

ORIGINAL ARTICLE

HOMESICKNESS AND DEPRESSION RISK AMONG UNDERGRADUATE HEALTH SCIENCE STUDENTS IN A THAI UNIVERSITY: A CROSS-SECTIONAL STUDY

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ABSTRACT

Homesickness is a common psychological issue among university students living away from home, impacting their mental health and academic performance. Studies have shown a higher risk of depression linked to homesickness. This study investigates the levels of homesickness, the risk of depression, and their relationship among health science students in Thailand. A descriptive cross-sectional study was conducted from October 2023 to March 2024, involving a total of 291 students selected through proportional stratified sampling. Data were gathered using self-administered questionnaires and analyzed employing descriptive statistics and Pearson's correlation coefficient. The results indicated that 78.1% of participants experienced moderate homesickness, 19.2% reported low homesickness, and 2.7% faced severe homesickness. In terms of depression risk, 48.5% reported very low risk and 34.0% reported low risk of depression, 13.0% exhibited a moderate risk, while 4.5% were classified as having a severe risk. A significant positive correlation was observed between total homesickness scores and depression risk ($r = 0.357$, $p < 0.001$). Among the various dimensions of homesickness, the loss of self aspect showed the strongest association with depression risk ($r = 0.482$, $p < 0.01$), highlighting its critical role in the connection between homesickness and mental health issues. This study emphasizes the high prevalence of moderate homesickness among university students, alongside a majority reporting very low to low depression risk. The significant relationship between homesickness and depression, particularly through the loss of self dimension, suggests the necessity for university mental health programs to implement early screening and targeted interventions to address these intertwined challenges.

Keywords: Homesickness; Depression; University students

INTRODUCTION

Homesickness, clinically termed "nostalgia" from the Greek words "nostos" (homecoming) and "algos" (pain), is a significant psychological condition that emerged as a formal concept through observations of Swiss missionaries working far from home¹⁻². It manifests as emotional distress when individuals are separated from familiar surroundings, particularly affecting students transitioning to university life. Studies indicate that approximately 75% of people experience homesickness at least once in their lives, with a particularly high prevalence among university students³.

The condition presents symptoms that overlap with depression, including frequent crying, sleep disturbances, difficulty concentrating, and social withdrawal³⁻⁴. Although homesickness is considered a normal adaptive response, research indicates that approximately 30% of all university students and 70% of first-year students experience significant symptoms, with the risk of progression to clinical depression being particularly elevated during the first few months of separation⁴⁻⁵.

In Thailand, this issue has gained increasing attention with research revealing that homesickness affects 9.30% of university students' academic performance, while approximately 30% of students report experiencing depression frequently or constantly.⁶ These findings are particularly significant given Thailand's broader mental health landscape, where recent statistics show that among the population aged 15 years and over, there has been a worrying upward trend in depression diagnoses, with the highest rates observed among young adults aged 18-25 years (13.80%)⁶.

Of particular concern is the dramatic increase in the prevalence of depression among students, rising from 9.40% to 21.10% between 2013 and 2018, with moderate to severe cases increasing from 23.20% to 41.10% over a similar period⁷. The concurrent presence of homesickness and depression risk among university students presents a significant challenge for educational institutions and mental health providers⁸⁻⁹.

From a stress-coping perspective, homesickness can be conceptualized as a chronic emotional stressor arising from separation from familiar

environments and support systems. According to the transactional model of stress and coping, psychological distress occurs when perceived environmental demands exceed an individual's coping resources, potentially leading to depressive symptoms¹⁰. Empirical studies have shown that homesickness is associated with emotional distress, maladjustment, and increased vulnerability to depression among university students¹¹⁻¹². When coping strategies are insufficient or maladaptive, prolonged exposure to such stress may exacerbate depressive risk¹³.

Given these concerning trends and the potential impact on academic performance and overall well-being, it is critical to understand the relationship between homesickness and the risk of depression among undergraduate health science students at a Rajabhat University in Thailand, to provide context-specific evidence that may inform student mental health support in similar public university settings. This study aims to examine the prevalence of homesickness, assess the risk of depression, and investigate the relationship between these conditions among students at Rajabhat University, with the goal of informing targeted interventions and support services.

