The Interplay of Emotional Intelligence and Resilience in Predicting Non- Suicidal Self-Injury among Nursing Students

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Abstract

Background: Non-suicidal self-injury (NSSI) is prevalent among young adults and often correlates with difficulties in emotion regulation and coping strategies. **This study aimed** to explore the role of emotional intelligence (EI) and resilience in predicting NSSI among nursing students**. Design:** A descriptive correlational research design was utilized from January 2025 to April 2025. **Setting:** The study was conducted at the faculty of nursing, Menoufia University, Menoufia Governorate, Egypt. **Subjects**: A purposive sample of 416 nursing students was selected from the previously mentioned setting. **Tools:** Four tools were used **tool 1:** A structured interview questionnaire to assess socio demographic characteristics of the studied students, **tool 2:** The emotional intelligence scale to assess student's emotional intelligence score, **tool 3:** The brief resilience scale to assess the students level of resilience and **tool 4:** Non-suicidal self-injury (NSSI) to evaluate the frequency and severity of non-suicidal self-injury behaviors among the studied students. **Results**: There was a highly statistically significant relation and positive correlation between EI and resilience, and there was a highly statistically significant relation and negative correlation between resilience and NSSI, as well as between EI and NSSI. Higher EI and resilience were associated with lower frequencies and severity of NSSI, and vice versa. **Conclusion:** There is an inverse relationship between emotional intelligence (EI) and resilience with the frequency and severity of non-suicidal self-injury (NSSI); as EI and resilience increase, the frequency and severity of NSSI decrease, and vice versa. **Recommendations**: Stress management and assertiveness training programs should be offered to students who are experiencing psychosocial stress and resort to maladaptive coping methods, to alleviate their psychological issues and improve their resilience and emotional intelligence.

Keywords: Non-Suicidal Self Injury (NSSI), resilience, emotional intelligence (EI), nursing students.

Introduction

Non-suicidal self-injury (NSSI) is relatively frequent behavior among young adults, and it seems to be associated with difficulties in emotion regulation. Individuals who have a history of non-suicidal self-injury (NSSI) are at an alarmingly high risk for suicidal ideation, suicidal planning, and suicidal attempts. Even if they do not have suicidal intent, engagement in NSSI behavior could significantly increase one's risk for subsequent engagement in suicidal behaviors, the difference between suicide and NSSI is determined by whether the individual intends to end his or her life **(Akbari et al., 2024).**

NSSI is regarded as a dysfunctional coping mechanism for emotion regulation and a method of relieving psychological pain. Non-suicidal self-injury is used by individuals to focus

on physical pain and reduce attention to unpleasant emotions, including tension, fear, and anger **(Orsolini et al., 2024).** Although NSSI is distinct from suicide attempts, several studies show that 50–75% of patients with a history of NSSI commit suicide. scratching, bashing, burning, cutting, self-hitting body parts, and interfering with wound healing are some of the most common self-injury examples among young adults **(Poudel et al., 2022) .**

Students who have been engaged in non-suicidal self-injury (NSSI) in their lifetime experience greater difficulty with emotion regulation and have lower levels of resilience and self-compassion. Resilience and self-compassion levels are the lowest among those currently engaged with NSSI **(Goncalves et al., 2024).** While individuals with higher levels of emotional intelligence (EI) reported significantly higher levels of self-esteem, and empathy, while also reporting significantly lower levels of depression, anxiety, and impulsivity **(Szewczuk-Boguslawska et al., 2021) .**

Emotional intelligence (EI) is the qualification, capacity, talent, or self-perceived competence to identify, appraise, and manage one's own, others', and groups' emotions. Emotional intelligence is perceived as a facilitator that determines the effectiveness of people's understanding of themselves and those around them. EI is influenced by various aspects of personality and can be within the lower levels of personality hierarchies. People who possess low levels of emotional intelligence with high social desirability were the most vulnerable to engaging in non-suicidal self-harm behaviors **(Waris & Quratulain, 2023) .**

On the other perspective, resilience shows the individual's ability to retain positive physical and mental states in adverse situations, adapt to their surroundings, and help prevent or overcome negative effects like depression, post-traumatic stress disorder, and violent behavior that are brought on by pressure from work or college. Moreover, resilience, along with coping mechanisms, can help people overcome and manage difficulties. Resilience plays as a mediator between aggression and NSSI. Furthermore, the suppression of resilience in depressed adolescents could influence their engagement in NSSI behaviors. Adolescents with strong resilience may encounter reduced psychological stress and its detrimental effects, as well as an enhancement in their quality of life and overall well-being **(Zhang et al., 2021) .**

Resilience is considered to be both a protective and a risk factor, contingent upon its association with advantageous or unfavorable psychological consequences (Brailovskaia et al., 2020) . People who experienced NSSI, had lower resilience and higher levels of stress, anxiety, and depression than people who had not experienced NSSI **(Watson & Tatnell, 2022) .**

Resilience and emotional intelligence have been discovered to be positively related to one another. Individuals with elevated emotional intelligence view themselves as more resilient, meaning they feel better equipped to handle adversity and manage negative experiences. The specific domains of emotional intelligence also have individual effects on resilience. Elevated emotional perception and facilitation enable individuals to recognize their emotions during stressful events and adapting their behavior and thoughts to communicate in a supportive manner **(Jabeen et al., 2024).**

Ultimately, individuals who possess strong emotional regulation and control tend to react to personal challenges with more constructive outcomes and effective coping strategies. This enhances resilience and assists individuals in dealing with life stresses. Conversely, it has also been found that highly resilient people actively enhance their positive emotionality through altruism, humor, relaxation, and optimism, demonstrating that emotional

intelligence and resilience possess a mutual relationship with one another **(Hughes et al., 2021).**

Significance of the study:

In Egypt, there is an increasing awareness regarding non-suicidal self-injury (NSSI) as a serious mental health issue. Nursing students are thought to control their emotional burdens, clinical responsibilities, and academic stress, all of which can develop maladaptive coping mechanisms later, such as self-harm. NSSI is notably found among college students. According to **Rabie et al. (2025),** 18.1% of high secondary school students committed NSSI, and 27.7% had suicidal thoughts, raising concerns about mental health problems that might continue into college.

On the other hand, **Elserafi et al. (2024)** have shown that 4.3% of participants experienced repetitive self-injury behaviour, and 18% of college students at Ain Shams University also reported engaging in NSSI. Many researchers suggest that nursing students and other health professionals may experience greater psychological distress because of clinical exposure to suffering, emotional exhaustion, and perfectionism during their training.

The emotional demands placed on nursing trainees are relevant to the findings of **Abdou et al., (2024)** who found that emotional regulation is a dominant function behind NSSI among Egyptian adolescents and young adults, including those in psychiatric settings. According to **Saad (2022),** the prevalence rate of NSSI among Egyptian adolescents was 26.5%, indicating early onset patterns that could potentially extend into nursing education. This brings high importance for early screening programs, training on emotional intelligence and resilience, plus mental health support systems in nursing curricula, which is vital because of the allegations in patient safety, professional identity formation, and the welfare of aspirant nurses. It is essential to study NSSI in this category to create focused interventions that promote professional capability and psychological well-being.

