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IMPACT OF SELF-ESTEEM AND OF THE SOCIODEMOGRAPHIC FACTORS ON THE SELF-EFFICACY OF UDERGRADUATE NURSING STUDENTS

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ABSTRACT

Objectives: to identify self-efficacy and self-esteem levels in undergraduate nursing students and to verify the mutual relationship between these constructs and with sociodemographic variables.
Method: a cross-sectional study, with a sample of 264 students from two universities. Self-esteem and self-efficacy were measured by the Brazilian versions of the Rosenberg's Self-Esteem and of the General and Perceived Self-Efficacy scales, respectively.
Results: a predominance of moderate to high self-efficacy was identified, with a mean score of 35.29 and moderate self-esteem, with a mean of 23.48. Self-efficacy was associated with the male gender, priority option in the college entrance examination by nursing, satisfaction with the course and absence of overload, besides correlating positively with age and self-esteem.
Conclusion: self-efficacy and self-esteem levels were moderate/high and moderate, respectively. These constructs have shown a mutual relationship and assume an indispensable role both in the individual's personal life and in the professionalization process. These findings point to the need to strengthen mental health in this population, especially in vulnerable students (female, activity overload, dissatisfaction with the course and low self-esteem and self-efficacy), in order to foster their sense of value and the belief in their abilities.

DESCRIPTORS: Self-image. Self-efficacy. Nursing students. Mental health. Nursing.

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IMPACTO DA AUTOESTIMA E DOS FATORES SOCIODEMOGRÁFICOS NA AUTOEFICÁCIA DE ESTUDANTES DE GRADUAÇÃO EM ENFERMAGEM

RESUMO

Objetivos: identificar os níveis de autoeficácia e autoestima em estudantes de graduação em enfermagem e verificar a relação destes constructos entre si e com variáveis sociodemográficas.
Método: estudo transversal, com amostra constituída por 264 estudantes de duas instituições de ensino superior. A autoestima e a autoeficácia foram mensuradas pelas versões brasileiras das Escalas de Autoestima de Rosenberg e de Autoeficácia Geral e Percebida, respectivamente.
Resultados: identificou-se predomínio de autoeficácia moderada a alta, com pontuação média de 35,29 e de autoestima moderada, com uma média de 23,48. A autoeficácia foi associada ao sexo masculino, opção prioritária no vestibular pela enfermagem, satisfação com o curso e ausência de sobrecarga, além de correlacionar-se positivamente com a idade e autoestima.
Conclusão: os níveis de autoeficácia e autoestima foram moderados/altos e moderados, respectivamente. Estes constructos mostraram relação entre si e assumem um papel imprescindível tanto na vida pessoal do indivíduo como no processo de profissionalização. Estes achados apontam para a necessidade do fortalecimento da saúde mental nesta população, sobretudo, em estudantes vulneráveis (sexo feminino, sobrecarga de atividades, insatisfação com o curso e baixa autoestima e autoeficácia), de modo a favorecer o sentimento de valor que atribuem a si próprios e a crença em suas capacidades.

DESCRITORES: Autoimagem. Autoeficácia. Estudantes de enfermagem. Saúde mental. Enfermagem.

EFECTO DE LA AUTOESTIMA Y DE LOS FACTORES SOCIODEMOGRÁFICOS SOBRE LA AUTOEFICACIA DE ESTUDIANTES UNIVERSITARIOS DE ENFERMERÍA

RESUMEN

Objetivos: identificar los niveles de autoeficacia y autoestima en estudiantes universitarios de enfermería y verificar la relación de estos constructos entre sí y con las variables sociodemográficas.
Método: estudio transversal con una muestra compuesta por 264 estudiantes de dos instituciones de enseñanza superior. La autoestima y la autoeficacia se midieron conforme a las versiones brasileñas de la Escala de Autoestima de Rosenberg y de la Escala de Autoeficacia General y Percibida, respectivamente.
Resultados: se identificó un predominio de autoeficacia de moderada a alta, con un puntaje medio de 35,29 y de autoestima moderada, con una media de 23,48. La autoeficacia se asoció con el sexo masculino, con opción prioritaria de ingreso a la carrera de enfermería, satisfacción con la carrera y ausencia de sobrecarga, además de correlacionarse positivamente con la edad y la autoestima.
Conclusión: los niveles de autoeficacia y autoestima fueron moderados/altos y moderados, respectivamente. Estos constructos evidenciaron una relación entre sí y asumen un rol imprescindible tanto en la vida personal del individuo como en el proceso de profesionalización. Estos hallazgos apuntan a la necesidad de fortalecer la salud mental en esta población, especialmente en estudiantes vulnerables (sexo femenino, sobrecarga de actividades, insatisfacción con la carrera y bajos niveles de autoestima y autoeficacia), de modo de favorecer la sensación de valor que se atribuyen como personas y lo que creen con respecto a sus capacidades.

