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THE CORRELATION BETWEEN SOCIAL DISTANCE TOWARDS PERSONS WITH INTELLECTUAL DISABILITIES AND EMPATHY IN SPECIAL EDUCATION AND REHABILITATION STUDENTS

POVEZANOST SOCIJALNE DISTANCE PREMA OSOBAMA S INTELEKTUALNIM TEŠKOĆAMA I EMPATIJE KOD STUDENATA SPECIJALNE EDUKACIJE I REHABILITACIJE

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ABSTRACT

Social distance toward people with intellectual disabilities and empathy are important aspects of study for future special educators and rehabilitators. Special educators and rehabilitators should show a lower social distance toward people with intellectual disabilities and a high empathy index. The main goal of this research is to examine the correlation between social distance toward people with intellectual disabilities and empathy, as well as differences in the manifestation of social distance and empathy concerning the year of study. The sample consisted of 60 students divided into two subgroups: 30 students in lower years of study (first and the second year) and 30 students in higher years of study (third and fourth year). Three scales were used: The Social Distance subscale from the Mental Retardation Attitude Inventor-Revised (MRAI-R), the Interpersonal Reactivity Index (IRI), and the General Questionnaire. The research results showed that students in special education and rehabilitation show a low social distance toward people with intellectual disabilities, and students with higher years of study show less social distance compared to students with lower years of study. Students manifest a high index of empathy, and there are no differences concerning the year of study. There is no correlation between social distance toward people with intellectual disabilities and empathy among special education and rehabilitation students. The results indicate the need to analyze content and the hours of practical classes in the faculty study program, and to include content that will encourage the strengthening of empathy among students.

Key words: attitudes, social distance, empathy, special education and rehabilitation

SAŽETAK

Socijalna distanca prema osobama sa intelektualnim teškoćama i empatija su veoma važan aspekt proučavanja kod budućih specijalnih edukacijatora i rehabilitatora.

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Od specijalnog edukatora i rehabilitatora se očekuje da ispoljava nižu socijalnu distancu prema osobama sa intelektualnim teškoćama i visok indeks empatije. Glavni cilj ovoga istraživanja je ispitati povezanost socijalne distance prema osobama sa intelektualnim teškoćama i empatije, kao i razlike u ispoljavanju socijalne distance i empatije u odnosu na godinu studija. Uzorak je činilo 60 studenata koji su podjeljeni u dvije podgrupe: 30 studenata nižih godina studija (prva i druga godina) i 30 studenata viših godina studija (treća i četvrta godina). Za procjenu socijalne distance korištena je subskala Socijalna distance iz Inventara stavova o mentalnoj retardaciji (eng. *Mental Retardation Attitude Inventor-Revised – MRAI-R*), za procjenu empatije Indeks međuljudskog reagovanja (eng. *Interpersonal Reactivity Index – IRI*) i Opšti upitnik za prikupljane podaka o polu i godini studija. Rezultati istraživanja su pokazali da studenti specijalne edukacije i rehabilitacije ispoljavaju nisku socijalnu distancu prema osobama sa intelektualnim teškoćama, te da studenti viših godina studija ispoljavaju manju socijalnu distancu u odnosu na studente nižih godina studija. Studenti ispoljavaju visok indeks empatije, a razlike ne postoje u odnosu na godinu studija. Pokazalo se da ne postoji povezanost između socijalne distance prema osobama sa intelektualnim teškoćama i empatije kod studenata specijalne edukacije i rehabilitacije. Rezultati ukazuju na potrebu analiziranja studijskog programa u odnosu na sadržaje i broj sati vježbi, kao i uvrštavanje sadržaja koji će podsticati jačanje empatije kod studenata.

Ključne riječi: stavovi, socijalna distanca, empatija, specijalna edukacija i rehabilitacija .