Nursing students are learning progressively about emotional intelligence (EI) and resilience. They influence how well they do in college, in hospitals, and in their thoughts. Emotional intelligence helps nurses recognize themselves more, manage stress better, and be more caring. Resilience also encourages students to endure through tough clinical training and stay inspired. **Dogham et al. (2025)** conducted a cross-sectional study with 1,096 undergraduate nursing students at Alexandria University. Results showed that 57.0% of the students had high emotional intelligence (EI) and 59.3% had high reflective thinking. There was a strong positive correlation between emotional intelligence and reflective thinking ($r = 0.612$, $p < 0.001$).

Shubayr and Dailah (2025) also studied that nursing student who improved at carrying and recognizing their feelings had more confidence in themselves and less stress when they were doing clinical practice. **Amin et al. (2025)** also studied how emotional intelligence (EI) affects the link between resilience and competence in dealing with workplace violence among 500 nursing students. They found that EI only partially affected this relationship (indirect effect = 0.12, 95% CI [0.08, 0.17]). These results are comparable to other researches that have been discovered. For example, **Martinez et al. (2025)** discussed how resilience can help nursing students cope with mental health problems like burnout, compassion and fatigue.

Individuals who have self-harm experiences tend to visit emergency departments and psychiatric facilities multiple times annually **(Budler et al., 2022).** Nurses typically serve as the initial providers of psychiatric care addressing NSSI. Nurses' perceptions of patients who engage in self-harm play a crucial role, as they can influence the effectiveness of clinical practices and treatment results, preventing additional harm and potential

outcomes like suicide in individuals with NSSI **(Ghaedi-Heidari, et al., 2025).**

Psychiatric nurses can conduct debriefing sessions after challenging clinical experiences to help students process their emotions and learn from the experience **(Haver, et al., 2025).** Psychiatric nurses can model healthy coping strategies for managing stress, anxiety, and difficult emotions in their own practice, creating a safe and supportive environment where students feel comfortable discussing their emotions and seeking help is crucial, Psychiatric nurses can validate students' feelings and experiences, foster a sense of understanding and belong **(Alodhialah et al., 2024).**

Theoretical and Operational definitions:

Emotional intelligence: is theoretically defined as the ability of an individual to perceive, understand, regulate, and manage emotions in themselves and others **(Filice et al., 2024).** Emotional intelligence in the present study is operationally defined as the score of student's emotional intelligence that was measured by the Emotional Intelligence Scale.

Resilience: is theoretically defined as a process involving adapting in a positive way when facing traumatic stress or disabling adversity with the aim of recovering previous functional levels **(Wu, et al., 2020).** Resilience in the present study is operationally defined as the score of student's resilience that was measured by Brief Resilience Scale (BRS).

Non-Suicidal Self-Injury (NSSI) is theoretically defined as the intentional and repetitive act of inflicting harm on one's own body without the intent to cause death **(Jong, et al., 2021).** Non-Suicidal Self-Injury in the present study is operationally defined as the score of student's Non-Suicidal Self-Injury that was measured by non-suicidal self-injurious scale.

Subjects and Methods:

The aim of the study:

The current study aimed to explore the role of emotional intelligence, and resilience in predicting Non- Suicidal Self-Injury among nursing students.

Sub-Objectives:

1. To assess the level of emotional intelligence among nursing students who engage in non-suicidal self-injury.
2. To measure the resilience levels in nursing students with a history of non-suicidal self-injury.
3. To investigate the combined predictive power of emotional intelligence and resilience on non-suicidal self-injury behavior.

Research question:

1. What are levels of Emotional Intelligence, resilience, and Non-Suicidal Self-Injury in nursing students?
2. Are there correlations between Emotional Intelligence, resilience, and Non- Suicidal Self-Injury?
3. What is the role of emotional intelligence and resilience in predicting Non- Suicidal Self-Injury among nursing students?

Research design:

A descriptive correlational study design was conducted from January 2025 to April 2025 to achieve the study's aim.

Research setting:

The research study was carried out at the faculty of nursing, Menoufia University, Menoufia Governorate, Egypt.

Sample size calculation: The sample size for this study was calculated to ensure statistical significance and representativeness of the faculty of nursing students, totalling 4742 registered students for the academic year of 2024-2025. To ensure feasibility and statistical power, the sample size was calculated using the following formula $\boldsymbol{n = [DEFF*Np(1-p)]/ [(d^2/Z^2_{1-\alpha/2}*(N-1) +p*(1-p)] = 416.}$

Research subjects:

A purposive sample of 416 nursing students was recruited to achieve the aim of the study. It is estimated according to the total number of the students in the four years in faculty of nursing in the academic year 2024-2025 selected from each grade according to the number of students in each one, using proportional allocation methods, who fit the following **inclusion criteria**; both genders, from first to fourth grade nursing students, engaged in non-suicidal self-injuries behavior and free from any psychiatric and chronic medical illness because these illnesses could affect the results of the study. **Exclusion criteria:** Participants who are not engaged in non-suicidal self-injury and have any chronic medical or psychiatric illness and who refused to give written consent.

Tools of data collection:

Data was collected by using the following four tools:

Tool (1): A structured interview questionnaire: This questionnaire was developed by the research team based on pertinent relevant literature. It consists of socio-demographic characteristics such as age, gender, marital status, place of residence, students' daily expenses, and students lived with whom, as well as information regarding the students' parents' education and their relationship, whether understanding and respectful or non-understanding and non-respectful.

Tool (2): Emotional Intelligence Scale: This tool was developed by **Goleman's (2006)** adapted and translated into Arabic by **Hussain & Shaira (2013).** The scale consists of 17 items, each designed to measure different facets of emotional intelligence, including self-awareness, emotional regulation, self-motivation, empathy, and social skills. Respondents were asked to rate each item using a five-point Likert scale ranging from "Nearly all the time" to "Never." The scores are categorized into levels of emotional intelligence: Very Low (50-70), Low (71-85), Moderate (86-115), High (116-130), and Very High (131-150).

Tool 3: The Brief Resilience Scale (BRS): It was developed by **Smith et al. (2008)**. It was translated into Arabic by **Hussein (2021)** to assess nursing students' resilience levels. This scale includes 20 items; participants respond to each item based on a five-point scale: 5 (Strongly agree), 4 (Agree), 3 (Neutral), 2 (Disagree), and 1 (Strongly Disagree). The total possible scores range from 20 to 100, with higher scores indicating greater resilience, with categorized levels defined as very low (20-31), low (32-48), moderate (49-68), high (69-83), and very high (84-100).

The responses reflect the individual's ability to cope with and recover from stress and adversity.