DESCRIPTORES: Imagen propia. Autoeficacia. Estudiantes de enfermería. Salud mental. Enfermería.

INTRODUCTION

Nursing undergraduates experience new, different and challenging situations in their daily lives. They enter a different environment and need to adapt quickly so that they can perform their academic activities and get used to the sociocultural changes. Some challenges include the following: being away from home for the first time, changes in the daily routine, need for greater responsibility and organization, exposure to professional practice, demands, expectations, and limited support for leaving family and friends.[1] The experience in this still unknown context can generate tensions, worries, anxiety and emotional instability.

Several research studies highlight that these students are generally vulnerable to stress,[2–4] have low self-esteem,[5–6] anxiety disorders and depression,[6–7] besides presenting decreased aspects of quality of life related to vitality, general health and emotional variables.[8]

In addition, the World Health Organization (WHO) warns that this young population has a high prevalence of suicidal ideation and behavior, which is the second most common cause of death in people aged 15-29, emphasizing that suicide prevention in this age group should be one of the priorities on the global public health agenda.[9]

A current investigation, which studied suicidal behavior prevalence in 5,572 college students in 12 countries, found reports of suicidal ideation in almost 29% of the sample and of suicide attempt in 7% of the participants, being strongly associated with some type of psychological distress.[10] Considering specifically undergraduate nursing students, a prevalence of 6.4% was found, indicating a risk of suicide, which correlated negatively and significantly with self-esteem and resilience,[11] pointing out to the importance of these constructs in strengthening mental health.

The high prevalence of stress and emotional disorders in this population is often due to the long hours devoted to study,[12] lack of leisure time,[12] insufficient support,[1] insecurity to perform the activities with clinical competence,[5] interpersonal problems with the patient, their families and the nursing staff,[5,13] difficulties in dealing with critically ill patients,[3] the rigor of the curricular activities,[3] apart from the vertical relations present between educators and students.[13]

Thus, university students constitute a population vulnerable to mental imbalance and/or crisis arising from stressors related to graduation. Physical and psychological harms such as anxious and depressive symptoms and low self-esteem may occur frequently, impairing academic performance,[14] interpersonal relationships,[5] quality of life,[8] sleep satisfaction,[12] the eating pattern[15] and the desire to live.[10] In addition to these possible physical and emotional disorders, low self-esteem may also lead to self-destructive behavior, lower self-efficacy and course dropout.[11]

Given this context, self-esteem, and more recently, self-efficacy, appears to comprise the most important variables that underlie mental health and the ability to manage decision-making processes in a healthy manner in college students. Self-esteem can be defined as an attitude of self-approval or disapproval and encompasses self-judgment regarding competence and value and can be classified as high, moderate or low.[5,16]

Self-efficacy, in turn, is defined as one's belief about one's own competence and ability to perform and organize tasks with the desired effect. It is not a matter of possessing certain skills, but rather of believing that you have them or that you can acquire them through personal effort.[17] These self-efficacy beliefs are necessary for effective adaptations, addressing challenges, and overcoming obstacles in a healthy and assertive manner[1] apart from correlating with academic performance.[18]

This construct is characterized as one of the vital elements of the Bandura's Cognitive Social Theory in learning, motivation and academic goals.[17] Thus, it is understood that self-esteem, associated with self-efficacy, plays an important role both in the individual's personal life and in the professionalization process and both should be considered together in the young students' emotional ambit.

Given these findings and the priority given by the WHO to preventing suicide in young people, it is invaluable to know the profile of the nursing students regarding their self-esteem and self-efficacy. These data can provide reflection on strategies that offer opportunities for these students to develop and strengthen their mental health, their sense of value and belief in their abilities. There is little scientific production regarding these constructs in nursing undergraduates, especially in relation to self-efficacy, their association with self-esteem and the factors that promote or harm them.

Thus, this study aims to identify self-efficacy and self-esteem levels in undergraduate nursing students and to verify these constructs relationship with each other and with the sociodemographic variables.

METHOD

A cross-sectional study, conducted in two Higher Education Institutions (HEIs) offering undergraduate nursing courses, in the inland of the state of São Paulo. These institutions were selected for the ease of the researchers to collect data. HEI 1 is a state-owned, full-time public school offering education, research and extension. The Nursing Course has existed since 1991, with approximately 1,200 trained nurses and 148 enrolled students. HEI 2 is a private university, which has offered the Nursing Course in eight semesters since 2004, in the morning and evening periods, articulating teaching, research and extension activities. It has 256 students enrolled in the morning and evening periods.

