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The relationship between perceived social support and positive mental health among students at the University of Sarajevo - Faculty of Health Studies – A cross-sectional study

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ABSTRACT

Introduction: Social support is very important in the educational transition for the promotion of well-being and transition among students of all ages, cultural identities, and educational levels. Support from parents, friends, teachers, and other relevant persons contribute to the academic, social, and emotional development of 1st-year undergraduate students.

Methods: A cross-sectional study was conducted. The convenience sampling method was used to determine the sample. The research included 148 students of the 1st year of the first cycle of studies at the Faculty of Health Studies. The instruments used in the research are the Multidimensional Scale of Perceived Social Support Questionnaire and the Mental Health Questionnaire-Short Form.

Results: Out of the total number of respondents, n = 126 (85.10%) perceived a high level, n = 17 (11.50%) a moderate level, while n = 5 (3.40%) a low level of social support. Out of the total number of 148 respondents, n = 70 (47.30%) belonged to the category of high positive mental health, n = 67 (45.30%) belonged to the category of moderate positive mental health, while n = 11 (7.40%) of the respondents characterized their mental health as low positive mental health. It was established that there is a medium-strong relation, with a positive sign, in correlation between positive mental health and perceived social support.

Conclusion: The research results indicate a direct connection between perceived social support and positive mental health in the 1st year of the first cycle of University of Sarajevo-Faculty of Health Studies students, which indicates the importance of providing social support as an important resource for preserving the mental health of students during their studies.

Keywords: Mental health; perceived social support; positive mental health; students

INTRODUCTION

Mental health is an integral part of the general health and well-being of the population, and it contributes to the quality of functioning of individuals, families, and communities (1). The term mental health is no longer used to describe the absence of mental disorders, but encompasses a continuum from the complete absence of mental health (languishing) to optimal mental health (flourishing) (1).

This model conceptualizes mental health as a continuum between a high positive level of mental health, "flourishing" or low positive level of mental health, "languishing", as measured by subjective well-being. Social support can be defined as help that is obtained through interaction with other people, and perceived social support refers to the subjective assessment of the person who was given help or who provided help in times of need. Social support represents a vital salutogenic resource for the mental health of individuals (2,3). It can be perceived from three sources: Family, friends, and significant others (4). The results of a meta-analysis of the relationship between social support and health show that social support can significantly predict health outcomes, such as well-being, quality of life, health status,

psychological and physical symptoms, depression, stress, psychological adjustment, coping strategies, improvement of health-related behavior, health beliefs, and self-actualization (5). People with close social ties also tend to report higher levels of well-being and a high positive level of mental health, "flourishing" (4). It has been proven that social support promotes the development of mental health and functions as the protection against stressful life events (6). Perceived social support and social ties are positively related to mental and physical health (4). Social support is in the focus of transition studies research. Jindal-Snape emphasizes the importance of social support in educational transition to promote well-being and transition among students of all ages, cultural identities, and educational levels (7). By the transition to university education, social support changes, students spend less time with family and friends, adapt to an unfamiliar environment, and the development of new social support networks (8). Support from parents, friends, teachers, and significant others contributes to the academic, social, and emotional development of 1st-year undergraduate students (9). Research indicates that among various forms of support, perceived social support contributes most significantly to the improvement of mental health, while the perception of a high level of social support predicts better mental health outcomes, acting both directly and indirectly to enhance mental health (10).

The results indicate that students who perceive a higher level of social support exhibit better mental health. Social support helps 1st-year University students manage stress more effectively and reduce the risk of depressive symptoms, thereby contributing to the improvement of their mental health. Understanding the factors that predict mental health among 1st-year students provides insight into the mechanisms leading to changes in mental health within this population (11). Extensive researches up to this date suggest that there is a strong connection between perceived social support and the well-being of the students (7).

The goal of the research is to correlate the perceived social support of students with their positive mental health.

METHODS

The cross-sectional study included 148 full-time and full-time self-financing students of the 1st year of the first cycle of studies at the University of Sarajevo - Faculty of Health Studies. The convenience sampling method was used to determine the sample. The research was conducted using standardized survey questionnaires: The Multidimensional Scale of Perceived Social Support (MSPSS) questionnaire and The Mental Health Continuum-Short Form (MHC-SF) questionnaire via the Google Forms application.