INTRODUCTION

The concept of social distance was first used at the beginning of the twentieth century by the sociologist R.E. Park. He used the term “social distance” instead of the concept “social attitudes”. Analyzing the literature, one can find different definitions of social distance, and it is usually presented as the degree of understanding and feeling of closeness or distance that occur in different pre-social and social relationships. Although R.E. Park is responsible for introducing this term in professional circles, E.S. Bogardus, to investigate attitudes and prejudices towards ethnic minorities, developed the concept of social distance. According to Bogardus (1925; 1933, according to Shin, Ji, & Park, 2022), social distance is defined as the degree of intimacy and understanding towards objects. Concerning people with intellectual disabilities, Nikolić, Stjepić, and Vantić-Tanjić (2016) define social distance as the level of readiness of people in the general population to enter into direct, immediate, reciprocal social interactions with people with intellectual disabilities and to achieve a certain degree of closeness through these interactions. For a complete understanding of social distance, it is necessary to define the concept of attitude. Attitude represents the tendency to react positively or negatively concerning some object (Čudina & Obradović, 1975). Allport (1935; according to Pennington, 1997) defines attitude as neural and mental readiness, formed based on experience, which exerts a direct and dynamic influence on the individual's reaction to objects and situations with which he comes into contact. This definition indicates the three most important characteristics of each attitude: 1.) attitudes are relatively permanent, that is, unchanging due to their physiological-nervous basis that determines the way of reaction; 2.) attitudes are acquired through life experience; 3.) attitudes have a direct and dynamic effect.

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Attitude can also be defined as an assessment of one's thoughts, beliefs, and emotions towards an object or phenomenon, which can be dispositional, constructive, or stable memory structures (N. Sharma, Pratap Yadav, & A. Sharma, 2021). In the literature, a three-component attitude model known as the ABC model is usually cited, which consists of feelings (emotions), behavior, and cognition. The stated dimensions are interconnected. The emotional component refers to emotional reactions toward the object of the attitude, the behavioral component includes the predisposition or intention to act in such a way as to reflect the attitude, and the cognitive component includes beliefs and thoughts about the object of the attitude. Shin et al. (2022) state that many studies agree that both cognitive understanding and emotions are important for understanding people's attitudes toward concepts, things, and events in our society. In the context of the mentioned model, it is considered that social distance represents a cognitive-behavioral factor of attitude (Sharma et al., 2021). Social distance is one of the more popular concepts through which the attitudes towards people with disabilities are examined. Why is it so popular? When examining attitudes, especially with scales that contain variables that indicate less intimacy in contact with people with disabilities, there is a fear that respondents will give socially desirable answers. Therefore, if statements do not require personal engagement and intimate interaction from person, individuals are more inclined to express a positive attitude towards people with disabilities because it is socially desirable. On the other hand, as the claims enter the more intimate sphere of the individual and require him to interact more intimately with persons with disabilities, an increased tendency towards negative attitudes is observed. The degree of social distance can vary from complete acceptance of people with disabilities to a tendency of open discrimination against them (Ouellette-Kuntz, Burge, Brown, & Arsenault, 2010). People tend to show different types of social distance towards people with disabilities, which formed at an early age and can, remain in the individual's perception for a long time (Shin et al., 2022). Social distance as a concept is particularly suitable for examining social attitudes towards people with intellectual disabilities, and for this purpose, it was also applied to the population of education and rehabilitation students in our region. The results showed that education and rehabilitation students do not express social distance toward people with intellectual disabilities (Nikolić, 2021; Nikolić, Stijepić, & Vantić-Tanjić, 2016), but it was observed that as the variables of the questionnaire become more intimate in terms of contact with people with intellectual disabilities, the social distance also increases (Nikolić, Stijepić, & Vantić-Tanjić, 2016). Numerous factors can influence the manifestation of social distance towards people with intellectual disabilities among special education and rehabilitation students, and they can be related or not to faculty study. Factors not related to the study are gender, previous contact with people with intellectual disabilities, the presence of people with intellectual disabilities in the family, volunteering in associations for people with intellectual disabilities, etc. Factors related to the study are the year of study, teaching content, frequency of contact with people with intellectual disabilities through practical classes, etc. Some factors can be classified in both groups, such as empathy. Empathy is a character trait that develops from early childhood, which means that students who choose to study special education and rehabilitation are more empathic by nature. However, the development of empathy should also be influenced through the study by acquiring new knowledge about people with intellectual disabilities.