METHODS

Study Design and Setting

A descriptive cross-sectional study was conducted between October 2023 and March 2024 at Rajabhat University, Thailand. The study location was specifically chosen as it represents a typical public university setting in Thailand where students often relocate from their home provinces to pursue higher education.

Study Population and Sampling

The study population consisted of undergraduate students enrolled at Rajabhat University during the academic year 2023-2024. The sample size was considered adequate based on recommendations for correlational cross-sectional studies, which suggest a minimum of 10 participants per variable. With 291 participants, the study exceeded the minimum requirement for stable correlation estimates and used proportional stratified random sampling. Inclusion criteria were: (1) current enrollment as a full-time student, (2) residence in Samut Songkhram Province during the academic year, and (3) ability to complete the self-administered questionnaire. Students with preexisting diagnosed mental health conditions or those experiencing acute psychological distress were excluded from the study.

Data Collection Instruments and Validation

The research instrument was a self-administered questionnaire consisting of three parts. Part I collected demographic information including gender, age, academic year, field of study, current accommodation type, and parental

marital status. Part II incorporated the validated 9-item Patient Health Questionnaire (9Q)⁸ for depression assessment using a 4-point Likert scale (0 = Least to 3 = Most). Depression risk levels were categorized as very low risk (0-7 points), low risk (8-12 points), moderate risk (13-18 points), and severe risk (≥ 19 points). Part III used the 33-item Single-Item Homesickness Measure (SIHM)¹⁴⁻¹⁵ with a 4-point scale (1 = None to 4 = Everyday). Homesickness levels were classified as no homesickness (0-33 points), low homesickness (34-66 points), moderate homesickness (67-99 points), and severe homesickness (100-132 points). The Thai SIHM underwent expert review yielding an Item-Objective Congruence (IOC) index of 0.837, and pilot testing among 30 students, demonstrating good internal consistency (Cronbach's $\alpha = 0.825$).

Data Collection Procedure

Data collection was conducted through electronic questionnaires distributed by Google Forms between October 2023 and March 2024. Prior to data collection, researchers conducted orientation sessions to explain the purpose of the study and questionnaire completion procedures to potential participants. Each participant was allocated 15-20 minutes to complete the questionnaire and the responses were continuously monitored for completeness and validity until the required sample size was achieved. To ensure data quality, participants received clear instructions and the opportunity to ask questions during the completion process.

Statistical Analysis

Data analysis was performed using SPSS software (version 25.0, IBM Corp., Armonk, NY, USA). The following analyses were conducted: descriptive statistics for demographic characteristics and scale scores and Pearson's correlation coefficient to examine relationships between homesickness and depression risk scores. Statistical significance was set at $p < 0.05$.

Ethical Considerations

The study protocol received approval from the Research and Development Institute of Suan Sunandha Rajabhat University (COA.1-003/2024). Informed consent was obtained from all participants, ensuring that data confidentiality was upheld throughout the research. Participants were made aware of their right to withdraw from the study at any time without facing any consequences.

RESULTS

Demographic Characteristics

A total of 291 students participated in this study. Table 1 provides a summary of the demographic characteristics of the participants. The majority of participants were women ($n = 226$, 77.7%), with the largest age group being those aged 19 to 20 ($n = 168$, 57.7%). In terms of academic year,

first-year students comprised the highest proportion (n = 98, 33.7%), followed by second-year students (n = 82, 28.2%), third-year students (n = 67, 23.0%), and fourth-year students (n = 44, 15.1%). Most participants were enrolled in Community Public Health programs (n = 96, 33.0%) and the majority lived in dormitories (n = 265, 91.1%). Furthermore, a significant number of participants reported that their parents were married (n = 226, 77.7%).

Level of Homesickness

The evaluation of homesickness levels in the participants indicated that the majority experienced moderate homesickness (n=227, 78.1%). Figure 1 illustrates the distribution of homesickness levels across the study population. As presented in Table 2, each dimension of homesickness was assessed and analyzed. Due to the varying number of items within each dimension, a direct comparison of scores across the dimensions is not possible. The overall mean score for homesickness among all participants was 76.88 (S.D. = 12.08).