The MSPSS, (Zimet et al., 1988) questionnaire, which measures perceived social support, was developed by Zimet et al. The questionnaire consists of 12 questions, and responses are scored on a Likert-type rating scale from 1- I completely disagree to 7- I completely agree. The questionnaire contains three subscales measuring family support (4 questions), friend support (4 questions), and support from other people (4 questions). The total score is formed based on the sum of all items and divided by the number of questions, while the results of individual subscales are summed based on the answers in each of the three dimensions. Results in the range of 1-2.99 points are classified as low, 3-5 points as medium, and 5.01-7 as high levels of perceived social support. Reliability (Cronbach's α) of the total MSPSS is 0.92, and for individual subscales it is 0.88 for family, 0.89 for friends, and 0.84 for perceived social support received from other people. For the purposes of the research, a questionnaire for which we obtained the author's consent was used (12-16).

MHC-SF, (Vuletić et al., 2018, Keyes, 2005) consists of 14 questions measuring positive mental health on a Likert scale, where 0 means "never", 1 means "once or twice during this period", 2 means "once a week", 3 means "several times a week", 4 means "almost every day", and 5 means "every day". The total score is formed based on the sum of all answers divided by the total number of questions. The mental health assessment ranges from 0 (low level mental health) to 5 points (high level mental health). For the purposes of the study, a version of the questionnaire with a reliability (Cronbach's α) of 0.92 was used (17,18).

The criteria for the inclusion of respondents in the study are: Students of both sexes, students of the 1st year of the first cycle of study, students who are in the status of full-time and full-time self-financing students.

The consent of the Ethical Board of the University of Sarajevo - Faculty of Health Studies was obtained for conducting the research. Before filling out the survey questionnaires, the respondents were informed about the structure and purpose of the research and in the first part of the questionnaire, the respondents filled out a letter of informed and voluntary consent. Participation was voluntary and anonymous.

BlueSkystatistics and JASP applications, based on R version 3.6.0, were used for statistical data analysis. Categorical variables are represented by frequency as an absolute number or in percentages. Comparison of the frequency and distribution of respondents within and between groups was tested with the Chi-square test. If the expected values in the contingency tables were lower than 5 in more than 20% of the cells, or if the number "0" was present, and there were <150 subjects in the groups, a modification of the Fisher's exact test was used. Scalar data were tested for the purpose of examining data distribution, and the mean value and standard deviation (mean ± SD) were used for data that corresponded to the parametric data distribution. In such circumstances, the t-test was used to test the differences between two groups, and the analysis of variance test was used to test the differences between three or more groups. Pearson's correlation factor was used to analyze the relationship between the investigated variables, given that they belong to ordinal scales. The results are presented in text and tables, and statistical significance was set at a $p < 0.05$.

RESULTS

The cross-sectional study included 148 full-time and full-time self-financing students of the University of Sarajevo - Faculty of Health Studies who were attending the 1st year of the first cycle of studies. The average age of the subjects was M = 19.66±0.85. Research included n = 131 (89%) female respondents and n = 17 (11%)

male respondents. By conducting the t-test, no statistically significant difference was found in the average age of the respondents in relation to gender (t = –0.260; p = 0.795). The analysis of the place of residence revealed that more than half of the respondents, n = 91 (61.5%) lived with their parents, n = 23 (14.9%) lived with a roommate, n = 19 (12.8%) lived alone, while the smallest number of respondents lived in a student accommodation/dorm during their studies n = 15 (10.1%) (Table 1).

The analysis of the sample and the inter-item correlations of the MHC-SF questionnaire showed a Kaiser-Meyer-Olkin (KMO) value of 0.901, indicating high sample adequacy. The results of Bartlett's test of sphericity (x^2 = 1287.57; p < 0.001) indicate significant correlations among the data and suitability for examining the specified topic.

The analysis of the sample and the inter-item correlations of the MSPSS questionnaire showed a KMO value of 0.825, indicating high sample adequacy. The results of Bartlett's test of sphericity (x^2 = 1244.94; p < 0.001) indicate significant correlations among the data and suitability for examining the specified topic.

Reliability (Cronbach's α) of MSPSS on the total sample is 0.88, and for individual subscales, it is 0.89 for family, 0.92 for friends, and perceived social support received from significant others is 0.84. The average value of the score of the respondents' perceived social support was M = 5.72 ± 1.03 points. Out of the total number of respondents, n = 126 (85.10%) perceived a high level of social support, n = 17 (11.50%) respondents perceived a moderate level of social support, while n = 5 (3.40%) respondents perceived a low level of social support. The Fisher's exact test did not establish a statistically significant difference between the level of perceived social support and the gender of the respondents (p = 0.715). Out of the total number of respondents, the highest percentage n = 23 (100%) of respondents living with a roommate perceived a high level of social support. No statistically significant difference was found in the relationship between the level of perceived social support and the place of residence of the respondents (p = 0.251) (Table 2).

