Effectiveness of Nursing Intervention on Clinical Training Stress and Self-Control among Faculty of Nursing Students

Shereen Roushdy Hashem[1]*, Mona Abd El-Rahim Al Nagar[2]

Lamiaa Hassnin Eita[3], Faten Hassan Alam[4]

[1]Assistant lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Menoufia University, Egypt.
[2, 3]Assistant Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Menoufia University, Egypt.
[4]Lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Menoufia University, Egypt.
s.roshdy1983@gmail.com

*Corresponding Author: Shereen Roushdy Hashem, Assistant lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Menoufia University, Egypt.

Abstract

Background: Clinical training has been recognized as a stressful experience for nursing students. Psychiatric/ mental health nursing is one of the core courses for undergraduate nursing students, but the complex and abstract nature of much of the psychiatric mental health course content makes it a challenge for many students. The aim of this study was to evaluate the effectiveness of nursing intervention on clinical training stress and self-control among faculty of nursing students. A quasi-experimental research design two groups (experimental and control group) was used to achieve the aim of the study. This study was carried out at Faculty of Nursing, Menoufia University. A convenient sample of 180 students selected from the previous selected setting who had clinical training stress and disturbed levels of self-control. Three tools were used for data collections (1): A structured interviewing questionnaire to assess socio-demographic characteristics of the students, (2): Nursing education stress scale (clinical training stress subscale), (3): Self-control scale. The results revealed that there was a significant reduction on the levels of clinical training stress and improvement of self-control levels in the experimental group after application of nursing intervention than control group. Based on this result it was concluded that nursing intervention had a great effect in reducing the levels of clinical training stress and increasing the levels of self-control among faculty of nursing students. Recommendations: Generalize the application of nursing intervention to all college students to reduce their clinical training stress and increase their self-control.

Keywords: *Nursing intervention, Clinical training stress, Self-control, Nursing students.*

INTRODUCTION

During nursing education and training, nursing students are frequently exposed to various stressors which may directly or indirectly impede their learning and performance. The nature of clinical education presents challenges that may cause students to experience stress. Moreover, the practical components of the program by its nature have made the program even more stressful than other programs (Murdaugh, Parsons, and Pender, 2018).

Students in psychiatric nursing courses can be a challenging task. Until students experience their first interaction with a patient who has psychiatric problems, they may not know what to expect. Regarding psychiatric nursing practice, many students confront myths and stereotypes of psychiatric patients that are framed by the society and the media. The problems of nursing students regarding psychiatric nursing practice, which illustrated as fears concerning building relationships with psychiatric patients, the gap between expectations and reality, uncertainties of

accurate knowledge about psychiatric illness, lack of educator guidance, feelings of lack of competency and limitation (Sarikoc, Ozcan, and Elcin, 2017).

The clinical training setting can put high demands on self-control and thus cause psychological strain. There are increasing indicators of strain, such as emotional distress and psychosomatic symptoms, and self-control failures. This finding indicate that time pressure, learning- and problem-solving demands, as well as clinical evaluation, are aversive and thus tax students' control capacity. Clinical training tasks may in general require high self-control (Externbrink, Diestel, and Krings, 2019).

Self-control refers to a fundamental human capacity to control one's thoughts, feelings, and behaviors by decisional inhibition, which enables people to overcome momentary temptations in service of future-oriented goals (Grund and Carstens, 2019). To accomplish successful self-control, student must have both intrinsic and extrinsic inspiration consistent with their goal of achieving great and acceptable behavior. Higher self-control is associated with high well-being, including good mental health, ability to maintain effective social relationships, and adaptive functioning in home or college. Self-control abilities facilitate goal oriented actions and optimal adjusting to emotional and cognitive challenging stimulating throughout successful regulation of feelings, emotions, behaviors, and cognitions (Baker, 2018).

It is important for the clinical instructors to help the students to feel comfortable working in the psychiatric mental health environment and is able to learn and gain from their experiences. They can do this by providing support, offering help and encouragement, assisting and helping the student to identify transferable skills that they can take with them to whatever clinical setting during their career, identifying a starting point with students that consider the student's current perceptions of mental health nursing and then foster and encourage the connection between skills regardless of setting. So the student departs with a positive constructive image of psychiatric mental health nursing and the need to care for the 'patient in all settings (Hooper, Browne, and O'brien, 2016). So, the aim of this study was to evaluate the effectiveness of nursing intervention on clinical training stress and self-control among faculty of nursing students.

The Significance of the Study

The prevalence of education stress among nursing students in Egypt was 31.1%, 48.2%, and 20.7% for low, moderate, and high academic stress levels respectively (Mayhob and Hashem, 2019). Clinical training stress among nursing students is rising and the nursing students may be more prone to clinical training stress than other students. Nursing information and the skills acquired in the clinical setting with actual patients is far more beneficial than structured scenarios in the labs or in a class room. Clinical practice provides nursing students with the opportunity to gain the applied knowledge as well as psychomotor skills that are imperative for their professional development. In most nursing curriculums, nursing students spend approximately half of their education within the clinical area; so it is alarming that they view the clinical practice as incredibly stressful (Nielsen, Norlyk, and Henriksen, 2019).

