

## Assertiveness and Self-esteem of Final Year Nursing Students: Effect of Psycho-Educational Nursing Intervention

Fatma Mohammed Ibrahim Morsi \*, Hanaa Ezz-Eldin Prince\*

\*Lecturer of Psychiatric Nursing, Faculty of Nursing - Ain Shams University

### Abstract

**Background:** Nursing students- as the future professionals- who can behave assertively develop self-worth, self-respect, and high self-esteem while communicating professionally and practicing competently. **Aim:** This study aimed to assess the assertiveness among final year nursing students; assess the self-esteem among final year nursing students; and to assess the effect of psycho-educational nursing intervention implementation on assertiveness and self-esteem of final year nursing students. **Design:** A quasi-experimental study design on one group pre/post assessment was utilized on 45 final year nursing students who were enrolled in psychiatric/Mental Health Nursing Department, Faculty of Nursing- Ain Shams University. **Tools of data collection:** The data was collected using an interview questionnaire that included three sections as the following: 1) student's demographic characteristics; 2) Rathus Assertiveness Schedule (RAS); and 3) Rosenberg self-esteem scale. **Results:** the current study revealed that: there were improvement in the studied nursing students` levels of assertiveness and self-esteem post- psycho-educational nursing intervention implementation; there were highly statistically significant differences between assertiveness levels; and self-esteem levels of the studied nursing students pre- and post-psycho-educational nursing intervention implementation; as well, there was a highly statistically significant direct correlation between levels self-esteem and assertiveness of the studied students post psycho-educational nursing intervention implementation. **Conclusion:** The study concluded that, the psycho-educational nursing intervention implementation had positive effect on assertiveness and self-esteem of final year nursing students. **Recommendation:** incorporating assertiveness training as an eligible training course of the undergraduate nursing program

**Key words:** Assertiveness – Nursing Student - Self-Esteem - Psycho-Educational Nursing Intervention

### Introduction

As known, adolescence is a period of internal turmoil and inner revolution. It is an influential and critical period for developing and maintaining social and emotional habits important for mental well-being which impact the individual entire life. These include developing an

identity, becoming a responsible community member, and selecting a career. During this period, the adolescent acquires coping, problem-solving, and interpersonal skills; and learns to manage emotions to develop a healthy self-esteem (Bos, Huijding, Muris, Vogel, & Biesheuvel, 2010; Hamoud, Dayem, & Ossman, 2011; and Heizomi,

**Allahverdipour, Jafarabadi, & Safaian, 2015).**

Assertiveness is an interpersonal skill and relational style that establishes boundaries while enabling individuals in the relationships to express their needs clearly, directly and in non-aggressive way. Assertive behavior is seen when a person communicates thoughts, emotions, and rights in a way that does not diminish but understands and respects others' thoughts, feelings, and rights, to maintain healthy relationships, resolve interpersonal conflict, and prevent one's needs from being stifled or repressed (**Warland, McKellar, & Diaz, 2014; and Yurtsal, and Özdemir, 2015).**

University education is of crucial importance to develop individuals of high level of self-esteem and assertiveness. One of the primary goals of education is to train individuals to make them flexible, adaptable and with critical thinking abilities. In other words, it means ensuring that youth are individuals who are more successful, productive, and valuable in society (**Karagözoğlu, Kahve, Koç, & Adamişoğlu, 2008; and Sitota, 2018).**

Accordingly, nursing education aims to develop highly self-worth, self-respect, and self-confident nursing professionals who are able to behave assertively. Studies revealed that people who are more assertive have higher self-worth and self-esteem (**Mahmoud, Al Kalalkeh, & El-Rahman, 2013).**

While assertiveness is necessary for effective professional communication, some nursing student lack of confidence, while others lack basic communication skills during their studying. Barriers that prevent nurses to be assertive including lack of knowledge about personal/professional rights, concern

about what others will think about their behavior, fear of other people's hostility, anxiety due to lack of confidence, and poor self-esteem and poor self-expression (**Kashani & Bayat, 2010; and Ibrahim, 2011).**

Self-esteem contributes to shaping the attitudes and behavior. It has a huge impact on behavior and psychological reactions involving relationships with others, the communication quality, competition or rivalry, compliance, or submission (**Dimitriadou–Panteka, Koukourikos, & Pizirtidou, 2014).**

Self-esteem is composed of both an appraisal of self-worth based on personal achievements and anticipation of others' evaluation. Low self-esteem is another factor affecting nursing functioning and this is mostly due to role conflict. People with low self-esteem tend to have less adaptable interpersonal relationships. In contrast, people with high self-esteem become competent and have positive self-image, leading to self-confidence and active interpersonal relationships (**Eom & Choi, 2010; Kashani & Bayat, 2010; and Mahmoud, et al., 2013).**