Table 1: Demographic variables of the participants (n=291)

Demographic variables		N (%)
Gender	Female	226 (77.70)
	Male	65 (22.30)
Age (Years)	>18	2 (0.70)
	19 – 20	168 (57.70)
	21 – 23	113 (38.80)
	< 24	8 (2.70)
Academic year	1 st	98 (33.70)
	2 nd	80 (27.50)
	3 rd	81 (27.80)
	4 th	32 (11.00)
Field of study	Community Public Health	96 (33.00)
	Public Health and Health Promotion	74 (25.40)
	Applied Thai Traditional Medicine	38 (13.10)
	Medical and Public Health Secretary	32 (11.00)
	Medical Cannabis	18 (6.20)
	Health And Beauty Science	12 (4.10)
	Chinese Medicine	18 (6.20)
	Health Service Business Management	3 (1.00)
Accommodation	House	26 (8.90)
	Dormitory	265 (91.10)
Marital status of parents	Married	226 (77.70)
	Widowed	10 (3.40)
	Divorce	28 (9.60)
	Separated	27 (9.30)

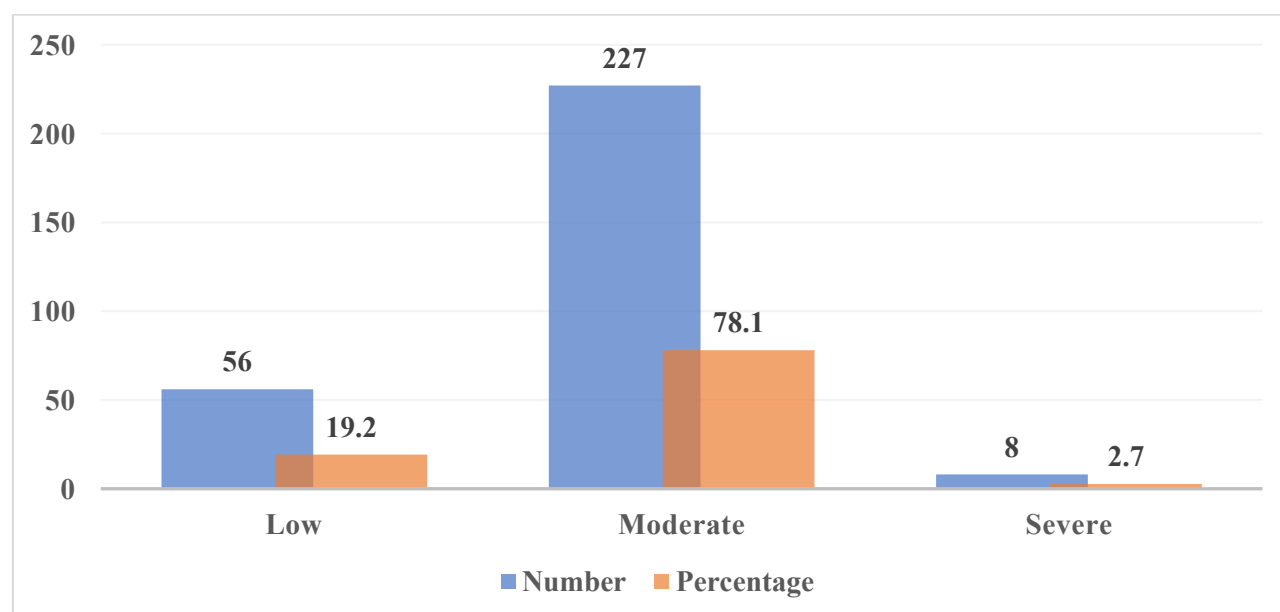


Figure 1: Distribution of Homesickness Level of the Participants

Table 2: Mean and Standard Deviation of Homesickness Dimensions (n = 291)

Homesickness Dimensions	Mean	S.D.
Preoccupation with thoughts	12.59	2.63
Pain and attachment-related distress	3.81	1.63
Attempts to maintain attachment	14.57	2.92
Homesickness-related dreams	6.41	2.45
Restlessness	8.16	2.13
Anger and blame	9.12	1.97
Feelings of guilt	3.72	1.72
Loss of self	3.98	1.63
Identity expression	5.12	1.43
Avoidance	9.39	1.99
A total score of homesickness	76.88	12.08

Depression Risk Levels

Depression risk assessment revealed that nearly half of the participants had a very low risk

(n=141, 48.5%). Figure 2 provides a detailed distribution of depression risk levels.

