# The Correlation between Bullying, Academic Emotion and Teacher Support in Baccalaureate Nursing Education

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**Abstract:** *Objective:* To investigate and analyze the relationship between bullying, academic emotion, and teacher support in the nursing education of undergraduate nursing students. *Methods:* A convenient sampling method was adopted by conducting a questionnaire survey on undergraduate nursing students of a university from October 2022 to December 2022. Spearman's correlation was used to analyze the relationship between bullying, academic emotions, and teacher support of nursing students, with a significance level of $\alpha = 0.05$. *Results:* The total score for educational bullying was $12.51 \pm 8.71$, the total academic emotional score was $284.25 \pm 34.69$, and the total teacher support score was $80.76 \pm 14.39$. A negative correlation was found between nursing students' bullying and teacher support, $s = -0.20$, $P < 0.01$, while a positive correlation was observed between academic emotion and teacher support, $s = 0.21$, $P < 0.01$. Additionally, bullying in nursing education was positively correlated with academic emotion, $s = 0.25$, $P < 0.01$. *Conclusion:* The academic emotion and teacher support of nursing students are at a moderate level. Part of the challenges in nursing survival is due to bullying in nursing education. Nursing educators should prioritize the stable development of nursing staff.

**Keywords:** Teacher support; Bullying behaviors in nursing education; Academic emotion

## 1. Introduction

Bullying behaviors in nursing education are negative actions experienced by nursing students in the educational environment, and there is no consensus on the prevalence of bullying in nursing education in China [1]. Bullying behavior seriously affects the physical, psychological, and mental health of the victims, leading to symptoms such as anxiety, depression, low self-esteem, and in severe cases, post-traumatic stress disorder and suicidal behaviors [2]. The impact of this traumatic experience on nursing students evolves over time, not only straining interpersonal relationships, and diminishing academic performance and health, but also causing long-term negative effects on their careers, career play a role, leading to increased turnover rates and adverse nursing events [3–5]. Teacher support has been shown to effectively buffer the adverse effects of bullying, improving students' academic emotions and stabilizing the nursing workforce [6,7]. Currently, there is insufficient attention

to bullying in nursing education in China. To better understand whether nursing students experience bullying during their education and to support the stable development of the nursing workforce, a survey was conducted involving 344 undergraduate nursing students in a university. The results are reported as follows.

## 2. Objects and methods

### 2.1. Subjects of the survey

Between September 2022 and December 2022, 344 undergraduate nursing students of a university in Henan Province were selected as research subjects by convenience sampling method. Inclusion criteria were: (1) age ≧ 18; (2) undergraduate nursing major; (3) voluntary participation. The exclusion criteria were: (1) Invalid responses to the questionnaire; (2) current use of anti-anxiety or anti-depressant medications.

### 2.2. Research tools

#### 2.2.1. General information questionnaire

Developed by the researchers based on a review of the literature, it includes information on the respondent's age, gender, grade, place of origin, personality, monthly family income, and parent's education level, among other factors.

#### 2.2.2. Teacher support scale

The scale consists of 19 items across three dimensions and uses a Likert 6-point scale, ranging from "not at all conforming" to "fully conforming," with higher scores indicating stronger perceived teacher support. The internal consistency coefficient of the scale was 0.878, and the Cronbach's α of the scale was 0.927 in this study [8].

#### 2.2.3. Academic Emotions Questionnaire (AEQ)

Developed by Ma Huixia, the scale consists of 88 items across four dimensions and uses a Likert 5-point scale, with five grades ranging from "not at all in line" to "fully in line," with higher ratings indicating stronger academic emotions. The Cronbach's α of the scale ranged from 0.641 to 0.887, and the Cronbach's α of this study was 0.931 [9].

