

# Study of the Impact of Self-Esteem on the Well-Being of Nursing Students at the Higher Institutes of Nursing and Health Techniques Professions of Fez and Rabat

Driss Touil<sup>1,2</sup>, Ismail Louragli<sup>1,2</sup>, Rachida Archou<sup>3</sup>, Abderrahmane Boualam<sup>1,4</sup>, Aziz Elouakfaoui<sup>5</sup>, Abdelaati Soufiani<sup>1,4</sup>, Ghizlane Bouazza<sup>1,4</sup>, Mohammed Fedouache<sup>1,4</sup>, Mounia Amazian<sup>5</sup>, and Kamelia Amazian<sup>6,7</sup>

<sup>1</sup>Higher Institute of Nursing and Health Techniques Professions – Kenitra, Morocco

<sup>2</sup>Laboratory of Biology and Health, Department of Biology, Ibn Tofail University, Kenitra, Morocco

<sup>3</sup>Higher Institute of Nursing and Health Techniques Professions, Meknes, Morocco

<sup>4</sup>Laboratory of Natural Resources and Sustainable Development, Department of Biology, Faculty of Sciences, Ibn Tofail University

<sup>5</sup>Higher Institute of Nursing and Health Techniques Professions, Rabat, Morocco

<sup>6</sup>Higher Institute of Nursing and Health Techniques Professions, Fez, Morocco

<sup>7</sup>Human Pathology, Biomedicine and Environment Laboratory, Faculty of Medicine and Pharmacy, Sidi Mohammed Ben Abdellah University Fez, Morocco.

**Abstract.** Context: The self-esteem of nursing students is a fundamental aspect of coping with the challenges of nursing education. This dimension can have a significant influence, whether positive or negative, on their academic success and general well-being. Objectives: The aim of this study is to examine self-esteem in nursing students, investigate the relationship between self-esteem and psychological well-being using psychometric scales, and examine the link between the various data collected and self-esteem. Material and methods: This was a descriptive cross-sectional study of students at the Fez and Rabat higher institutes of nursing and technical health professions, using a questionnaire containing general data, a Rosenberg self-esteem scale and a scale assessing psychological flourishing. Results: The majority of nursing students (2/3) have self-esteem levels ranging from low to very low. Girls have higher self-esteem than boys. Moreover, self-esteem is positively related to the perception that training is motivating, and to students' psychological flourishing. Conclusion: Boosting the self-esteem of these students is essential for their psychological flourishing. This can be achieved by ensuring a favorable study climate at institute and internship sites, psychological support and the introduction of emotional education activities.

**Keywords:** Self-esteem, Nursing students, psychological well-being, Fez, Rabat

## 1. Introduction

Self-esteem is a global evaluation of the self that can be broadly positive or negative. High self-esteem reflects feeling adequate and worthy, whereas low self-esteem reflects dissatisfaction and self-rejection [1]. It is a subjective construct grounded in how individuals perceive and evaluate themselves. It encompasses not only emotional experience but also how people function in practice, and it serves as an important indicator of health and well-being, as well as a factor that helps explain human behaviour [2].

University life, particularly in the early years, can be a vulnerable time for self-esteem. On the one hand, the acquisition of autonomy due to the separation from parents and the change in the social environment are essential moments in the construction of self-esteem. Academic expectations, own success projections or competition in certain courses contribute to the elevation of self-esteem through a good adaptation to this new life. On the other hand, it can cause a decline in self-esteem; faced with difficulties to assume financial and social autonomy. Self-esteem is threatened during this period [3].

In the field of nursing training, one of its aims is to develop self-reliant and self-confident individuals who are able to solve problems and have a sense of professionalism. Self-esteem is important for nurses because it is related to the nurse's ability to communicate and also improves potential for success [4].

During undergraduate nursing education, students are in constant contact with individuals at different stages of health and illness and face a wide range of challenging tasks, including exposure to suffering, pain and death. The accumulation of these factors, or even a subset of them, may indirectly affect nursing students' relationships with others and their level of self-esteem [4].

The links between self-esteem and student health were confirmed by Karaca and colleagues (2019) [5]. They found that final year self-esteem was found to have a strong relationship with mental health in a group of 516 Turkish nursing students.

Finally, nursing students with higher self-esteem generally manage stress more effectively, report greater job satisfaction, perform better, participate more actively in therapeutic nursing care, and tend to have a more positive outlook on life [6]. In contrast, those with low self-esteem often experience difficulties communicating with colleagues and patients, show reduced empathy and effectiveness, and demonstrate poorer work performance.

The aim of this study was to examine self-esteem in student nurses, investigate the relationship between self-esteem and psychological flourishing using psychometric scales, and examine the link between the various data collected and self-esteem.