Assertiveness training program is a structural intervention aims to help individuals change their self-image, directly express their feelings, thoughts and ideas appropriately and consequently enhance their self-esteem and communication skills (**Eslami, Rabiei, Afzali, Hamidzadeh, & Masoudi, 2016).**

This training program can be used for people of all ages and from different interests. Assertiveness training was found to be effective in improving the social coping skills of general populations of adolescents (**Çeçen-Eroğul, & Zengel, 2009; and Parray, & Kumar, 2017).** It is used in social relationship programs

and treatment for different disorders as anxiety disorders and depression in children and adults. This multifaceted program includes guidance, role-playing, feedback, modeling, practicing, and reviewing of the received behaviors (Mehrabani Zade, Taghavi, & Attari, 2009; and Mahmoud, et al., 2013).

### **Significance of the study:**

University students who have low self-esteem exhibit negative professional attitudes and behaviors after graduation. Neglecting one's personal rights and being uncertain in different interactions, causes physical and mental diseases in individuals and damages social relations (Sibiya, 2018; and İlhan, Sukut, Akhan, & Batmaz, 2016).

Self-esteem and assertiveness are important behaviors for today's competent nurse, as nurses step away from conventional subservient roles and perceived stereotypes, it is necessary for nursing students, who will care for individuals, families, and community in the fields of health and education in the future, to behave in an assertive manner and use their professional knowledge and skills more competently.

In this context, enhancing self-esteem and teaching assertiveness techniques to undergraduate nurses will enable them to solve their problems, categorize their priorities; make better use of support systems; lessen medical errors; and make positive patient outcomes when they graduate.

### **Aim of the study:**

The aim of this study was to:

1. Assess the assertiveness among final year nursing students.

2. Assess the self-esteem among final year nursing students.

3. Assess the effect of psycho-educational nursing intervention implementation on assertiveness and self-esteem of final year nursing students.

### **Research hypothesis:**

Psycho-educational nursing intervention implementation has positive effect on assertiveness and self-esteem of final year nursing students.

### **Subject and Methods**

#### **Research design:**

A quasi-experimental study design on one group pre/post assessment was utilized to achieve the aim of the study.

#### **Study setting**

The study was carried out at Faculty of Nursing Ain Shams University.

#### **Subjects:**

Simple randomization sampling technique was used. The subjects for the study were 45 fourth year nursing students who were enrolled in Psychiatric/Mental Health Nursing Department in second semester of academic year 2018/2019. The students were divided randomly in 5 subgroups "9 students in each subgroup".

#### **Tools of data collection**

The data was collected through the following tools:

I) An interview questionnaire sheet that included Student's demographic characteristics including

gender, marital status, age, residence, and living condition.

### II) Rathus Assertiveness

**Schedule (RAS):** it was developed by **Rathus (1973)**, which is the most frequently used scale for measuring assertiveness and the effects of assertiveness training (**Omura, Levett-Jones, & Stone, 2019; and Nakamura, Yoshinaga, Tanoue, Kato, Nakamura, Aoishi, & Shiraishi, 2017**). The RAS consists of 30 items (including 16 inverted items) with a 7-point Likert scale as follow: +3 extremely descriptive; +2 quite descriptive; +1 slightly descriptive; -1 slightly no descriptive; -2 quite no descriptive; and -3 extremely no descriptive. The scores obtained ranged from -90 to +90. Those who receive below a total of +10 points from the tool are considered non-assertive and those with a score above +10 points are considered assertive (**Parray, & Kumar, 2017**).

#### Scoring:

RAS	Nonassertive	Assertive
	-90 : +10	+10.1 : +90

In the current study, the test's Internal consistency (Cronbach alpha was 0.88) and Pearson reliability coefficient was found to be  $r = 0.86$ .

### III) Rosenberg Self

**Esteem Scale:** it was developed by **Rosenberg (1965)**, it is a standardized resource widely known and applied in clinical and research practice (**García, Olmos, Matheu, & Carreño, 2019**). It is a short structured, self-report 10 items Likert scale. It was used to measure self-esteem and self-worth of the nursing students. Items are answered on a 4-point scale from strongly agree, agree, disagree, and strongly disagree. Items 2, 5, 6, 8, and 9 are negative items and 1, 3, 4, 7 and 10 are positive items. Scores range from 0

to 30. The higher the score indicates the high self-esteem (**Vaupot, & Železnik, 2018**).