Tool 4: Non-Suicidal Self-Injury Scale: It was developed by **Burke et al. (2017)** and translated into Arabic by **Abdou et al. (2024)**. It comprises 23 questions designed to assess the frequency and severity of non-suicidal self-injury behaviors. Responses to each question are scored on a scale from 1 (Never) to 5 (Always), allowing for a detailed measure of the behavior's severity. The total scoring range is between 23 and 115, with categorized severity levels defined as mild (23-53), moderate (54-84), and severe (85-115). This scale was validated using exploratory and confirmatory factor analysis.

Ethical Considerations

An official approval was obtained from the Research and Ethics Committee of the Faculty of Nursing, Menoufia University. (Approved number is ERCNMA1000/5/1/91/25). Before conducting the study, written consent was obtained from each student who agreed to participate in the study, after providing them with detailed information about the purpose of the study and assuring them of the maintenance of anonymity and confidentiality of their data.

Validity and reliability of the tools:

Validity: Tools validity was ascertained by a jury of five experts in the field of psychiatric nursing and psychiatric medicine who were selected to test the content and face validity of the tools. Necessary modifications were made to reach the final valid version of the tools. The tools were considered valid from the experts' perspective.

Reliability: The tools were tested for reliability by using Cronbach's alpha coefficient. It was (α = 0. 89) for tool (2), the emotional intelligence scale, and it was (α = 0. 85) for tool (3), the brief resilience scale, and it was (α = 0. 92) for tool (4) the non-suicidal self-injury scale. The tools were clear, comprehensive, and applicable.

Pilot Study: A pilot study was conducted on 40 nursing students (10% of the calculated sample size) to determine the questionnaires' practicality and applicability. The participants of the pilot study were not included in the final analysis. The pilot study revealed that the study tools were clear, understood, and applicable. There were some slight changes in wording and sequence of some of the questions for clarity, based on feedback.

Procedure for data collection:

Permission to conduct the study was obtained from the dean of the faculty of nursing, Menoufia university, Menoufia Governorate, Egypt. After obtaining written consent from the nursing students who agreed to participate and fit for inclusion criteria after assuring them of the confidentiality of the information obtained, the researchers administered pre-test questionnaires to identify nursing students who experienced non-suicidal self-injury and met the inclusion criteria for the study.

A brief description of the purpose of the study and the type of questionnaire required to fill out was given to each student. Data collection was done through interviews with the students at the main lecture hall for each grade. The researcher collected the data during the morning at two days/week. Each interview lasted for 20-30 minutes, depending on the response of the students, consisting of 20-30 students per day according to the availability and readiness of the students until the predetermined duration was completed. The process of data collection took a period of four months from January 2025 to April 2025.

Statistical Analysis

Statistical analysis was performed using R v 4.3 (R Core Team, 2020). Counts and percentages were used to summarize categorical variables. The mean ± standard deviation (SD) and the median/interquartile range (IQR) were used to summarize continuous normal and non-normal variables. The Chi-square test was used to assess the association between categorical variables. Pearson's and Spearman's correlations were used to test the association between normal and non-normal variables. In addition, Spearman's correlation was used to test the linear trend in the association between EI categories/NSSI categories and resilience. Cronbach's alpha was used to assess the reliability of the included scales, with values > 0.7 indicating good reliability.

Results:

Table (1) explains the sociodemographic characteristics of the studied students. The mean age of the studied students is 20.33±2.60 age ranges from 18-23. Females represent most of the sample (86.3%), while males constitute a smaller proportion at 13.7%, almost one-third 31% are from the third year. Regarding marital status, the majority are single (90.4%), while married students constitute a minimal proportion (7.93%). Almost three quarter (74%) lives in rural areas

Nearly half of them report that they do not have enough daily expenses (45.2%), while majority of them (86.5%) live with both parents, regarding parents' education nearly one third of their parents (29.6%) and (27.2%), have university or higher education for father and mother

respectively, most of their parents (88.9%) have understanding and respectful relationships.

Figure (1) shows the emotional intelligence level; the results show that approximately half of the studied students have low (n = 152, 36.5%) and very low (n = 108, 26%) emotional intelligence levels. A smaller proportion of students have very high (n = 37, 8.9%) emotional intelligence levels.

Figure (2) shows the nursing students' responses to emotional intelligence scale with a tendency towards answers that favor low and very low emotional intelligence.

Figure (3) represents more than one-third of the studied nursing students 38% have a low level of resilience, and almost one quarter of them 24% have very low resilience scores.

Figure (4) shows the nursing students' responses to the brief resilience scale with a tendency towards answers that favor very low and low resilience.

Figure (5) clarifies that most nursing students fall into the moderate level of non-suicidal self-injury (n = 354, 85.1%). Fewer students only report severe non-suicidal self-injury (n = 7, 1.7%).

Figure (6) shows the nursing students' responses to the non-suicidal self-injury scale with a tendency towards answers that favor moderate non-suicidal self-injury.

Table (2) Regarding the correlation coefficient between socio-demographic characteristics vs emotional intelligence. shows that there is a highly statistically significant positive correlation between students' older age, male gender, students living with family and emotional intelligence, which means that as students' age increases, being male gender, students living with family the student's emotional intelligence levels will increase.

Moreover, there is a statistically significant positive correlation between the mother's education and emotional intelligence, which means that as student's mother education level increases, student's emotional intelligence level will also increase.

Regarding the correlation coefficient between socio-demographic characteristics vs resilience. It shows that there is a highly statistically significant positive correlation between student male gender, higher level of mother education, students' urban residence, students' high daily expenses, and resilience, meaning that being male gender, a higher level of mother education, setting in urban and having high daily expenses, will increase the students' resilience level.

Regarding the coefficient correlation between socio-demographic characteristics vs non-suicidal self-injury. It shows that there is a highly statistically significant negative correlation between student's mothers' education, students' daily expenses and non-suicidal self-injury, which means that as student mothers' education decreases, the non-suicidal self-injury will increase. And as students' daily expenses decrease, the non-suicidal self-injury will increase.

Also, there is a statistically significant negative correlation between students' parents' relationships and non-suicidal self-injury, which means that as students' parents' relationships do not understand and respect non-suicidal self-injury will increase

Table (3) shows that there is a highly statistically significant relation and negative correlation ($r = -0.69$, $p < 0.001$) between emotional intelligence and non-suicidal self-injury.

Additionally, there is a highly statistically significant relation and negative correlation between resilience and non-suicidal self-injury ($r = -0.45$, $p < 0.001$).

Conversely, there is a highly statistically significant relation and positive correlation ($r = 0.41$, $p < 0.001$) observed between emotional intelligence and resilience.

Table 1: Sociodemographic characteristics of the studied students (n=416).

