

DOI: 10.5281/zenodo.20040388

GENDER DIFFERENCES IN PSYCHOLOGICAL DISTRESS AND COPING PROCESSES AMONG UNIVERSITY STUDENTS: A SOCIAL-PSYCHOLOGICAL PERSPECTIVE

Le Thi Thanh Thuy¹, Nguyen Ngoc Huyen², Hoang Thi Hanh³, Lê Thu Hiền⁴, Pham Ngoc Linh^{5*}

^{1,2,3,4,5} Vietnam Youth Academy, Hanoi, Vietnam.

Received: 01/12/2025

Accepted: 02/01/2026

Corresponding author: Pham Ngoc Linh

(phnglinh@gmail.com)

ABSTRACT

Psychological distress among university students has become a prominent concern in contemporary mental health research, particularly within the fields of psychology and social sciences. Prior studies suggest that gender differences in mental health are not only reflected in symptom expression but are also shaped by socially constructed roles, emotional regulation patterns, and preferred coping processes. However, empirical evidence integrating psychological symptoms with coping strategies in the Vietnamese university context remains limited. This study aimed to investigate gender differences in psychological distress and coping processes among university students, and to examine how different coping strategies are associated with mental health symptoms as assessed by the Symptom Checklist-90-Revised (SCL-90-R). Methods: A cross-sectional survey was conducted among 535 undergraduate students (37.2% male, 62.8% female). Participants completed the SCL-90-R and a structured questionnaire assessing coping strategies. Additional variables included sociodemographic characteristics, living arrangements, and perceived economic status. Independent t-tests and multivariate regression analyses were employed to examine gender-based differences and to explore associations between coping patterns and psychological symptoms. Results: Female students reported significantly higher levels of internalizing symptoms, particularly depression and anxiety, whereas male students exhibited relatively higher scores in interpersonal sensitivity and psychoticism-related dimensions. Gender differences were also observed in coping processes. Female students more frequently adopted emotion-focused and support-seeking strategies, reflecting greater interpersonal engagement in stress management. In contrast, male students tended to rely on externalizing or avoidance-oriented coping responses. Regression analyses indicated that maladaptive coping strategies were positively associated with psychological distress across both genders. Notably, adaptive coping strategies demonstrated stronger protective effects among female students, while structural coping style and social competence emerged as salient resilience-related factors among male students. Conclusions: The findings underscore the importance of a gender-sensitive, social-psychological approach to understanding mental health among university students. Gender differences in psychological distress are closely intertwined with distinct coping processes shaped by socialization and emotional norms. Mental health interventions in academic settings should therefore move beyond symptom reduction and incorporate gender-responsive strategies that strengthen adaptive coping and resilience resources.

KEYWORDS: Gender differences; psychological distress; coping processes; university students; SCL-90-R; social psychology; resilience

1. INTRODUCTION

University life presents a unique set of challenges for students as they transition into adulthood, navigate academic pressures, and adjust to new social environments. These factors can significantly affect students' mental health, often resulting in psychological distress, such as anxiety, depression, and stress [1, 2]. Mental health issues among university students are a growing concern worldwide, as they are associated with academic underperformance, reduced quality of life, and increased dropout rates. Understanding the mental health status of university students and the factors influencing their psychological well-being is therefore critical for developing effective support systems [3].

Gender differences play a significant role in how university students experience and cope with mental health challenges. Numerous studies have highlighted that female students are more likely to report higher levels of psychological distress, particularly in domains such as somatization, depression, and anxiety [4-7]. Conversely, male students often exhibit heightened symptoms in areas like interpersonal sensitivity and psychoticism, potentially due to societal norms that discourage emotional expression in men [8, 9]. These disparities underscore the importance of examining mental health symptoms through a gendered lens to tailor interventions that address specific needs effectively.

Coping strategies and resilience resources are critical factors influencing mental health outcomes among students [10, 11]. Coping strategies are the behavioral and cognitive efforts individuals employ to manage stressors, while resilience resources refer to the internal and external strengths that enhance individuals' ability to adapt to adversity. Gender differences in coping styles are well-documented, with females often using emotion-focused strategies, such as seeking social support, and males tending toward problem-focused approaches [10, 11]. These differences in coping and resilience not only shape the manifestation of mental health symptoms but also determine students' ability to overcome challenges.