#### 2.2.4. Bullying Behaviors in Nursing Education Scale (BBNE)

Compiled by Cerit et al. and translated by Wang et al. [10]. The scale consists of 18 items across four dimensions and uses a Likert 5-point scale with five grades ranging from "never" to "always," with higher ratings indicating a greater sense of bullying in nursing education. The Cronbach's α of the scale was 0.921, and the Cronbach's α of the scale in this study was 0.938.

### 2.3. Data collection

From September 2022 to December 2022, a questionnaire survey was conducted on nursing students in the medical department of a university in Henan Province, using three scales: academic emotions, teacher support, and nursing education bullying behavior. Of the 355 questionnaires distributed, 344 were returned as valid, resulting in an effective response rate of 96.9%.

### 2.4. Statistical methods

Statistical Package for the Social Sciences (SPSS) 20.0 software was used, and the measurement data were expressed as " ± s," and the correlation between variables was tested by Spearman's correlation, with a test

level of $\alpha = 0.05$.

## 2.5. Ethical principles

The study followed the principles of favorable harmlessness, informed consent, and confidentiality and was carried out after obtaining the consent of the respondents.

# 3. Results

## 3.1. General information situation

There were 55 males (16.0%) and 288 females (84.0%), including 2 freshmen (0.6%), 139 sophomores (40.5%), 114 juniors (33.2%), and 88 seniors (25.7%).

## 3.2. Nursing students' perceptions of nursing education bullying, academic emotions, and teacher support total scores

The total score for nursing education bullying perceptions was $12.51 \pm 8.71$, which includes the following sub-scores: academic aggression at $4.12 \pm 2.59$, educational environment isolation at $2.67 \pm 2.42$, personality aggression at $3.99 \pm 3.19$, and direct negative behavior at $1.73 \pm 2.07$. The total academic mood score was $284.25 \pm 34.69$ and the total perceived teacher support score was $80.76 \pm 14.39$. See **Table 1**.

**Table 1.** Perception score of nursing students bullying, academic mood score, and teacher support score ($\bar{x} \pm s$)

| Project | Score |
|---|---|
| Educational bullying sense total score | $12.51 \pm 8.71$ |
| Academic aggression | $4.12 \pm 2.59$ |
| Educational environment isolation | $2.67 \pm 2.42$ |
| Personality aggression | $3.99 \pm 3.19$ |
| Direct negative behavior | $1.73 \pm 2.07$ |
| Total teacher support score | $80.76 \pm 14.39$ |
| Total academic emotional score | $284.25 \pm 34.69$ |

## 3.3. Correlation analysis of nursing students' perception of nursing education bullying, academic emotions, and teacher support

Nursing students' perception of nursing education bullying was negatively correlated with teacher support, $s = -0.20$, $P < 0.01$. Academic mood was positively correlated with teacher support, $s = 0.21$, $P < 0.01$, and perception of nursing education bullying was positively correlated with academic mood, $s = 0.25$, $P < 0.01$. See **Table 2**.

**Table 2.** Correlation analysis of nursing students' perception of nursing education bullying, academic mood, and teacher support ($s$)

| | Nursing education bullying feelings | Academic emotions | Teacher support |
|---|---|---|---|
| Nursing education bullying feelings | 1 | | |
| Academic emotions | 0.25 | 1 | |
| Teacher support | -.20** | 0.21 | 1 |

Note: ** is $P < 0.01$.

## 3.4. Correlation analysis of nursing students' academic mood and scores of each dimension with perception of nursing education bullying

Nursing students' academic mood was positively correlated with their perception of nursing education bullying, $s = 0.25$, $P < 0.01$. The negative high arousal dimension and negative low arousal dimension were positively correlated with the perception of nursing education bullying, $s = 0.32$, $s = 0.36$, $P < 0.01$, while the positive high arousal dimension and positive low arousal dimension were negatively correlated with it, $s = -0.21$, $s = -0.19$, $P < 0.01$. See **Table 3**.