Socio-demographic Characteristics	Frequency (No.)	Percent (%)
Students Age / years ($\bar{X}$ ±SD)	20.33±2.60	
Range	18 – 23	
Gender		
- Female	359	(86.3%)
- Male	57	(13.7%)
Which grade:		
- First Year	91	(21.9%)
- Second Year	84	(20.2%)
- Third Year	129	(31%)
- Fourth Year	112	(26.9%)
Marital status:		
- Married	33	(7.93%)
- Separated	4	(0.96%)
- Single	376	(90.4%)
- Widowed	3	(0.72%)
Place of residence		
- Urban	109	(26%)
- Rural	307	(74%)
Students' daily expenses		
- Enough only	174	(41.8%)
- Enough and saves	55	(13.2%)
- Not enough	187	(45 %)
Students live with whom		
- Both parents	360	(86.5%)
- Relatives	14	(3.5%)
- Friends	42	(10%)
Father's education		
- Illiterate	8	(1.9%)
- Reads and writes	18	(4.3%)
- Primary	90	(21.7%)
- Preparatory	92	(22.1%)
- Secondary	85	(20.4%)
- University or higher	123	(29.6%)
Mother's education		
- Illiterate	13	(3.1%)
- Reads and writes	41	(9.9%)
- Primary	60	(14.4%)
- Preparatory	94	(22.6%)
- Secondary	95	(22.8%)
- University or higher	113	(27.2%)
Relationship between parents		
- Understanding and respectful	370	(88.9%)
- Nonunderstanding and non-respectful	46	(11.1%)

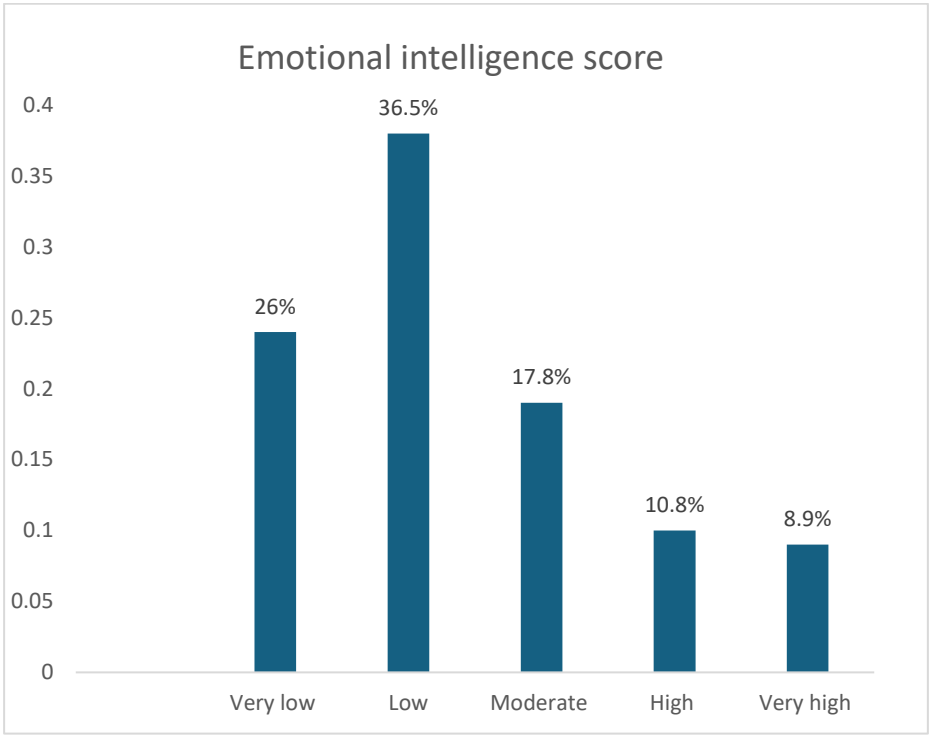

Figure 1: Descriptive statistics for emotional intelligence scores among the studied students (n=416)