Given the increasing prevalence of mental health issues among university students and the significant influence of gender on mental health, this study aims to explore the associations between gender, mental health symptoms, and coping strategies. Using the Symptom Checklist-90-Revised (SCL-90-R) as the primary tool, the study investigates gender-specific patterns in mental health symptoms and resilience resources among university students. By identifying these differences, the research seeks to provide actionable insights for developing gender-sensitive

mental health interventions that foster resilience and promote psychological well-being in academic settings.

2. MATERIALS AND METHOD

2.1. Study Design and Participants

This cross-sectional study was conducted among undergraduate university students to explore gender differences in mental health symptoms and coping strategies. A total of 535 students were recruited from diverse academic disciplines using stratified random sampling to ensure proportional representation of gender, academic year, and living situations. Inclusion criteria included active enrollment in the university, willingness to participate, and completion of the study survey. Participants who did not complete the questionnaire or provided inconsistent responses were excluded from the final analysis.

2.2. Measures

2.2.1. Demographic Information

Demographic variables collected included age, gender, academic year (freshman to senior), living situation (alone, with family, or with friends), and self-reported economic status (low, average, or well-off). These factors were considered to account for potential confounding influences on mental health and coping strategies.

2.2.2. Mental Health Symptoms

Mental health symptoms were assessed using the Symptom Checklist-90-Revised (SCL-90-R), a validated tool widely used to evaluate psychological distress across multiple domains. The nine primary symptom dimensions—somatization, obsessive-compulsive behavior, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism—were evaluated along with an additional "other" category and total scores.

2.2.3. Coping Strategies

Coping mechanisms were measured using a structured coping inventory, categorizing strategies into four domains: adaptive coping strategies, externalizing emotional responses, maladaptive behaviors, and passive coping strategies. Adaptive strategies included emotion-focused techniques like problem-solving and seeking support, while externalizing and maladaptive strategies involved outward emotional responses and avoidance, respectively.

2.2.4. Resilience Resources

Resilience was assessed across five domains: personal competence, structure style, social support,

social competence, and family cohesion. Participants rated their agreement with various statements using a Likert scale. Higher scores indicated stronger resilience in the respective domains.

2.2.5. Procedure

Participants were provided with both online and paper-based questionnaires to maximize accessibility. Prior to data collection, they received a detailed explanation of the study objectives and provided informed consent. Surveys were anonymized to protect participant confidentiality. Data collection occurred over a two-month period, during which researchers ensured a balanced response rate across gender and academic years.

2.2.6. Statistical Analysis

All analyses were performed using Stata 16.0. Descriptive statistics summarized demographic characteristics and the distribution of mental health symptoms, coping strategies, and resilience resources. Differences between genders were analyzed using independent t-tests for continuous variables and chi-square tests for categorical variables. Multiple linear regression was employed to examine the associations between gender, coping

strategies, resilience resources, and mental health symptoms across the SCL-90-R dimensions. Statistical significance was set at $p < 0.05$.

2.2.7. Ethical Considerations

This study was approved by the university's Institutional Review Board. All participants were assured of their right to withdraw at any time without penalty and were provided with contact information for mental health support services should they experience distress during the study. Data were securely stored and used solely for research purposes.

3. RESULTS

Table 1 summarizes the demographic characteristics of 535 participants, with 37.2% male and 62.8% female. Most were freshmen (29.5%) or sophomores (30.7%), followed by juniors (29.9%) and seniors (9.9%). Living with family was most common (45.1%), followed by living with friends (33.9%) and living alone (21.0%). Economic status was predominantly average (42.5%), with 30.9% well-off and 26.6% low. Males were more likely to live alone (25.1%) and report low economic status (31.2%) compared to females.