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In this research, the influence of two factors on social distance towards people with intellectual disabilities among students of special education and rehabilitation was examined, namely the year of study and empathy. Research shows that the year of study can influence the manifestation of social distance towards people with intellectual disabilities among education and rehabilitation students, but the results are not consistent. The research conducted by Stjepić (2015) showed that there are no differences in the expression of social distance towards people with intellectual disabilities among students of education and rehabilitation concerning the year of study, while research by Nikolić (2021) shows that students in the fourth year of the study show the least social distance towards people with intellectual disabilities. The author believes that the obtained results are expected considering that fourth-year students have more knowledge about intellectual disabilities and experience in contact with people with intellectual disabilities, which they acquired through practical work with this population, compared to students in lower years of study. Before analyzing the results of research on the relationship between social distance and empathy, something will be said about the concept of empathy. The concept of empathy is derived from the German word Einfühlung, which means, "to feel". Empathy represents an important component of social cognition that contributes to our ability to understand and adaptively respond to the emotions of others, succeed in emotional communication, and promote pro-social behavior (Rathbone, 2013). Empathy is the ability to feel and understand the emotional state of another person through emotional matching and sharing (Babik & Gardner, 2021). Empathy is an emotional response to the perceived distress of another person. It is seen as the ability to experience similar emotions as another person. However, it is crucial to note that empathy is the genesis that leads to a change in attitude. This change has become a necessity in our society, especially towards certain individuals (Sharma et al., 2021). Empathy enables people to observe others in a more positive way (Rathbone, 2013). For the last two decades, it has been considered that empathy is not a one-dimensional construct, but consists of two components, cognitive and emotional. Cognitive empathy is the extent to which one successfully guesses another's thoughts and feelings (Wlodarski, 2015, according to Sharma et al., 2021). Cognitive empathy is more related to visual perspective-taking or complex mental challenges, such as imagining what another person might be thinking. In addition, greater cognitive empathy is known as empathic accuracy, where an individual has precise knowledge of the contents of another person's mind (also including that other person's feelings). Affective empathy tends to the emotional aspect of an individual and is therefore called emotional empathy, and is subcategorized into three components: 1.) Emotional contagion (having a similar feeling as another person); 2.) Personal distress (one's feelings of distress as a reaction to seeing someone else's distress), and 3.) Empathic concern/sympathy (feeling compassion for another person). All these accumulate to create emotional empathy (Sharma et al., 2021). Research conducted on a population of students of various profiles shows that there is a correlation between empathy and positive attitudes towards people with disabilities. The study conducted by Rathbone (2013) on a sample of 150 business school students in Dublin showed that there is a correlation between empathy and positive attitudes. Barr (2013) found in a sample of students of teaching faculties (N=140) that there is a correlation between empathy and attitudes, i.e. students who exhibited a higher degree of empathy exhibited more positive attitudes towards people with disabilities.

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Research conducted by Mirete et al. (2020) on a population of undergraduate students (N=245) in Spain showed that empathy is a predictor of good attitudes towards people with intellectual disabilities. In Bosnia and Herzegovina, the correlation between social distance toward people with intellectual disabilities and empathy among students of special education and rehabilitation has not been researched until now. Students of special education and rehabilitation as future experts will be in contact with people with intellectual disabilities in their daily work, so has to show a lower degree of social distance towards people with intellectual disabilities and a higher degree of empathy. The main goal of this research is to examine the correlation between social distance toward people with intellectual disabilities and empathy in students of special education and rehabilitation and differences in the manifestation of social distance and empathy concerning the year of study.

MATERIAL AND METHODS

Sample of participant

Special education and rehabilitation students at the Faculty for Special Education and Rehabilitation of the University of Tuzla participated in the research. The sample is convenience and consisted of 60 students. Regarding the variable of years of study, 30 students with lower years of study (first and the second year) and 30 students with higher years of study (third and fourth year) participated in the sample. Students of first and second year have fewer professional and much more general subjects important for their studies, and they still have not received content related to work and support for people with intellectual disabilities, which are provided in the third and fourth year. The sample is not uniform concerning the gender of the students and female students dominate (N = 55; 91.7%), which is characteristic of this profile of studies.

Method of conducting research

Data were collected from students of special education and rehabilitation at the Faculty for Special Education and Rehabilitation at the University of Tuzla using the paper-pencil method. The study was conducted on Faculty premises. At the beginning of the material, there was informed consent about the research. Students were informed about the goal of the study. They were informed that filling out the questionnaire is anonymous and that they can withdraw from participating at any stage. By continuing to fill out the questionnaire, the respondents confirm that they understand all the information and agree to participate in the research, and allow the data to be used exclusively for this research.