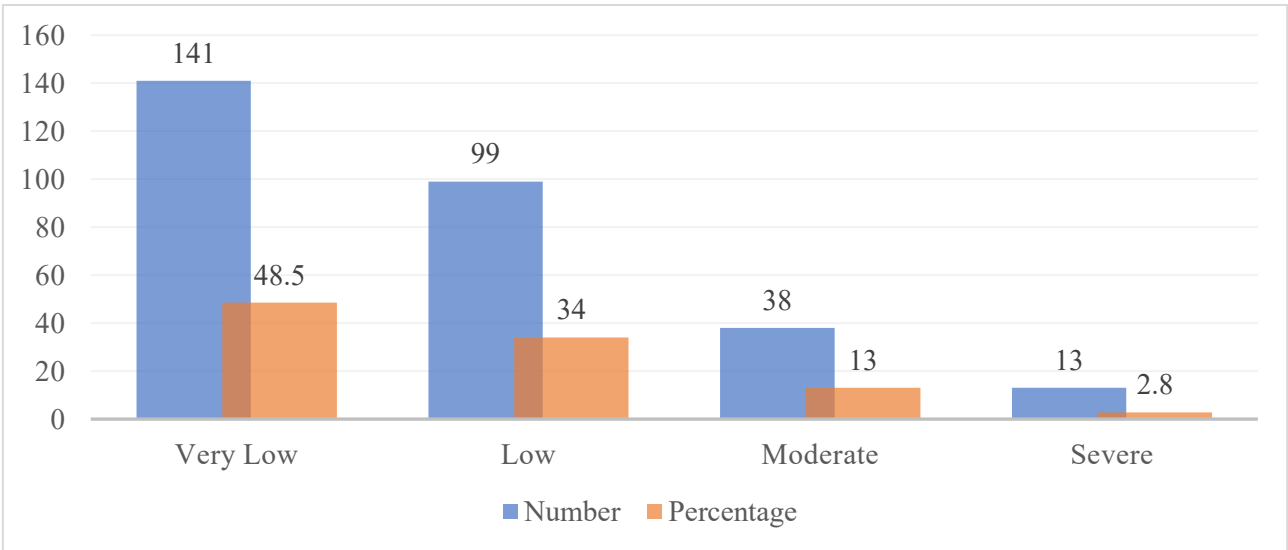


Figure 2: Distribution of Risk Level of Depression in Students

Correlation Between Homesickness and Depression Risk

Pearson's correlation analysis indicated significant relationships between various dimensions of homesickness and the risk of depression. As shown in Table 3, the correlation coefficients between specific symptoms of homesickness and depression risk scores revealed noteworthy findings. The most substantial correlation was found between low self-esteem and the risk of depression ($r=0.482$, $p<0.001$), while homesickness dreams exhibited the weakest correlation ($r=0.276$, $p<0.001$). Additionally, the overall homesickness score displayed a moderate positive correlation with depression risk ($r=0.357$, $p<0.001$).

DISCUSSION

This study offers valuable insights into the relationship between homesickness and depression risk among Thai university students.

The findings showed that 78.1% of the participants experienced moderate homesickness, while 2.7% reported severe homesickness. These rates are higher than those observed in a recent study at an Appalachian university in North Carolina, where homesickness was identified as a significant concern that affects 65% of residential students¹⁶. This difference may be influenced by distinct social and cultural contexts. In many Asian cultures, including Thailand, strong family ties and collectivist values emphasize close-knit relationships and interdependence, which may amplify feelings of homesickness when students are separated from their families. In contrast, western cultures, which tend to value individualism and independence, may prepare students earlier for life away from home¹⁷. These cultural differences highlight the importance of tailoring support systems to address the unique challenges faced by students in different regions¹⁸⁻¹⁹.