## 2. Materials and Methods

**2.1. Type of study :** This is a descriptive cross-sectional study with analytical purposes, carried out between 01/03/2022 and 30/06/2022.

**2.2. Place of study :** Higher institutes of nursing and health techniques in Fes and Rabat, whose main function is to train nurses and health technicians.

### 2.3. Study population and sample

**Study population:** The study population is composed of students in nursing and health techniques from Higher institutes of nursing and health techniques in Morocco. A representative sample was recruited from the Higher institutes of nursing and health techniques in Fez and Rabat. The study participants were undergraduate students from both institutes, either in nursing or in techniques of health.

**Sample size:** The sample size, notated n, is calculated as follows:

- $n = t^2 \cdot p(1-p) / m^2$
- t: set to 1.96 for a 95% confidence interval.
- m: Accuracy set at 4%.
- P: prevalence value set at 50% (Since the prevalence of reported stress levels in the literature varies widely from study to study, the statistically recommended value is 50%).
- $n = (1.96)^2 \cdot 0.5 \cdot (1-0.5) / (0.04)^2 = 601$  students

**2.4. Data collection instrument :** Data were collected using a self-administered questionnaire, divided into several sections:

#### 2.4.1. Student characteristics :

- o Socio-economic data
- o Nursing training data
- o Health-related data

#### 2.4.2. Psychological Flourishing Scale [7].

o The Flourishing Scale, developed by Diener et al. (2010) and translated and validated in French by Sovet and Villieux (2016), assesses well-being in the domains of relationships, life purpose, self-esteem and optimism. It comprises eight items, each reflecting a key aspect of optimal social-psychological functioning, rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

#### 2.4.3. Self-esteem scale [1].

o Rosenberg Scale: A ten-item scale that assesses self-esteem by measuring both positive and negative feelings about oneself. It is scored from 10 to 40, so that a high score indicates very high self-esteem.

**2.5. Statistical data analysis :** A descriptive analysis was carried out for all study variables. Qualitative variables were presented as proportions. Quantitative variables were presented as mean  $\pm$  standard deviation.

**2.6. Parametric tests** (Pearson correlation test, Student's t test, ANOVA) were used to test associations. The significance level is set at 0.05. Data were analyzed using SPSS software version 26.0.

## 3. Results

### 3.1. General characteristics:

Table 1 : General characteristics:

Variables	Modalities	Sample (% valid, N = 696)
Age		Mean = 19,9(1,4)
Gender	Male	20,1 % (n = 140)
	Female	79,9 % (n = 556)
Nationality	Moroccan	95,00 % (n = 661)
	Foreign	5,00 % (n = 35)
Economic status of parents	High	01,6 % (n = 11)
	Medium	86,5 % (n = 602)
	Low	11,9 % (n = 83)
have the scholarship	Yes	54,6 % (380)
	No	45,4 % (316)

Table 1 shows that the average age of our sample was 19.9 years ( 1.4). The majority of participants were female (79.9%), with a predominance of Moroccan nationality (95%). In addition, 86.5% of students report an average standard of living and 54.6% receive a scholarship.

### 3.2. Characteristics related to training:

Table 2 : characteristics related to training

Variables	Modalities	Percentage (% valide, n = 696)
Stream	Nursing care	74,7 % (n = 520)
	Techniques of Health	25,3 % (n = 176)
Semester	S2	45,00 % (n = 313)
	S4	26,3 % (n = 183)
	S6	28,7 % (n = 200)
Perception of training	Motivating	67,8 % (n = 472)
	Stressful	86,1 % (n = 599)

Table 2 shows that 74.7% of students belong to the nursing stream. Of these, 45% are enrolled in semester 2, 28.7% in semester 6 and 26.3% in semester 4. What's more, 67.8% of students consider their studies at Institute to be motivating.

### 3.3. Prevalence of self-esteem levels :

**Table 3: Distribution of students according to self-esteem levels**

Variable		Number	Percentage (% valide, n = 696)
Self-esteem	Very low	161	23.1%
	Low	356	51.2%
	Average	117	16.8%
	High	62	8.9%

The results in Figure 1, taken from the Rosenberg self-esteem scale, show that almost half the students in the study (51.2%) have low self-esteem, 23.1% have very low self-esteem, 16.8% have average self-esteem and only 8.9% have high self-esteem.

### 3.4. Average self-esteem scores :

**Table 4 : Average self-esteem scores**

Variable	n	Mean score	Standard deviation
Strong	62 (8,9)	36,30	1,25
Medium	117(16,8)	32,91	0,86
weak	356(51,1)	28,62	1,75
Very weak	161(23,1)	23,05	2,51

Mean scores for self-esteem levels were 36.30 for high self-esteem, 32.91 for medium self-esteem, 28.62 for low self-esteem and 23.05 for very low self-esteem.