#### Scoring:

Self-esteem	Low	High
	0:18	18.1 - 30

In the present study, the test's Internal consistency (Cronbach alpha was 0.87) and Pearson reliability coefficient was found to be  $r = 0.89$ .

#### Operational Design

The operational design for this study included preparatory phase, pilot study, fieldwork, and ethical considerations.

#### Preparatory phase:

It included reviewing past, current, local and international related literature and theoretical knowledge of various aspects of assertiveness, self-esteem, factors affecting nursing students' assertive level and self-esteem, and the role of psychiatric/mental health nurse by using books, articles, periodicals and other available resources through the Internet search.

The researchers prepared and designed tools of data collection. Then the standardized tools were translated into Arabic language and back translated into English language by language experts, and any discrepancies found between the back translation and the original tools were taken as an indication of translation error.

#### Tool validity and reliability:

It was ascertained by a group of three experts from Psychiatric/Mental Health Nursing, their opinions were

elicited as regards to the tool format layout, consistency, knowledge accuracy, relevance, and competencies as well the scoring system. Internal consistency (Cronbach alpha) and Pearson correlation coefficient (r) were tested for each tool.

#### **Pilot study:**

The pilot study was carried out during the first and second weeks of October 2018. It was conducted on a ratio of 10 % of the study sample size “5 fourth year nursing students” who were later excluded from the study sample and substituted with other 5 students, to evaluate the feasibility, applicability, and clarity of the research tools and to estimate the time needed for data collection. The tool was finally printed based on the results of the pilot.

#### **Field work:**

The study consumed 7 months starting from the beginning of October 2018 (pilot study) to the first week of May 2019 (posttest).

At the beginning, during the period from the final week of October to the half of November 2018, the researchers assessed the needs (pre-test) of 45 fourth year nursing students who were selected using simple randomization technique.

The researchers obtained approval from the students after explaining the aim, purpose and nature of the study and ensure confidentiality of data. Then the questionnaire forms were distributed to students and they were asked to complete it by selecting only one response that most suitable for them. The questionnaire took about (25-30) minutes. The researchers asked the students about any difficulties that faced them during answering the questionnaires, offered help, and informed them that they will receive the psychoeducational nursing intervention in the second semester.

Based on the assessment findings the psycho-educational nursing intervention was developed by the researchers during the period from the beginning of December 2018 to the half of January 2019. Psycho-educational nursing intervention then was revised by two Psychiatric/Mental Health Nursing assistant professors, before its implementation to the nursing students to assure the student's safety, during the period from the half of January to the half of February 2019.

The Psycho-educational nursing intervention program was implemented on fourteen sessions, i.e., one or two sessions per week for each subgroup. The researchers coordinated the meeting time with each subgroup according to their free and available time each week. Each session took about 60-90 minutes.

1 <sup>st</sup> week	• <b>Session one &amp; two:</b> Concept of assertiveness and communication.
2 <sup>nd</sup> week	• <b>Session three &amp; four:</b> Typical unassertive thinking and our assertive rights.
3 <sup>rd</sup> week	• <b>Session Five:</b> Say “No” and Make request assertively.
4 <sup>th</sup> week	• <b>Session six and seven:</b> “Constructive criticism” respond and give criticism assertively
5 <sup>th</sup> week	• <b>Session eight:</b> Dealing with non-assertiveness physical tension.
6 <sup>th</sup> week	• <b>Session nine:</b> Give and accept compliments.
	• <b>Session ten:</b> Make apology assertively.
7 <sup>th</sup> week	• <b>Session eleven:</b> “be prepared” dealing with professional communication.
8 <sup>th</sup> week	• <b>Session twelve:</b> concept and importance of self-esteem.
9 <sup>th</sup> week	• <b>Session thirteen:</b> Obstacles and levels of self-esteem.
	• <b>Session fourteen:</b> Building positive self-esteem.
10 <sup>th</sup> week	• <b>Post test</b>

At the beginning of the first session, the researchers explained the rules of group honesty and confidentiality, duration of program, place of meeting, number, and length of each session. At the beginning of each session the researchers reviewed the previous session homework and providing feedback to the students. The researchers used different teaching methods and media such as lectures discussions, brain storming discussion, role play, behavior rehearsal, modeling, scenarios, real life situations, and colored handouts. In addition, homework assignment, worksheets and exercises were used through sessions such as: positive self-talk journal, self-critical thought challenging record, practicing asking for help, self-esteem checkup, I-feel practice, and how to handle criticism.

