



## ORIGINAL ARTICLE

# Assessment of self-compassion levels in nursing students

### HIGHLIGHTS

1. Nursing students are vulnerable to mental disorders during their undergraduate studies.
2. The Self-Compassion Scale assesses emotional and psychological aspects.
3. Religious practice is associated with higher levels of self-kindness.
4. Psychotherapy reduces self-criticism, obsessive rumination, and feelings of isolation.

Stephanie Caroline de Sena<sup>1</sup>   
Katyucia Oliveira Crispim de Souza<sup>1</sup>   
Marcos Morais Santos Silva<sup>1</sup> 

### ABSTRACT

**Objective:** Assess and understand levels of self-compassion in nursing graduates. **Method:** Quantitative and exploratory study conducted at a private institution in São Paulo, SP, Brazil, using a validated scale to measure self-compassion. The data were analyzed using descriptive statistics, and Student's t-test, Welch's t-test, and Mann-Whitney test were applied for comparison between groups. **Results:** 60.7% of participants practiced some form of religion, 73.3% did not undergo psychotherapy, and 82.2% did not use psychotropic drugs. Participants who practiced religion had higher scores on the self-kindness subscale. Those who underwent psychotherapy showed less self-criticism and a tendency toward obsessive rumination. **Conclusion:** Self-compassion was associated with factors such as religiosity, psychotherapy, and physical activity, indicating a positive influence on emotional well-being. The findings reinforce the importance of self-care strategies in nursing education, promoting mental health and reducing stigma in the search for support.

**KEYWORDS:** Self-Compassion; Mental Health; Students, Nursing; Self-Care; Spirituality.

### HOW TO REFERENCE THIS ARTICLE:

de Sena SC, de Souza KOC, Silva MMS. Assessment of self-compassion levels in nursing students. Cogitare Enferm [Internet]. 2025 [cited "insert year, month and day"];30:e98290en. Available from: <https://doi.org/10.1590/ce.v30i0.98290en>

## INTRODUCTION

The mental health of university students has been receiving increasing attention. Data provided by the World Health Organization (WHO) estimates that approximately 35% of university students meet the diagnostic criteria for some form of mental disorder<sup>1</sup>. It is clear that university students are more vulnerable to stress due to constant contact with academic challenges, such as poor performance and unfulfilled obligations<sup>2</sup>.

During the COVID-19 pandemic, many students faced a series of challenges related to availability and access to classes, continuous isolation, and possible contact with disruptive relationships, factors that directly affect the mental health of each individual<sup>3</sup>. However, even before this period, studies had already indicated that nursing students were at greater risk of developing problems such as depression and anxiety due to constant exposure to suffering, patient death, and the great responsibility inherent in the profession, including concern about the possibility of making mistakes<sup>3-4</sup>.

It has been observed that during practical classes, nursing students may develop feelings of incompetence and contribute to negative thoughts about themselves, affecting their levels of stress, self-criticism, vulnerability, and, as a result, a decrease in their self-compassion<sup>5</sup>.

Self-compassion is the act of feeling compassion for oneself, constituting a positive emotional attitude that aims to protect the individual from the negative consequences of self-criticism, isolation, and mental rumination—which is the practice of developing negative and repetitive thoughts, usually associated with mental illnesses such as depression and anxiety<sup>6</sup>. Self-compassion, therefore, can be defined as the act of caring for oneself in the same way one would care for a friend who is going through difficult times, offering clear and understanding ways to cope<sup>7-8</sup>.

Self-compassion consists of three fundamental elements: (a) self-kindness, which represents the need to treat oneself in a welcoming and encouraging manner in the face of personal mistakes or failures, counteracting the tendency toward constant criticism; (b) shared humanity, which involves understanding that all human beings have flaws, make mistakes, and face difficulties. It is the rational perception that pain is part of the human experience, varying in degree and circumstances, but present for everyone; (c) the concept of *mindfulness*, which consists of understanding the reality of the moment in a clear and balanced way, adapting to the present and facing the thoughts and emotions of each experience, even if it is painful<sup>8-9</sup>.