### 3.5. Self-esteem and general data:

**Table 5 :Self-esteem and general data:**

	Sample (% valid, N = 696)	Average self-esteem score	p Value
Age	Moyenne (19,92)	28,74	0,83 (r)
Gender	F n = 556 (79,9%) M n = 140 (20,1%)	28,95 27,92	<b>0,012</b> (test t)
Nationality	Moroccan n = 661(95,0%) Foreign n = 35(5,0%)	28,70 29,45	0,32 (test t)
Economic status of parents	Low n = 83(11,9%) Medium n = 602(86,5%) High n = 11(1,6%)	28,80 28,77 26,90	0,36 (Anova 1 facteur)
have the Scholarship	yes n = 380 (54,6%) No n = 316 (45,4%)	28,55 28,98	0,18 (test t)

From the table above, we can see that there is a significant relationship between self-esteem and gender ( $p=0.012$ ), with female students having higher self-esteem than males.

### 3.6 . Self-esteem and training characteristics

**7. Table 6 : Self-esteem and training characteristics**

	Echantillon (% valide, N = 696)	Average self-esteem score	p Value (test used)
Stream	n = 520 (74,7%) n = 176 (25,3%)	28,56 29,28	0,054 (test t)
Semester	S2 n = 313 (45,0%) S4 n = 183 (26,3%) S6 n = 200(28,7%)	28,92 28,42 28,77	0,46 (Anova 1 factor)
Perception of training	Motivating 472 (67,8%) Stressful 599 (86,1%)	29,03 28,69	0,012 (test t) 0,441 (test t)

The table above reveals that there is a significant link between the perception of training as motivating, and that students who perceive their training as motivating have higher self-esteem;

### 3.7. Psychological flourishing and self-esteem:

**9. Table 7: The correlation between perceived stress, psychological fulfillment and students' self-esteem.**

Variable	Statistical test used	Psychological flourishing score
Self-esteem score	r : Coefficient de corrélation p	0,460 < $10^{-3}$

From this table, we can see that there is a significant positive relationship between self-esteem and psychological fulfillment ( $p=<<10^{-3}$ ).The most fulfilled students are those with higher self-esteem.

## 4. Discussion

Students' self-esteem is a crucial aspect that needs to be taken into consideration. This dimension can have a significant influence, whether positive or negative, on their academic success and general well-being. What's more, self-esteem plays a key role in preparing students for their future professional and personal lives. Healthy self-esteem promotes self-confidence, resilience and the ability to overcome challenges, while low self-esteem can lead to academic, social and emotional difficulties. Our research focused on the study of self-esteem and associated factors in nursing and health techniques students, a category of students who need to have good self-esteem in order to manage their training, which involves working with a diverse population during their clinical placements.

This study, involving a sample of 696 students spread over the three years of training, assessed the self-esteem of nursing and health technician students using the Rosenberg scale. The results show that the majority of students (74.3%) have low to very low self-esteem, 16.8% have average self-esteem and only 8.9% have high self-esteem. Our results are consistent with an Egyptian study that found that most students presented a problematic self-esteem level (low to moderate) [8]. On the other hand, these results disagree with those of Duruk et al. (2017) [9], who reported respectively that the majority of students (57% and 88.6%) had high levels of self-esteem. The results found in our study can be explained by the devaluation of the nursing profession in Morocco as well as the arduousness and burden of training in nursing, a training that extends throughout the day (morning and afternoon) between theoretical courses and practical internships involving different categories of staff and population. In addition, the transition to university studies, an environment that requires a particular adaptation with more responsibilities especially for students who leave their families can also impact the self-esteem of these students.

Furthermore, in contrast to Edwards et al. (2010) [6], who showed that nursing students' self-esteem varied across the different stages of their training, students at the end of the program displayed lower levels of general self-esteem than when they were only eight months into their course. Our study revealed that self-esteem was low for all students in all three semesters, with a mean score of 28.92 for students enrolled in semester 1, a mean score of 28.42 for students enrolled in semester 2 and a mean score of 28.77 for students enrolled in S3. The results of this study confirm those of Sasat and colleagues, who reported that self-confidence did not differ significantly according to the different educational stages for nursing students [15]. This can be explained by the diversity of problems encountered by nursing students in Morocco throughout their training, so that confrontation with reality during the first internships leads to self-doubt in students enrolled in the first semester, while the intensification of work placements, courses and exams and preparation for end-of-study projects generate high levels of stress that can create a feeling of inefficiency or personal exhaustion, impacting on the self-image of students enrolled in the second and third semesters.