The implementation of the Psycho-educational nursing intervention program consumed about 10 weeks from the beginning of the third week of February to the end of April 2019. Posttest was done at the beginning of May 2019

### Administrative Design

An official approval for conducting the study was obtained from Head of Psychiatric/Mental Health

Nursing Departments at Faculty of Nursing, Ain Shams University

### Ethical considerations

At the initial interview, each student was informed about the aim and nature of the study, and the researchers emphasized that participation would be voluntary; hence each student had the right to participate or refuse to be included in the work, and they were informed about the right to withdraw at any time without giving any reasons, and without any consequences. The consent for participation was taken orally. In addition, the confidentiality of any gathered data was assured, explained, and printed in the questionnaire as follows: "collected information will be used only for the purpose of the study without referring to the personnel's participation through anonymity of the subjects that will be assured by the coding of all data".

### Statistical Design

The statistical analysis of data was done by using computer software for excel program and statistical package for social science SPSS version 20.0. Data were presented using descriptive statistics in the form of frequencies and percentages for categorical data. Continuous variables were summarized as means and standard deviations (SD), and

paired sample t. test was used to identify the significance in group before and after psycho-educational nursing intervention implementation, significant level value was set at  $\leq 0.05$ .

## Results

**Table (1)** reveals that (73.3%) of nursing students were female, (95.6%) of them were more than 20 years old and their mean age was  $20.1 \pm 1.8$ , and (95.6%) of them were single. Regarding the residence, (66.7%) of them lived in rural areas, and (71.1%) of them lived with their families.

**Figure (1):** reveals that there was an improvement in the studied nursing students' assertiveness levels post-psycho-educational nursing intervention implementation, as (77.9%) of them reported high level of assertive behaviors post-psycho-educational nursing intervention implementation, whereas (34.7%) of them reported high level of assertive behaviors pre-psycho-educational nursing intervention implementation.

**Figure (2):** illustrates that, there was an improvement in the studied nursing students' levels of self-esteem post-psycho-educational nursing intervention implementation, as (83.2%) of them reported high level of self-esteem post-psycho-educational nursing

intervention implementation, noted that (58.9%) of them reported high self-esteem level pre-psycho-educational nursing intervention implementation.

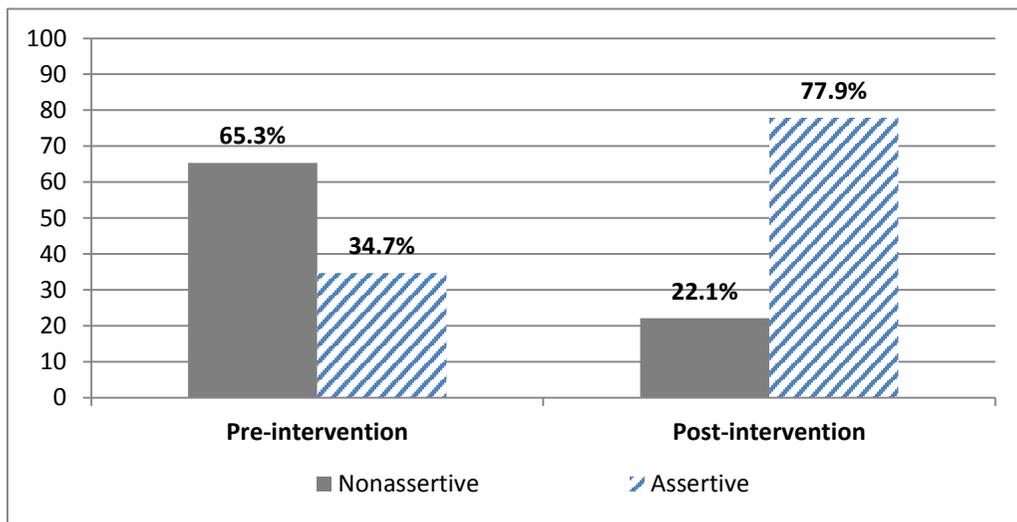
**Table (2)** shows that there was a highly statistically significant difference between assertiveness levels of the studied nursing students pre- and post-psycho-educational nursing intervention implementation as they exhibited a statistically significant rise compared to their scores at the beginning of the psycho-educational nursing intervention implementation in which  $t$  test= 51.22 at  $p= 0.00$ .

**Table (3):** reveals that, there was a highly statistically significant difference between self-esteem levels pre- and post-psycho-educational nursing intervention implementation as the studied nursing students exhibited a statistically significant rise compared to their scores at the beginning of the psycho-educational nursing intervention implementation in which  $t$  test= .773 at  $p= 0.00$ .