Self-control abilities can predict individuals' health problems, socioeconomic position, and tendency to criminal offence. Individuals with ineffective self-control skills are at high risk of mental health disorders (Kaunhoven and Dorjee, 2017). Clinical training stress is associated with psychophysiological symptoms, Physiological symptoms include raised heart rate, increased blood pressure, sweating, raised blood coagulation rate, increased ventilation, subjective symptoms, tiredness and/or difficulty in sleeping, muscle tension particularly in neck and shoulder muscles, indigestion; constipation or diarrhea (Robles, 2019).

Psychological symptoms include depression or general unhappiness, anxiety and agitation, moodiness, irritability, or anger, feeling overwhelmed, loneliness and isolation. Behavioral symptoms include easily getting nervous, increased consumption of alcohol, smoking, loss of appetite or excessive eating, restlessness, and loss of interest. Clinical training stress lead to poor psychological wellbeing that interfere with learning and limit the academic performance of students and lower productivity, increase suicidal thoughts and minimize quality of life (Samson, 2018). Therefore, further teaching and learning methods are needed to improve students' competency and to prevent students' from having negative experience around psychiatric nursing practicum (Yong-Shian, Selvarajan, Chng, Tan, and Yobas, 2016).

Aim of the Study

Evaluate the effectiveness of nursing intervention on clinical training stress and self-control among faculty of nursing students.

Research Hypotheses

1- The students who participate in the nursing intervention (Experimental group) will have lower scores of clinical training stress than students who don't participate in the nursing intervention (Control group).

2- The students who participate in the nursing intervention (Experimental group) will have higher scores of self-control than students who don't participate in the nursing intervention (Control group).

Theoretical and Operational Definitions

Clinical training stress is theoretically defined as a state of distress induced by clinical learning environment (Bahadır-Yılmaz, 2016). Clinical training stress in the present study is operationally defined as the student's clinical training stress score that was measured by nursing education stress subscale which was developed by (Rhead, 1995), was modified to be fit for psychiatric nursing students and used by the researcher.

Self-control is theoretically defined as a fundamental human capacity to control one's thoughts, feelings, and behaviors by post decisional inhibition, which allows individuals to overcome momentary temptations in service of future-oriented goals (Grund, and Carstens, 2019). Self-control in the present study is operationally defined as the score of student's self-control that was measured by self-control scale which was developed by (Abdullah, 2007), and used by the researcher.

Nursing intervention is theoretically defined as a nursing action, procedure, activity, or service designed to achieve an outcome for which the nurse is accountable (Butcher, Bulechek, Dochterman, and Wagner, 2018). Nursing intervention in the present study is operationally defined as a psycho-educational intervention which was developed by the researcher based on scientific review of literature and under supervisors guidance which given for the students in the form of sessions. Its effect was evaluated by comparing clinical training stress and self-control scores pre and post nursing intervention.

SUBJECTS AND METHOD

Research Design

A quasi - experimental research design two groups (experimental and control group) was utilized to achieve the purpose of the study. Such design fits the nature of the problem under investigation.

Research Setting

This study was carried out at the Faculty of Nursing, Menoufia University.

Sample

Sample size was calculated at power 80%, confidence level 95%, and margin of error 5%, accordingly the calculated sample size was 180 students by using the following equation:

$$n = [DEFF*Np\,(1-p)]/\,[(d^2/Z^2_{1-\alpha/2}*(N-1) +p*(1-p)]$$

Subjects

A convenient sample of 180 students was selected from the chosen setting who had the following inclusion and exclusion criteria **Inclusion criteria which are** fourth year psychiatric nursing students in faculty of nursing and first time interacting with psychiatric patients. **Exclusion criteria which are** any history of chronic physical illness e.g. diabetes mellitus or others and any history of psychiatric illness e.g. depression because these illnesses may lead to stress and will interfere with the results. The students were divided into two equal groups, 90 were experimental group who participate in the nursing intervention and other 90 control group not participates in the nursing intervention.

Tools of Data Collection

The following tools were used to achieve the aim of the study:-

Tool one: A structured Interviewing Questionnaire

This questionnaire was developed by the researcher based on pertinent literature to assess socio-demographic characteristics of the students as age, gender, residence and parent's education (Bahadır-Yılmaz, 2016).

Tool Two: Nursing Education Stress Scale (NESS)

This scale was originally developed by Rhead (1995) to assess education stress among nursing students

generally. It was tested for its validity by a panel of experts. It was an English scale with 32 items; the nursing education stress scale uses two subscales first one to measure academic stress and second one to measure clinical training stress among nursing students in general. The researcher used the clinical training stress subscale It was translated to Arabic and was translated back to English and modification done to be fit for psychiatric nursing students, Responses are rated on a 3-point Likert scale ranging from 1-3, "Disagree, partially agree, and fully agree".

