

## **Correlates to Perceived Anger among Faculty Nursing Students: An Application of Psycho-Educational Program**

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**Abstract:** Stress, anger and lack of effective communication skills are the most common factors that appear to be the most common problems of nursing students. The aim of this study was to assess correlates of perceived anger among faculty nursing students and examine the effect of application of psycho-educational program for them. A pre-post quasi-experimental design was utilized in this study. A sample of convenience of 168 faculty nursing students was recruited for the conduction of this study. Socio-demographic data sheet and dimension anger reaction scale were used for data collection. A psycho-educational program session was held for 90 minutes for a total of 6 weeks (12 sessions), the program focused on particular topics for anger management such as problem solving, self-control, thought stopping and assertiveness. Findings of this study indicated that, the studied participants experienced mild to high levels of anger with statistical significance difference between pre and post program in relation to level of perceived anger, there were no significance associations between socio-demographic characteristics and anger level among the studied participants. To conclude, psycho-educational program is an effective management program for those experienced anger problems. Anger management program for mental health promotion is essential for faculty nursing students.

**Key words:** Psycho-education • Anger problem • Nursing students

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### **INTRODUCTION**

Anger and Aggression are a serious phenomenon of insensitive behavior by which individuals have a direct intention to cause harm to others and has the most vigorous effects for both [1]. According to Colman [2] aggression is behavior with a sole purpose or function to injure physically or psychologically". Myers [3] defined aggression as "physical or verbal behaviors intended to hurt someone".

Stress, anger and lack of effective communication skills are the three factors that appear to be the most common problems of colleague students [4]. The problems can be so serious that we can propose that it predisposes people to physical illnesses, mental disorders, behavioral disturbances and inappropriate reactions. The intensive care unit is a stressful environment for students, especially college students [5].

College students are in their early adulthood stage, wherein they want to play independent roles in accordance with their physical maturity; however, they

experience various adaptation problems such as difficulty in developing complete mental and economic independence [6]. Moreover, college students experience anger due to psychological stressors, which are related to low self-esteem, unstable family, or faculty environment [7].

Nursing students are the nucleus of the professional nurses of tomorrow, who will interact with their colleagues and other health care professionals on a daily basis and provide the care for patients, their families and society in the area of health and education in the future. The acquisition of the assertion skills is considered the key to enhance personal competence and satisfying relationships [8].

Anger is an affective experience that varies in intensity and chronicity and includes physiological, cognitive, phenomenological and behavioral components [9]. Although anger has been associated with positive outcomes such as mobilizing psychological resources, facilitating perseverance and protecting self-esteem, anger can also be problematic,

anger has been associated with negative outcomes, including physical health problems, poor quality of life [10] and interpersonal conflict [11].

Nursing is a stressful profession and nursing students are exposed to high level stress in both theoretical and clinical components of their educational programs [12]. Anger is the result of frustration when students do not get what they need, want, or expect from life or others or developed in response to unwanted action of others person who is perceived to be disrespectful, demeaning, threatening [13].

Nursing students, who participate in clinical learning experiences, face a myriad of patient's problems and complex situation [14]. Moreover, clinical situation experienced by nursing students can be unexpected and disturbing [15] and student's distress can increase as training progress [16]. Although students enter the psychiatric nursing profession with some theoretical knowledge and role – play experience, they still report feeling frightened, overwhelmed and /or emotionally traumatized by what they hear or observe [17].

Cognitive-behavior therapy is based on the assumption that cognitive deficits and distortions characteristics of are learned rather than inherent. Programs, therefore, emphasize individual accountability and attempt to teach to understand the thinking processes and choices that immediately preceded their criminal behavior. Learning to self-monitor thinking is typically the first step, after which the therapeutic techniques seek to help identify and correct biased, risky, or deficient thinking patterns. All cognitive behavioral interventions, therefore, employ a set of structured techniques aimed at building cognitive skills in areas where show deficits and restructuring cognition in areas where' thinking is biased or distorted. These techniques typically involve cognitive skills training, anger management and various supplementary components related to social skills, moral development and relapse prevention [18].