Table 1: Demographic characteristics according to gender

Variable	Category	Male	Female	Total
		N (%)	N (%)	N (%)
Total		199 (37.2)	336 (62.8)	535 (100.0)
Academic Year	Freshman	57 (28.6)	101 (30.1)	158 (29.5)
	Sophomore	55 (27.6)	109 (32.4)	164 (30.7)
	Junior	64 (32.2)	96 (28.6)	160 (29.9)
	Senior	23 (11.6)	30 (8.9)	53 (9.9)
Living Situation	Living Alone	50 (25.1)	62 (18.5)	112 (21.0)
	Living with Family	88 (44.2)	153 (45.7)	241 (45.1)
	Living with Friends	61 (30.7)	120 (35.8)	181 (33.9)
Economic Status	Low	62 (31.2)	80 (23.9)	142 (26.6)
	Average	79 (39.7)	148 (44.2)	227 (42.5)
	Well-off/Sufficient	58 (29.1)	107 (31.9)	165 (30.9)

Table 2 presents the distribution of resilience resources across genders, encompassing five domains: personal competence, structure style, social support, social competence, and family cohesion. In the personal competence domain, a significantly higher proportion of females (69.0%) than males (54.3%) reported reaching their goals through hard work ($p=0.001$), while other statements in this domain showed no significant gender differences. For structure style, females (57.1%) were more likely than males (46.2%) to report being at their best with clear aims and objectives ($p=0.015$), though other items in this domain were not significantly different by gender. In the social support domain, females consistently reported stronger support systems, with

significantly higher agreement in statements like "I have some close friend's/family members that really care about me" (64.0% vs. 49.8%, $p=0.001$) and "I always have someone that can help me when I need it" (65.8% vs. 47.7%, $p<0.001$). The social competence domain also showed significant differences, with females more likely to report making others feel comfortable (60.4% vs. 46.2%, $p=0.001$), while other statements were not significantly different. In family cohesion, no significant gender differences were observed across the items.

Mean domain scores revealed that females had significantly higher personal competence (2.37 ± 1.38 vs. 2.06 ± 1.39 , $p=0.012$), social support (1.87 ± 1.14 vs. 1.42 ± 1.18 , $p<0.001$), and social competence ($2.02 \pm$

1.37 vs. 1.78 ± 1.42, p=0.046) compared to males, while no significant differences were observed in structure style and family cohesion. These findings highlight

gender-specific variations in resilience resources, with females generally reporting stronger support systems and social skills.

Table 2: Resilience resource according to gender

Variable	Male	Female	Total	p-value
	N (%)	N (%)	N (%)	
Personal Competence				
I reach my goals if I work hard	108 (54.3)	231 (69.0)	339 (63.5)	0.001
I am satisfied with my life up till now	97 (48.7)	184 (54.8)	281 (52.5)	0.178
I feel competent	100 (50.3)	186 (55.4)	286 (53.5)	0.252
My belief in myself gets me through difficult times	105 (52.8)	194 (57.7)	299 (55.9)	0.263
Structure Style				
I am at my best when I have clear aims and objectives	92 (46.2)	192 (57.1)	284 (53.1)	0.015
I always make a plan before I start something new	95 (47.7)	159 (47.5)	254 (47.6)	0.951
I am good at organizing my time	81 (40.7)	117 (34.8)	198 (37.0)	0.173
In my family, we have rules that simplify everyday life	97 (48.7)	170 (50.6)	267 (49.9)	0.679
Social Support				
My friends always stick together	89 (44.7)	191 (56.9)	280 (52.3)	0.007
I have some close friends/family members that really care about me	99 (49.8)	215 (64.0)	314 (58.7)	0.001
I always have someone that can help me when I need it	95 (47.7)	221 (65.8)	316 (59.1)	<0.001
Social Competence				
I easily make others feel comfortable around me	92 (46.2)	203 (60.4)	295 (55.1)	0.001
I easily find new friends	96 (48.2)	170 (50.6)	266 (49.7)	0.599
I am good at talking to new people	82 (41.2)	155 (46.1)	237 (44.3)	0.268
I always find something fun to talk about	85 (42.7)	152 (45.2)	237 (44.3)	0.570
Family Cohesion				
In my family, we share views of what is important in life	82 (41.2)	152 (45.2)	234 (43.7)	0.364
My family views the future positively, even when sad things happen	91 (45.7)	177 (52.7)	268 (50.1)	0.120
In my family, we like to do things together	88 (44.2)	149 (44.3)	237 (44.3)	0.978
Domains	Mean (SD)	Mean (SD)	Mean (SD)	p-value
Personal Competence	2.06 ± 1.39	2.37 ± 1.38	2.25 ± 1.39	0.012
Structure Style	1.83 ± 1.35	1.90 ± 1.27	1.88 ± 1.30	0.529
Social Support	1.42 ± 1.18	1.87 ± 1.14	1.70 ± 1.17	<0.001
Social Competence	1.78 ± 1.42	2.02 ± 1.37	1.93 ± 1.39	0.046
Family Cohesion	1.31 ± 1.16	1.42 ± 1.15	1.38 ± 1.15	0.258