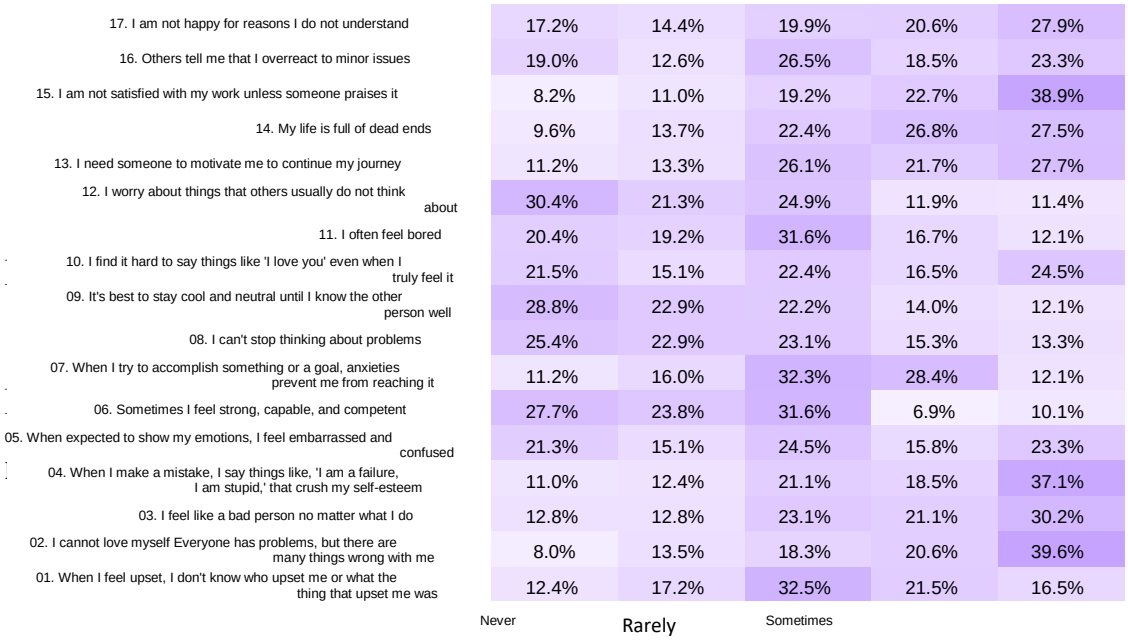

Figure 2. Nursing Students' responses to the emotional intelligence scale items

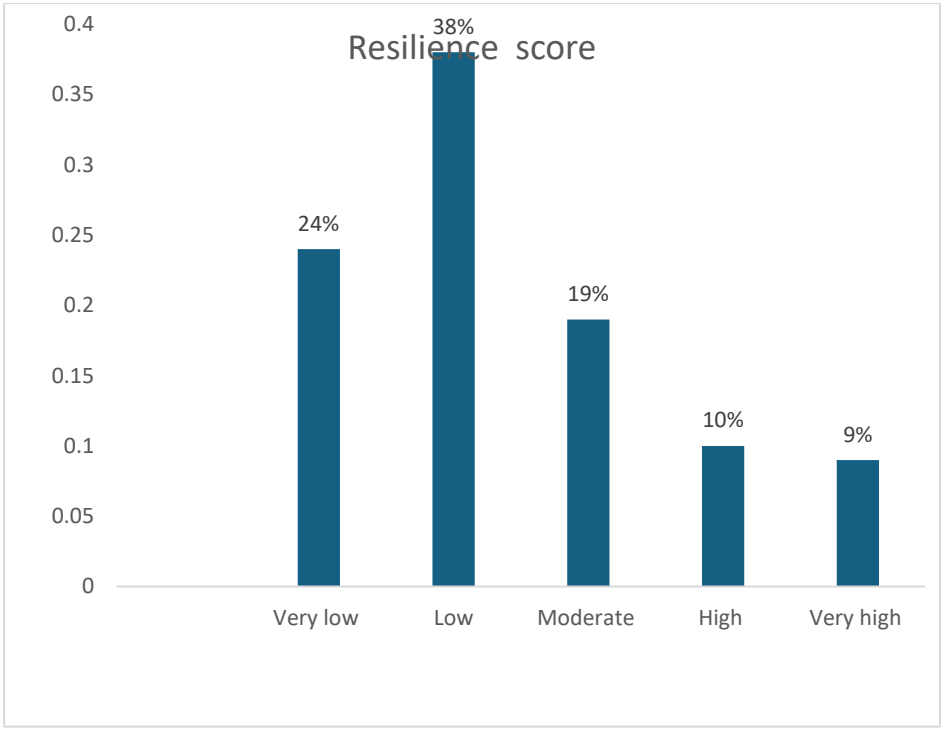

Figure 3: Descriptive statistics for resilience scores among the studied students (n=416)

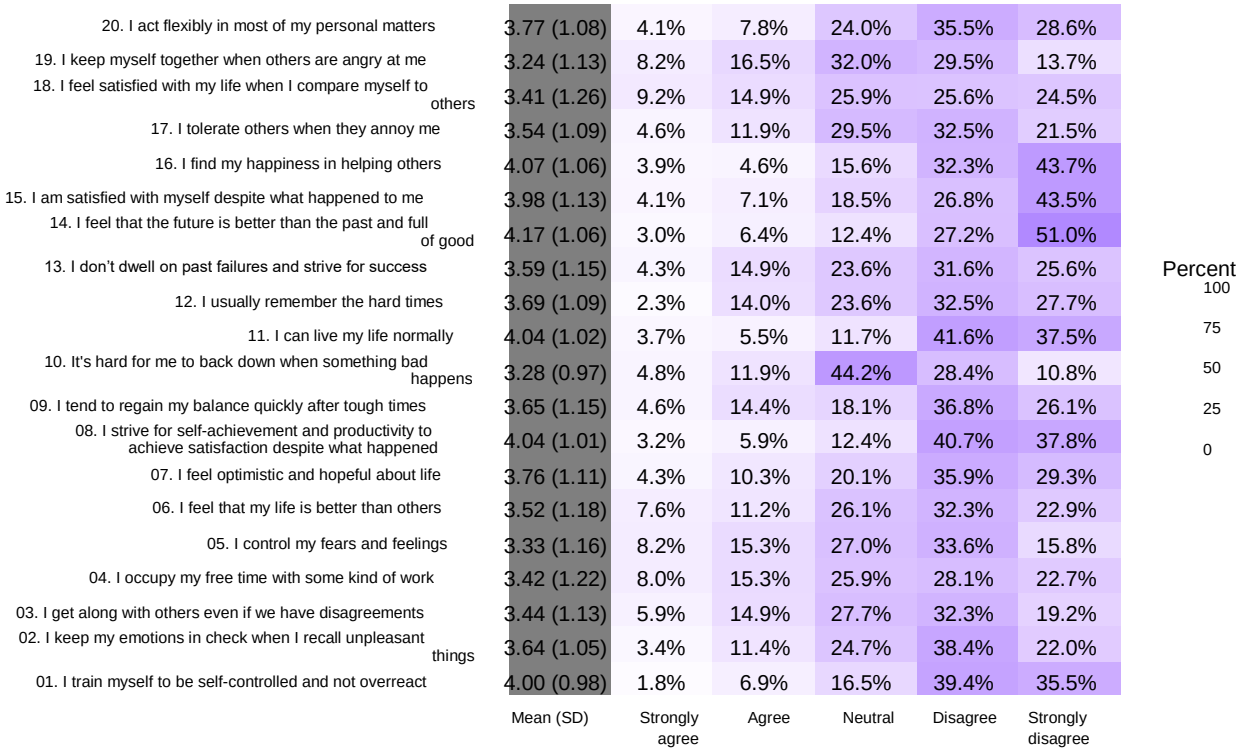

Figure 4. Nursing Students' response to the brief resilience scale items

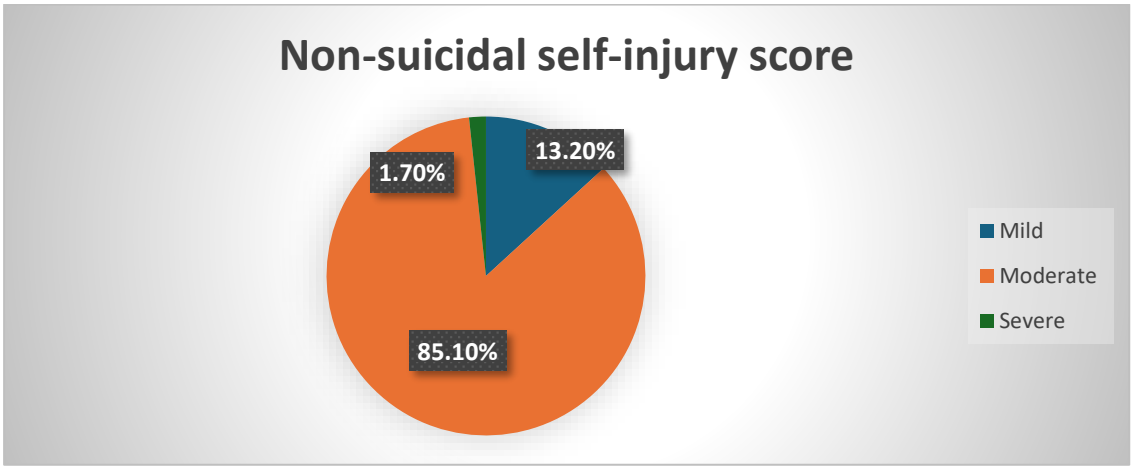

Figure 5: Descriptive statistics for non-suicidal self-injury scores among the studied students (n=416)

