Factors Associated with Stress Levels among First-Year Students in the Faculty of Science, Chiang Mai University, during the 2025 academic year

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ABSTRACT

This study aimed to examine stress levels and the factors associated with stress among first-year undergraduate students in the Faculty of Science, Chiang Mai University, during the 2025 academic year. Data were collected from 150 participants selected through simple random sampling. A structured questionnaire was used as the data collection instrument. Data were analyzed using descriptive statistics and the chi-square test of independence.

The results revealed that 60.67% of participants experienced high to severe stress levels. Factors significantly associated with stress levels included gender, hours of sleep, understanding of course content, appropriateness of class schedule, academic performance not meeting expectations, adequacy of rest time, satisfaction with accommodation, family pressure, feelings of loneliness, adjustment to new peers, and lack of access to counseling or emotional support.

INTRODUCTION

In a rapidly changing society, stress has become a significant issue affecting individuals' quality of life, particularly among adolescents, who tend to experience higher levels of stress than other age groups.

Adolescence is a critical transitional stage characterized by physical, psychological, and emotional changes, along with the search for personal identity and growing expectations from family and society. Inadequate stress management during this period may negatively impact physical health, mental well-being, behavior, and academic achievement.

First-year university students, in particular, are adjusting to higher education and facing academic challenges, a new environment, and increased responsibilities. These factors can contribute substantially to stress. Therefore, studying stress during this transitional period is essential to inform the development of appropriate mental health care and promotion strategies.

OBJECTIVES

examine stress levels and the factors associated with stress among first-year undergraduate students in the Faculty of Science, Chiang Mai University, during the 2025 academic year.

METHODOLOGY

- Population: First-year undergraduate students, Faculty of Science, excluding the Environmental Science Major, Chiang Mai University (2025)
- Sample size: 150 students
- Sampling method: Simple random sampling
- Instrument: Structured questionnaire on stress levels and related factors
- Data analysis: Descriptive statistics and Chi-square test of independence ($\alpha = 0.05$)

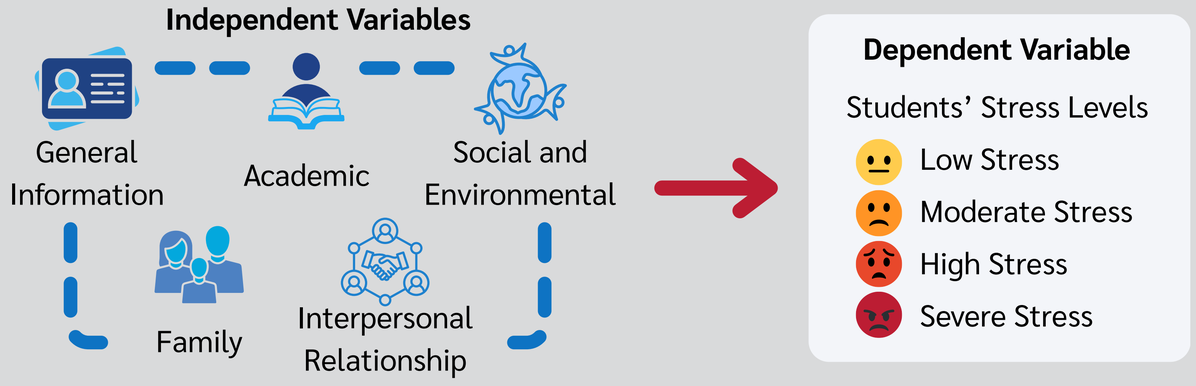
CHI-SQUARE TEST OF INDEPENDENCE

$$\chi^2_{cal} = \sum_{i=1}^{r}\sum_{j=1}^{c}\frac{(O_{ij}-E_{ij})^2}{E_{ij}}; df = (r-1)(c-1)$$