Scoring System

score less than 24 no clinical training stress, score range from 24-32 mild clinical training stress, score range from 33-40 moderate clinical training stress, score range from 41-48 refer to severe clinical training stress.

Tool Three: Self-Control Scale

This scale was originally developed by Abdullah (2007). It was an Arabic scale used to evaluate the self-control of adolescents. It consists of 26-items. Questions number 3, 4,11,12,16,17,20,25 with reversal score Responses are rated on a 4-point Likert scale ranging from 1-4, "Scarcely, sometimes, much, and too much".

Scoring System

Score below 39 refer to no self-control, score ranged from 39-65 refers to low self-control, score ranged from 66-91 refers to moderate self-control and score ranged from 92-104 refers to high or extremely self-control.

Validity of the Tools

The validity of the study tools were ascertained by a jury of five professors experts in the field of psychiatric nursing and psychiatric medicine to test their content validity and to examine the face validity in terms of whether that reflected the concepts intended to measure and to determine its clarity to reach consensus on the best form to be implemented. Following the judgment of the experts, some items were modified to fit the psychiatric nursing students.

Reliability of the Tools

The internal consistency of the questionnaire was calculated using Cronbach's alpha coefficients. The reliability of the tools were done using test - retest reliability and proved to be strongly reliable at 0.86 for tool two and at 0.90 for tool three.

Procedure

Administrative Approval

Before starting the study, an administrative approval was obtained from directors of psychiatric nursing department after explanation of the purpose of the study.

Ethical Consideration

An informed consent was obtained from every participant who accepts to participate in the study after complete description of the aim, nature and confidentiality of the study.

A Pilot Study

A pilot study was conducted in order to test the reliability and validity of the questionnaire items and clarity of questions. A total of 10% of the sample were recruited for the pilot study. All subjects included in the pilot study met the inclusion criteria for. The pilot study revealed minimal modifications in the questionnaires. Subjects in the pilot study were excluded from the main study sample.

Data Collection

Collection of study subject and application of the program began from September 2018 to December 2018.The data in the current study was collected through three phases: assessment phase, implementation phase and evaluation phase.

Assessment Phase

An extensive literature related to the study was done, including electronic dissertations, available books, articles, doctoral dissertation, research and peer interaction, and idea from external sources and periodicals. A review of literature to formulate a knowledge base relevant to the study was also done.

All subjects who were met the inclusion criteria were included in the study; the researcher introduced herself to them, provides verbal explanation of the study and answered all related question.

The researcher met the students within one day from 10 AM to 11 AM in a lecture hall for both groups. Through interview technique the students were asked

individually to fill the assessment questionnaire for a structured questionnaire. They also filled nursing education stress scale and self-control scale, the researcher contacted with them for clarification of scale and for explanation of the aim of the study. After pretest, the researcher divided the students into two equal groups (experimental and control group).

Implementation Phase

The researcher applied the implementation phase on experimental group according to the following steps:

The first step: After reviewing related literature the researcher developed the Nursing intervention in Arabic language in the form of a booklet. The nursing intervention reviewed by experts in the field of psychiatric nursing and psychiatric medicine. This nursing intervention had a set of specific objectives for each session. It included introduction about clinical training stress, time management and the study skills, objectives of the nursing intervention, and total equipment as pencils, papers for application, and nursing intervention sessions in details (name of session, objectives, teaching methods, media used, and procedures for each one). The nursing intervention sessions aimed at minimizing clinical training stress and increase self-control among faculty of nursing students. The lecture room was chosen for the nursing intervention. Orientation was done about researcher name, purpose and content of the study All subjects who were met the inclusion criteria were included in the study, the researcher introduced herself to them, provides verbal explanation of the study and answered all related question.

The second step: the researcher divided the participants of experimental group into three equal sub-groups. Every sub-group was 30 students, every group attended eleven nursing intervention sessions every session took near about one hour within two days\week from 11 AM to 2 PM. The sessions designed to meet specific objectives, including techniques and content. At the beginning of session the researcher explain the rules and regulation of the sessions the researcher keeps reinforcing the students followed the rules and finished the task completely.

Before the beginning of each session, the researcher asked about homework and application and how they used the content.

The Content of Nursing Intervention Sessions were

Session One: This session aimed to encouraging students to actively participate in the nursing intervention sessions. The researcher talks about the nursing intervention sessions, explained the nature and purpose of the study and the possibility to convince the students about the importance of nursing intervention sessions. Written consent was taken from the students that they agreed to participate in the nursing intervention sessions and setting an agreement on the number of sessions (11 sessions, two session every week, for 45-60 minute), time and duration of every session, then specifying the subject of the next session and setting an agreement on the rules of the sessions that must be followed by students**.**

Session Two: aimed to identifying the concept of stress and anxiety, clinical training stress, causes, and symptoms**,** the researcher presents models of students' stories with clinical training stress and the problems that arise from stress. The researcher presented a video showing the symptoms of clinical training stress.