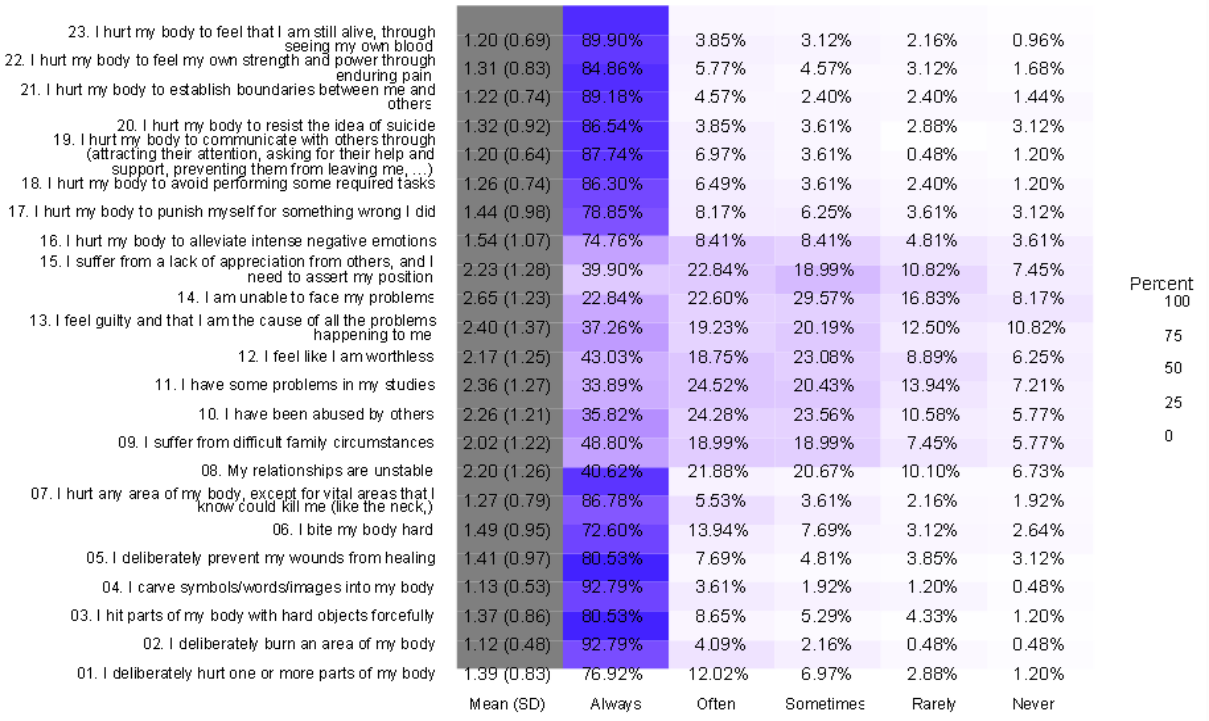

Figure 6. Nursing Students' responses to non-suicidal self-injury scale items

Table 2: Correlation coefficient between socio-demographic characteristics and emotional intelligence, resilience, and non-suicidal self-injury among the studied students (n=416):

Socio-demographic characteristics vs emotional intelligence, Resilience, and non-suicidal self-injury						
Socio-demographic characteristics	**Emotional intelligence**		**Resilience**		**non-suicidal self-injury**	
	R	**P-value**	**R**	**P-value**	**R**	**P-value**
Age	0.637	**0.000****	0.210	0.09	0.052	0.140
Gender	0.502	**0.000****	0.631	**0.003****	0.048	0.192
Which grade	0.128	0.091	0.262	0.214	0.033	0.238
Marital status	0.268	0.089	0.194	0.503	0.293	0.083
Father education	0.203	0.252	0.027	0.082	0.192	0.362
Mother education	0.613	**0.029***	0.445	**0.000****	-0.401	**0.000****
Place of residence	0.301	0.632	0.429	**0.000****	0.213	0.215
Students 'daily expenses	0.061	0.080	0.625	**0.000****	-0.704	**0.000****
Students live with whom	0.648	**0.000****	0.229	0.261	0.412	0.706
Relationship between parents	0.309	0.283	0.094	0.517	-0.883	**0.029***

Table 3: Relation and correlation between emotional intelligence, resilience, and non-suicidal self-injury among studied students n= (416)

Variable	**Non-suicidal self-injury**			
	X2	**P-Value**	**R**	**P-Value**
Emotional intelligence	19.34	**0.001****	- 0.69	**0.001****
Resilience	15.38	**0.001****	- 0.45	**0.001****
Variable	**Emotional intelligence**			
	X2	**P-Value**	**R**	**P-Value**
Resilience	15.79	**0.001****	0.41	**0.001****

Discussion

University students face complicated problems related to academics, social interactions, and personal matters, which can greatly affect their mental well-being and academic success. Emotional intelligence (EI) is essential for students to effectively navigate academic challenges and social situations. EI also promotes resilience, allowing students to deal with challenges successfully. Resilient students exhibit an increased ability to adjust to stress and difficulties. Individuals with higher EI and

greater resilience are less likely to engage in non-suicidal self-injury (NSSI), as they are better equipped to handle negative emotions and stressful situations in adaptive ways **(Wilson, 2022)**.

Concerning socio-demographic characteristics of the studied students:

The current study sample was 416 nursing students, who were characterized by the following: the majority were female, single, with a mean age of 20.33±2.60, ranging from 18 to 23 years old. Nearly half of them reported not enough daily expenses, the majority was living with both parents, and most of their parents had understanding and respectful relationships **(Table 1).** This might be due to nursing being a female-dominated profession with a hard study load that requires effort, time, and money. A respectful relationship between parents was also common because of majority of sample living in rural areas that foster respect and understanding due to the interconnectedness of the joint family system, which provides a supportive social network.

Regarding scores of emotional intelligences among nursing students, the present study revealed that more than half of the studied students had low and very low emotional intelligence scores **(Figure 1&2).** This might be because many students may exhibit insufficient social skills training, and the influence of societal emphasis on academic achievement over emotional development. The finding that a large percentage of nursing students displayed low or very low EI is supported by previous Egyptian studies reporting similar results, **Hussien et al. (2020), Shaarawy Abdelshafy et al. (2024)**. However, it differs from other findings from Saudi Arabia, Iran, and international frameworks, where most nursing students showed moderate to high EI **Almansour (2023); Aghabarary et al. (2025); Dogham et al. (2025); Sutil-Rodríguez et al. (2024)**.

Concerning the score of resilience among nursing students, the current study showed that more than one-third of the nursing students had low scores of resilience, and almost one quarter of them had very low resilience scores **(Figure 3&4)**. This could be due to facing high levels of academic burnout, social, financial, family, and academic stressors, which can negatively impact their resilience. The result of the current study was in the same line with **Chen et al. (2024) Ozer & Altun (2024)** who reported low-to-moderate resilience in most students. Meanwhile, these results contradicted two studies of **Mayor-Silva et al. (2024) and Koshy et al. (2024)** which showed that resilience increases over time, with significant gains over 4 years with a high resilience score.