The reliability (Cronbach's α) of the total MHC-SF questionnaire in our sample of respondents is 0.92. The average value of the positive mental health score of the respondents was M = 3.27 ± 0.95 points. Out of the total number of respondents, n = 70 (47.30%) belong to the category of high positive mental health, n = 67 (45.30%) belong to the category of moderate positive mental health, while n = 11 (7.40%) of the respondents characterized their mental health as low positive mental health. No statistically significant difference was established by using the chi-square test in the category of positive mental health in relation to the gender of the respondents (x^2 = 2.360; p = 0.307). The analysis of the place of residence and the category of positive mental health did not establish a statistically significant difference (x^2 = 5.113; p = 0.529) (Table 3).

The analysis established that there was a medium-strong relation, with a positive sign, in correlation between positive mental health and perceived social support, with respondents with higher scores on the positive mental health scale achieving significantly better scores on the perceived social

TABLE 1. Sociodemographic characteristics of the respondents

Sociodemographic characteristics	Sample size	Mean (SD)	t	p
Gender				
Female				
n	131			
%	89			
Male				
n	17			
%	11			
Age (years)		19.66±0.85	−0.260	0.795
Place of residence				
Student accommodation/ Dorm				
n	15			
%	10.1			
Lives with roommate				
n	23			
%	14.9			
Lives with parents				
n	91			
%	61.5			
Lives alone				
n	19			
%	12.8			
Total				
n	148			
%	100			

n: number, %: percentage; P<0.05; SD: standard deviation

TABLE 2. Sociodemographic characteristics and level of perceived social support

Sociodemographic characteristics	Level of perceived social support			Fishers' exact p
	High	Moderate	Low	
Gender				
Male				
n	15	2	0	0.715
%	88.20	11.80	0.00	
Female				
n	111	15	5	
%	84.70	11.50	3.80	
Place of residence				
Student accommodation/ Dorm				
n	12	3	0	0.251
%	80.00	20.00	0.00	
Lives with roommate				
n	23	0	0	
%	100.0	0.00	0.00	
Lives with parents				
n	77	10	4	
%	84.60	11.00	4.40	
Lives alone				
n	14	4	1	
%	73.70	21.10	5.30	
Mean (SD)		5.72±1.03		
Total				
n	126	17	5	
%	85.10	11.50	3.40	

n: Number, %: Percentage; p<0.05

TABLE 3. Sociodemographic characteristics and level of positive mental health

Sociodemographic characteristics	Level of positive mental health			x^2	p
	High	Moderate	Low		
Spol					
Male					
n	11	5	1	2.36	0.307
%	64.70	29.40	5.90		
Female					
n	59	62	10		
%	45.00	47.30	7.60		
Place of residence					
Student accommodation/ Dorm					
n	5	7	3	5.113	0.529
%	33.30	46.70	20.00		
Lives with roommate					
n	11	11	1		
%	47.80	47.80	4.30		
Lives with parents					
n	43	42	6		
%	47.30	46.20	6.60		
Lives alone					
n	11	7	1		
%	57.90	36.80	5.30		
Mean (SD)	3.27±0.95				
Total					
n	70	67	11		
%	47.30	45.30	7.40		

n: Number, %: Percentage; *p*<0.05

TABLE 4: Correlation of the relationship between positive mental health and perceived social support

Scale	MSPSS			
	Family subscale	Friend subscale	Significant others subscale	Total
Total MHC scale				
r	0.396**	0.420***	0.298*	0.483***
p	<0.001	<0.001	<0.001	<0.001
n	148	148	148	148