Table 3 presents the SCL-90-R domain scores by gender. While most scores were similar between males and females, males showed significantly higher mean scores in interpersonal sensitivity (16.5 vs. 15.3, p = 0.016), anxiety (15.5 vs. 13.9, p = 0.015), paranoid ideation (10.2 vs. 9.4, p = 0.038), psychoticism (16.9 vs. 14.7, p = 0.002), and "others"

(10.5 vs. 9.3, p = 0.001). Total scores were slightly higher for males (156.6 vs. 147.1), approaching significance (p = 0.051). No significant gender differences were observed in somatization, obsessive-compulsive, depression, anger-hostility, or phobic-anxiety domains.

Table 3: SCL-90-R domains according to gender

Variable	Male	Female	Total	p-value
	Mean (SD)	Mean (SD)	Mean (SD)	
Somatization Score	19.9 (9.02)	19.5 (9.76)	19.6 (9.49)	0.587
Obsessive-Compulsive Score	18.6 (8.16)	18.6 (7.69)	18.6 (7.86)	0.693
Interpersonal Sensitivity	16.5 (6.56)	15.3 (6.78)	15.8 (6.72)	0.016
Depression Score	21.5 (8.91)	21.4 (9.53)	21.4 (9.30)	0.750
Anxiety Score	15.5 (7.23)	13.9 (7.66)	14.5 (7.54)	0.015
Anger-Hostility Score	10.1 (4.71)	9.6 (4.98)	9.8 (4.88)	0.116
Phobic-Anxiety Score	11.8 (5.81)	10.9 (6.08)	11.2 (5.99)	0.063
Paranoid Ideation Score	10.2 (4.58)	9.4 (4.96)	9.7 (4.83)	0.038
Psychoticism Score	16.9 (7.99)	14.7 (8.12)	15.5 (8.14)	0.002
Others Score	10.5 (4.64)	9.3 (4.77)	9.7 (4.76)	0.001
Total Score (0-360)	156.6 (59.02)	147.1 (63.18)	150.6 (61.77)	0.051

Table 4 summarizes coping strategies for psychological crises by gender, highlighting notable differences. Females demonstrated significantly higher scores in Adaptive Coping Strategies (2.80 ± 0.57) compared to males (2.52 ± 0.54), ($p < 0.001$), suggesting a greater reliance on constructive methods. In contrast, males had significantly higher scores in Externalizing Emotional Responses ($2.17 \pm$

0.62) than females (2.03 ± 0.58), ($p = 0.003$), indicating a tendency toward outward emotional expression. However, there were no significant gender differences in Maladaptive Behaviors (males: 2.26 ± 0.63 , females: 2.28 ± 0.57 , $p = 0.931$) or Passive Coping Strategies (males: 2.33 ± 0.51 , females: 2.36 ± 0.55 , $p = 0.389$).

Table 4: Coping strategies with psychological crises according to gender

Coping strategies	Male	Female	Total	p-value
	Mean (SD)	Mean (SD)	Mean (SD)	
Adaptive Coping Strategies	2.52 ± 0.54	2.80 ± 0.57	2.69 ± 0.58	<0.001
Externalizing Emotional Responses	2.17 ± 0.62	2.03 ± 0.58	2.08 ± 0.60	0.003
Maladaptive Behaviors	2.26 ± 0.63	2.28 ± 0.57	2.27 ± 0.60	0.931
Passive Coping Strategies	2.33 ± 0.51	2.36 ± 0.55	2.35 ± 0.53	0.389