The population consisted of all the students from the Nursing Courses students of the selected institutions (n=404). The student's identification occurred through a list provided by the course coordinators. All the students who expressed interest in participating were included in the survey.

The inclusion criteria were the following: being enrolled in any period of the Nursing course, being 18 years old or older and being present at the data collection dates. The sample consisted of 264 students. The reasons for exclusion were the following: age below 18 years old (n=3), absence on the data collection days (n=58) and those who refused to participate in the research (n=79).

Three data collection instruments were applied: Sociodemographic Characterization, Rosenberg's Self-Esteem Scale and General and Perceived Self-Efficacy Scale.

The sociodemographic characterization instrument contains the following variables: identification data, gender, age, marital status, origin, if they lived in the same city as their parents, monthly income, with whom they lived, number of people residing in the house, institution teaching profile (public or private), year of graduation, satisfaction with the profession, whether nursing was their first option in the college entrance exam, if they had ever thought or think of dropping out of the course, if they performed paid professional activities and if they felt overloaded with academic activities.

The Rosenberg's Self-Esteem Scale (RSES), validated for Portuguese in 2001,[16] of a four-point Likert type, where number 1 represents strongly agrees and 4, strongly disagrees. It consists of 10 items that measure a single dimension; five of these evaluate the individual's positive feelings about himself and five negative feelings. The self-esteem measurement is obtained by summing up the values of the answers to the scale items, after recoding the five reverse-scoring items (2,5,6,8, 9). The sum of the answers can range from 10 to 40, and self-esteem rated high or satisfactory (greater than 30 points), moderate (20 to 30 points), and low or unsatisfactory (less than 20 points).[16]

To measure self-efficacy, the *General and Perceived Self-Efficacy Scale* was selected, originally created by Schwarzer and Jerusalem.[19] This scale has been adapted and validated for Brazil,[20] obtaining good internal consistency (Cronbach's alpha of 0.81).

It is an instrument composed of 10 items, of the Likert type, with answers ranging from one to five. Each item refers to goals achievement and attributes to the internal perception of success, with a higher score indicating a greater perception of self-efficacy in a range of 10 to 50.[20]

Data collection took place in February 2017. Data was processed and analyzed using the Minitab 17 software (Minitab Inc.). Descriptive analyses were performed for the characterization variables of the variables, such as gender, marital status, year of graduation, origin, family income and satisfaction with the Nursing course. To analyze the influence of the characterization variables of the sample in Rosenberg's self-esteem and self-efficacy scores, t-tests were used for independent samples, and the Variance Analysis with the Tukey post-hoc multiple comparison test. To observe the possible correlations between Rosenberg's self-esteem and self-efficacy scores and the quantitative variables, the *Spearman* correlation test was used.

The participants completed the Free and Informed Consent Form.

RESULTS

264 undergraduate nursing students participated in this study. The results showed that most were female (232; 87.88%), without a partner (167; 63.26%), belonged to the private institution (142; 53.79%), attended the second year of the graduation course (83; 31.44%), resided in the same city as their parents/family (192; 72.73%), with a family income of three to six minimum wages (114; 43.35%), with four people living in the same residence (96; 36.36%) and did not perform any paid work (167; 63.26%).

Most of the students mentioned the nursing course as their first option in the college entrance exam (161; 60.98%). The others (n=103; 39.02%) stated their preference for other courses: medicine (n=61; 59.22%), followed by law (n=5; 4.85). Most of the students said they were satisfied with the course (227; 85.98%) and did not think about dropping out (162; 61.36%). Most of them reported feeling overwhelmed with the undergraduate activities (154; 58.33%) and self-rated with a good study performance (173; 66.03%).

The students' self-esteem was classified as moderate, with a mean of 23.48±2.86, a median of 24 and minimum and maximum values of 4 and 31, respectively. The self-efficacy levels were considered as medium to high, with a mean score of 35.29±6.84 points (median: 36; minimum: 11 and maximum: 50) (allowed range of 10 to 50 points, the higher this score, the greater the respondent's perception of self-efficacy).

The results indicated the absence of differences when the self-esteem scores were compared with the characterization variables (P>0.05). In this context, no characterization variable evaluated influenced the participants' self-esteem scores, according to Table 1.

The results in Table 2 indicate the presence of differences in the self-efficacy scores in four cases.