**Table (4):** shows that, there was a highly statistically significant direct correlation between assertiveness and self-esteem of the studied nursing students post psycho-educational nursing intervention implementation in which  $r$  test= .629 at  $p= 0.001$ .

**Table 1: Distribution of the studied final year nursing students according to their demographic characteristics (n=45).**

Parameter	n (%)	
Gender		
▪ Male	12	(26.7)
▪ Female	33	(73.3)
Age		
▪ Less than 20	2	(4.4)
▪ More than 20	43	(95.6)
Mean $\pm$ SD	20.1 $\pm$ 1.8	
Marital status		
▪ Single	43	(95.6)
▪ Married	2	(4.4)
Residence		
▪ urban	15	(33.3)
▪ rural	30	(66.7)
Living condition		
▪ With family	32	(71.1)
▪ With other colleagues	13	(28.9)



**Figure (1): Frequency Distribution of the studied final year nursing students according to their levels of assertiveness pre- and post- psycho-educational nursing intervention implementation (n=45).**

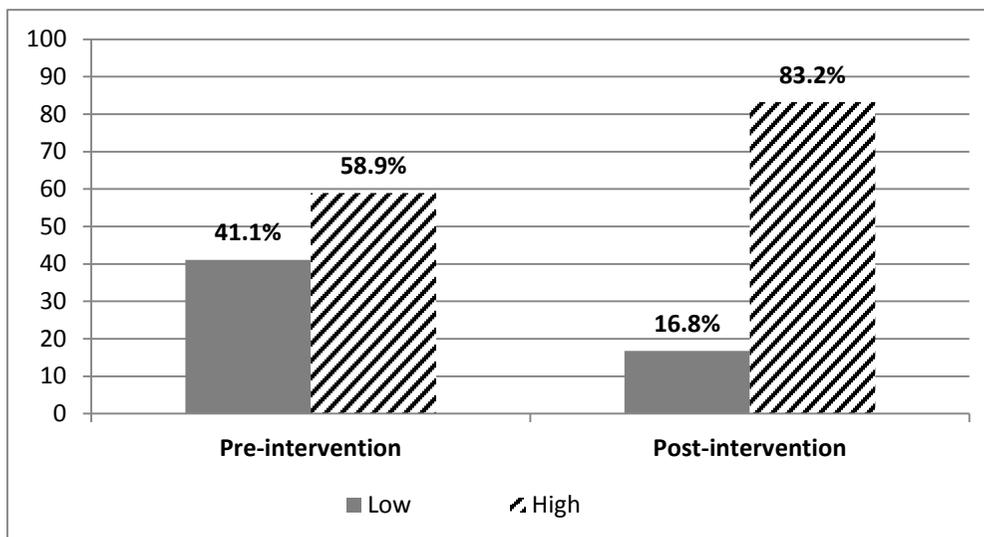


Figure (2): Frequency Distribution of the studied final year nursing students according to their levels of self-esteem pre- and post- psycho-educational nursing intervention implementation (n=45).

Table 2: Comparison between assertiveness pre- and post- psycho-educational nursing intervention implementation among the studied final year nursing students (n=45).

	Pre-intervention Mean±SD	Post-intervention Mean±SD	t test	P value
Assertiveness	10.5±13.5	29.9±15.6	51.22	0.00

Table 3: Comparison between self-esteem pre- and post- psycho-educational nursing intervention implementation among the studied final year nursing students (n=45).

	Pre-intervention Mean±SD	Post-intervention Mean±SD	t test	P value
self-esteem	16.6±5.42	22.5±3.36	.773	0.00

Table 4: Correlation between assertiveness and self-esteem pre- and post- psycho-educational nursing intervention implementation among the studied final year college nursing students (n=45).

Variable		Assertiveness		Post	
		Pre	P value	r test	P value
Self-esteem	Pre	.155	.513		
	Post			.629	0.001**

nursing students (n=45).

## Discussion

It is crucial for faculty nursing students, to be individuals with assertiveness and high self-esteem in order to ensure competent and safe practice, in this context this study aimed to assess the impact of psycho-educational nursing intervention implementation on assertiveness and self-esteem of final year nursing students.

Results of the current study showed that more than three quarters of the studied final year nursing students were female, the majority of them were more than 20 years old and the mean age of them was  $20.1 \pm 1.8$ , and the majority of them (95.6%) were single. Regarding the residence, less than three quarters of them lived in rural areas, and three quarters of them were living with their families.