MHC: Mental Health Continuum, MSPSS: Multidimensional scale of perceived social support. *Low connection, **Moderately strong connection, ***Medium strong connection
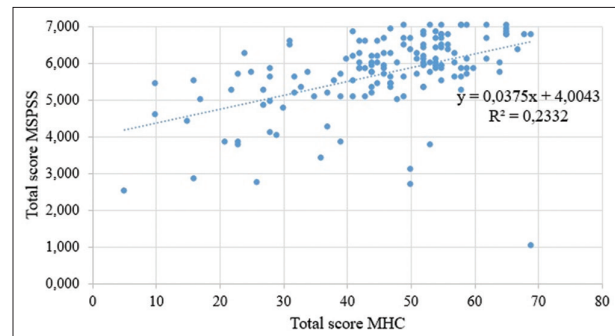
FIGURE 1. Correlation of the relationship between positive mental health and perceived social support. MSPSS: Multidimensional scale of perceived social support; MHC: Mental Health Continuum

support scale (r = 0.483; *p* < 0.001). Respondents who perceived social support from family had higher scores on the positive mental health scale (r = 0.396, *p* < 0.001), the relationship was rated as moderately strong, with a positive sign. It was also found that respondents who perceived high social support from friends had better scores on the positive mental health scale, the relationship was rated as a medium-strong, with a positive sign (r = 0.420, *p* < 0.001). The correlation between perceived social support from significant others and positive mental health indicates a weak relationship, with positive sign (r = 0.298, *p* < 0.001) (Table 4).

The analysis revealed that the baseline score on the overall Positive Mental Health scale (MHC-SF) was 4.0043 points. For each one-point increase on the overall Positive Mental Health scale (MHC-SF), the score on the overall Perceived Social Support scale (MSPSS) increased by 0.0375 points. Participants who belonged to higher categories of Positive Mental Health perceived greater social support on the overall scale (Figure 1).

DISCUSSION

Research on the impact of perceived social support on the positive mental health of students was conducted on a sample of n = 148 students of the University of Sarajevo - Faculty of Health Studies, who were enrolled in the 1st year of the first cycle of studies. The average age of the respondents was M = 19.66 ± 0.85 years. Out of the total number of respondents, 89% of the sample consisted of female respondents and 11% of male respondents. No statistically significant difference was found in the average age of respondents in relation to gender (t = –0.260; *p* = 0.795). Chong et al. (2014) obtained an almost identical average age of respondents while examining perceived social support as a predictor of adjustment and academic achievement of 1st-year university students in Malaysia M = 19.37 ± 1.19. Female respondents were a larger part of the sample, 71.60%, as in our study (9). A similar average age of the subjects M = 19.14 ± 1.73 was obtained by Cobo-Rendón et al. (2020), who investigated the impact of perceived social support on changes in the affective and eudaimonic well-being of students at the University of Chile, with a higher percentage of male students, 63.90% compared to our research (4). Zhao et al. (2022) obtained a similar average age of respondents M = 19.93 ± 1.47 years among students in China. Majority of the sample, 62%, consisted of female respondents (19).

To assess perceived social support, we used the MSPSS. Internal consistency reliability for the 12 questions of the MSPSS questionnaire is α = 0.88, and for individual subscales, it is α = 0.89 for family, α = 0.92 for friends, and perceived social support from significant others is α = 0.84. High reliability of the subscales of the MSPSS questionnaire was also obtained by the Cobo-Rendón et al. (2020), for the family subscale α = 0.89, for the friend subscale α = 0.91, and for the subscale of perceived support from significant others α = 0.89 (4). Abdullah et al. (2021) examining social support and mental health of students in Jordan obtained reliability for the subscale family support α = 0.87, support from friends α = 0.87, and support from significant others α = 0.88 (20). The internal consistency reliability of the research instrument used by the authors corresponds to the reliability obtained in our sample.

Zhao et al. (2022) obtained a higher reliability of the scale for the entire questionnaire α = 0.95 in comparison to our research. However, the respondents achieved a slightly lower average score on the perceived social support scale 4.87± 1.08 (19), compared to our research in which the average score on the perceived social support scale was M = 5.72 ± 1.03.

The largest percentage of respondents, 85.10%, perceived a high level of social support, 11.50% of respondents perceived a moderate level of social support, while only 3.40% of respondents from the University of Sarajevo-Faculty of Health Studies perceived a low level of social support.

Wang et al. (2022) in their research report a similar representation of perceived social support as in our research, in which the highest percentage of respondents perceived a high level of social support 61.30%, a moderate level of social support was perceived by 37% of respondents, while the lowest percentage of respondents, 1.70% perceived a low level of social support. Lower levels of social support were perceived by male respondents in comparison to female respondents, which contradict the results of our research (15). McLean et al. (2022) indicate a categorization of social support among students in Ireland that differs from the results of our research, a total of 32% of respondents perceived a low level, 33% moderate level, and 35% of respondents perceived a high level of social support. A statistically significant difference was also observed in the levels of perceived social support in relation to the gender of the respondents (p < 0.013) (8). The results of the research conducted by Zhao et al. (2022) coincide with the results of our research, where no statistically significant difference was observed in the level of perceived social support in relation to the gender of the respondents (19). Research conducted in Canada (2021) and Jordan (2021) reports a statistically significant difference in the perception of social support in relation to the gender of the respondents. Female respondents perceived higher levels of social support compared to male respondents (20,21).