Table 1 – Descriptive statistics of self-esteem, according to the characterization variables of the sample: gender, year of graduation, residing in the same city as parents, family income, Nursing as a first option, course satisfaction and overload. Sao Jose do Rio Preto, SP, Brazil, 2017. (n=264)

Characterization variables	Self-esteem			p-value
	N	Mean (Standard Deviation)	Median	
Gender				
Female	232	23.49(2.86)	24.00	0.967†
Male	32	23.46(2.90)	23.00	
Graduation year:				
1st	43	22.93(3.02)	23.00	0.298‡
2nd	83	23.38(2.72)	23.00	
3rd	66	23.47(2.56)	23.00	
4th	72	23.95(3.14)	24.00	
Lives in same city as parents				
No	72	23.70(2.66)	24.00	0.426†
Yes	192	23.40(2.93)	24.00	
Family income (minimum wage)				
1 to 3 MWs*	104	23.28(2.53)	23.00	0.636‡
3 to 6 MWs	114	23.54(3.21)	24.00	
6 to 9 MWs	26	24.07(2.74)	24.00	
More than 9 MWs	19	23.31(2.49)	24.00	
Nursing as the first course option				
No	103	23.27(2.54)	23.00	0.307†
Yes	161	23.62(3.04)	24.00	
Satisfaction with the course				
Dissatisfied	6	25.00(1.54)	25.00	0.205‡
Did not know what to answer	31	22.87(2.39)	23.00	
Satisfied	227	23.53(2.93)	24.00	
Course overload				
No	110	23.70(3.25)	24.00	0.311†
Yes	154	23.33(2.54)	23.00	

*MW: Minimum Wage; † p value referring to the t-test for independent samples to p<0.05; ‡p value referring to the variance analysis test to p<0.05.

The gender of the students influenced the self-efficacy scores, showing that, on average, male students had higher self-efficacy than female students. The students who opted for nursing as their first course option had a significantly higher mean self-efficacy score when compared to those who did not choose Nursing as their priority. The participants who reported satisfaction with the Nursing course have significantly higher self-efficacy scores compared to those who could not answer this question. The absence of overload with the academic activities influenced students to have higher self-efficacy scores.

Table 2 – Descriptive statistics of self-efficacy according to the characterization variables of the sample: gender, year of graduation, residing in the same city as parents, family income, Nursing as a first option, course satisfaction and overload. Sao Jose do Rio Preto, SP, Brazil, 2017. (n=264)

Characterization variables	Self-efficacy			p-value
	N	Mean (Standard Deviation)	Median	
Gender				
Female	232	34.96(6.90)	36.00	0.020†
Male	32	37.72(5.92)	38.00	
Graduation year:				
1st	43	33.97(6.30)	35.00	0.261‡
2nd	83	35.42(6.18)	36.00	
3rd	66	34.76(8.25)	36.50	
4th	72	36.43(6.39)	37.00	
Lives in same city as parents				
No	72	35.29(7.50)	36.50	0.996†
Yes	192	35.29(6.59)	36.00	
Family income (minimum wage)				
1 to 3 MWs*	104	34.50(7.53)	35.00	0.073‡
3 to 6 MWs*	114	35.13(6.52)	36.50	
6 to 9 MWs*	26	36.61(5.09)	38.00	
More than 9 MWs*	19	38.63(6.11)	37.00	
Nursing as the first course option				
No	103	33.67(7.31)	34.00	0.003†
Yes	161	36.33(6.33)	37.00	
Satisfaction with the course				
Dissatisfied	6	36.00(2.97^{ab})	36.00	0.018‡
Did not know what to answer	31	32.03(5.84^{b})	33.00	
Satisfied	227	35.72(6.93^{a})	37.00	
Course overload				
No	110	36.40(6.94)	37.00	0.026†
Yes	154	34.50(6.67)	35.00	

* MW: Minimum Wage; † p value referring to the t-test for independent samples to p<0.05; ‡ p value referring to the variance analysis test to p<0.05. Different letters in the same column differ significantly by Tukey's post-hoc multiple comparison test to p<0.05.

With the exception of the students' age and self-esteem scores, the results showed positive correlations (P<0.05) among the investigated variables, i.e., as one variable increases the other correlated variable also increases its score (Table 3).

Table 3 – Spearman Correlation coefficients (P values) for the evaluated correlations. São José do Rio Preto, SP, Brazil, 2017. (n=264)

	Age	Rosenberg's Self-Esteem
Rosenberg's Self-Esteem	0.114 (0.068)	-
Self-efficacy	0.199 (0.001)	0.164 (0.008)

Despite the evidence of correlation, it was observed that it was considered weak, presenting a *Spearman* coefficient below 0.300.

DISCUSSION

A predominance of moderate to high self-efficacy was observed in the sample, with a mean score of 35.29, corroborating findings from other international studies that also showed a predominance of moderate self-efficacy in this same population.[18,21–22]

The results showed that male individuals presented higher self-efficacy compared to the female gender. The literature also indicates a higher level of self-efficacy in men, relating this fact to higher scores of perceived stress, psychological distress, somatic and anxious symptoms present in women.[6] Therefore, the higher prevalence of mental stressors in females may support the lower levels of self-efficacy found in women in this study.