Higher levels of self-compassion are directly linked to increased feelings of happiness, optimism, and social connection, while decreasing levels of depression, anxiety, rumination, and fear of failure<sup>10</sup>. These studies also demonstrate that self-compassionate people adopt healthier behaviors, such as exercising, drinking less alcohol, and visiting the doctor more often<sup>8,11</sup>.

One of the theoretical proposals on self-compassion is based on Buddhist theories, highlighting the difference between the Western concept and the Buddhist concept of happiness and well-being. The Buddhist perspective recognizes that suffering is inevitable and inherent to the human experience. Rather than avoiding suffering, it should be accepted as part of the cycle of life, where suffering and happiness are interconnected and influence each other<sup>6</sup>. This understanding is directly related to the concept of self-compassion, which involves accepting suffering with kindness, transforming it into a tool for emotional and psychological growth<sup>9</sup>.

In 2022, a study conducted in northern Texas, United States of America (USA), sought to identify factors that could affect stress levels, well-being, and potential physical and emotional factors in nursing students. Participants responded to an online questionnaire about demographic and health factors, as well as habits and measures of well-being and stress. The results showed that most students perceived a deterioration in their mental health when they started their undergraduate course and that few participants practiced any activities related to well-being, self-compassion, and *mindfulness*<sup>12</sup>.

Currently, it is important for healthcare professionals to adopt healthy self-care practices and for these practices to be incorporated from the beginning of their academic training. In this context, the present study aims to assess and understand the levels of self-compassion in nursing undergraduates, in order to support future strategies for promoting self-care among these students.

## METHOD

This is a field study using a quantitative approach with descriptive and exploratory characteristics, conducted at a private higher education institution located in the southern part of the city of São Paulo, which offers an undergraduate nursing program and other courses for semester-based classes.

This research was conducted with students regularly enrolled in undergraduate nursing programs, specifically including those who, in 2024, were in their seventh and eighth semesters, corresponding to the fourth and final year of the program. Although sampling was done for convenience, all 90 students enrolled during that period participated in the survey.

The data for this study were collected in the second half of 2024, between August and September, during classes at the educational institution. The researchers requested authorization from the professor who was teaching the course at the time and, after receiving permission, approached the students in person to present the project, explain its objectives, and invite them to participate. Students who agreed to participate initially received the Free and Informed Consent Form (FICF), with explanations about the role of the participant.

After consenting, students answered a printed questionnaire divided into two sections: the first with sociodemographic questions, without personal identification, containing information about semester, gender, marital status, religion, physical exercise, and psychotherapy; and the second with the *Self-Compassion Scale* (SCS).

The *Self-Compassion Scale* was developed by Kristin Neff and adapted for the Brazilian context by Souza and Hutz in 2016, with permission from the original author. The instrument consists of 26 items distributed across six dimensions: self-kindness, which refers to the ability to be kind to oneself; self-criticism, which involves the tendency to judge oneself harshly; *mindfulness*, the ability to maintain balanced attention in the present; rumination, related to the repetition of negative thoughts; shared humanity, which consists of recognizing that everyone faces difficulties; and isolation, which represents the feeling of being alone in one's pain<sup>8,13</sup>.

Each item on the scale is answered on a Likert scale, from 1 (almost never) to 5 (almost always), indicating the frequency with which the participant experiences each situation described. To calculate the final score, the average of the responses to the

items in the subscales is calculated. As the instrument contains items of a positive and negative nature, the values of negative responses must be reversed before calculating the total<sup>14</sup>.

Although the Self-Compassion Scale does not have established clinical norms, scores can be interpreted comparatively. In general, scores between 1.0 and 2.49 are considered low, between 2.5 and 3.5 moderate, and between 3.51 and 5.0 high. For analyses of specific samples, researchers commonly use the median as a cutoff point to classify levels of self-compassion<sup>14-15</sup>. Permission to use the translated version of the scale was obtained directly from the authors Souza and Hutz via email, ensuring the legitimacy of the instrument used in this study.