Session Three: aimed to identifying what is exam anxiety, symptoms and causes, providing them with useful instructions to deal with clinical training stress and emphasis on the prevention and treatment of exam anxiety.

Session Four: aimed to recognizing the importance of time, identifying principles of time management; explaining how to organize time for studying and prepare flexible study schedule according to the student abilities and circumstances. Then the researcher provides students with a module schedule to help them organize study and study times.

Session Five: aimed to develop the ability of students to focus during the study, explain to the students the effective learning methods, increase the efficiency of students in conservation and study, provide students with guidance on focus and effective learning, and instructions to deal with the psychiatric patient in the clinical setting.

Session Six: aimed to explain the importance of preparing for the exam, explain the steps to prepare for the exam, teaching students the skills to deal with the answer sheet at the time of the exam, increasing the effectiveness of students' performance in the exam,

and then the researcher discussed some guidance for parents to decrease exam anxiety of their teens.

Session Seven: aimed to clarify the relationship between clinical training stress and self-control, identify the meaning of self-control, teach the importance and the factors affecting self-control, and clarify the features of the student with no self-control.

Session Eight: aimed to provide general self-control tips, demonstrate the stages of self-control with realistic examples and the researcher mentioned the obstacles of self-control.

Session Nine: aimed to clarification of the methods used for self-control, provide the skill of stopping and thinking before doing wrong behavior, practice the skill of stopping and thinking before doing wrong behavior, to provide a positive self-talk skill before doing behavior, provide training on positive self-talk, provide the skill of identifying the problem and identifying the possible alternatives in solving it, training on identifying the problem and the development of possible alternatives in resolving it.

Session Ten: aimed to teach students the meaning of relaxation and its benefits, training students on different relaxation techniques (deep breathing exercises - mental relaxation– progressive muscle relaxation - meditation exercises), explain and apply the steps several times, ensure that students master the application of relaxation techniques(demonstration and re-demonstration).

Session Eleven: aimed to provide a summary of the previous skills, understand the students' experience and feedback about the nursing intervention sessions, evaluate the effectiveness of nursing intervention on clinical training stress and self-control. At the end of the session, the researcher thanked the students who participated in the nursing intervention sessions for their attention and the effort they exerted in the implementation of the homework and emphasizes to generalize what they learned in different situations in their daily lives and future and urges them to apply what they learned in the extension sessions to reflect on the increase in their academic achievement.

Evaluation Phase

The last phase in which the researcher assess the achievement of the aim of the study through reintroducing the research tools (nursing education stress scale; clinical training stress subscale, and self-control scale) (posttest) for both experimental and control groups to evaluate the effectiveness of nursing intervention sessions among the experimental group.

After obtaining the results for an ethical purpose the nursing intervention sessions were given to the control group.

Statistical Analysis

The collected data were organized, tabulated and statistically analyzed using SPSS version 20.0. Graphic were done using excel program. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables. Mc Nemar test, Fischer exact test, ANOVA (F) test, Chi-square test ($\chi2$) and t-test were used. Level of significance was set as highly significant level as P value < 0.001 and significant level as P-value <0.05 while P value of >0.05 indicated non-significant.

Limitations of the Study

There were no limitations but difficulties while conduction the study such as: The sample was generally big and required more effort and time to handle and give opportunity for each student to participate and demonstrate the practice and Sometimes changing the timing of the sessions because the students have other lecture to attend make the researcher wait for them to finish.

RESULTS

Table 1: Socio-demographic characteristics of the studied students (N =180): This table reveals that there is no statistically significant difference between the experimental group and the control group regarding to all their socio-demographic characteristics.

Figure (1): Clinical training stress levels of the experimental group and control group at pre and post nursing intervention (N=180): This figure shows that there is no statistically significant difference between the experimental group and the

control group regarding to their self-control levels pre nursing intervention, while there is a highly statistically significance difference between clinical training stress levels in the experimental group pre and post nursing intervention at p-value < (0.001), which is decreased post nursing intervention, The moderate and severe levels of clinical training stress pre nursing intervention for the experimental group are decreased from 51.1% for moderate level and 6.7% for severe level respectively to 0.00% post nursing intervention.

Figure 2: Self-control levels of the experimental group and control group at pre and post nursing intervention (N=180): This figure shows that there is no statistically significant difference between the experimental group and the control group regarding to

their self-control levels pre nursing intervention, while there is a highly statistically significance difference between self-control levels in the experimental group pre and post nursing intervention at p-value < (0.001), which is increased post nursing intervention, The moderate level of self-control for the experimental group pre nursing intervention are increased from 11.1% to 80.0% post nursing intervention.

