



Original Article

Explore the Association of Anger with Academic Year Among Nursing Students at Private Nursing Institute Karachi Pakistan

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ABSTRACT

Anger among nursing students can stem from various sources, considering the demanding nature of their education and future profession. **Objective:** To explore the association of anger with academic year among nursing students at a private nursing institute in Karachi, Pakistan. **Methods:** This cross-sectional study was conducted at Horizon School of Nursing and Health Sciences: 153 nursing students were recruited through convenient sampling. Nursing students enrolled in various academic years were included. **Results:** The study findings revealed that the participants are predominantly male, making up 85.6% of the sample, while females represent 14.4%. Moreover, the findings revealed that the mean anger score is calculated at 28.8366, indicating the average level of anger reported by nursing students. The findings also include p-values, highlighting significant differences in academic years ($p = 0.016$) but not in gender ($p = 0.156$) or age groups ($p = 0.440$). The study found average anger levels among nursing students (28.8366). Academic years showed significant differences in anger ($p = 0.016$), while gender ($p = 0.156$) and age ($p = 0.440$) did not. **Conclusions:** Tailored support for specific program stages could enhance student well-being.

INTRODUCTION

Anger is a normal emotion that arises from environmental stress and is associated with irritation over one's wants or perceived threat. It is an adaptive, subjective emotion ranging from mild annoyance or upset to furious outbursts [1]. Moreover, it is divided into aspects that are experienced and expressed. Anger expression is the behavioral area in which a person expresses their anger, whereas anger experience is the emotional state that a person experiences along with physiological reactions. State and trait anger are standard components of the anger experience. State rage is the instantaneous, unpleasant, and variable-intensity subjective response to an

environment that elicits anger. An essential idea in determining an individual's baseline level of anger is trait anger, which is a comparatively constant and steady emotion independent of particular circumstances or timing [2]. While anger control is seen as a regulated, adaptive strategy of anger resolution, anger suppression and expression-out are thought to be uncontrollable, maladaptive forms of expressing anger. Anger management gone wrong has detrimental effects on one's physical well-being, such as a rise in the incidence of cardiovascular illnesses and a rise in eating disorders-related body mass index [3, 4]. Adolescent anger is a

significant topic because of the detrimental psychological and physiological impacts it can have. Anger has detrimental impacts on overall health and presents psychosomatically as a range of symptoms, including headaches, nausea, upset stomachs, trouble rising out of bed in the morning, and complaints of aches and pains [5]. Based on these findings, it is advised that a program be developed to help nurses express their anger to help them deal with their suppressed emotions and prevent interpersonal conflicts [6]. Research revealed a link between high levels of anger and drug, alcohol, and cigarette addiction [7]. Another survey shows that long duty hours lead to anger [8]. It also results in psychological issues, including low self-esteem or interpersonal conflicts. Therefore, preserving one's physical and emotional well-being requires effective anger management [2]. It has been stated that approximately 18% of South Korean nurses encounter state anger at work [9]. One of the feelings that nurses experience regularly is anger. Interpersonal disputes brought on by a lack of communication, unfair treatment, and disrespect are some of the things that might make someone angry. The workload of nurses was another source of rage. For instance, a study of hospital nurses revealed that having a lot on your plate often angers you [10]. Nursing students and nurses can provide better patient care if they manage their negative emotions, such as rage, and maintain a good mental state. Additionally, because nursing students must shoulder the obligations of future healthcare workers, their negative emotions are more potent than those of college students [11]. This emotional state could become angry or dissatisfied, resulting in poorer nursing practice and care. Nursing education and practice can be highly stressful due to the demanding nature of the profession. Students may face challenges in clinical placement, like long hours, academic pressure, and emotional stress while caring for patients [12].

This environment could potentially contribute to increased anger levels. Therefore, understanding the anger levels of nursing students is crucial.

METHODS

This cross-sectional study was conducted at Horizon School of Nursing and Health Sciences from September to December 2023. One hundred fifty three nursing students were recruited through convenient sampling. Nursing students enrolled in various academic years were included. Consent was obtained from participants before their involvement. Sample size was calculated through open Epi with a 95% confidence interval. Collect relevant demographic information such as age, gender, academic year, and any prior experience in healthcare. A structured instrument called the Level of Anger Scale (LAS) was

created to gauge youths' levels of anger. Respondents are asked to score how frequently they experience various anger-related symptoms, such as feeling irritable, becoming angry quickly, and having difficulties managing their temper, on a 13-item measure. A 5-point rating system is used to rank the items, ranging from 'never' to 'very often' [5]. Prior ethical approval was obtained from the relevant institute with reference number SHNHS/2023/467 and date of November 24, 2023. Anonymity and confidentiality of participants' responses was ensured. Informed consent was obtained from all participants before data collection. Statistical analysis software SPSS26 was used for data analysis. Frequency and percentage were used for the demographic data, mean, and standard deviation were used for the anger level score. Moreover, the independent t-test was used to associate gender with anger score, and one-way ANOVA was used to associate academic year and age with anger score.