On the other hand, unlike the findings of this study, evidence of a predominance of low self-efficacy (62.7%) in undergraduate students[6] and absence of differences in this score between genders were found,[21] translating the heterogeneous character and peculiarities of each population.

Additionally, the present data demonstrated that the priority option in the college entrance exam for the nursing course, the satisfaction with the course and the absence of overload were related to higher self-efficacy levels. These variables can translate students' well-being and help them cope with stress. The recent findings in the literature proved the inverse relationship between self-efficacy and stress levels,[23] which may partially explain the relationship found in this study.

A Polish survey found that the level of stress and self-efficacy were high in most of the nursing students of the sample. It also showed that the students with low levels of perceived stress had higher self-efficacy and those with higher scores of this variable used coping strategies more frequently when having to deal with stressful situations. The authors concluded that high self-efficacy influenced the stress level, also the ways of dealing with challenging situations in nursing students.[23]

The results also showed that the self-efficacy scores correlated positively with age and self-esteem. This condition may be related to the improvement brought on by time[1] and to a greater ability to resolve the conflicts arising from graduation.

The correlation between self-esteem and self-efficacy has also been found in the literature[5] and demonstrates the importance of investigating and working on these two constructs together in this population. Despite the existence of a correlation between self-esteem and self-efficacy, some of the characteristics investigated in this sample were associated with self-efficacy, but not with self-esteem (male gender, preference for nursing as a college entrance exam, satisfaction with course and absence of overload). Research studies that seeks to clarify the mechanisms involved in the relationship between self-esteem and self-efficacy are necessary, given the scarcity of this information in the literature.

It is noteworthy that, although these concepts are similar and related, they do not have the same meaning. Self-efficacy is the belief an individual has about his or her ability to accomplish a certain future task successfully. Self-esteem is the ideas that a person has about himself/herself, built throughout his/her life generating a feeling of acceptance or denial. Thus, although these phenomena are positively correlated, self-esteem may not influence a person's ability to perform some specific activities.[17]

Considering the opportune moment for reflection on the investigated theme and the relationships between teachers and students, present throughout the undergraduate course, it is valuable to describe other important variables found in the literature that influenced the self-efficacy levels in students. The qualitative analyses of a research, based on mixed methods, showed that self-efficacy in nursing

students was influenced by the postures of the teacher, of the clinical nurses and of the patients themselves. The students reported that they needed their teachers' confidence and encouragement.[21]

Additional data reflect the influence of the educators on their students' self-efficacy. In line with our findings, a recent study also found that most undergraduate nursing students had moderate to high self-efficacy. The authors also showed that the leadership style adopted by the teachers was associated with these scores. This association was observed mainly in the transformational leadership style, whose pillars are based on trust, respect, collaboration and commitment, characteristics that favored greater self-efficacy in the students.[22]

To better understand the behavior of this variable and the teacher's role in this context, a longitudinal study conducted in the United Kingdom presented an adaptation curve experienced by the students throughout their undergraduate studies. Between the first and fourth months of this period, there were increased levels of anxiety and uncertainty related to the transition process and necessary adaptations. Between the fourth and eighth months, most of them showed greater self-efficacy, beginning to demonstrate their coping strategies to deal with stress. At this time, empathy, attention, respect, and positive feedback from teachers, as well as a growing sense of belonging-to a community, facilitated the empowerment and self-efficacy of the students. These conditions were critical to the successful transition by the end of twelve months.[1]

Regarding the self-esteem scores, there was a predominance of moderate self-esteem, with a mean of 23.48, which was not related to the variables studied. Heterogeneous prevalence of this variable in college population were found in the literature, ranging from low,[2,6] to moderate[24] and even high.[25–26]

Corroborating the data from this research, a recent American study conducted with college students identified a mean self-esteem of 22.63 by the Rosenberg's scale. The authors also found a relationship between self-esteem and excessive Internet use and the students' psychological profile. Low self-esteem was associated with increased insomnia, anxiety, depression, stress and excessive Internet use.[24] These data refer to another self-esteem interface, negatively influenced by the increasing use of digital technologies, which needs to be further explored by future investigations.