Measuring instruments

Three measuring instruments were used in the research, namely: the Social Distance subscale (SDS) from the Mental Retardation Attitude Inventor-Revised - MRAI-R (Antonak & Harth, 1994), the Interpersonal Reactivity Index - IRI (Davis, 1980) and a General Questionnaire constructed for the needs of this research.

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Social Distance subscale from the Mental Retardation Attitude Inventor-Revised - MRAI-R measures attitudes/willingness to live near people with intellectual disabilities. It contains eight variables (item example – "I would allow my child to accept an invitation to the birthday party of a child with intellectual disabilities"). The subscale is a four-point Likert type with answers absolutely disagree (1), disagree (2), agree (3), and absolutely agree (4). It contains positive (1, 2, 3, 6, and 7) and negative statements (4, 5, and 8). A higher number of points means a more positive attitude towards people with intellectual disabilities, i.e., less social distance, so negatively formed statements scored inversely. The average score of the subscale is 20, and scores above the average score represent a lower social distance toward people with intellectual disabilities. In the research sample, the subscale shows satisfactory internal reliability, given that Cronbach's alpha is 0.71.

The *Interpersonal Reactivity Index* assesses empathy. It consists of 28 items that can be answered on a five-point Likert-type scale (answers range from 1 – "Does not describe me well" to 5 – "Describes me very well"). The scale has four subscales, each containing seven items. The subscales are Perspective taking, Fantasy, Empathic Concern, and Personal distress. Perspective taking measures the tendency to spontaneously accept the psychological point of view of others (example item, "Sometimes it is difficult for me to understand things (situations) the way another person ′sees′ them"). Fantasy measures the tendency of respondents to easily "immerse themselves" in the feelings and activities of fictional characters from books, movies, and plays (example item, "I dream and fantasize about things that could happen to me"). Empathic concern assesses orientations of feelings of others or sympathy and concern for the victims (example item, "Sometimes I don't feel sorry for other people when they have problems"). Personal distress measures self-directed feelings of personal anxiety and discomfort in a tense interpersonal environment (example item, "In emergencies, I feel scared and uncomfortable"). The subscale Perspective Taking assesses the cognitive domain of empathy, while the remaining three subscales represent the affective component of empathy (Davis, 1983). Higher scores indicate a higher degree of empathy and the negative statement scores inversely (3, 4, 7, 12, 13, 14, 15, 18, and 19). The mean score of the IRI is 84, while for subscales is 21. In the study sample, the IRI shows satisfactory internal reliability, as Cronbach's alpha for the entire IRI is 0.76. Obtained Cronbach's alpha for the IRI subscales shows that two have a satisfactory internal reliability, the Fantasy (α = 0.77) and the Personal distress (α = 0.72). The remaining two subscales do not have satisfactory internal reliability because their Cronbach alpha coefficient value is below the acceptable minimum value of 0.70 (Perspective taking α = 0.61 and Empathic concern α = 0.53). Therefore, in the further processing of the results, only the total results for the entire IRI were used.

General Questionnaire was used to obtain data on gender and year of study.

Data processing methods

The normality of the distributions on the SDS and IRI was checked using the Kolmogorov-Smirnov test.

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The results of the Kolmogorov-Smirnov test on the SDS are statistically significant (KS = 0.15; p = 0.00), which means that the distribution of the results deviates from the normal distribution. Therefore, it is indicated to use non-parametric statistics to test the hypothesis regarding social distance. The Mann-Whitney U test was used to examine the differences in the expression of social distance towards people with intellectual disabilities among students of special education and rehabilitation concerning the year of study. Kolmogorov-Smirnov test for the IRI is not statistically significant (KS = 0.10; p = 0.20), which means that the distribution of the results does not deviate from the normal distribution. Regarding empathy, it is indicated to use parametric statistics, so the t-test was used to examine the differences in the expression of empathy concerning the year of study. Spearman's correlation coefficient was used to examine the relationship between social distance and empathy.

RESULTS AND DISCUSSION

Table 1 shows the results of descriptive statistics for the total scores on the Social Distance Subscale (SDS) and the Interpersonal Reactivity Index (IRI).