RESULTS

Table 1 presents demographic data gathered from 153 participants across several categories. Regarding age distribution, most participants fall within the 23-25 age range, comprising 54.9% of the total. A significant portion, 37.3%, are between 19 and 22 years old, while a smaller fraction, 7.8%, are above 25 years old. Gender-wise, the participants are predominantly male, making up 85.6% of the sample, while females represent 14.4%. Regarding the academic year, the largest group consists of students in their 3rd year, comprising 39.9% of the participants. Following closely, the 4th-year students make up 35.9%, with smaller percentages from the 2nd year (20.9%) and the 1st year (3.3%).

Table 1: Demographic data of the participants (N=153).

Variables	Frequency (%)
Age (years)	
19-22	57 (37.3)
23-25	84 (54.9)
above 25	12 (7.8)
Gender	
Male	131 (85.6)
Female	22 (14.4)
Academic year	
1 st year	5 (3.3)
2 nd year	32 (20.9)
3 rd year	61 (39.9)
4 th year	55 (35.9)

Table 2 provides statistical information regarding the mean and standard deviation of anger levels among nursing students. The mean anger score is calculated at 28.8366, and the standard deviation is 9.82910, with a total score of 65.

Table 2: Mean and standard deviation of anger among nursing students.

Mean ± SD	Total Score
28.8366 ± 9.82910	65

Table 3 shows the association of demographic variables with anger score. Looking at gender, females show a higher average score (30.68) compared to males (28.53). Regarding age groups, those between 19-22 and 23-25 years old have relatively similar mean scores of 29.16 and 29.12, respectively, while individuals above 25 have a slightly lower score of 25.33. Academic year-wise, 1st and 4th-year students exhibit similar high average scores of 31, contrasting with 2nd-year students, who show a lower average of 24.19. 3rd-year students fall in the middle with an average score of 29.15. The table also includes p-values, highlighting significant differences in academic years ($p = 0.016$) but not in gender ($p = 0.156$) or age groups ($p = 0.440$).

Table 3: Association of demographic variables with anger score.

Variables	N	Mean ± SD	p - value
Gender			
Male	131	28.5267 ± 10.06160	0.156
Female	22	28.5267 ± 10.06160	
Age			
19-22	57	29.1579 ± 9.09040	0.440
23-25	84	29.1190 ± 10.11191	
above 25	12	25.3333 ± 11.32442	
Academic Year			
1 st year	5	31.0000 ± 6.04152	0.016
2 nd year	32	24.1875 ± 10.81050	
3 rd year	61	29.1475 ± 8.19926	
4 th year	55	31.0000 ± 10.45626	

DISCUSSION

Anger is a common and natural emotion that arises in diverse situations based on interactions with the surroundings, playing a vital role in maintaining human relationships [13]. The study includes 153 predominantly male participants (85.6%), with the most significant portion of students (39.9%) in the third-year class. In another study by Ansar F et al., incorporating with 400 participants, 43.3% were recorded as female, and most were in their final year (36.7%) [14]. Another study was conducted in Turkey in 2020 by Korkmaz E.K et al., to explore the association of anger with age, revealing a mean and standard deviation of 30.8 ± 7.3 (18-59). However, no significant relationship was found among participants about age [15]. The current study's findings demonstrated that participants' average level of anger is 28.8366, which is the mean anger score. Similarly, Hamdan-Mansour A.M et al., showed that the mean state anger score was 31.7,

suggesting a moderate level of state anger in students [16]. Additionally, another study was conducted in Korea by Campano J.P. et al., in 2021, and its mean and standard deviation were 2.20 (SD = 0.51) and 2.44 (SD = 0.38), respectively. In this regard, another study also found an average level of anger among the participants [17]. Today, anger and violence among students are serious concerns. Pupils who struggle with cognitive processing and have high levels of anger are more likely to experience relationship difficulties, academic underachievement, and health issues [18]. The current study found a non-significant association ($p = 0.156$) between gender and anger. In contrast, another study reported by Tanabe Y et al., a significant association ($p = .016$), indicating potential variations in gender-related patterns across research contexts [19]. In contrast, in another study conducted by Mohamed Moustafa M et al., it has been found that males have higher anger than females. Also, that males have higher anger compared to females. In the present study, the association between age and anger has a mean of 10.17, while another study reports a higher association of 19.86 for the same demographic characteristic [20]. The present study identified a non-significant association ($p = 0.156$) between gender and anger. In comparison, another study in Pakistan by Naveed H et al., reported a p-value of 0.124 concerning the association of anger with gender [21]. The present study indicates a significant association with the academic year ($p = 0.016$), while another study done by Cha N.H. et al., suggests a distinct connection with anger ($p = 0.004$) across academic years [12]. The present study highlights a significant association with the academic year (mean = 28.83 ± 8.87). In contrast, a study conducted in Turkey in 2022 by Girgin B.A reports the different values (mean = 59.27 ± 11.07) [22]. Students in their second year may be in a transitional stage, going from primary education to more applied, hands-on experiences. This change can be difficult, and the adjustment needed may exacerbate emotions of rage.

CONCLUSIONS

The study on anger levels among nursing students revealed an average anger score of 28.8366. Significant variations were found based on academic years ($p = 0.016$), indicating differing anger levels across the program's stages. However, gender ($p = 0.156$) and age groups ($p = 0.440$) did not demonstrate substantial differences in reported anger.

Authors Contribution

Conceptualization: AB

Methodology: FK, AB,

Formal analysis: MI, HAR, AB

Writing-review and editing: HA, SM, AB

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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