**Significance F the Study:** Nursing students experience various tensions as well as anger and negative self - esteem from their clinical learning environment [19]. Nursing students are educated in a strict manner in order to conduct high quality nursing duties in clinical settings. Accordingly, their anger expressions can result in maladaptive behaviors, which will eventually lead students to aggressive behaviors. This significantly influences the nursing student's ability to care of patients. In spite of the pervious importance of studying and

managing anger problems among the faculty nursing students a few scattered researches were done in Egypt regarding assessing mental health among students and application of psycho-educational interventions among the faculty nursing students. Therefore; it will be meaningful to investigate the method of nursing students' expression of their anger. If nursing students are able to maintain a healthy mental state and control their negative emotion such as anger, then nursing students and nurses will able to improve the quality of patient care. So, this current research will help the nurse educators to test the effectiveness of applying psycho-educational interventions for anger management among nursing students which will improve nursing practice in education, practice and increase the nursing body of knowledge.

**Aim of the Study:** The aim of this study was to assess correlates of perceived anger among faculty nursing students and examine the effect of application of psycho-educational program for them.

**Research Questions:** Q1. What are the correlates to perceived anger problems among faculty of nursing students?

**Q2:** What is the difference between pre and post psycho-educational program regarding perceived anger problems among faculty of nursing students?.

## **MATERIALS AND METHODS**

**Research Design:** A quasi-experimental design was selected for the current study; such design fits the nature of the problem under investigation. This type of research design involves one or more group of subjects observed before and after the implementation of an intervention [20].

**Sample:** A sample of convenience of 168 nursing students from different educational levels was recruited for the conduction of this study. Students with mental and emotional disorders were excluded.

**Setting:** The study was carried out at the Faculty of nursing-Cairo University. Faculty of Nursing Cairo-University is one of biggest nursing faculties in Egypt. The Faculty is accredited from the National Authority of Quality and Accreditation of Education- Egypt. The total number of students is around 1051 students in addition to around 150 to 200 internship year students.

## Tools for Data Collection

### Two Tools Were Used for Data Collection

**Socio-demographic Data Sheet:** this sheet was developed by the investigators. It includes age, sex, no. of siblings, no. of rooms, level of education of father and mother, occupation of father and mother, last time exposed to anger/or aggression, ..... Etc.

**Dimension Anger Reactions (DAR) [21]:** The dimension anger reaction (DAR) is a 7-item self-report listing dimensions of anger reactions and designed to assess acuities of anger dispositions directed toward others. The scale measures three acuity of anger (low, moderate and high). Respondents score each item from 0=not at all to 8=exactly so to indicate the degree to which each statement describes their feelings or behaviors.

The total score is the sum of all 7- items, total score ranged from (0 to 56), from not at all to exactly so. Total scores were divided as follows:

- Mild acuity of anger = 0-22
- Moderate acuity of anger = 23-42
- High acuity of anger = 43-56.

The tool was tested by using a two-week interval test-retest reliability coefficient (0.753).

**Tool Translation:** The investigators translated the instruments (English formats) into Arabic language, rendered the same English formats to bilingual experts for more verification of the translation of the Arabic formats. Then, the resulting versions were translated back into the original language by other bilingual experts who were blind to the original. Minor discrepancies in the content were founded and necessary modifications were done.

**Ethical Consideration:** A written approval was obtained from the Faculty of Nursing- Cairo University to conduct the current study. All participants were informed that participation in the current study is voluntary and the data collected will be used only for research purpose and anonymity and confidentiality of each participant was protected by allocation of a code number for each response. The participants were informed that they can withdraw at any time during the study without giving reasons; confidentiality was assured and subjects were informed that the content of the tools will be used for the research purposes.

**Procedure:** After obtaining the official permission from the administrators in the Faculty of Nursing- Cairo University, the investigators met with the eligible

students and the purpose of the study was explained to obtain their cooperation. Baseline assessment for the study participants was measured through pretest by the utilizing the data collection tools. The questionnaires were self-reported and the investigators were available to explain any unclear questions and made sure that each student has filled the scale completely and there are no missing data.