This study also demonstrated that there was no influence of the sociodemographic variables on the participants' self-esteem. Recent research studies also found no association between self-esteem, gender[6,25–26] and family income.[2,27] Conversely, another investigation revealed that self-esteem was significantly higher in men, apart from being directly influenced by the students' age, family income, monthly expenses and area of residence.[28]

A worldwide survey involving 48 countries showed gender and age differences in self-esteem. In all nations, men had higher levels of self-esteem than women. Both showed graduated increases in self-esteem from late adolescence to mid-adulthood. The authors also hypothesized that socioeconomic, sociodemographic and gender equality factors contributed to the differences found.[29]

Moreover, the present data showed no difference between the self-esteem levels and the college year. These data differ from the findings of a recent longitudinal survey that assessed self-esteem from the first to the last year of graduation. On average, self-esteem levels declined substantially during the first semester, recovered at the end of the first year, and gradually increased over the next three years, producing a small but significant increase in the average self-esteem from beginning to end of college.[30]

The literature also demonstrates other factors related to self-esteem. Among the factors that positively influenced it, the following stand out: family support,[2,25] satisfactory monthly income,[25] and religious belief.[26] Among those who related negatively to this construct, stress,[2] underage[2] and lower education level[2] stand out.

A recent study classified factors that affected nursing students' self-esteem into two groups: one positive, called protection, and the other negative, called pressure. The pressure factors included the following: low student's self-efficacy, sense of triviality, ineffective teacher-student interaction, and low self-confidence. The protection factors included knowledge acquisition, professional autonomy, religious beliefs and interest in choosing the nursing area.[5]

It is also noteworthy that recent evidence suggests that high levels of self-esteem contribute to the reduction of the anxiety and depression disorders.[7] Several research studies proved the inverse relationship between depression and self-esteem,[6–7,24] demonstrating the magnitude of the advantages in promoting mental health when working on the undergraduates' self-esteem.

Exploring the current literature, it can be observed that self-esteem and self-efficacy were objects of study in several research studies. However, there is clearly a heterogeneous prevalence of their levels and the variables that may influence the college students. This aspect reflects the need for investigations in different educational institutions, which provide peculiar data and each population's vulnerability, considering different social and cultural contexts, essential for constituting the basis of assertive actions by the educational authorities.

Moreover, although the diverse evidence makes clear what the teachers' role is in promoting students' mental health, recent data have pointed to the presence of symbolic and psychological violence in teacher-student relationships. This condition may cause distancing between them, which often has a negative impact on the health of undergraduates,[13] demonstrating that the topic still needs to be widely debated within the academic context.

Important implications for the practice should be considered from the present study. The findings point to the need to strengthen mental health in nursing students favoring their sense of value and belief in their abilities. The education authorities need to be alert to this vulnerability; as well as to the associated factors, since these constructs showed to be related to each other and assume an essential role both in the individual's personal life and in the professionalization process. Promoting them in a university setting is essential to contribute in the formation of healthy and productive young individuals.

In addition, the findings support an expanded look at future intervention research studies focusing on the students' self-esteem and self-efficacy so that they can overcome obstacles healthier and more effectively, preventing negative outcomes and facilitating learning.

This study was limited by its cross-sectional design and by the inability to evaluate the students throughout the undergraduate course so that the most critical phases could be identified. The choice of a generic instrument to measure the participants' self-efficacy should be highlighted as fragile. There are no specific instruments, translated and validated for Brazil, aimed at this population.

Moreover, the instruments employed in this research are subjective and self-reported; therefore, they require reflection and self-knowledge on the part of the respondent. In addition, despite the assurance of anonymity, the participant may feel uncomfortable expressing derogatory beliefs about himself/herself and admitting a reduced ability to perform tasks successfully.

CONCLUSION

The present study identified a predominance of moderate self-esteem and moderate to high self-efficacy. Nursing students with higher self-esteem scores had better self-efficacy.

Self-efficacy was better performed by male students, who opted primarily for the Nursing course in the university entrance exam, and reported satisfaction with the course and absence of overload, apart from being positively correlated with the students' age.