Data analysis of the present study had proved the research hypothesis as the psycho-educational nursing intervention implementation had a positive effect on assertiveness and self-esteem of final year nursing students. This provides encouraging evidence that educational institutions that provide specific and targeted assertiveness education will be rewarded with more assertive graduates.

Regarding students' assertiveness level pre-psycho-educational nursing intervention implementation, data analysis revealed that only one third of them reported high level of assertive behaviors pre-psycho-educational nursing intervention implementation.

This may be due to that the students in the current study were in the late adolescence and assertive skills are still developing. This can also be interpreted by the mistaken traditional assumptions of Arab countries that inhibit disclosing freely any feelings, thoughts,

behaviors, and ignoring or even hiding own true feelings, and needs. Examples of these mistaken traditional assumptions that are reinforcing during rearing practices for juniors: "don't interfere with family matters, you are still young"; "it is selfish to consider your needs before others"; and "don't ask questions showing your silliness to others". These faulty rearing attitudes diminish assertiveness and develop passivity. Also, many nurses especially newly graduate do not constantly behave or communicate in assertive way because of inhibited thinking about their rights, feelings, or needs; and negative attitude of the society toward the nursing field.

This is supported with **Hijazi, Tavakoli, Slavin-Spenny, & Lumley, (2011)**, in a study entitled "Targeting interventions: Moderators of the effects of expressive writing and assertiveness training on the adjustment of international university students" and mentioned that women report being less assertive than men across many cultures, with this being especially the case in collective or Eastern cultures.

This finding is also in line with findings of **Hamoud, et al., (2011)** who assessed the effect of an assertiveness training program on assertiveness skills and self-esteem of faculty nursing students and stated that both the students of the study and control groups in the preprogram period had a high tendency to be non-assertive in the ordinary conditions.

Likewise, a study by **Ibrahim (2011)**, who assessed factors affecting assertiveness among student nurses, and stated that about half of the second-year nursing students were nonassertive.

This finding is congruent with that of **Warland, et al., (2014)** in a study

entitled “Assertiveness training for undergraduate midwifery students” and mentioned that, identified barriers that may prevent nurses from being assertive include lack of knowledge about personal/professional rights, concern about what others will think about their behavior and anxiety due to a lack of confidence and poor self-esteem.

Regarding the effect of psycho-educational nursing intervention implementation on the assertiveness, the results of the current study revealed that, there was improvement in the studied final year nursing students` levels of assertiveness post- psycho-educational nursing intervention implementation, as they exhibited a statistically significant rise compared to their scores at the beginning of the psycho-educational nursing intervention implementation, and it illustrated as more than three quarters of them reported high level of assertive behaviors post- psycho-educational nursing intervention implementation.

These findings are congruent with the findings of **Kashani & Bayat (2010)**, who studied the effect of social skills training on assertiveness and self-esteem and concluded that participation in the program has improved unassertive students` ability to self-analysis and practicing assertive behaviors in communication with others using such skills appropriately. These skills include: the ability to cope with manipulation and criticism without responding with counter criticism; the ability to make requests and state points of view, and to refuse unreasonable requests; and the ability to express feelings in social situations.

These findings are also supported with the study carried out by **Paezy, Shahraray, & Abdi, (2010)**, who investigated the impact of assertiveness training on assertiveness, subjective well-

being and academic achievement of Iranian female secondary students and found a significant increase in assertiveness and subjective well-being of Iranian female students at the post-test and two months follow-up.

This finding is also in line with findings of **Hamoud, et al., (2011)** who stated that the students in their study exhibited some significant improvement in their assertiveness skills after delivering the training program.

This finding is congruent with that of **Warland, et al., (2014)** who mentioned that there was an overall improvement in self-perceived assertiveness scores following the assertiveness training workshop.

This comes in line with the finding of **Eslami, et al., (2016)**, in their study entitled “The effectiveness of assertiveness training on the levels of stress, anxiety, and depression of high school students”, and mentioned that the assertiveness training program largely reduces students` stress, anxiety, and depression. The program helps students manage and solve their problems and difficulties.

Regarding students` self-esteem levels pre-psycho-educational nursing intervention implementation, data analysis revealed that more than half of them reported high self-esteem level pre-psycho-educational nursing intervention implementation.

This may be due to the fact of receiving the university education increases the student`s self-confidence, and especially the nature of the relationship of Faculty of Nursing Ain Shams university with its students that encourages them to open communication and discussion with faculty members

through problem solving and debriefing sessions.