After collection, the data were entered and organized into spreadsheets for further statistical analysis. The information was stored anonymously, without any identifying data, and password protected, ensuring the confidentiality of participants. For statistical analysis purposes, these variables were grouped into dichotomous categories. The semester was classified as "7th semester" and "8th semester"; gender as "female" and "male"; marital status was classified as "in a relationship" and "not in a relationship"; and the other variables (religious practice, psychotherapy, use of psychiatric medication, physical exercise, internship, and work) were grouped as "yes" and "no." This categorization allowed for the appropriate application of the selected statistical tests.

The data were analyzed using descriptive statistics, including mean, median, standard deviation, percentages, and 25th and 75th percentiles. For comparisons, Student's t-tests, Welch's t-tests, and Mann-Whitney tests were applied. The Student's t-test was used when the data were normally distributed and had homogeneous variances, while the Welch test was used for unequal variances. In cases of non-normal distribution, the Mann-Whitney test was used. The significance level adopted was  $p < 0.05$ , and the analyses were conducted using RStudio software, version 4.1.2. During the analysis, it was observed that age information was missing from 79 forms, but as the other data were complete, the participants were kept in the sample.

No multivariate analyses or statistical strategies were performed to control for confounding variables. Thus, potential external factors that may have influenced the association between the variables analyzed could not be controlled, which represents a limitation in the interpretation of the results.

This research was approved by the Scientific Committee of the Albert Einstein Israeli Faculty of Health Sciences (FICSAE) and the Research Ethics Committee (CEP) of the Albert Einstein Israeli Hospital, with final approval number 6,978,024.

## RESULTS

Most participants were in their eighth semester (59.6%) and identified as female (88.9%). As for religiosity, 60.7% said they practiced some form of religion. With regard to mental health, 73.3% did not undergo psychotherapy and 82.2% did not use psychiatric medication. With regard to physical exercise, 61.8% reported engaging in some form of regular activity. In addition, 51.7% were not in an internship at the time of data collection, and 66.7% were not employed (Table 1).

**Table 1.** Sociodemographic characteristics of nursing students at a private higher education institution. São Paulo, SP, Brazil, 2024

Variable	Categories	n (%)
Semester	7th semester	36 (40.4)
	8th semester	53 (59.6)
Gender	Women	80 (88.9)
	Male	10 (11.1)
Marital status	Relationship	8 (9)
	No relationship	81 (91)
Practices religion	No	35 (39.3)
	Yes	54 (60.7)
Psychotherapy	No	66 (73.3)
	Yes	24 (26.7)
Psychiatric drugs	No	74 (82.2)
	Yes	16 (17.8)
Physical exercises	No	34 (38.2)
	Yes	55 (61.8)
Internship	No	46 (51.7)
	Yes	43 (48.3)
Works	No	60 (66.7)
	Yes	30 (33.3)
<b>Total</b>	-	<b>90 (100)</b>

Source: The authors (2024).

Descriptive data of the subscales of the Self-Compassion Scale applied to study participants (Table 2).

**Table 2.** Descriptive statistics of the subscales of the Self-Compassion Scale. São Paulo, SP, Brazil, 2024

Variable	Average	Median	Standard deviation	Minimum	Maximum	Percentiles	
						25t	75th
Self-kindness	3.07	3.00	0.834	1.20	5.00	2.45	3.60
Self-criticism	2.93	2.90	0.836	1.00	5.00	2.40	3.40
Shared Humanity	3.05	3.00	0.724	1.50	5.00	2.50	3.50
Isolation	3.23	3.25	0.941	1.00	4.75	2.56	4.00
Mindfulness	3.26	3.25	0.730	1.25	5.00	2.75	3.75
Obsessive rumination	2.89	2.75	0.881	1.00	4.50	2.25	3.50

Source: The authors (2024).

In the religion category, it was observed that religious individuals showed greater self-kindness compared to non-religious individuals ( $p = 0.024$ ). The *mindfulness* subscale indicated a possible difference between the groups, but without statistical significance ( $p = 0.052$ ) (Table 3).