REFERENCES

1. Porteous DJ, Machin A. The lived experience of first year undergraduate student nurses: A hermeneutic phenomenological study. Nurse Educ Today [Internet]. 2018 [cited 2018 Mar 14]; 60:56-61. Available from: https://dx.doi.org/10.1016/j.nedt.2017.09.017
2. Acharya Pandey R, Chalise HN. Self-Esteem and Academic Stress among Nursing Students. Kathmandu Univ Med J (KUMJ) [Internet]. 2015 [cited 2017 Apr 17]; 3(52):298-302. Available from: https://www.ncbi.nlm.nih.gov/pubmed/27423278
3. Tharani A, Husain Y, Warwick I. Learning environment and emotional well-being: A qualitative study of undergraduate nursing students. Nurse Educ Today [Internet]. 2017 [cited 2018 Mar 14]; 59:82-7. Available from: https://dx.doi.org/10.1016/j.nedt.2017.09.008
4. McCarthy B, Trace A, O'Donovan M, Brady-Nevin C, Murphy M, O'Shea M, et al. Nursing and midwifery students' stress and coping during their undergraduate education programmes: An integrative review. Nurse Educ Today [Internet]. 2018 [cited 2018 Mar 14]; 61:197-209. Available from: https://dx.doi.org/10.1016/j.nedt.2017.11.029
5. Valizadeh L, Zamanzadeh V, Gargari RB, Ghahramanian A, Tabrizi FJ, Keogh B. Pressure and protective factors influencing nursing students' self-esteem: A content analysis study. Nurse Educ Today [Internet]. 2016 [cited 2017 Apr 17]; 36:468-72. Available from: https://dx.doi.org/10.1016/j.nedt.2015.10.019
6. Saleh D, Camart N, Romo L. Predictors of Stress in College Students. Front Psychol [Internet]. 2017 [cited 2018 Mar 14];8:19. Available from: https://dx.doi.org/10.3389/fpsyg.2017.00019
7. Bajaj B, Robins RW, Pande N. Mediating role of self-esteem on the relationship between mindfulness, anxiety, and depression. Pers Individ Dif [Internet]. 2016 [cited 2018 Mar 14];96:127-31. Available from: https://dx.doi.org/10.1016/j.paid.2016.02.085
8. Sawicki WC, Barbosa DA, Fram DS, Belasco AGS. Alcohol consumption, Quality of Life and Brief Intervention among Nursing university students. Rev Bras Enferm [Internet]. 2018 [cited 2018 May 01];71(Suppl 1):505-12. Available from: http://dx.doi.org/10.1590/0034-7167-2017-0692
9. World Health Organization (WHO). Preventing Suicide: A Global Imperative. Geneva: World Health Organization; 2014. Available from: http://www.who.int/mental_health/suicide-prevention/world_report_2014/en/
10. Eskin M, Sun JM, Abuidhail J, Yoshimasu K, Kujan O, Janghorbani M, et al. Suicidal Behavior and Psychological Distress in University Students: A 12-nation Study. Arch Suicide Res [Internet]. 2016 [cited 2017 Apr 17];20(3):369-88. Available from: https://dx.doi.org/10.1080/13811118.2015.1054055
11. Montes-Hidalgo J, Tomás-Sábado J. Self-esteem, resilience, locus of control and suicide risk in nursing students. Enferm Clin [Internet]. 2016 [cited 2017 Apr 17];26(3):188-93. Available from: https://dx.doi.org/10.1016/j.enfcli.2016.03.002
12. Benavente SBT, Silva RM, Higashi AB, Guido LA, Costa ALS. Influence of stress factors and socio-demographic characteristics on the sleep quality of nursing students. Rev Esc Enferm USP [Internet]. 2014 [cited 2017 Apr 17];48(3):514-20. Available from: https://dx.doi.org/10.1590/S0080-623420140000300018
13. Zanatta EA, Motta MGC, Trindade LL, Vendruscolo C. Experiences of violence in the nursing training process: repercussions of corporeity in youths. Texto Contexto Enferm [Internet]. 2018 [cited 2018 Sept 11]; 27(3):e3670016. Available from: https://dx.doi.org/10.1590/0104-07072018003670016
14. Jirdehi MM, Asgari F, Tabari R, Leyli EK. Study the relationship between medical sciences students' self-esteem and academic achievement of Guilan university of medical sciences. J Educ Health Promot [Internet]. 2018 [cited 2018 May 1];7:52. Available from: https://dx.doi.org/10.4103/jehp.jehp_136_17

15. Phillips L, Kemppainen JK, Mechling BM, MacKain S, Kim-Godwin Y, Leopard L. Eating disorders and spirituality in college students. J Psychosoc Nurs Ment Health Serv [Internet]. 2015 [cited 2017 Apr 17];53(1):30-7. Available from: http://doi.org/10.3928/02793695-20141201-01

16. Dini GM, Quaresma MR, Ferreira LM. Translation into Portuguese, Cultural Adaptation and Validation of the Rosenberg Self-esteem Scale. Rev Bras Cir Plást [Internet]. 2004 [cited 2017 Apr 17];19(1):41-52. Available from: http://www.rbcp.org.br/details/322/pt-BR/adaptacao-cultural-e-validacao-da-versao-brasileira-da-escala-de-auto-estima-de-rosenberg

17. Polydoro SAJ, Guerreiro-Casanova DC. Higher education self-efficacy scale: Construction and validation research. Aval Psicol [Internet]. 2010 [cited 2017 Apr 17]; 9(2):267-278. Available from: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1677-04712010000200011

18. Farokhzadian J, Karami A, Azizzadeh Forouzi M. Health-promoting behaviors in nursing students: is it related to self-efficacy for health practices and academic achievement? Int J Adolesc Med Health [Internet]. 2018 June 28 [cited 2018 Sept 20]. Available from: http://doi.org/10.1515/ijamh-2017-0148

19. Schwarzer R, Jerusalem M. Generalized Self-Efficacy scale. In: Weinman J, Wright S, Johnston M. Measures in health psychology: A user's portfolio. Causal and control beliefs. Windsor (UK): NFER-NELSON; 1995 [cited 2018 Sept 20]. p. 35-7. Available from: https://userpage.fu-berlin.de/health/engscal.htm.