To assess the positive mental health of the subjects, we used a Mental Health Questionnaire (MHC-SF). The reliability (Cronbach's α) of the total MHC questionnaire is α = 0.92. The average value of the positive mental health score of the respondents was M = 3.27±0.95 points. Out of the total number of the respondents, 47.30% belonged to the high positive mental health category, 45.30% belonged to the moderate positive mental health category, while 7.40% of the subjects characterized their mental health as low positive mental health. Slightly different results of the positive mental health categories were presented by Baghoori et al. (2021), where the largest number of respondents characterized their positive mental health as moderate positive mental health 65.38%, 11.24% of the subjects assessed their health as low positive mental health, while 23.37% of the subjects assessed their health as high positive mental health (21). Vuletić et al. (2018) in their study also state that the largest number of respondents, 52%, assessed their health as moderate positive mental health, 44.30% assessed it as low positive mental health, while 3.7% of respondents were in the category of high positive mental health (17). No study found a statistically significant difference in the relationship between positive mental health and the gender of the respondents (12,21). First-year students must cope with new demands and changes, such as moving away from the family home, establishing new social relationships, developing new learning habits, and coping with an unfamiliar and competitive environment (22). Research indicates a positive relationship between perceived social support and psychological well-being, which represents an important protective mechanism that can improve psychological well-being, maintain positive emotional feelings, and alleviate stress (4).

The results of the research conducted on 1st-year students of the Faculty of Health Studies show that there is a moderately strong positive correlation between positive mental health and perceived social support, whereby a higher level of perceived social support was associated with better ratings of positive mental health. Furthermore, research conducted in Canada (2021) indicates a moderate positive correlation between positive mental health and perceived social support (r = 0.51, p < 0.001). Higher scores on the scale of perceived social support were directly related to higher scores on the scale of positive mental health (21). Yıldırım and Green who conducted the research at the University of Turkey show that social support is significantly positively related to resilience, life satisfaction and highly positive mental health, "flourishing" (23). Research conducted by Cobo-Rendón et al. (2020) confirm that perceived social support positively predicts the well-being of 1st-year students in Chile (4). Similar results were obtained from a meta-analysis that investigated the relationship between social support and mental health in 64 analyzed studies, and found a moderate size effect of social support on mental health (24).

The results of the study conducted at a university in China indicate that perceived social support is positively correlated with mental health, which is consistent with the findings of our research (25). Ruihua et al. (2025) analyzed 51 studies that examined the impact of social support on students' well-being and mental health. The results of their research show that social support has a significant positive effect on emotional and psychological well-being. Individuals who perceive their support networks as reliable tend to experience more positive emotions, fewer negative emotions, and a higher level of life satisfaction, which is consistent with the findings of our study (26). A large study conducted on a sample of n = 13,189 students in Germany, Russia, and China indicates the importance of resilience and social support as key protective factors for mental health (8). Social support functions as a protective factor for mental health; thus, individuals with higher levels of social support face fewer adverse circumstances for mental health, while at the same time they show a higher level of resilience in situations of increased stress (24).

CONCLUSION

The research results show that 85.1% of students perceived a high level of social support, 47.3% of respondents belong to the category of high positive mental health. The results of the research indicate a direct connection between perceived social support and positive mental health in students of the 1st year of the first cycle of the University of Sarajevo-Faculty of Health Studies, whereby respondents

with higher scores on the scale of positive mental health achieved significantly better scores on the scale of perceived social support (r = 0.483; *p* < 0.001). Students who perceive a higher level of social support demonstrate better scores on the positive mental health scale, indicating a reciprocal relationship between perceived social support and positive mental health. These findings highlight that social support not only contributes to the maintenance of mental health but can also serve as a key resource for students' well-being throughout their academic studies.

STUDY LIMITATION

A limitation of the study is the relatively small number of respondents. For a more detailed analysis, research should be conducted on a larger sample.

RECOMMENDATION

The authors recommend research on the support provided by the University and organizational units to students during their studies, and on the effects of social support on the mental health and academic achievements of students.

DECLARATION OF INTERESTS

Authors declare no conflicts of interest.

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