Table 1. Descriptive statistics data for the social distance and empathy

Total score	M	SD	Minimum	Maximum	Range
Social distance	28.45	2.86	19.00	32.00	13.00
Empathy	98.02	11.59	71.00	119.00	48.00

The results in Table 1 show that special education and rehabilitation students on social distance achieve a minimum score of 19.00 and a maximum score of 32.00, while the range of variation is 13.00. The average score achieved by the students is 28.45 that is higher than the average score of the subscale, which is 20.00, and it can be concluded that students do not show social distance toward people with intellectual disabilities. The obtained results are consistent with the results of other studies on social distance toward people with intellectual disabilities that were conducted on the population of education and rehabilitation students (Nikolić, 2021; Stjepić, 2015). For the empathy, the results presented in Table 1 show that the minimum score is 71.00 while the maximum score is 119.00, and the range of variation is 48.00. The average score on IRI is 98.02 and is above the mean score is 84, which means that students exhibit a high empathy. The minimum results for social distance (Min. = 19) and empathy (Min. = 71) are below the average results for scales showing that there were students who show social distance and those who were not inclined to empathy. Results show that it should not be considered that students who choose to study special education and rehabilitation do so because they have attitudes that are more positive and more empathetic. Some students are not sufficiently informed about the study, and their motives for enrolment were not based on empathy and positive attitudes. Although just some students were involved, this group should not be ignored and should be identified on time, and efforts should be made to change their attitudes and develop empathy.

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A special educator and rehabilitator who does not show positive attitudes and tends to social distance from people with intellectual disabilities, as well as not showing empathy, is an expert who will not do his job willingly. He may be dissatisfied with his work and therefore exposed to the risk of professional burnout. Table 2 presents the results of testing the differences in the expression of social distance towards persons with intellectual disabilities among students of special education and rehabilitation concerning the year of study.

Table 2. Results of the examination of differences in the manifestation of social distance towards persons with intellectual disabilities among students of special education and rehabilitation concerning the year of study

	Year of stady	N	Mean Rank	Mann-Whitney U	p
Social distance	Lower years of study (I i II)	30	22.30	204.00	0.00
	Higher years of study (III i IV)	30	38.70		

Concerning the year of study, the Mann-Whitney U test was used to compare the results of special education and rehabilitation students on the total SDS score. The results presented in Table 2 show that the mean rank of students in higher years of study is higher (MR = 38.70) compared to the mean rank of students in lower years of study (MR = 22.30). The results show a statistically significant difference between the achieved mean ranks on the total SDS score between students with higher and lower years of study (U = 204.00; p = 0.00). Considering that students in higher years of study gain more knowledge and competencies related to working with people with intellectual disabilities, and also have more direct contact with them through practical classes the results are expected. Nikolić (2021) obtain the same results. Table 3 shows the results of testing differences in the expression of empathy among special education and rehabilitation students concerning the year of study.

Table 3. Results of testing differences in the expression of empathy among students of special education and rehabilitation concerning the year of study

	Year of stady	N	M	SD	t	df	p
Empathy	Lower years of study	30	101.33	10.57	2.29	58	0.50
	Higher years of study	30	94.70	11.79			

T-test was used to examine the differences in the expression of empathy among students of special education and rehabilitation concerning the year of study. The results presented in Table 3 show that students of lower years of study achieve higher arithmetic mean (AS = 101.33), while students of higher years achieve slightly lower arithmetic mean (AS = 94.70). However, the results of the t-test show no statistically significant differences between students of special education and rehabilitation in lower and higher years of study in the expression of empathy (t = 2.29; df = 58; p = 0.50). The results are surprising because it was expected that students of special education and rehabilitation in higher years of study would show a higher empathy.

