initiative, activity, ambition and strive for success. Their strengths and abilities correspond to many life tasks.

Students with an average level of mal-adaptability (69.23%) are quite secretive, anxious, annoyed, tense, shy, sometimes feel humiliated, not always confident in their own attractiveness to the opposite sex, not often confident in their ability to change life, have adequate – underestimated self-esteem, sometimes they may be frightened by possible thoughts about them from other people, often avoid thinking about their problems, and often avoid making decisions in difficult life situations with possible unpleasant consequences. They partially formed a system of their own beliefs and rules. In half of the cases, they are ready for defense and aggression; however, they do not always experience insults for a long time and imagine ways of revenge. They believe that some people are undeservedly friendly and this alarms them.

Quite often, students with an average level of mal-adaptability are unable to organize themselves, experience discomfort due to the distance-learning format, they want to leave everything and run away. Quite often they feel dislike for what surrounds them, as well as for members of the opposite sex. It is worth noting that they joined only almost half of the distance learning sessions. They agree that sometimes it is difficult for them to think, make individual decisions and act independently. In almost half of all life situations, these students consider themselves losers, feel helpless and need to get support from other people. They believe that circumstances often force them to defend themselves, excuse and justify their actions. In some situations, these students may make a decision and immediately change it to another, acknowledging their helplessness and despising themselves for it.

Students with a high level of mal-adaptability (30.77%) are shy, anxious, annoyed, tense, unwilling to be open with others, often feel humiliated, have doubts about their attractiveness to the opposite sex, are not confident in their abilities, have low self-esteem and inferiority complex, are afraid of other people's thoughts about them, try not to think about their problems, and also avoid solving difficult life situations with possible unpleasant consequences. They do not have a system of their own beliefs and rules. These students are always ready to defend or even attack, because they experience insults for a long time and imagine ways of revenge. They are often alarmed by the undeserved kindness of other people.

Students with a high level of mal-adaptability are disorganized, feel very uncomfortable during distance learning, and have a desire to leave and run away. They feel dislike for what surrounds them, as well as for members of the opposite sex. It is worth noting that these students did not participate in distance learning classes at all, explaining it as follows: "I cannot study remotely." They believe that they do not always manage to think, make decisions and act independently. These students are confident in their bad luck, feel helpless and need support from other people. They believe that circumstances often force them to defend themselves, excuse and justify their actions. These students often make decisions and change them immediately, despising themselves for their weak will and acknowledging their helplessness.

Thus, in general, it is empirically established that in the conditions of distance learning almost two thirds of respondents are characterized by an average level of adaptability and mal-adaptability. Instead, almost one third of university students are demonstrated a high level of adaptability and mal-adaptability. A low level of adaptability and mal-adaptability in the surveyed students was not detected.

Results of research of social intelligence as a factor of socio-psychological adaptation of respondents

Another task of our research, which was to study of social intelligence as a factor of socio-psychological adaptation of respondents in distance learning, was solved using the Pearson's correlation coefficient. Namely, we identified the relationship of social intelligence with adaptability and mal-adaptability (as socio-psychological adaptations levels) of students (Table 1).

Table 1. *Correlation matrix*

	Social intelligence	*Adaptability*	**Mal-adaptability**
Social intelligence	1		
Adaptability	.38**	1	
Mal-adaptability	-.2*		1

*Source: ** Sig. p≤0.01.*
** Sig. p≤0.05.*
Source: Author's own conception

We can see (Table 1), that a statistically significant direct and quite strong relationship between the social intelligence and adaptability of respondents established (r= .38**). The established relationship confirms the influence of sufficiently developed social intelligence on the high efficiency of socio-psychological adaptation of university students with special educational needs in the conditions of distance learning. A statistically significant back and quite strong relationship was found between the social intelligence and mal-adaptability of students (r=- .2*). The defined relationship testifies to the influence of insufficiently developed social intelligence on the low efficiency of socio-psychological adaptation of respondents in the conditions of distance learning.

Thus, statistically significant relationship have confirmed the presence that social intelligence is a factor of socio-psychological adaptation of respondents during distance learning due to restrictions' periods.

Discussion

The results of the experimental research proved that social intelligence is a factor of socio-psychological adaptation of respondents during their distance educational process in pandemic time.

We think that the development of social intelligence of students with special needs will help increase their adaptability as an important indicator of socio-psychological adaptation during distance learning due to the COVID-19 pandemic or due to other restrictions' periods.