Concerning levels of non-suicidal self-injury among nursing students. The current study clarified that most students fall into the moderate level of non-suicidal self-injury. Fewer students only report severe non-suicidal self-injury **(Figure 5&6)**. This might be due to many students engage in self-harm as a way to cope with overwhelming pressure, such as academic stress, bullying, or social isolation. Self-harm is often not about wanting to die, but rather a way to express or release intense emotional pain. This finding aligns with population-based studies reporting similar prevalence ranges in multi-country **Bandeira et al. (2022)** Chinese university students **Qin et al. (2024)** and adolescent meta-analyses **Farkas et al. (2024).** However, it contrasts with higher rates reported among medical students **Lin et al. (2025)** and certain youth populations such as Singaporean adolescents **Chang et al. (2025).**

Regarding the correlation between the socio-demographic characteristics vs. emotional intelligence, it was shown that there was a highly statistically significant positive correlation between students' older age, male gender, students living with family and emotional intelligence.

Moreover, there was a statistically significant positive correlation between high level of mother's education and emotional intelligence **(Table 2)**.

Concerning students' age, there was a highly statistically significant positive correlation between students' age and emotional intelligence, which means as students age increases, emotional intelligence level will also increase **(Table 2)**. This might be because older adults had more opportunities to develop and enhance their emotional intelligence through several life situations. This result was supported by **Budler et al. (2022)** reported that there was a correlation exists between the students' age and their level of EI. On the contrary, the study conducted by **Gebregergis et al. (2025)** showed that no significant associations were found between EI and demographic variables such as age.

Concerning students' gender, there was a highly statistically significant positive correlation between male gender and emotional intelligence **(Table 2)**. This might be due to males have higher scores than females on measures of emotional intelligence, particularly in areas like emotional awareness, self-regulation, and interpersonal relationships. This result, supported by **Belay & Kassie (2021)** showed that there was a statistically significant disparity in the average EI levels between male and female nursing students, in which male students had greater EI levels than their female counterparts. While this study contradicted with **Halimi et al. (2021)** stated that there was no significant difference between males and females regarding their emotional intelligence level.

Concerning mother's education and emotional intelligence, there was a statistically significant positive correlation between mother's education and emotional intelligence. This suggests that if a student's mother's education level goes up, their emotional intelligence level will also go up **(Table 2)**. This is probably because there is a relation between a mother's education level and her capacity to create a supportive and stimulating environment for her children's emotional intelligence. A highly educated mother is better able to model good emotional control, make the home a safe place to be, and do fun things with her kids that help them build their EI. Similar findings were reported by **Almegewly (2022)** revealed that nursing students with high levels of EI usually had parents with high educational levels. In contrast to this study, **Ibrahim et al. (2024)** reported that there was no significant association between parental education and adolescents' emotional intelligence.

Regarding students' lives with whom and emotional intelligence, there was a highly statistically significant positive correlation between students' lives with family and emotional intelligence **(Table 2)**. This could be due to the quality of relationships and the environment in which a student lives and learns significantly shape their emotional intelligence. Positive and supportive relationships at home and in college foster emotional growth and well-being; a strong family support system can provide a buffer against stress and anxiety, which are linked to emotional intelligence. The result of the current study was in line with **Zhao et al. (2024)** who showed that where students live is an important influence on their emotional intelligence with a good level if they lived with family. But this outcome was contradicted with **Pandey (2025)** showed, that there was no significant relation between a student living in a hostel (day scholar) and a student living at home in terms of their emotional intelligence·

Regarding the correlation between socio-demographic characteristics vs resilience. There was a highly statistically significant positive correlation between being a male student and being resilient. There was also a highly statistically significant positive correlation between being a student who lives in urban area, having high daily expenses, and having a mother with a high level of education, and being resilient **(Table 2)**. This suggests that

if kids' daily expenses and their mother's education go up, their resilience level will also go up.

Regarding gender and resilience, the current study showed that male students were more resilient than female students when it comes to their gender and resilience. This could be because of several things, such as what people in the community expect and how men and women deal with problems in different ways. What people in the community expect about gender differences between men and women can affect how people deal with problems and challenges, which could make them less resilient. This result was supported by **Latif & Amirullah (2024)** who said that there was a big difference between how resilient boys and girls were. Boys had higher resilience ratings than girls. This result doesn't match up with **Al Omari et al. (2023)** who said that there was no big difference in resilience between men and women. Moreover, **Vera Gil (2024)** said that women are more resilient in some situations because they use different coping mechanisms or have distinct social support systems than men.

Regarding students' residence and resilience, there was a highly statistically significant positive correlation between students' urban residence and how resilient they were **(Table 2).** This means that where pupils reside, which can affect how well they can get over problems. This could be because urban students have better access to all social, academic, financial resources and support. **Qi & Yang (2024)** were in line with the current study, who found that urban and rural adolescents had very different levels of resilience with high level was for urban one. But the result of this study contradicts with **Amoadu et al. (2025)** who said that there was no statistically significant difference between rural and urban students in terms of their resilience.

Regarding students' daily expenses and resilience, there was a highly statistically significant positive correlation between students' high daily expenses and their resilience. This means that when students' daily expenses go up, their resilience levels will also go up **(Table 2)**. This could be because of financial stress, which can happen when students have to deal with basic needs, can make them more anxious and mentally ill, and hurt the students' academic performance, overall health, and resilience. The current study agreed with **de Andrade et al. (2024)** who said that having a lower family income and getting help from the government were both strongly linked to lower resilience ratings. But **Alkaissi et al. (2023)** showed that household income (daily allowance or spending habits) was not significantly linked to adolescents' resilience.

Regarding students' mothers' education and resilience, there was a highly statistically significant positive correlation between students' resilience and their mothers' higher educational level. This means that when the mother's education level rises, the student's resilience level will also rise **(Table 2).** This could be because parents with more education are more likely to spend time and money on helping their adolescents improve their social and communication skills, as well as their overall health, which makes them better able to handle stress and bounce back from it. **Arshad et al. (2020)** found that mothers who had gone to college had more resilient children, which supports the current study. This means that a mother's education level is linked to children's resilience in a good way.

Regarding the correlation between socio-demographic characteristics vs non-suicidal self-injury.

Concerning students' daily expenses and non-suicidal self-injury, there was a highly statistically significant negative correlation between students' not enough daily expenses and non-suicidal self-injury, which means that as students' daily expense decreases, the non-suicidal self-injury will increase **(Table 2)**. This might be due to financial stress being able to a major risk factor for non-suicidal self-injury (NSSI) among students because lack

of financial resources can limit access to mental health support, increase pressures, and potentially increase the risk of self-harm.

This result was like **Liao et al. (2024)** reported that family economic hardship and relative deprivation had a significant and detrimental impact on the likelihood of engaging in NSSI. But the current study disagreed with **Meng et al. (2022)** showed that family income was not significantly correlated with the frequency of NSSI. It highlights that family support, peer connection, and emotional coping skills are stronger predictors than economic factors for adolescents engaging in NSSI.