20. Souza I, Souza MA. Validação da escala de autoeficácia geral percebida. Rev Univ Rural [Internet]. 2004 [cited 2017 Apr 17]; 26(1-2):12-7. Available from: https://www.researchgate.net/publication/260338439_Validacao_da_Escala_de_Autoeficacia_Geral_Percebida

21. Abdal M, Masoudi Alavi N, Adib-Hajbaghery M. Clinical Self-Efficacy in Senior Nursing Students: A Mixed- Methods Study. Nurs Midwifery Stud [Internet]. 2015 [cited 2017 Apr 17]; 4(3):e29143. Available from: https://dx.doi.org/10.17795/nmsjournal29143

22. Sohrabi Z, Kheirkhah M, Sahebzad ES, Rasoulighasemlouei S, Khavandi S. Correlation between Students' Self-Efficacy and Teachers' Educational Leadership Style in Iranian. Glob J Health Sci [Internet]. 2016 [cited 2018 Mar 14]; 8(7):260-5. Available from: https://dx.doi.org/10.5539/gjhs.v8n7p260

23. Bodys-Cupak I, Majda A, Zalewska-Puchała J, Kamińska A. The impact of a sense of self-efficacy on the level of stress and the ways of coping with difficult situations in Polish nursing students. Nurse Educ Today [Internet]. 2016 [cited 2017 Apr 17]; 45:102-7. Available from: https://doi.org/10.1016/j.nedt.2016.07.004

24. Younes F, Halawi G, Jabbour H, El Osta N, Karam L, Hajj A, et al. Internet addiction and relationships with insomnia, anxiety, depression, stress and self-esteem in university students: a cross-sectional designed study. PLoS One [Internet]. 2016 [cited 2017 Apr 17]; 11(9):e0161126. Available from: https://dx.doi.org/10.1371/journal.pone.0161126

25. Shi J, Wang L, Yao Y, Su N, Zhao X, Chen F. Family Impacts on Self-Esteem in Chinese College Freshmen. Front Psychiatry [Internet]. 2017 [cited 2018 Mar 14]; 8:279. Available from: https://dx.doi.org/10.3389/fpsyt.2017.00279.

26. Papazisis G, Nicolaou P, Tsiga E, Christoforou T, Sapountzi-Krepia D. Religious and spiritual beliefs, self-esteem, anxiety, and depression among nursing students. Nurs Health Sci [Internet]. 2014 [cited 2018 Mar 14]; 16(2):232-8. Available from: https://dx.doi.org/10.1111/nhs.12093

27. Nematollahi A, Tavakoli P, Akbarzadeh M. The relationship between self-esteem and students' academic achievement and some parental demographic factors. Sch J App Med Sci [Internet]. 2017 [cited 2018 Mar 16];5(5A):1758-64 Available from: https://dx.doi.org/10.21276/sjams

28. Haq MA. Association Between Socio-Demographic Background and Self-Esteem of University Students. Psychiatr Q [Internet]. 2016 [cited 2018 Mar 16]; 87(4):755-62. Available from: https://doi.org/10.1007/s11126-016-9423-5

29. Bleidorn W, Arslan RC, Denissen JJ, Rentfrow PJ, Gebauer JE, Potter J, et al. Age and gender differences in self-esteem-A cross-cultural window. J Pers Soc Psychol [Internet]. 2016 [cited 2018 Mar 16]; 111(3):396-410. Available from: https://dx.doi.org/10.1037/pspp0000078

30. Chung JM, Robins RW, Trzesniewski KH, Noftle EE, Roberts BW, Widaman KF. Continuity and change in self-esteem during emerging adulthood. J Pers Soc Psychol [Internet]. 2014 [cited 2018 Mar 16]; 106(3):469-83. Available from: https://dx.doi.org/10.1037/a0035135

NOTES

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Discussion of the results: Ribeiro RM, Eid LP, Pompeo DA.
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ETHICS COMMITTEE IN RESEARCH

Approved by the Research Ethics Committee of the São José do Rio Preto Medical School, Opinion No. 1.586.156 and CAAE 55752516.2.0000.5415.

CONFLICT OF INTEREST

There is no conflict of interest.

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