**Table 3.** Correlation analysis of nursing students' academic mood and scores of each dimension with perception of nursing education bullying ($s = -0.21$)

| | Nursing education bullying feelings | Academic mood | Negative high arousal dimension | Negative low arousal dimension | Positive high arousal dimension | Positive low arousal dimension |
|---|---|---|---|---|---|---|
| Nursing education bullying feelings | 1 | | | | | |
| Academic mood | 0.25** | 1 | | | | |
| Negative high arousal dimension | 0.32** | 0.89** | 1 | | | |
| Negative low arousal dimension | 0.36** | 0.64** | 0.71** | 1 | | |
| Positive high arousal dimension | -0.21** | 0.29** | 0.03** | -0.39** | 1 | |
| Positive low arousal dimension | -0.19** | 0.29** | -0.05* | -0.25** | 0.75** | 1 |

Note: ** is $P < 0.01$.

## 4. Discussion

### 4.1. The current situation of nursing students' perception of nursing education bullying

The survey results indicated that the total score for nursing students' perception of nursing education bullying was $12.51 \pm 8.71$. Approximately 37.5% of nursing students reported experiencing nursing education bullying, which is lower than findings from Wang *et al.* [11]. This discrepancy may be due to differences in the stages of the survey respondents. Intern nursing students, facing significant role transition, experience greater role pressure and a more complex clinical environment, leading to a higher perception of bullying compared to the study population [12]. Despite this, undergraduate nursing students in this study did report experiencing nursing education bullying, a traumatic experience that can contribute to instability in the nursing workforce and significant turnover [13]. Data show that the healthcare sector loses up to $200 billion due to nursing shortages caused by bullying [14]. As nursing students are crucial to the future of healthcare, their stability directly impacts the healthy development of healthcare systems and costs. Therefore, nursing educators should enhance their educational practices and address the issue of nursing education bullying to support the healthy and stable development of the nursing workforce.

### 4.2. Nursing students' perceptions of nursing education bullying, academic mood, and teacher support are closely related

This study found that nursing students' perception of nursing education bullying was negatively correlated with teacher support, $s = -0.20$, $P < 0.01$. Bullying experiences can lead to emotional isolation and helplessness, such as low self-esteem, despair, and loneliness, resulting in heightened psychological sensitivity [15].

Teachers, as one of the closest contacts for students, play a crucial role in preventing and intervening in school bullying [16]. Teacher support acts as a protective factor against nursing education bullying among nursing students [6], effectively improving students' academic mood, learning engagement, and self-regulation [17–19]. It is also effective in alleviating students' negative moods, enhancing nursing skill competence, and professional identity [20–22], and maintaining the stable development of the nursing workforce [7]. In this study, students' academic emotions were positively correlated with teacher support ($s = 0.21$, $P < 0.01$), but the correlation was much lower than that of Li's study [23]. This discrepancy may be due to the mediating effect of the sense of bullying, which may weaken the correlation between the two variables.

Additionally, this study found a positive correlation between nursing students' perception of nursing education and academic mood, $s = 0.25$, $P < 0.01$. This result contradicts the pre-existing hypothesis that higher perceptions of bullying would lead to lower academic mood. Literature indicates that a sense of bullying typically affects academic performance and reduces learning ability [24]. It is possible that the bullying experienced by students stimulates a reverse increase in academic mood, leading to differing results. The increase in academic mood observed in this study was predominantly in negative arousal ($s = 0.36$, $P < 0.01$), which might explain the weaker correlation between academic mood and teacher support, a conjecture that warrants further investigation.

# 5. Conclusion

Nursing students may experience bullying behavior during their nursing education, and nursing educators should address this issue and provide additional faculty support to maintain the health of the nursing workforce. This study investigated only nursing students at a single university, which limits the sample size and representativeness of the findings. Additionally, the weak correlation between variables suggests the potential influence of other confounding factors, such as mediating variables, which require further investigation.

# Disclosure statement

The authors declare no conflict of interest.

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