In turn, the university student's socio-psychological adaptation will contribute to a success of their social interactions, in particular – with special educational needs in an inclusive educational environment. It is established that the success of this student's educational activities and social adaptation depends on their sociability, activity and effectiveness of their interactions with other students in an inclusive educational environment. In the context of social inclusion, university students with special educational needs learn

the role behavior of other students. Also, university students with special educational needs are directed to join groups' educational environment, better adapt to the university requirements (Afanasenko et al., 2021).

Also, the development of social intelligence of students with special needs will help increase their adaptability as an important indicator of socio-psychological adaptation during distance learning through the COVID-19 pandemic, and the level of mental health.

Scientists experimentally studied of social intelligence and mental health of university students who have the special needs in distance educational process during pandemic period. They have established a relationship between certain components of social intelligence and mental health of these students. Defined correlation shows that the highest level of personality capacity to understand the other people's verbal expression and the higher level of personality capacity to anticipate their further actions is characteristic of respondents with higher level of mental health. Also defined correlation indicates that the higher level of social intelligence of the individual and the higher level of personality ability to correctly explain the other people's verbal expression inherent in respondents with a higher level of social well-being. In addition, defined correlation shows that the highest level of personality ability to properly explain the other people's non-verbal behavioral expression is characteristic of respondents with a lower level of psychological well-being (Starynska et al., 2021).

Thus, a development of social intelligence of university students who have the special needs will help increase their adaptability as an important indicator of socio-psychological adaptation during distance learning through the COVID-19 pandemic or due to other restrictions' periods, mental health, and effectiveness of their social interactions in an inclusive environment.

Conclusions

Thus, according to the study of the social intelligence as a factor of the socio-psychological adaptation of university students with special educational needs in terms of distance learning due to the COVID-19 pandemic, the following results were obtained.

Social intelligence consists of many personality abilities that are related to the knowledge and successful solution of different communicative situations with other people. This complex consists of the following abilities of the individual – to determine and analyze the general properties and individual elements of behavior of other people; the purpose, aspirations

and consequences of their behavior in different life situations; understand the people's nonverbal and verbal behavioral expression.

Socio-psychological adaptation of personality is both a process of its active adaptation to social environments' conditions, and the result of this process. If there is a discrepancy between the needs of the individual and the requirements of the social environment, then there may be a conflict and, as a result, the level of personal anxiety might be increased and their resources are mobilized. Instead, the emotional well-being of an individual determines the levels of their adaptation, namely, the normal level of anxiety is associated with adaptability, while the increased and high level is associated with mal-adaptability.

Most students have an average level of social intelligence (more than half), which characterizes their ability to explain properly many different communicative interactions of other people, predict other people's behavior, and understand their nonverbal and verbal expression in almost half of life situations. A smaller number of respondents have a higher than average level of social intelligence (almost a quarter), which allows them to understand clearly and predict the behavior of other people in almost three quarters of communicative interactions. In the same, almost a quarter of students have a lower than average level of social intelligence, which presents their ability to correctly understand and predict the behavior of others in only almost a quarter of communicative interactions. High and low levels of social intelligence in the surveyed students were not detected.

The majority of students (almost two thirds) characterize an average level of adaptability and mal-adaptability. The high level of adaptability and mal-adaptability was found in the minority of students (almost one third). Students with a low level of adaptability and mal-adaptability were not identified. The adaptability of students indicates a correspondence between their needs and the requirements of the social environment, while mal-adaptability – a discrepancy.

The relationship between social intelligence and adaptability of university students with special educational needs is statistically significant and direct, with mal-adaptability – the opposite. The determined relationship testifies to the influence of the level of social intelligence on the efficiency of socio-psychological adaptation of students in the conditions of distance learning. Namely – developed social intelligence determines a sufficiently high efficiency of socio-psychological adaptation of students, while underdeveloped – quite low efficiency.

The results of the research proved that social intelligence is a factor of socio-psychological adaptation of respondents during distance educational process due to pandemic period.

Prospects for further research. The prospect of further research is to identify and apply effective psychological technologies for the development of social intelligence as a factor in socio-psychological adaptation of university students with special educational needs for distance learning due to restrictions' periods. Scientists may also be interested in a cross-cultural issue of improving the conditions of university students' socio-psychological adaptation of to learning due to restrictions' periods.