Table 2: Correlation between clinical training stress and self-control of the experimental group post nursing intervention (N =90): this table shows that there is a negative statistically significant correlation between clinical training stress and self-control levels post nursing intervention at p- value < (0.001). It means when clinical training stress levels increases self-control levels decreases.

Table 1. *Socio-demographic characteristics of the studied students (N =180)*

| Socio-demographic characteristics		Studied students (180)				Test of sig.	P value
		Experimental group (N=90)		Control group (N=90)			
		No.	%	No.	%		
Age / years	Mean ±SD Range	21.4±0.58 20 - 22		21.3±0.58 20 - 22		t-test 1.15	0.252 (NS)
Gender	Male Female	27 63	30.0 70.0	29 61	32.2 67.8	χ^2 0.104	0.747 (NS)
Father education	Illiterate Primary Preparatory Secondary University or higher	15 22 8 12 33	16.7 24.4 8.90 13.3 36.7	17 19 6 13 35	18.9 21.1 6.70 14.4 38.9	χ^2 0.729	0.948 (NS)
Father job	Governmental Nongovernmental Not work	45 28 17	50.0 31.1 18.9	50 28 12	55.6 31.1 13.3	χ^2 1.12	0.570 (NS)
Mother education	Illiterate Primary Preparatory Secondary University or higher	22 19 12 4 33	24.4 21.1 13.3 4.40 36.7	22 19 5 15 29	24.4 21.1 5.60 16.7 32.2	χ^2 9.50	0.050 (NS)
Mother job	Governmental Nongovernmental Not work	25 2 63	27.8 2.20 70.0	24 3 63	26.7 3.30 70.0	χ^2 0.220	0.896 (NS)

NS: Non significant
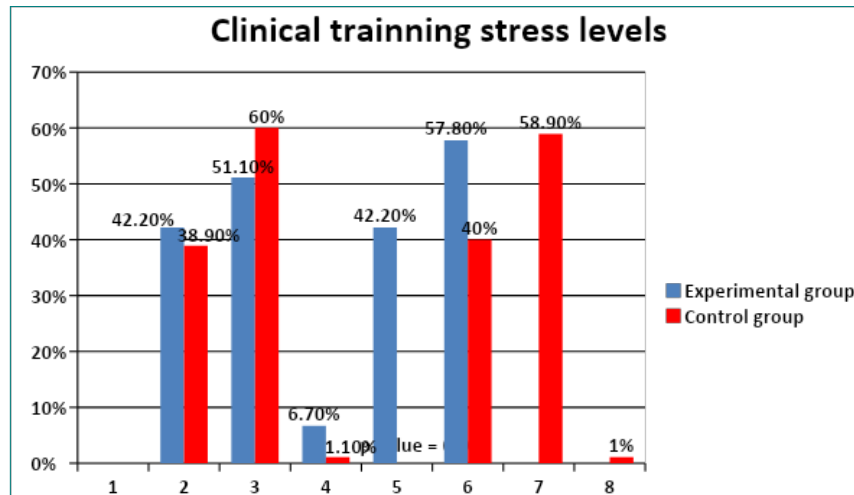
Figure 1. *Clinical training stress levels of the experimental group and control group at pre and post nursing intervention (N=180)*
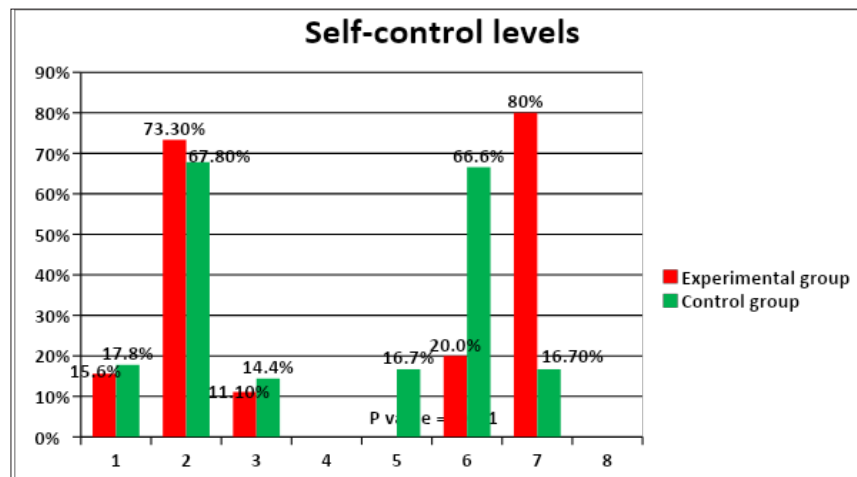

Figure 2. *Self-control levels of the experimental group and control group at pre and post nursing intervention (N=180)*