Psychotherapy analysis showed significant differences in some subscales. Individuals undergoing psychotherapy showed lower levels of self-criticism ( $p = 0.026$ ) and obsessive rumination ( $p < 0.001$ ). In addition, the isolation subscale, assessed by the Mann-Whitney test, indicated that these participants feel less isolated compared to those who do not undergo psychotherapy ( $p = 0.030$ ) (Table 4).

**Table 3.** Association between religious practice and subscales of the Self-Compassion Scale. São Paulo, SP, Brazil, 2024

Student's t-test – Religion		
Variable	T-statistic (Student's t-test)	P
Self-kindness	-2.301	0.024
Self-criticism	-1.391	0.168
Mindfulness	-1.969	0.052
Obsessive Rumination	-0.464	0.644
<b>Total</b>	<b>-1.648</b>	<b>0.103</b>
Mann-Whitney test – Religion		
Variable	U Statistics (teste de Mann-Whitney)	P
Shared Humanity	207	0.109
Isolation	290	0.707

Source: The authors (2024).

**Table 4.** Association between participation in psychotherapy and subscales of the Self-Compassion Scale. São Paulo, SP, Brazil, 2024

Student's t-test – Psychotherapy		
Variable	T-statistic (Student's t-test)	P
Self-criticism	2.260	0.026
Shared Humanity	0.662	0.510
Mindfulness	0.479	0.633
Obsessive Rumination	3.632	<0.001
<b>Total</b>	<b>3</b>	<b>0.010</b>
Mann-Whitney test – Psychotherapy		
Variable	U Statistics (teste de Mann-Whitney)	P
Isolation	555	0.030
Welch's t-test – Psychotherapy		
Variable	Statistics t (Welch's t-test)	P
Self-kindness	1.39	0.173

Source: The authors (2024).

In the context of physical exercise, the isolation subscale showed a tendency to be significant, although it did not reach the conventional threshold for significance (Table 5).

**Table 5.** Association between physical exercise and subscales of the Self-Compassion Scale. São Paulo, SP, Brazil, 2024

Student's t-test – Physical Exercise		
Variable	T-statistic (Student's t-test)	P
Self-kindness	-1.39	0.168
Self-criticism	-1.35	0.182
Shared humanity	-1.56	0.122
Isolation	-1.77	0,08
Mindfulness	-1.27	0.206
Obsessive Rumination	-1.48	0.141
<b>Total</b>	<b>-2.12</b>	<b>0.037</b>

Source: The authors (2024).

In the other categories evaluated in the sociodemographic questionnaire, no statistically significant differences or trends were found in the subscales analyzed. Considering that the averages obtained for the six subscales, when evaluated together, did not show significant values, all falling within the range of 2.5 to 3.5, categorized by Neff as moderate, it can be concluded that there was no clear impact of these variables on the aspects investigated.

## DISCUSSION

The results indicate that the nursing students evaluated showed moderate levels of self-compassion, according to the classification proposed by Neff. This points to a balance between self-compassionate and self-critical attitudes, but also suggests that there is room for strengthening these emotional competencies in the academic context of nursing, especially considering the emotional burden involved in training and professional practice.

The association between religious practice and higher levels of self-kindness may be related to the role of religiosity as emotional and moral support in times of adversity. Previous studies indicate that elements such as spirituality, religious rituals, and a sense of belonging to a community can promote more accepting attitudes toward one self<sup>16-18</sup>. However, this effect was not widely observed in other dimensions of self-compassion, which limits broader conclusions about this relationship.

Psychotherapy stood out as a possible protective factor, especially in terms of reducing self-criticism, obsessive rumination, and feelings of isolation. These results reinforce the understanding that psychotherapeutic interventions can contribute to strengthening emotional and self-regulatory skills, which are fundamental for maintaining mental health in demanding academic contexts<sup>19-20</sup>. Despite this, the low adherence to psychotherapy observed among students could not be properly explored in terms of its determinants, which points to the need to investigate perceived barriers to access to psychological care in this population.