**Program Implementation:** Psycho-educational anger management program sessions were hold 60-90 minutes, for a total of 6 weeks (two sessions per week), with five minutes relaxation exercises before and after each session. Studied participants were divided into small groups according to their lectures timetable. The main topics of the sessions are, understanding anger, thought stopping, modeling, assertiveness, problem-solving....etc. Each session was followed by homework which was discussed individually in the next session.

Evaluation of the benefits of psycho-educational anger management program was done by prognosis of homework and applying post-test to assess the level expressed anger problems as perceived by the studied participants.

**Pilot Study:** The questionnaire was pretested on a sample equal to 10 % of the total sample size that were not part of the main study. No further modifications were done to the scale.

**Data Management and Analysis:** Data was analyzed using statistical package for social science (SPSS) version 20. Numerical data were expressed as mean  $\pm$  SD and range. Qualitative data were expressed as frequency and percentage. For qualitative data, comparison between two variables was done using student t-test for test. Relations between different numerical variables were tested using person correlation. Probability (P-value) less than 0.05 was considered significant and less than 0.001 was considered as highly significant.

## RESULTS

Fig. (1) illustrates that (67.9%) of the studied participants were females while, (32.1%) were males. Fig. (2) shows that (66.7%) of the studied participants were from rural origin whereas, (33.3%) were from urban areas in Egypt.

Table (1-a) shows that the majority of the studied participants (82.7%) were between the ages of 19 to 20 years while, (17.3%) were older than 20 years old with a

### Frequency distribution of the studied sample according to their gender

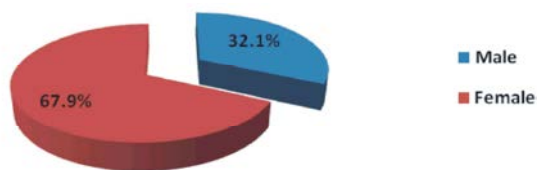


Fig. 1: Gender distribution of the studied participants (n=168)

### Frequency distribution of the studied sample according to their residence

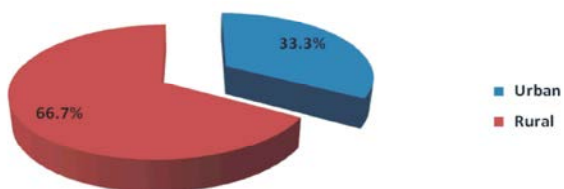


Fig. 2: Residence distribution of the studied participants (n=168)

Table (1-a): Frequency distribution of the studied participants according to their socio-demographic characteristics (n=168)

Variables	N	%
<b>Age</b>		
19-20 years	139	82.7
> 20 years	29	17.3
M±SD	19.94± .88	
<b>Rank among siblings M±SD</b>		
	2.70± 1.65	
<b>Father's job</b>		
Employee	76	45.2
Teacher	24	14.3
Free work	20	11.9
Worker	11	6.5
Driver	8	4.8
Retired	19	11.3
Died	10	6.0
<b>Mother's job</b>		
Housewife	130	77.4
Teacher	16	9.5
Nurse	9	5.4
Employee	10	6.0
Died	3	1.8

mean age of (19.94± .88). The average rank of the studied participants among their siblings was (2.70± 1.65). Regarding the father's job of the studied sample, the results revealed that more than three quarters (76%) were employees, followed by (14.3%) were working as teachers

Table (1-b): Frequency distribution of the studied participants according to their socio-demographic characteristics and anger experience history of anger (n=168)

Variables	N	%
<b>Number of the family members</b>		
≤ 5 members	98	58.3
> 5 members	70	41.7
M±SD	5.52±1.55	
<b>Crowding index M±SD</b>		
	1.66±.58	
<b>Have you ever do a violent act?</b>		
No	54	32.1
Yes	114	67.9
<b>Do you have a violent person in your family</b>		
No	72	42.9
Yes	96	57.1
<b>How many violent acts did you do?</b>		
None	61	36.3
< 5 times	53	31.5
≥ 5 times	54	32.2

whereas, (11.3%) were retired from work. Regarding the mother's job, slightly more than three quarters (77.4%) were not working, while (9.5% and 6%) were working as teachers and employees respectively.