Regarding students' preprogram levels of self-esteem, the result of the current study is contradicted with **Hamoud, et al., (2011)** who stated that both the study and control groups revealed a tendency of the second-year students to have low self-esteem. This is also contradicted with **Ebrahim, Elsebie, & Fouad, (2007)**, who found the second-year students at Alexandria University had the largest percent of low self-esteem. In this respect **Gomaa (2003)**, reported that the high level of stress of the second-year students at Suez Canal University is a concomitant to low self-esteem

The results of the current study revealed that, there was an improvement in the studied nursing students' levels of self-esteem post- psycho-educational nursing intervention implementation, as they exhibited a statistically significant rise compared to their scores at the beginning of the psycho-educational nursing intervention implementation, and it illustrated as the highest percentage of them reported high level of self-esteem post- psycho-educational nursing intervention implementation. The enhancement of their self-esteem post-the psycho-educational nursing intervention implementation is related to the impact of it, as it provided them with such assertiveness skills that improved their personal capabilities and self-esteem.

This result comes in line with findings of **Hamoud, et al., (2011)** who stated that the training program in their study made a positive contribution in developing assertiveness skills and enhancing self-esteem of the nursing students.

This is also congruent with **Mahmoud, et al., (2013)**, who confirmed that assertiveness training provides the required assertiveness skills that are associated with increased assertiveness and self-esteem.

Data analysis of the current study revealed that, there was a highly statistically significant direct correlation between self-esteem and assertiveness of the studied final year college nursing students post psycho-educational nursing intervention implementation. This may be due to self-esteem is strongly associated with the characteristics of assertiveness and low self-esteem is a common characteristic of people who consider themselves passive or/and aggressive.

This finding is congruent with the findings of **Karagözoğlu et al., (2008)**, who studied the self-esteem and assertiveness of final year Turkish university students and stated that a positive correlation, was found between self-esteem and assertiveness levels

This is also come in accordance with the findings of **Ibrahim (2011)**, who proved the association between assertiveness and self-esteem in which students with higher assertiveness have higher levels of self-esteem.

On the contrary, these findings contradict the study findings of **Mahmoud, et al., (2013)**, who showed no concrete effect of assertiveness training on students' self-esteem

## Conclusion

---

Conclusion from the present study results, it can be concluded that, the psycho-educational nursing intervention implementation had positive effect on assertiveness and self-esteem among final year nursing students.

**Recommendations:**

The present study recommended that:

- Incorporating assertiveness training as an eligible training course of the undergraduate nursing program.
- The nursing education should aim at enhancing the self-esteem of students giving the appropriate theoretical knowledge and skills required to practice as a nurse
- Further study with multistage follow up after the program implementations to ensure that the acquired assertiveness skills shape the students attitude positively and enhance their self-esteem.

**Funding**

No funding was received for this study.

**Conflict of interest**

The authors declare no conflict of interest or otherwise.

**References**

- Bos, A. E., Huijding, J., Muris, P., Vogel, L. R., & Biesheuvel, J. (2010).** Global, contingent and implicit self-esteem and psychopathological symptoms in adolescents. *Personality and Individual Differences*, 48(3), 311-316.
- Çeçen-Eroğul, A. R., & Zengel, M. (2009).** The Effectiveness of an Assertiveness Training Programme on Adolescents' Assertiveness Level. *Ilkogretim Online*, 8(2).
- Dimitriadou–Panteka, A., Koukourikos, K., & Pizirtzidou, E. (2014).** The concept of self-esteem in nursing education and its impact on professional behavior. *International journal of caring sciences*, 7(1), 6-11.
- Ebrahim, N., Elsebie, N., & Fouad, R. (2007).** Assessment of student's self-esteem at the faculty of nursing, Alexandria university. In *Proceedings of the 9th international Scientific Nursing conference. The 2<sup>nd</sup> Scientific Association of Arab Nursing Faculties conference "Accreditation and Nursing*.
- Eom, H., & Choi, I. (2010).** The effect of a group counseling program on self-esteem and interpersonal relationships of Chinese students in Korea. *EKorea Journal of Counseling*, 11, 903-927.
- Eslami, A. A., Rabiei, L., Afzali, S. M., Hamidzadeh, S., & Masoudi, R. (2016).** The effectiveness of assertiveness training on the levels of stress, anxiety, and depression of high school students. *Iranian Red Crescent Medical Journal*, 18(1).
- García, J. A., y Olmos, F. C., Matheu, M. L., & Carreño, T. P. (2019).** Self esteem levels vs global scores on the Rosenberg self-esteem scale. *Heliyon*, 5(3), e01378.
- Gomaa N. (2003).** Impact of two stress reduction techniques on student nurses' level of stress. Unpublished Doctoral Dissertation of Psychiatric Nursing and Mental Health. Faculty of Nursing, Port- Said University.
- Hamoud, S., El Dayem, S., & Ossman, L. (2011).** The effect of an assertiveness training program on assertiveness skills and self-esteem of