References

Afanasenko, V., Komar, T., Potapchuk, N., Vasylenko, O., Podkorytova, L., & Havrylkevych, V. (2021). Socio-Psychological Features of Students with Special Educational Needs as a Cause of Conflicts in Inclusive Groups. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 12*(2), 01-17. https://doi.org/10.18662/brain/12.2/188

Bossaert, G., Colpin, H., Pijl, S. J., & Petry, K. (2012). Loneliness among students with special educational needs in mainstream seventh grade. *Research in Developmental Disabilities, 33*(6), 1888-1897. https://doi.org/10.1016/j.ridd.2012.05.010

Burlachuk, L. F. (1989). *Psychodiagnostic of personality.* Health.

Fetyskin, N. P., Kozlov, V. V., & Manuilov, G. M. (2009). *Socio-psychological diagnostics of the development of the personality and small groups* (2nd edition, supplemented). Psychotherapy.

Frumos, L. (2020). Inclusive Education in Remote Instruction with Universal Design for Learning. *Revista Romaneasca pentru Educatie Multidimensionala, 12*(2Sup1), 138-142. https://doi.org/10.18662/rrem/12.2Sup1/299

Goleman, D. (2021). *Social intelligence. The new science of human relations.* CORPUS.

Government of Ukraine. (2017). *Law of Ukraine "On Education", № 2053-VIII.* Verkhovna Rada https://zakon.rada.gov.ua/laws/show/2053-19#Text

Government of Ukraine. (2020). *Law of Ukraine "On Higher Education", № 1556-VII.* Verkhovna Rada. https://zakon2.rada.gov.ua/laws/show/1556-18

Guilford, J. P. (1982). Is some creative thinking irrational? *Journal of creative behavior, 16*(3), 151-154.

Hendricks, M., Guilford, J. P., & Hoepfner, R. (1969). *Measuring creative social intelligence*: reports from the Psychological Laboratory. University of Southern California.

Khusheim, S. M. (2022). Students with Special Educational Needs: Explaining Their Social Integration and Self-Concept. *Journal of Education and Learning, 11*(1), 54-64. https://doi.org/10.5539/jel.v11n1p54

Koster, M., Pijl, S. J., Nakken, H., & Van Houten, E. (2010). Social participation of students with special needs in regular primary education in the Netherlands. *International Journal of Disability, Development and Education, 57*(1), 59-75. https://doi.org/10.1080/10349120903537905

Mikhailova (Aleshina), E. S. (2001). *Test of J. Guilford and M. O'Sullivan: diagnostics of social intelligence: methodological guidance.* GP "IMATON".

Ministry of Education and Science of Ukraine. (2020). Letter from Ministry of Education and Science of Ukraine № 1/9-154. Ministry of Education and Science of Ukraine. https://mon.gov.ua/storage/app/media/news/%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8/2020/03/11/1_9-154.pdf

Morozova, K. O. (2012). The aspects of the informational-communicative competence's monitoring, *Information technologies and teaching aids*, *6*(32). https://doi.org/10.33407/itlt.v32i6.764

Nisser, W. (1981). *Knowledge and Reality.* Progress.

O'Sullivan, M., & Guilford, J. P. (1967). *The nature of human intelligence.* McGraw-Hill.

Piaget, J. (1985). *The equilibration of cognitive structures. The central problem of intellectual development.* University of Chicago Press.

Rean, A. A., Kudeshev, A. R., & Baranov, A. A. (2006). *Psychology of personality adaptation. Analysis. Theory. Practice.* prajm Evro-znak.

Selye, H. (2002). *Stress without Distress.* Progress.

Starynska, O., Spivak, L., & Melnyk, Zh. (2021). Mental health and social intelligence of students with special educational needs of Ukrainian higher education institutions. In M. Wierzbik-Strońska, & O. Nestorenko (Eds.), *Digital transformation of society : theoretical and applied approaches : Monograph* (pp. 35-42). Publishing House of University of Technology.

Sternberg, R. J. (1985). *Beyond IQ.* Cambridge University Press.

Sternberg, R. J. (1987). *Beyond IQ: A triarchic theory of human intelligence.* Cambridge University Press. XVI.

UNESCO. (1994). *The Salamanca Statement and Framework for Action on Special Needs Education.* UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000098427

Ushakov, D. V. (2004). *Social intelligence: theory, measurement, research*. Publishing House of the Institute of Psychology of the RAS.

Wertheimer, M. (1987). *Productive thinking.* Progress.

World Health Organization. (2011). *World Report on Disability 2011* . World Health Organization. https://www.who.int/teams/noncommunicable-

diseases/sensory-functions-disability-and-rehabilitation/world-report-on-disability

World Health Organization. (2020). *WHO characterizes COVID-19 as a pandemic.* World Health Organization. https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020