The results in Table 5 reveal gender-specific associations between coping strategies, resilience resources, and mental health symptoms as measured by the SCL-90-R dimensions. Among males, maladaptive and externalizing emotional coping strategies were consistently linked to elevated symptoms across most domains, including somatization, obsessive-compulsive, and total symptom scores. For example, externalizing emotional responses were strongly associated with somatization (4.12 , $p < 0.05$), phobic anxiety (3.81 , $p < 0.05$), and total symptom scores (34.32 , $p < 0.05$). Conversely, resilience resources such as personal competence and structure style were protective, showing significant negative associations with depression (-1.06 , $p < 0.05$), anxiety (-1.05 , $p < 0.05$), and total scores (-6.65 , $p < 0.05$). Social competence also emerged as a robust protective factor, inversely linked to multiple symptoms, including interpersonal sensitivity (-0.87 , $p < 0.05$) and total symptom scores (-10.38 , $p < 0.05$).

For females, the associations followed a similar pattern, though there were notable differences in the specific coping strategies and resilience factors that influenced symptoms. Maladaptive and externalizing emotional coping strategies were positively linked to symptoms such as obsessive-compulsive (2.52 , $p < 0.05$), interpersonal sensitivity (1.66 , $p < 0.05$), and total scores (16.96 , $p < 0.05$). Adaptive coping strategies, while generally considered protective, were positively associated with symptoms such as depression (2.64 , $p < 0.05$) and total scores (9.29 , $p < 0.05$). Resilience resources

like personal competence (-7.90 , $p < 0.05$) and structure style (-8.57 , $p < 0.05$) were significantly associated with reduced total scores and specific symptoms such as depression and interpersonal sensitivity, highlighting their role in mitigating psychological distress. Social competence and family cohesion also had significant protective effects, particularly for depression and total scores, underscoring the importance of social and familial support in female mental health.

Overall, the findings highlight distinct gender-based differences in how coping strategies and resilience resources influence mental health symptoms. Males appear more affected by externalizing emotional responses and maladaptive coping, with protective effects from structure style and social competence. In contrast, females exhibit stronger associations between resilience resources like personal competence and family cohesion and reductions in symptoms. These results emphasize the need for tailored interventions to enhance resilience and promote adaptive coping strategies based on gender-specific vulnerabilities and strengths. Such targeted approaches can help mitigate the impact of psychological distress and improve overall mental well-being.

Table 5: Associations between coping strategies, resilience resources and SCL-90-R symptoms