- faculty nursing students. *Journal of American Science*, 7, 1085-1096.
- Heizomi, H., Allahverdi-pour, H., Jafarabadi, M. A., & Safaian, A. (2015).** Happiness and its relation to psychological well-being of adolescents. *Asian journal of psychiatry*, 16, 55-60.
- Hijazi, A. M., Tavakoli, S., Slavin-Spenny, O. M., & Lumley, M. A. (2011).** Targeting interventions: Moderators of the effects of expressive writing and assertiveness training on the adjustment of international university students. *International Journal for the Advancement of Counselling*, 33(2), 101-112.
- Ibrahim, S. (2011).** Factors affecting assertiveness among student nurses. *Journal of Nurse Education Today*, 31, 356-60.
- İlhan, N., Sukut, Ö., Akhan, L. U., & Batmaz, M. (2016).** The effect of nurse education on the self-esteem and assertiveness of nursing students: A four-year longitudinal study. *Nurse Education Today*, 39, 72-78.
- Karagözoğlu, Ş., Kahve, E., Koç, Ö., & Adamişoğlu, D. (2008).** Self esteem and assertiveness of final year Turkish university students. *Nurse Education Today*, 28(5), 641-649.
- Kashani, P., & Bayat, M. (2010).** The effect of social skills training (Assertiveness) on assertiveness and self-esteem increase of 9 to 11 year-old female students in Tehran, Iran. *World Applied Sciences Journal*, 9, 1028-32.
- Mahmoud, A. S., Al Kalal-deh, M. T., & El-Rahman, M. A. (2013).** The Effect of assertiveness training program on jordanian nursing students' assertiveness and self-esteem. *International Journal of Nurse Practitioner Educators*, 2(1).
- Mehrabi-Zade, M.H., Taghavi, S.F., & Attari, Y.A. (2009).** Effect of group assertive training on social anxiety, social skills and academic performance of female students. *Journal of Behavioral Sciences*, 1, 59-64.
- Nakamura, Y., Yoshinaga, N., Tanoue, H., Kato, S., Nakamura, S., Aoishi, K., & Shiraishi, Y. (2017).** Development and evaluation of a modified brief assertiveness training for nurses in the workplace: a single-group feasibility study. *BMC nursing*, 16(1), 1-8.
- Omura, M., Levett-Jones, T., & Stone, T. E. (2019).** Evaluating the impact of an assertiveness communication training programme for Japanese nursing students: A quasi-experimental study. *Nursing open*, 6(2), 463-472.
- Paezy, M., Shahraray, M., & Abdi, B. (2010).** Investigating the impact of assertiveness training on assertiveness, subjective well-being and academic achievement of Iranian female secondary students. *Journal of Procedia Social and Behavioral Science*, 5, 1447-50.
- Parray, W. M., & Kumar, S. (2017).** Impact of assertiveness training on the level of assertiveness, self-esteem, stress, psychological well-being and academic achievement of adolescents. *Indian Journal of Health and Wellbeing*, 8(12), 1476-1480.

- Rathus, S. A. (1973).** A 30-item schedule for assessing assertive behavior. *Behavior therapy*, 4(3), 398-406.
- Rosenberg, M. (1965).** Self-esteem scale. Appendix D In Rosenberg M., Society and the Adolescent Self-Image.
- Sibiya, M. N. (2018).** Effective Communication in Nursing. *Nursing*, 19.
- Sitota, G. (2018).** Assertiveness and Academic Achievement Motivation of Adolescent Students in Selected Secondary Schools of Harari Peoples Regional State, Ethiopia. *International Journal of Education and Literacy Studies*, 6(4), 40-46.
- Vaupot, S. R., & Železnik, D. (2018).** Communicative factors associated with assertiveness in Slovenian nursing staff in clinical practice. *Informatologia*, 51(3/4), 149-158.
- Warland, J., McKellar, L., & Diaz, M. (2014).** Assertiveness training for undergraduate midwifery students. *Nurse education in practice*, 14(6), 752-756.
- Yurtsal, Z. B., & Özdemir, L. (2015).** Assertiveness and problem solving in midwives. *Iranian journal of nursing and midwifery research*, 20(6), 647.