Table 3: Association between Homesickness Levels and Risk of Depression (n = 291)

Variable	PT	PA	AM	HR	RL	AB	FG	LS	IE	AV	TS	Dep
PT	1											
PA	0.427 **	1										
AM	0.320 **	0.071	1									
HR	0.428 **	0.511 **	0.196 **	1								
RL	0.188 **	0.405 **	-0.136 *	0.403 **	1							
AB	0.213 **	0.295 **	0.077	0.330 **	0.356 **	1						
FG	0.147 *	0.321 **	-0.051	0.282 **	0.468 **	0.508 **	1					
LS	0.169 **	0.373 **	0.088	0.277 **	0.317 **	0.521 **	0.506 **	1				
IE	0.160 **	0.354 **	0.177 **	0.361 **	0.312 **	0.116 *	0.106	0.169 **	1			
AV	0.308 **	0.432 **	0.168 **	0.368 **	0.326 **	0.415 **	0.349 **	0.353 **	0.262 **	1		
TS	0.621 **	0.678 **	0.403 **	0.719 **	0.580 **	0.623 **	0.567 **	0.591 **	0.473 **	0.660 **	1	
Dep	0.194 **	0.345 **	-0.084	0.242 **	0.255 **	0.257 **	0.244 **	0.482 **	0.135 *	0.222 **		1

*Statistically significant at 0.05, **Statistically significant at 0.01

Abbreviations: PT = preoccupation with thoughts, PA = pain and attachment-related distress, AM = attempts to maintain attachment, HR = homesickness-related dreams, RL = restlessness, AB = anger and blame, FG = feelings of guilt, LS = loss of self, IE = identity expression, AV = avoidance, TS = total score of homesickness, Dep = depression risk

Regarding depression risk, our finding that 48.5% of students showed very low risk and 34.0% showed low risk is noteworthy, aligning with Akhtar, Ma, Waqas, Naveed, Li, Rahman, Wang²⁰ systematic review, which found that only 24.4% of university students in low- and middle-income countries exhibited significant depressive symptoms²⁰. This relatively low prevalence in our study may be attributed to several protective factors. First, the high proportion of students from intact families (77.7% with married parents) may provide stronger social support networks, which have been identified as crucial buffers against depression in university students²⁰. Second, the cohesive nature of Thai university dormitory communities, where 91.1% of our participants resided, might facilitate peer support systems that help mitigate depression risk. Additionally, the structured environment of health science programs, which comprised our study population, may provide clearer academic goals and identify opportunities for professional development, potentially reducing uncertainty-related stress that often contributes to depression in university students²¹.

The moderate positive correlation between homesickness and depression risk ($r = 0.357$, $p < 0.001$) supports emerging evidence of the interconnected nature of these phenomena²². Particularly significant was the strong correlation

between low self-esteem and depression risk ($r = 0.482$, $p < 0.001$), suggesting that self-esteem may be a crucial mediating factor in the homesickness-depression relationship²³.

Our findings have several important implications for university mental health services. First, the high prevalence of moderate homesickness suggests a need for preventive interventions, particularly during the initial transition to university life. The recent online survey in Canada has shown that early intervention programs that combine social support with coping skills training can effectively reduce homesickness intensity²⁴. Second, the strong correlation between low self-esteem and depression risk highlights the importance of incorporating self-esteem-building components into student support services²⁵. Finally, this study extends existing literature by providing empirical evidence from a Southeast Asian LMIC context, where family interdependence and collectivist values may intensify homesickness experiences. The multidimensional assessment further highlights loss of self as a key psychological pathway linking homesickness and depression risk.

Several limitations should be considered when interpreting these results. The cross-sectional design limits causal inference about the relationship between homesickness and

depression risk. Future longitudinal and intervention-based studies are needed to clarify causal pathways and guide evidence-based mental health interventions for university students. Additionally, the sample was drawn from a single Rajabhat University and included only undergraduate health science students, which may limit the generalizability of the results. Rajabhat Universities primarily serve students from regional and rural backgrounds, and their academic and social environments may differ from those of private universities or large metropolitan institutions in Thailand. Therefore, the findings should not be generalized to all Thai university students. Future studies employing multicenter designs across diverse university settings and academic disciplines are recommended to enhance external validity. The use of self-reported measures, while validated, may be subject to response bias and social desirability effects.

CONCLUSIONS

This study found a significant prevalence of moderate homesickness among undergraduate health science students, whereas most students exhibited a very low to low risk of depression. Notably, a strong positive correlation was observed between homesickness and depression risk, especially through the "loss of self" dimension. This underscores the potential psychological vulnerability faced by students living away from home.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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