Variable	Somatization	Obsessive-Compulsive	Interpersonal Sensitivity	Depression	Anxiety	Anger Hostilit	Phobic Anxiet	Paranoid Ideation	Psychoticism	Other	Total
	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)
Gender = Male											
Adaptive Coping Strategies	-2.64 (0.89)*	0.77 (0.89)	-2.36 (0.76)*	1.21 (0.90)	-1.02 (0.73)	-1.07 (0.45)*	-2.52 (0.63)*	-0.54 (0.48)	-1.11 (0.70)	-0.46 (0.49)	-11.04 (5.01)*
Externalizing Emotional Responses	4.12 (0.95)*	0.71 (0.95)	3.33 (0.81)*	3.38 (0.95)*	4.32 (0.78)*	3.30 (0.48)*	3.81 (0.67)*	2.63 (0.52)*	5.44 (0.75)*	1.88 (0.52)*	34.32 (5.28)*
Maladaptive Behaviors	2.00 (0.88)*	4.34 (0.88)*	1.19 (0.75)	4.38 (0.89)*	1.10 (0.72)	0.91 (0.44)*	0.53 (0.62)	1.26 (0.48)*	2.48 (0.69)*	1.93 (0.48)*	21.22 (4.90)*
Passive Coping Strategies	2.44 (1.08)*	2.40 (1.08)*	1.20 (0.92)	0.07 (1.08)	0.55 (0.89)	0.68 (0.54)	0.40 (0.76)	0.57 (0.59)	1.01 (0.85)	0.62 (0.59)	9.91 (5.98)
Personal Competence	-0.56 (0.48)	-0.15 (0.48)	-0.52 (0.41)	-1.06 (0.48)*	0.10 (0.39)	0.07 (0.24)	-0.12 (0.34)	-0.40 (0.26)	-0.30 (0.37)	-0.44 (0.26)	-3.68 (2.65)
Structure Style	-0.71 (0.54)	-0.54 (0.54)	-0.56 (0.46)	-0.49 (0.54)	-1.05 (0.45)*	-0.79 (0.27)*	-0.67 (0.38)	-0.55 (0.29)	-0.88 (0.42)*	-0.32 (0.30)	-6.65 (2.99)*
Social Support	-0.74 (0.49)	-0.59 (0.49)	0.05 (0.42)	0.28 (0.49)	0.07 (0.40)	-0.01 (0.25)	0.11 (0.35)	-0.08 (0.27)	-0.18 (0.38)	0.08 (0.27)	-1.17 (2.71)
Social Competence	-1.24 (0.51)*	-0.90 (0.51)	-0.87 (0.44)*	-1.09 (0.51)*	-1.81 (0.42)*	-0.85 (0.26)*	-0.71 (0.36)*	-0.62 (0.28)*	-1.34 (0.40)*	-0.65 (0.28)*	-10.38 (2.85)*
Family Cohesion	-0.38 (0.48)	-0.05 (0.48)	-0.04 (0.41)	-0.72 (0.48)	-0.37 (0.40)	-0.10 (0.24)	-0.59 (0.34)	0.25 (0.26)	-0.12 (0.38)	-0.25 (0.26)	-2.14 (2.67)
Gender = Female											
Adaptive Coping Strategies	1.60 (0.86)	2.77 (0.71)*	0.55 (0.59)	2.64 (0.85)*	1.23 (0.67)	0.07 (0.44)	-0.36 (0.52)	0.81 (0.45)	-0.03 (0.63)	0.08 (0.44)	9.29 (5.03)
Externalizing Emotional Responses	3.87 (0.91)*	1.80 (0.76)*	2.41 (0.63)*	1.49 (0.90)	3.62 (0.71)*	2.93 (0.47)*	2.34 (0.55)*	1.83 (0.48)*	4.36 (0.67)*	2.22 (0.47)*	27.49 (5.38)*
Maladaptive Behaviors	1.60 (0.84)	2.52 (0.70)*	1.66 (0.58)*	2.60 (0.84)*	1.51 (0.66)*	0.85 (0.44)	0.89 (0.51)	1.45 (0.45)*	2.01 (0.62)*	1.15 (0.43)*	16.96 (5.05)*
Passive Coping Strategies	2.04 (0.92)*	1.41 (0.76)	1.63 (0.63)*	1.03 (0.91)	0.99 (0.71)	0.81 (0.47)	1.97 (0.56)*	0.67 (0.48)	1.24 (0.68)	-0.02 (0.47)	11.46 (5.39)*
Personal Competence	-1.24 (0.43)*	-0.51 (0.36)	-0.42 (0.29)	-1.46 (0.42)*	-1.05 (0.33)*	-0.43 (0.22)	-0.42 (0.26)	-0.69 (0.23)*	-0.90 (0.32)*	-0.64 (0.22)*	-7.90 (2.54)*
Structure Style	-1.21 (0.49)*	-0.57 (0.41)	-0.84 (0.33)*	-1.04 (0.48)*	-0.95 (0.38)*	-0.29 (0.25)	-0.98 (0.30)*	-0.48 (0.26)	-1.14 (0.36)*	-0.38 (0.25)	-8.57 (2.86)*
Social Support	0.28 (0.40)	-0.50 (0.33)	-0.22 (0.27)	-0.32 (0.39)	-0.13 (0.31)	0.12 (0.21)	-0.34 (0.24)	-0.15 (0.21)	-0.21 (0.29)	-0.03 (0.20)	-1.72 (2.37)
Social Competence	-1.20 (0.47)*	-0.78 (0.39)*	-0.95 (0.32)*	-1.40 (0.46)*	-0.70 (0.36)	-0.76 (0.24)*	-0.39 (0.28)	-0.46 (0.25)	-0.84 (0.34)*	-0.51 (0.24)*	-8.12 (2.76)*
Family Cohesion	-0.95 (0.43)*	-0.55 (0.36)	-0.59 (0.30)*	-0.86 (0.43)*	-0.47 (0.34)	-0.12 (0.22)	-0.29 (0.26)	0.02 (0.23)	-0.51 (0.32)	-0.14 (0.22)	-4.68 (2.53)

*Significant values are indicated with * ($p < 0.05$); Models were adjusted to academic years, living situation and economic status

4. DISCUSSION

This study examined the relationships between resilience resources, coping strategies, and mental health symptoms among undergraduate university students, highlighting significant gender differences. Females reported stronger resilience resources, such as personal competence and social support, while males exhibited higher symptom scores in interpersonal sensitivity, anxiety, paranoid ideation, and psychoticism. Gender-specific associations between coping strategies and mental health symptoms revealed that females benefit more from adaptive coping, whereas males are disproportionately impacted by maladaptive and externalizing emotional coping strategies.