In addition, although the majority of studies [8] have reported that male students have a higher self-esteem perception than female students, our study showed that female students have a higher self-esteem than male students. This could be attributed to the specificity of this training, which mainly attracts girls more than boys, so that the nursing profession remains deeply identified with the female gender. Although there has been an increase in the number of men in the nursing profession over the past few decades, this proportion remains relatively marginal. Indeed, the presence of a minority of boys among a female majority can impact their self-confidence especially in a Moroccan population that is still reserved [10].

On the other hand, students who consider their training to be motivating show higher self-esteem. Similarly, Nicholls (1984) reported a direct link between self-esteem and motivation [11]. These two positively associated concepts are fundamental to the success of any learning [12]. This suggests that academic motivation and satisfaction with the curriculum can play a crucial role in developing self-esteem. An encouraging and enriching educational environment can strengthen students' self-confidence. [12].

In addition, the study of the association between self-esteem and psychological flourishing among nursing students revealed a significant positive link between the two components of mental health. Thus, students with high self-esteem are more likely to feel psychologically fulfilled. These results are consistent with those of Bolognini & Prêteur, who reported that high self-esteem is associated with psychological well-being and good physical health [13]. In this perspective, Ryff and Keyes (1995) consider that well-being is first and foremost about a good self-esteem and positive assessment of one's life. Having a good self-esteem seems necessary to survive in an increasingly competitive and thus increasingly stressful society [14]. Thus, positive self-esteem contributes to better resilience to stress and a more optimistic view of life. Mental health specialists observe that having good self-esteem is one of the best tools we can have for coping with life's difficulties.

## 5. Conclusion

Self-esteem is an essential component of the mental health that all nurses must have in order to practice their profession, which involves responsibility for the health of the population.

The results of this study show that the majority of nursing students (2/3) have self-esteem levels that vary from low to very low. Girls have higher self-esteem than boys. Moreover, self-esteem is positively related to the perception that training is motivating, and to students' psychological flourishing.

Strengthening the self-esteem of these students is essential to increase their psychological flourishing. This can be achieved by ensuring a favourable climate for study at the institute and internship sites, psychological support and the introduction of emotional education activities.

## References

1. Rosenberg M. Society and adolescent self-image. New York (NY): Princeton University Press; 1965. p. 30–1.
2. Laguna M, Lachowicz-Tabaczek K, Dworakowska I. Scale of SES Morris Rosenberg self-assessment – Polish adaptation of the method. Soc Psychol. 2007;2(4):164–76.

3. Arsандаux J. L'estime de soi chez les étudiants à l'université : liens avec les comportements de santé et les problèmes de santé mentale et physique [thèse]. Bordeaux (FR) : Université de Bordeaux; 2019.
4. İlhan N, Sukut Ö, Akhan LU, Batmaz M. The effect of nurse education on the self-esteem and assertiveness of nursing students: A four-year longitudinal study. *Nurse Educ Today*. 2016;39:72–8.
5. Karaca A, Yildirim N, Cangur S, Acikgoz F, Akkus D. Relationship between mental health of nursing students and coping, self-esteem and social support. *Nurse Educ Today*. 2019;76:44–50.
6. Edwards D, Burnard P, Bennett K, Hebden U. A longitudinal study of stress and self-esteem in student nurses. *Nurse Educ Today*. 2010;30(1):78–84.
7. Diener E, Wirtz D, Tov W, Kim-Prieto C, Choi D, Oishi S, et al. New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Soc Indic Res*. 2010;97:143–56.
8. El Fetouh MSA. Relation entre l'intelligence émotionnelle et l'estime de soi chez les étudiants en infirmiers. *Egypt Nurs J*. 2019;16(2):53–8.
9. Duruk N, Kurban NK, Kurban O. An example of nursing students' self-esteem: Does university education make a difference? *Int J Caring Sci*. 2017;10(3):1577–86.
10. Roy B, Holmes D, Chouinard V. Contribution à une éthique de la sollicitude : masculinités et genre dans la profession infirmière. *Rech Soins Infirm*. 2011;107(4):38–48.
11. Nicholls J. Achievement motivation: Conceptions of ability, subjective experience, task choice and performance. *Psychol Rev*. 1984;91:328–46.
12. Eloirdi A, Amine A, Ahmed A. Association entre la motivation et l'estime de soi en éducation physique et sportive. *Le Pédagogue*. 2016;4(3):43–9.
13. Bolognini M, Prêteur Y. Estimation de soi. Perspectives développementales. Paris: Delachaux et Niestlé; 1998.
14. Ryff CD, Keyes CLM. The structure of psychological well-being revisited. *J Pers Soc Psychol*. 1995;69(4):719–27.
15. Sasat S, Burnard P, Edwards D, Naiyapatana W, Hebden U, Boonrod W, et al. Self-esteem and student nurses: A cross-cultural study of nursing students in Thailand and the UK. *Nurs Health Sci*. 2002;4(1–2):9–14.