Table 2. *Correlation between clinical training stress and self-control of the experimental group post nursing intervention (N =90)*

Studied variable	Self-control	
	r	P value
Clinical training stress	-0.735	**<0.001** HS

HS: High significant

DISCUSSIONS

Nursing students face increasing levels of stress, as well as negative effects to well-being in relation to the stresses they experience. While understanding how stress and anxiety can impact nursing students' health provides needed insight into their experiences, with the harmful effects that can result from increasing anxiety and stress levels, it is important to provide beneficial treatment programs and methods to manage and reduce anxiety and stress in nursing students. Attention to these methods of managing stress and anxiety are particularly essential considering the connection between ways of coping, mental health

and well-being in nursing students (Terp, Hjarthag, & Bisholt, 2019). So the aim of this study was to evaluate the effectiveness of nursing intervention on clinical training stress and self-control among faculty of nursing students.

The results of the current study revealed that there is no statistically significant difference between the experimental group and the control group regarding to their socio-demographic characteristics (table 1). This might be due to the experimental and control group had the same inclusion criteria. This result was in harmony with Mateus & Oliveira (2017) they found that there was no significant differences in the basic characteristics and pre-intervention scores were found between the intervention and the control group. Moreover Ramadan & Ahmed (2015) they revealed that there is no statistical significance difference among study and control group in age, academic year, marital status, residence, nature of home, number of brothers and arrange among brothers.

The mean age of the experimental group 21.4±0.58, and 21.3±0.58 for the control group, almost three quarters 70%, 67.8% of the experimental and control group respectively were female(table 1). This could be due to that the number of female students was higher than male students and the study was carried out among students of fourth year and this is appropriate age for them. This result in the same line with Elsayes & Obied (2018) they revealed that the highest percent of the participant nursing students (66%) aged between 21-23 years and majority of them (81.2%) were female. Also Dhanpal & Paul (2015) they found that the significant numbers of students their age was 21 years and were females (80%). This result was contradicted with Ramadan & Ahmed (2015) they found that more than half of the intervention and control groups 64.0% & 60.0% were in age 19 years.

The results of the current study revealed that more than one third 36.7 %, 38.9% respectively for experimental and control group their father education are university or higher, near to one third 36.7%, 32.2% of the experimental and control group their mother education were university or higher (table 1). This might be due to nature of the culture in the governorate to be lived with both parents and the motivation from the parents to have high graduation.

This result was contradicted with Ramadan & Ahmed (2015) they found that half of the participant's fathers and mother's educational level of the intervention group was secondary education.

The results of the current study revealed that there is no statistically significant difference between the experimental group and the control group regarding to their clinical training stress levels pre nursing intervention (figure 1).This could be due to the experimental and control group had the same inclusion criteria. This result was in the same line with Labrague, McEnroe-Petitte, Papathanasiou, Edet, Tsaras, et al., (2018) they revealed that nursing students are distressed, disappointed and experience a lack of motivation and burnout because of academic and clinical stressors. Also this result was in harmony with Bahadır-Yılmaz (2016) they found that students generally had moderate levels of academic and clinical stress. The nursing education stress level varied in students according to gender (p < 0.05).

The result of the present study showed that there is a highly statistically significance difference between levels of clinical training stress in the experimental group pre and post nursing intervention, which is decreased post nursing intervention and students had experienced a clearer mind and a sense of calmness and they felt the need to balance various kinds of assignments without getting overwhelmed (figure1). This could be due to the nursing intervention sessions which were within the needs and interest of the students which helped them to be able to contact with psychiatric patients. This result was in the same line with Liang, Wu, Hung, Wang, & Peng (2019) they found that participants achieved positive results in reducing clinical training stress.

Moreover Perera, Pandey, & Srivastava (2018) they revealed that spiritual interventions, such as mindfulness meditation, praying can alleviate stress and produce positive effects psychologically, physiologically and spiritually. Also this result was in the same line with Jenitha, Rajan, Karumari, & Patel (2018) who studied "Impact of Heartfulness Meditation on Reducing Stress in Nursing Students: A Prospective Observational Study". They revealed that the investigation on the effectiveness of Heartfulness Meditation as a mental and emotional support tool to deal with and to mitigate stress reveals positive

results. And Koch (2017) they revealed that students experienced a reduction of psychological burden and anxiety because they understood that mistakes was allowed and would not result in harm.

Regarding clinical training stress levels of the control group, the present study reflected that there was no statistically significance difference between level of clinical training stress in the control group at pre and post nursing intervention (figure 1). This might be due to the control group don't receive the knowledge and information provided by the nursing intervention. The current study was supported by study done with Ratanasiripong, Park, Ratanasiripong, & Kathalae (2015) they revealed that the reduction was not statistically significant for the control group, perceived stress scores at pre intervention and post intervention showed no significant differences.