Table (1-b) indicated that slightly more than half of the studied participants (58.3%) the number of their family members were less or equal to five members while, (41.7%) were more than five members with a mean of (5.52±1.55). The average of the studied participants crowding index was (1.66±.58). Slightly more than two thirds of the studied participants (67.9%) reported that they have been violent through their lives compared to (32.1%) reported that they have not been ever violent. More than half of the studied participants (57.1%) indicated that they have a violent person in their family whereas, (42.9%) reported they do not have any violent member in their families. Regarding the frequency of the violent acts, almost one third (31.5% and 32.2%) reported less than five times and more than five times respectively whereas, (36.3%) indicated that they have not been violent at all.

Fig. (3) illustrates that the scores of the perceived anger level among the studied participants and revealed that, near half of the studied participants (48.2%) perceived mild level of anger pre program as compared (41.1%) post program. In addition the Fig. revealed that, 33.9% of the studied participants perceived moderate level of anger pre-program as compared to 48.2% post program. Moreover, 17.9% of the studied sample perceived high level of anger pre-program as compared to 10.7% post program. The pretest mean scores was (31.15±10.9) compared to (25.12± 11.19) of the posttest with a mean difference of (6.03±5.24); the results also indicated that, there was a statistically significant difference between the pretest and posttest score as (t=14.896, p=.000).

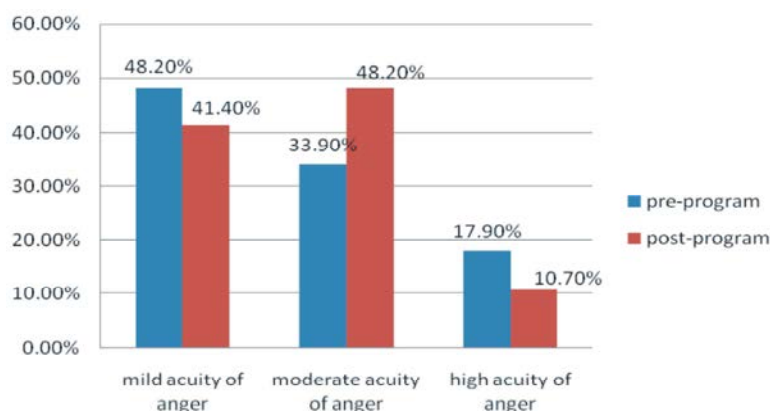


Fig. 3: Pre and post program anger levels as perceived by studied participants (n=168)

In addition, the study findings revealed that there were no statistically significant differences between males and females on the pre-program and post program levels of anger ( $X^2= 3.067$ ,  $p=.216$ ; and  $X^2=4.542$ ,  $p=103$  respectively). Also, there were no statistically significant differences between urban and rural origins in relation to the anger levels on the pre-program and post program ( $X^2=3.616$ ,  $p=.164$ ; and  $X^2=2.837$ ,  $p=.242$  respectively)

Moreover, the study results revealed that, there were statistically significant differences between pre and post program in relation to recurrent exposure to anger/aggression, attacks of anger acting out and having an aggressive family member ( $X^2= 5.364$ ,  $p=.000$ ;  $X^2=4.780$ ,  $p=0.001$ ; and  $X^2=6.532$ ,  $p=0.000$ , respectively).

## DISCUSSION

The current results revealed that, more than two thirds of the studied participants were females and two thirds were from rural areas. Moreover the study results added that, there are no statistical significant differences between male and female, place of residence in relation to perceived anger level. These results could be due to increasing the number of females' admission to the faculties of nursing due to cultural issues that females are able to give care more than males, moreover, the gender and residence didn't make in difference related to perceived anger level because of decrease social diversity and differences between different groups from different places of residence.