Where

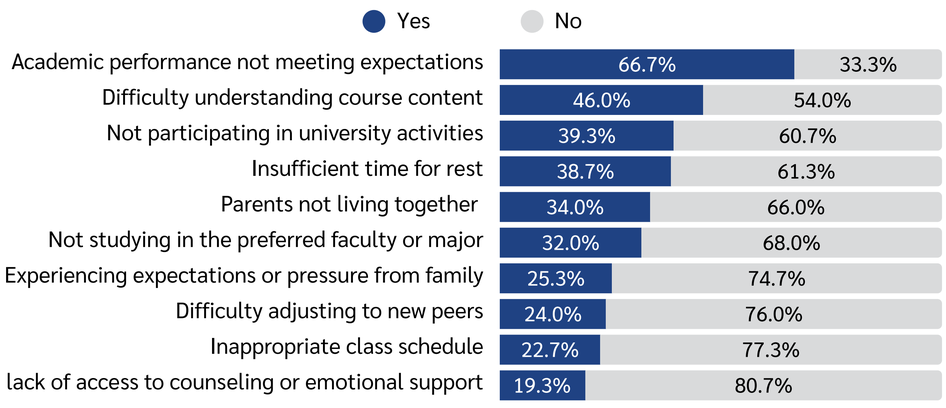
χ^2_{cal} = Chi-square test statistic
O_{ij} = Observed frequency in the i-th row and j-th column
E_{ij} = Expected frequency in the i-th row and j-th column
r = Number of rows
c = Number of columns

CONCEPTUAL FRAMEWORK

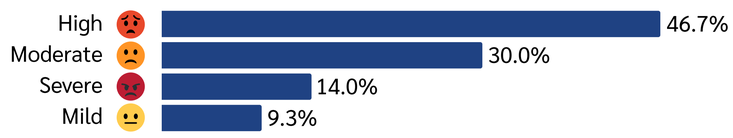


RESULT

Questionnaire responses
Top 10 Problems Contributing to Student Stress



Stress Levels Among Students



Analysis of Factors Associated with Stress Levels

No.	Variables	P-value
1	**Gender**	**0.0109**
2	Health Status	0.2379
3	**Hours of Sleep**	**0.0437**
4	Average Monthly Income	0.5712
5	Hometown	0.6527
6	Type of Accommodation During Study	0.7117
7	Co-residents	0.2651
8	Distance from Accommodation to University	0.7727
9	Alignment of Major with Personal Interest	0.5085
10	**Understanding of Course Content**	**0.0058**

No.	Variables	P-value
11	Academic Workload	0.1985
12	**Appropriateness of Class Schedule**	**0.0498**
13	**Academic Performance**	**0.0491**
14	Adequacy of Learning Equipment	0.3704
15	Suitability of Learning Environment	0.6473
16	**Adequacy of Rest Time**	**0.0044**
17	Participation in University Activities	0.8102
18	Involuntary Participation in Activities	0.4248
19	**Satisfaction with Accommodation**	**0.0222**
20	Satisfaction with University Environment	1.0000

No.	Variables	P-value
21	Part-time Employment During Study	0.7782
22	Parental Marital Status	0.3037
23	Family Support	1.0000
24	**Family Expectations**	**0.0419**
25	Close Peer Group	0.8387
26	**Feelings of Loneliness**	**0.0089**
27	Conflict with Peers	0.6760
28	Conflict with Instructors	0.3883
29	**Adjustment to New Peers**	**0.0117**
30	**Lack of Access to Counseling**	**0.0319**

Note : Significance level = 0.05

CONCLUSION

The questionnaire responses indicated that academic factors were the primary sources of stress among students, particularly academic performance not meeting expectations and difficulty understanding course content.

Stress levels, the majority of students experienced a high level of stress, comprising 70 participants, representing 46.67% of the sample.

Factors associated with stress levels included gender, hours of sleep, understanding of course content, appropriateness of class schedule, academic performance not meeting expectations, adequacy of rest time, satisfaction with accommodation, family pressure, feelings of loneliness, adjustment to new peers, and lack of access to counseling or emotional support.

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