Regarding students' mothers' education and non-suicidal self-injury, there was a highly statistically significant negative correlation between students' mothers' education and non-suicidal self-injury, which means that as students' mothers' education decreases, the non-suicidal self-injury will increase and vice versa **(Table 2)**. This might be due to parents with lower education levels tending to adopt negative parenting styles such as harsh punishment and denial, which make it difficult to provide rational and effective guidance for adolescents' confusion and problems during adolescence which lead to a higher risk of NSSI, unlike higher parental education level can be a protective factor against NSSI.

The current study was in line with **Cheng et al. (2022)** reported that the prevalence of NSSI among students tended to decrease gradually as parents' education level increased. But was inconsistent with **Wang et al. (2025)** reported that reduced levels of education (i.e., primary school and lower) were notably associated with a decreased occurrence of NSSI in children. With an increase in parental education to high school or university, there was a notable connection to a greater occurrence of NSSI.

Concerning students' parents' relationship and non-suicidal self-injury, there was a statistically significant negative correlation between students' parents' relationship and non-suicidal self-injury, which means that as the students' parents' relationship is not understanding and not respect the non-suicidal self-injury behavior will increase **(Table 2)**. This might be due to family constitutes the primary social group for many individuals. Within the household, members feel secure and relaxed. Indeed, a fundamental role of the family is its psychological function, which enhances the mental well-being of its members and lowers the likelihood of engaging in high-risk behaviors such as NSSI. The absence of nurturing parent-child bonds and family conflict heightened the chances of adolescents encountering NSSI **(Nemati et al. 2020).**

The present study was supported by **Zhao & Sun (2025)** clarified that parent relationship significantly influences NSSI, indicating that individuals with a harmonious, healthy relationship with their parents have lower scores of NSSI compared to those who have non-respectful relationships. In addition, this result was consistent with **Fong et al. (2022)** who reported that not understanding relationship within the family setting found a significant risk factor for NSSI. But this result was contradicted with **Lui et al. (2021)** suggested no direct causal link between harsh parenting and NSSI.

Regarding emotional intelligence and non-suicidal, the current study clarified that there were a highly statistically significant relation and negative correlation between emotional intelligence and non-suicidal self-injury indicate that higher emotional intelligence significantly correlates with lower level of non-suicidal self-injury behaviors, and that emotional intelligence could be a key factor in mitigating harmful behaviors **(Table 3)**. This could be because people with higher emotional intelligence are less likely to hurt themselves. Emotional intelligence gives people the tools they need to recognize, deal with, and express their feelings in healthy ways. This may make them less likely to hurt themselves as a means to cope. It also helps people develop empathy, which helps them deal with

stress better and may lower the risk of self-harm.

The result of the current study was in the same line with **Halicka-Maslowska et al. (2021)** who found that people with greater levels of emotional intelligence were less likely to be depressed, anxious, or impulsive. This means that emotional intelligence may help defend against bad feelings and acting on impulse, which could lower the risk of self-harm. This is why there was a strong negative relation between EI and NSSI. Also, **Waris and Quratulain (2023)** showed a strong negative relation between trait EI and NSSI. People with lower trait EI ratings were more likely to do NSSI activities.

Regarding resilience and non-suicidal self-injury, there was a highly statistically significant relation and negative correlation between resilience and non-suicidal self-injury, which means that those who are more resilient are less likely to hurt themselves without wanting to die **(Table 3).** This might be because students with less resilience may have a harder time dealing with stress and negative emotions, which could cause them to use NSSI to deal with these tough situations. **Liu et al. (2025)** supported this study by saying that Pearson's correlation analysis showed that NSSI activities were strongly linked to lower resilience. **Weedage et al. (2025)** also found a strong, negative relation between resilience and NSSI, which means that students who are more resilient are less likely to engage in NSSI.

Regarding emotional intelligence and resilience, there was a highly statistically significant relation and positive correlation between emotional intelligence and resilience. It suggests that a higher emotional intelligence was associated with greater resilience **(Table 3)**. This could be due to students with strong emotional intelligence being able to handle stress and adversity more effectively; recover from difficulties more easily, because of emotional intelligence equips individuals with the skills to cope with challenging situations, find new approaches to overcome obstacles, all of which are essential for high resilience.

The current study aligned with **Peng et al. (2025)** who showed that mental resilience plays a positive role in inducing emotional intelligence and recommends that individuals with higher mental resilience also hold higher emotional intelligence. Moreover, **Siddiqi et al. (2025)** revealed that there were significant positive correlations between emotional intelligence and resilience and explored that participants with higher emotional intelligence scores reported stronger peer support, better conflict resolution skills, and more effective communication. These abilities promoted a supportive academic atmosphere that improved their resilience. But this result was opposite to **Nguyen et al. (2023)** who reported no significant correlation between emotional intelligence and resilience among university students.

Available evidence highlights that university students often report experiencing periods of time that are characterized by high levels of perceived stress. The continued experience of stress has been shown to contribute to a variety of negative outcomes that interfere with optimal academic performance. Emotional intelligence and the use of reappraisal contribute to reductions in perceived stress through their influence on resilience. Enhancing emotional intelligence (EI) can be a crucial strategy in reducing non-suicidal self-injury (NSSI) behaviors because it acts as a protective factor against self-harm by assisting people in managing their emotions and creating more effective coping strategies

Conclusion:

The study concluded that the studied nursing students have low and very low emotional intelligence, low level of resilience and moderate level of non-suicidal self-injury

there were a highly statistically significant relation and negative correlations between non-suicidal self-injury and both emotional intelligence and resilience. Moreover, there was a highly

statistically significant relation and positive correlation between resilience and emotional intelligence.

This study values the significant roles that EI and resilience play in mitigating non-suicidal self-injury among nursing students.

Findings suggested that higher levels of emotional intelligence and resilience are associated with reduced frequency and severity of NSSI behaviors. These relationships highlight the potential for targeted interventions that enhance EI and resilience as preventative measures against NSSI. Developing programs that improve emotional regulation, overcome stress, enhance coping mechanisms and foster emotional awareness could be crucial in reducing the prevalence and impact of these harmful behaviors.

Recommendations:

- Explore the effectiveness of developed intervention models that enhance emotional intelligence, resilience and reduce NSSI.
- Provide specialized training for nursing students focusing on the psychological consequences of stress and evidence-based coping strategies.
- Establish support systems and resources for nursing students facing psychosocial stress and provide accessible information about these resources.
- Offer recreational facilities for nursing students to help them relieve tension and develop healthy coping mechanisms.
- Implement stress management and assertiveness training programs for nursing students using maladaptive coping strategies.
- Implement proactive screening programs to identify nursing students at risk and provide timely support.

Limitations of the study: Purposive sampling focuses on selecting nursing students with specific characteristics (e.g., experiencing NSSI), which may not reflect the broader population of all nursing students.

Conflict of interest: The authors declare that the study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest. No conflict of interest needs to be disclosed

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