Moreover the study results reported that, there are no statistical associations were found between perceived anger level in relation to socio-demographic characteristics. This might be due lack of social diversity between the studied participants.

These study results are supported by Jeyasutha [22] who revealed that, The chi square test showed that there was no significant association of anger level with age, sex, religion, type of family, siblings, type of stay, socio-economic status, hobbies and academic performance at  $P>0.05$ . Meanwhile, [23] disagreed with the current study results who had stated that a multitude of factors contribute to their anger. Some of these factors include poverty, divorce, physical or psychological abuse, neglect and alcoholism.

As regards the correlates of perceived anger among the studied participants the current study results revealed that, there are statistical significant associations were found between recurrent exposure of anger/or aggression, doing anger/aggression acts and having aggressive/violence family members in relation to the level of perceived anger among the studied participants. These results could be interpreted as having an aggressive family member or recurrent exposure to anger/or violence acts makes the studied participants vulnerable to aggression attacks either physical or verbal which in turn express themselves or their demands in an anger attacks also. These study results are supported by [23] who revealed that physical or psychological abuse and negligence are risk factors for anger expression.

In relation to the effect of psycho-educational anger management program on anger level among the studied participants; the current study results revealed that there is observable reduction in the perceived mild and high anger level in post program assessment than in preprogram assessment. These results could be interpreted as a positive effect of the program sessions which include understanding anger, thought stopping, modeling, assertiveness, problem-solving which give the studied participants a comprehensive overview about understanding anger and the best ways to deal with anger

attacks and problems and this gives the studied participants a safe anger outlet through the program session and through discussion of each session homework. The studied participants revealed also that, the program was very effective and helpful for them especially with the beginning of the clinical training in the hospitals which put them in very stressful situation which provoked their anger expressions. The studied participants also recommended the repetition of the program in the beginning of every new clinical experience and to be special for the newly admitted nursing students in the faculty.

These study results are supported by Tahmasebian *et al.* [24] who revealed that, teaching anger management skills to enhance the mental health of students has the significant difference between the experimental group and control group. These study results are also supported by Jeyasutha [22] who reported in a research study about effectiveness of anger management programme among early adolescents in a selected, school that, the pre-test means was 77.97 with the standard deviation of 10.44 and the post test mean was 55.57 with the standard deviation of 11.60. The paired  $t'$  test value was 20.378 at  $P < 0.05$ . There is a significant reduction of anger level in post-test. Moreover, the current study results also in agreement with Pollock and Kymissis [25] who had stated that working with a group of adolescents will help counsellors reach more people at once while simultaneously decreasing the adolescents feeling of isolation around the issue of anger.

### CONCLUSIONS

The current study concluded that perceived anger among faculty nursing students ranged from mild to high level. There are no associations between perceived anger level and socio-demographic characteristics of the studied participants. Moreover, having an aggressive/or violent family member, frequent exposure to anger/violence attacks and recurrent anger acts are considered correlates of perceived anger among the studied participants. The study also concluded that, psycho-educational anger management program played a vital role in reduction of perceived mild and high anger level among the studied participants as proved from the statistical significance difference between pre and post program anger level.

### Recommendations:

- The educational institutions must provide opportunities for nursing students to learn anger management especially during the clinical training period
- Emphasis should be given regarding the planning and implementation of anger management for students' families
- Replication of the study is recommend using a control group.