Physical exercise has also been shown to contribute to emotional well-being, with physically active students tending to feel less isolated. Although the direct association

did not reach significance in all subscales, the literature recognizes the positive effects of regular physical activity on reducing stress, improving mood, and promoting social integration, aspects that are related to dimensions of self-compassion such as belonging and emotional balance<sup>21-24</sup>.

Self-compassion has gained prominence in the field of health for its ability to reduce symptoms of stress, anxiety, burnout, and promote emotional regulation. Self-compassion-based interventions have been applied with good results in academic and healthcare populations, promoting greater cognitive flexibility and emotional resilience<sup>25-27</sup>. In the context of nursing, promoting emotional well-being can be strategic in preventing emotional illness and improving the quality of care provided<sup>28</sup>.

Taking care of one's own well-being through self-compassionate practices, such as mindful breathing, expressive writing, taking breaks to rest, and seeking social support, has been shown to be effective in reducing symptoms such as anxiety and depression. These strategies also promote greater cognitive flexibility, contributing to the psychological well-being and academic performance of university students<sup>29-30</sup>. However, it is important to consider the barriers that may hinder the adoption of self-compassion, such as fear of compromising personal goals or getting in touch with difficult emotions, such as sadness or feelings of vulnerability, which can limit engagement in self-compassionate practices, even when there is awareness of their benefits. These challenges reinforce the importance of educational approaches that encourage the gradual and safe development of self-compassion in the context of health education.

The study has some relevant limitations. The absence of significant differences between students in the 7th and 8th semesters may reflect emotional stability and greater maturity at the end of the course. However, as the research was limited to students in the final stages of their undergraduate studies, it was not possible to verify possible changes throughout their educational journey. Future studies that include participants from different semesters may provide important contributions in this regard.

Furthermore, the sample was defined for convenience and restricted to a single private institution, which limits the generalizability of the findings. No multivariate analyses were performed, making it impossible to control for possible confounding variables. In addition, the field for participants' age was poorly filled out (only 12%), making it impossible to use as a variable for analysis. The absence of this data prevented, for example, the verification of possible variations in levels of self-compassion by age group, which would have had significant analytical potential. This limitation seems to have occurred due to poor formatting of the field in the questionnaire, which reinforces the importance of well-structured instruments in surveys with self-completed questionnaires.

## FINAL CONSIDERATIONS

The results of this study highlight the importance of self-compassion as a relevant strategy for the emotional well-being of nursing students in the final stages of their undergraduate studies. Understanding how they deal with their emotions and reactions when faced with difficulties can help these students develop healthier strategies for coping with the academic and professional challenges of nursing training.

Nursing, as a profession that involves deep human involvement and empathy, requires professionals to know how to balance caring for others with self-care. In this

sense, practices such as self-compassion emerge as crucial tools for promoting well-being among students and future health professionals. Self-compassion allows you to develop a more understanding relationship with yourself, reducing excessive self-criticism and promoting a more balanced perspective on your own flaws and limitations.

Promoting a culture of self-care within educational and healthcare institutions, encouraging both students and professionals to seek help without fear of stigma, is a strategy that can generate lasting benefits. This way, in addition to taking better care of themselves, these professionals will be better prepared to offer empathetic and humane care to their patients.

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**Received:** 03/02/2025

**Approved:** 22/06/2025

**Associate editor:** Dr. Gilberto Tadeu Reis da Silva

**Corresponding author:**

Stephanie Caroline de Sena

Faculdade Israelita de Ciências da Saúde Albert Einstein

Avenida Padre Lebrecht - Morumbi, São Paulo - SP

E-mail: [stephanie.sena024@gmail.com](mailto:stephanie.sena024@gmail.com)

**Role of Authors:**

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **de Sena SC, de Souza KOC, Silva MMS**. Drafting the work or revising it critically for important intellectual content - **de Sena SC, de Souza KOC, Silva MMS**. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **de Sena SC, de Souza KOC, Silva MMS**. All authors approved the final version of the text.

**Conflicts of interest:**

The authors have no conflicts of interest to declare.

**Data availability:**

The authors declare that all data are fully available within the article.

ISSN 2176-9133



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