The result of the current study revealed that there is a highly statistically significant difference between the experimental group and the control group regarding to their self-control level post nursing intervention, which is increased post nursing intervention (figure2). This might be because the control group didn't participate in the intervention. This means that nursing intervention were effective in improvement of self-control and in providing techniques of self-control. This result was in harmony with Jenitha et al. (2018) they revealed that a short session of meditation clears the mind of disturbing thoughts and relaxes the mind as it gets tuned to the present moment. Thus, the effect of anxiety and nervous tension is minimized. This was in disagreement with de Angulo (2018) they revealed that there were no statistically significant differences in self-control between the groups.

The current study revealed that there is a highly statistically significant difference between the experimental group pre and post nursing intervention regarding to their self-control level, which is increased post nursing intervention (figure 2). This could be due to the effectiveness of the nursing intervention program which was within the interest of the students and also their commitment to participate in the program. This was supported by Myhre (2018) they revealed that post intervention scores of adolescents in experimental group were high for self-belief, persistence and perceived self-control than their pre intervention scores. Also in harmony with Canby,

Cameron, Calhoun, & Buchanan (2015) they found that the 6-week mindfulness based intervention significantly decreased psychological symptomatology and increased self-control.

The result of the current study revealed that there is a highly statistically significant negative correlation between clinical training stress and self-control levels of the experimental group post nursing intervention (table 2). This could be due to the effect of the program which increases student's ability to cope better with stress where students with low self-control will not act properly in the difficult or stressful clinical situation. This was supported by Reed (2017) who found that students with higher self-control were better able to be mindful and think before reacting. It was also found that participants with higher self-control were less anxious and had fewer psychosomatic symptoms, affirming that individuals with higher self-control are better able to cope with stressful situations. Also Galla & Wood (2015) they found that individuals with high self-control have better ability to cope with stressful events.

The findings of this research study can be used to improve clinical teaching activities regarding clinical practicums for nursing programs. Nursing instructors should consider preparing the clinical teaching program that puts emphasis on providing social support, enhancing knowledge and skills readily applicable to clinical practice, and providing appropriate learning facilities so that the program can help reduce stress-levels and improve the clinical practicum experience.

CONCLUSION

Based on the findings of this study and research hypotheses, it was concluded that: nursing interventions has a positive effect on clinical training stress and self-control among faculty of nursing students. In so doing, the current study managed to answer the purpose of the study and hypothesis.

RECOMMENDATIONS

Based on the previous findings of the present study, the following recommendations are suggested: Apply the nursing intervention sessions to all college students to reduce their academic stress and increase their self-control and screening for high risk students of academic stress and low self-control should be done

and referral when necessary, change the negative thinking used by students in dealing with different situations, and train them on how to replace negative thinking with positive one and train the students on cognitive behavioral programs to modify the way of thinking.

REFERENCES

[1] Abdullah, S. (2007). *The effectiveness of self-control training in reducing aggressive behavior in a sample of adolescents at the Social Observation House,* Doctoral dissertation, 48-51.

[2] Bahadır-Yılmaz, E. (2016). Academic and clinical stress, stress resources and ways of coping among Turkish first-year nursing students in their first clinical practice. *Kontakt*, *18*(3), 145-151.

[3] Baker, S. (2018). The effects of parenting on emotion and self-regulation. In *Handbook of* parenting and *child development across the lifespan* (pp. 217-240). Springer, Cham

[4] Butcher, H., Bulechek, G., Dochterman, J., & Wagner, C. (2018). *Nursing Interventions classification (NIC)-E-Book*. Elsevier Health Sciences.

[5] Canby, N., Cameron, I., Calhoun, A., & Buchanan, G. (2015). A brief mindfulness intervention for healthy college students and its effects on psychological distress, self-control, meta-mood, and subjective vitality. *Mindfulness*, *6*(5), 1071-1081.

[6] de Angulo, L. (2018). Impact of a self-control promotion program on nursing students. *Enfermería Clínica (English Edition)*, *28*(2), 118-124.

[7] Dhanpal, H., & Paul, A. (2015).Effectiveness of Assertive Training Programme on Relieving the Academic Stress and Anxiety. *International Journal of Nursing*, *1*(1), 26-29.

[8] Elsayes, H., & Obied, H. (2018). Association between senior nursing students perceived stress and learning environment in clinical practice. *Journal of Nursing Education and Practice*, *8*(3), 126-136.

[9] Galla, B., & Wood, J. (2015). Trait self-control predicts adolescents' exposure and reactivity to daily stressful events. *Journal of personality*, *83*(1), 69-83.

[10] Grund, A., & Carstens, C. (2019). Self-control motivationally reconsidered: "Acting" self-controlled is different to "being good" at self-control. *Motivation and Emotion*, *43*(1), 63-81.

[11] Hooper, M., Browne, G., & O'brien, A. (2016). Graduate nurses' experiences of mental health services in their first year of practice: An integrative review. *International journal of mental health nursing*, *25*(4), 286-298.