### REFERENCES

1. Ahsan, M., 2015. Physical, verbal and hostility aggressiveness in University's physical education students. *International Journal of Sports and Physical education*, 1(2): 20-23.
2. Colman A.M., 2003. *A dictionary of psychology*. New York. Oxford University Press Emmerova, I (n.d). *Aggressive behavior of pupils against teacher – theoretical Reflection and school practice*. The New Educational Review.
3. Myers DG., 2005. *Social Psychology*. 8 thed; New Delhi: McCraw Hills.
4. CASEL. 2010. CASEL select programmes. <http://www.casel.org/programs/selecting.php>.
5. Austin, E.J., 2010. Measurement of ability emotional intelligence: Results for two new tests. *British Journal of Psychology*, 101(3): 563-578.
6. Kim, G.H. and K.H. Kim, 2012. Factors related to happiness in first year women nursing students. *Journal of Korean Academy Psychiatric Mental Health Nursing*, 21: 149-157.
7. Cha, N.H. and S.R. Sok, 2013. Depression, self-esteem and anger expression patterns of Korean nursing students. *International Nursing Review*. Internal Council of nurses, 61: 109-115.
8. Hamoud S., S. Abd El Dayem and L. Ossman, 2011. The Effect of an Assertiveness Training Program on Assertiveness skills and Self-Esteem of Faculty Nursing Students. *Journal of American Science*, 2011;7(12) <http://www.americanscience.org>.
9. DiGiuseppe, R.A. and R. Tafrate, 2007. *Understanding Anger Disorders*. New York. Oxford University Press.
10. Painuly, N., P. Sharan and S.M. Mattoo, 2007. Antecedents, concomitants and consequences of anger attacks in depression. *Psychiatry Research*, 153: 39-45.

11. McDermut, W., J. Fuller, R. DiGiuseppe, I. Chelminski and M. Zimmerman, 2009. Trait anger and Axis I disorders: implications for REBT. *Journal of Rational Emotive & Cognitive Behavior Therapy*, 27: 121-135.
12. Abazary, F., A. Abbaszadeh and M. Arab, 2004. A study on level and sources of stress in nursing students. *Journal of Medical Education Development Center*, 1(1): 23-31.
13. Guin, J, J. Kiecolt-Glaser., W. Malarkey and Glaser, 2008. The influence of anger expression on wound healing Brain, behavior and Immunity, 22(5): 699-708
14. Sullivan, P., 1993. Occupational stress psychiatric nursing. *Journal of Advanced Nursing*, 18: 591-601.
15. Laws, T. and C. Hawkins, 2016. Critical incident stress: A normal response to an abnormal situation. *Australian Nursing Journal*, 2,7. Available at: <http://www.info.au>
16. Tully, A., 2004. Stress, sources of stress and ways of coping among psychiatric nursing students. *Journal of Psychiatric and Mental Health Nursing*, 11: 43-47.
17. Morrissette, P.J., 2000. Promoting Psychiatric students well – being. *Journal of psychiatric and mental health Nursing*, 11: 534-540.
18. Lipsey, M.W., N.A. Landenberger and S. Wilson, 2007. *Effects of Cognitive-Behavioral Programs for Criminal Offenders*. Oslo, Norway: The Cambell Corporation.
19. Murphy, F., M. Rosser, R. Bevan, G. Warner and S. Jordan, 2012. Nursing students' experiences and preferences regarding hospital and community placements. *Nurse Education in Practice*, 12: 170-175.
21. Polit, D. and C. Beck, 2010. *Essential of nursing research. Appraising evidence for nursing practice*, 7<sup>th</sup> ed. London. Walters Kluwer. Novaco, R.W., 2004. Assessment of anger and aggression in male offenders with developmental disabilities *Psychological Assessment*, 16(1): 42-50.
22. Jeyasutha, R., 2014. Effectiveness of anger management programme among early adolescents in a selected, school, Thoothukudi - True Experimental Study. *International Journal of Comprehensive Nursing*:
23. Thompson Rodolph and Henderson, 2004. *Conseling children*. Located at: [https://books.google.com/eg/books/about/Counseling\\_Children.html?id=3YFLAAAYAAJ&redir\\_esc=y](https://books.google.com/eg/books/about/Counseling_Children.html?id=3YFLAAAYAAJ&redir_esc=y)
24. Tahmasebian, H., B. Roshani, K. Farhadi and P. Amjadian, 2014 Effects of Anger Management Training on Students' Mental Health, *Kermanshah University of Medical Sciences, World Applied Programming*, 4(1): 58-64.
25. Pollock, K.M. and M.D. Kymissis, 2001. The future of adolescent group therapy. An analysis of historical trends and current momentum. *Journal of Child and Adolescent Group Therapy*, 11(1): 5-14.