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The results show that there is even a downward trend in the empathy index among students in higher years of study compared to students in lower years of study. The observed trend indicates the need for further research into this phenomenon on larger samples of special education and rehabilitation students, and perhaps a comparison of only first- and fourth-year students. It also indicates the need to analyze the contents of special education and rehabilitation curricula. There is a need to include content that will encourage the strengthening of empathy among students in higher years of study. Research shows that there is a correlation between attitudes towards people with disabilities and the frequency of contact (Gething, 1991; Malak, 2013; Pace, Shin, & Rasmussen, 2010; Tait & Purdie, 2000), as well as a correlation between discomfort and fear expressed by education and rehabilitation students toward persons with intellectual disabilities and frequency of contact (Nikolić & Šeatović, 2022). Future research on the student population should examine the relationship between empathy and the frequency and type of contact (formal or informal). If it turns out that there is a correlation between empathy and contact, students should be encouraged to have the contact that is more frequent with people with intellectual disabilities. A contact can improve by increasing the hours of practical classes, but also encouraging students to volunteer in organizations that support people with intellectual disabilities. The results show that students in higher years of study express less social distance and empathy than students in lower years of study. Why is that so? Did the faculty study influence this decrease in empathy index or something else? Given that this research is a cross-sectional study and that two groups of students are compared at one point, the results indicate the need for longitudinal monitoring of students from the first to the fourth year. Therefore, to determine whether the faculty study leads to a drop in the empathy index, it is necessary to assess the same group of students at two points in time, in the first and fourth year, and see what happens with empathy. The research must account for other factors that can affect the empathy index (e.g. the number of practical classes, direct contact that students have with people with intellectual disabilities, volunteering in organizations that support people with intellectual disabilities, etc.). Table 4 presents the results of the correlation between social distance toward people with intellectual disabilities and empathy among special education and rehabilitation students.

Table 4. Results of the correlation between social distance towards people with intellectual disabilities and empathy among special education and rehabilitation students

Special education and rehabilitation students	r_s	p
Social distance Empathy	0.11	0.43

Spearman's correlation coefficient was used to determine the relationship between social distance and empathy among education and rehabilitation students. The results presented in

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Table 4 show that there is no statistically significant relationship between social distance toward people with intellectual disabilities and empathy among special education and rehabilitation students (rs = 0.11; p = 0.43). A possible explanation for this result is the fact that social distance is lower among older students, but empathy is also lower. Also, a possible reason is the sample and group formation concerning the year of study. In future research, the sample should be expanded and separated by years of study. The results are not consistent with previous research on the correlation between attitudes and empathy. The correlation between attitudes towards people with disabilities and empathy has been established in business studies students (Rathbone, 2013) and teaching students (Barr, 2013). This discrepancy can be explained by the fact that mentioned research examined attitudes, not social distance towards people with disabilities and that the results were influenced by social desirability. Another possible reason is that the mentioned research examined attitudes towards people with disabilities in general, and not according to a specific type of disability, like in this study.

CONCLUSION

Social distance toward people with intellectual disabilities is an imperative aspect of the study, especially for future special education and rehabilitation professionals. Special educators and rehabilitators must be the initiator of breaking down stigmas and prejudices about people with intellectual disabilities in society, and they must show a lower social distance toward people with intellectual disabilities. Also, the profession of a special educator and rehabilitator requires a high degree of empathy towards the clients he works with, and a special educator and rehabilitator are expected to exhibit a high empathy index. The results showed that special education and rehabilitation students show a low social distance toward people with intellectual disabilities. Students of higher years of study show less social distance toward people with intellectual disabilities compared to students of lower years of study. The results showed that students manifest a high empathy, but that differences do not exist concerning the year of study. The results also showed no correlation between social distance towards people with intellectual disabilities and empathy in students of special education and rehabilitation. Based on the results, it can be concluded that positive attitudes and close contact with people with intellectual disabilities still need to be encouraged as part of theoretical and practical classes because they certainly contribute to a lower social distance. Also, a downward trend in the empathy index was observed among special education and rehabilitation students in higher years of study compared to students in lower years of study, although the difference was not statistically significant, it is still worrying. These results point to the need to include content that will encourage the strengthening of empathy among students in higher years of study. The results also indicate the need for further research on social distance toward people with intellectual disabilities and empathy. Future research should try to overcome the limitations of this research, which primarily relate to the sample. The sample was convenient and included only students of special education and rehabilitation at the Faculty for Special Education and Rehabilitation of the University of Tuzla.

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In addition, although the Social Distance subscale from the Mental Retardation Attitude Inventor-Revised was used in research both in the world and in our country, it only has eight variables, so it would be good to expand the number of variables, that is, intimate situations that the new variables would cover.

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