[12] Jenitha, S., Rajan, C., Karumari, S., & Patel, S. (2018). Impact of Heartfulness Meditation on Reducing Stress in Nursing Students: A Prospective Observational Study. *International Journal of Medical Research and Health Sciences*, *7*(1), 98-109.

[13] Kaunhoven, R., & Dorjee, D. (2017). How does mindfulness modulate self-regulation in pre-adolescent children? An integrative neurocognitive review. *Neuroscience & Biobehavioral Reviews*, *74*, 163-184.

[14] Koch, D. (2017). *The Effect of Live Actor Simulation on Perceived Self-Efficacy of Nursing Students Completing Psychiatric Clinical Experiences* (Doctoral dissertation, Capella University).

[15] Labrague, L., McEnroe-Petitte, D., Papathanasiou, I., Edet, O., Tsaras, K., Leocadio, M., ... & Vera Santos-Lucas, K. (2018). Stress and coping strategies among nursing students: an international study. *Journal of Mental Health*, *27*(5), 402-408.

[16] Liang, H., Wu, K., Hung, C., Wang, Y., & Peng, N. (2019). Resilience enhancement among student nurses during clinical practices: A participatory action research study. *Nurse education today*, *75*, 22-27.

[17] Mateus, P., & Oliveira, P. (2017). Brief Biofeedback Intervention for Stress and Anxiety: a Study with Nursing College Students. *International Journal of Nursing*, *4*(1), 7-12.

[18] Mayhob, M., & Hashem, S. (2019). Sources of Stress and Its Levels among Nursing Students during Attending Adult Nursing Clinical Placement. *International Journal of Novel Research in Healthcare and Nursing*, *5,* (1), 162-172.

[19] McCarthy, B., Trace, A., O'Donovan, M., Brady-Nevin, C., Murphy, M., O'Shea, M., & O'Regan, P. (2018). Nursing and midwifery students' stress and coping during their undergraduate education programmes: An integrative review. *Nurse education today*, *61*, 197-209.

[20] Murdaugh, C., Parsons, M., & Pender, N. (2018). *Health promotion in nursing practice.* Pearson Education Canada.

[21] Myhre, S. (2018). *The* Effects *of Reattribution Training and Behavioral Activation on Cognitive Vulnerabilities to Depression Among College Students* (Doctoral dissertation, North Dakota State University).

[22] Nielsen, K., Norlyk, A., & Henriksen, J. (2019). Nursing students' learning experiences in clinical placements or simulation–A qualitative study. *Journal of Nursing Education and Practice*, *9*(1), 1-12.

[23] Perera, C., Pandey, R., & Srivastava, A. (2018). Role of Religion and Spirituality in Stress Management Among Nurses. *Psychological Studies*, *63*(2), 1-13.

[24] Ramadan, E., & Ahmed, H. (2015). The Effect of Health Educational Program on Depression, Anxiety and Stress among Female Nursing Students at Benha University. *IOSR J Nurs Health Sci*, *4*(3), 49-56.

[25] Ratanasiripong, P., Park, J., Ratanasiripong, N., & Kathalae, D. (2015). Stress and anxiety management in nursing students: Biofeedback and mindfulness meditation. *Journal of Nursing Education*, *54*(9), 520-524.

[26] Reed, K. (2017). The Moderating Effects Of Stress On The Relationship Between Self-Control, and Desire For Control, On Impulsive Purchasing (Master thesis).

[27] Rhead, M. (1995). Stress among student nurses: is it practical or academic?. *Journal of clinical nursing*, *4*(6), 369-376.

[28] Robles, T. (2019). *Health, Stress, and Coping. Advanced Social Psychology*: The State of the Science, 431.

[29] Samson, P. (2018). *Stress, Anxiety, and Depression: Role of Campus Connectedness, Social Support, and Coping among Nepalese Nursing Students, Doctoral dissertation*, 50-74.

[30] Sarikoc, G., Ozcan, C., & Elcin, M. (2017). The impact of using standardized patients in psychiatric cases on the levels of motivation and perceived learning of the nursing students. *Nurse education today*, *51*, 15-22.

[31] Terp, U., Hjarthag, F., & Bisholt, B. (2019). Effects of a cognitive behavioral-based stress management program on stress management competency, self-efficacy and self-esteem experienced by nursing Students. *Nurse educator*, *44*(1), 1-5.

[32] Yong-Shian, G., Selvarajan, S., Chng, M. , Tan, C., & Yobas, P. (2016). Using standardized patients in enhancing undergraduate students' learning experience in mental health nursing. *Nurse education today*, *45*, 167-172.

[33] Yusainy, C., Chan, D., Hikmiah, Z., & Anggono, C. (2019). Physical activity in Indonesian University students: the contradictory roles of dispositional mindfulness and self-control. *Psychology, health & medicine*, *24*(4), 446-455.