The findings reveal significant gender differences in mental health symptoms among university students as measured by the SCL-90-R. Male students exhibited higher symptom severity in dimensions such as anxiety, interpersonal sensitivity, and psychoticism compared to their female counterparts. These heightened levels may be influenced by societal norms that discourage emotional expression in men, potentially leading to underutilization of supportive resources. Conversely, while females reported lower symptom severity in these dimensions, their mental health challenges were pronounced in other areas, such as depression. This aligns with evidence that adaptive coping strategies employed by females, although generally protective, may not fully mitigate the psychological burden of academic and social pressures. These patterns underscore the distinct ways in which male and female students experience and express psychological distress. Research across diverse cultural contexts corroborates these gender-based differences in SCL-90-R outcomes. For instance, studies in Mexico have shown that female students report higher psychological distress overall, particularly in relation to interpersonal and emotional stressors [12]. Similarly, research among medical students in Iran found that females scored significantly higher across multiple SCL-90-R dimensions, including somatization, obsessive-compulsive tendencies, and psychoticism [13]. Studies in Chile and Argentina further affirm these trends, with females consistently demonstrating elevated scores in various mental health domains, suggesting a global consistency in gender differences [14]. Together, these findings highlight the need for culturally and gender-sensitive approaches to addressing mental health challenges in university populations.

The study highlights distinct gender differences in coping strategies among university students. Female

students predominantly employed adaptive, emotion-focused coping mechanisms, such as seeking social support or engaging in calming activities like deep breathing or emotional regulation.

This inclination aligns with findings in existing literature, which suggest that women often rely on strategies aimed at managing emotions, such as seeking solace in relationships or religious beliefs, to navigate stress [15-17]. Conversely, male students exhibited a stronger tendency toward externalizing emotional responses and problem-focused strategies, such as direct problem-solving or outward emotional expression. For instance, interviews revealed that some male students focused on maintaining calm and devising solutions, while others expressed frustration and self-criticism when faced with unexpected challenges. These differences underscore the varied ways in which male and female students experience and address stressors. The findings also illustrate the complexity of coping strategies used by university students, with some adopting constructive approaches, such as reframing situations positively or regulating emotions, while others resorted to less effective methods like avoidance or blaming external circumstances. Females' reliance on emotion-focused strategies often correlates with higher perceived stress, as they are more likely to openly process and express their feelings [17, 18]. On the other hand, males' preference for problem-focused strategies may limit emotional expression, sometimes exacerbating distress due to a lack of supportive engagement [19].

These patterns suggest that interventions to support students during crises should be tailored, recognizing the unique coping styles and needs of different genders to foster resilience and well-being effectively.

The distinct patterns of coping and resilience resources across genders underscore the need for tailored mental health interventions in university settings. For male students, programs that promote adaptive coping strategies and encourage seeking social support could mitigate the effects of psychological distress. For female students, interventions should address the pressures associated with academic and social expectations while enhancing their resilience resources.

Integrating gender-sensitive mental health programs into university curricula and fostering supportive peer networks may help bridge these gaps.

Universities should also aim to create an inclusive environment that reduces stigma around help-seeking behaviors, particularly for male students.

While the study provides valuable insights, several limitations should be acknowledged. Its cross-sectional design prevents causal inference, and the reliance on self-reported data introduces the potential for bias. The sample, though comprehensive, may not

fully represent the diversity of undergraduate students in other settings. Future longitudinal research is needed to explore the evolving impact of gendered coping strategies and resilience resources throughout the university experience. Additionally, investigating the role of cultural and institutional factors in shaping these gender differences would offer a more nuanced understanding.

5. CONCLUSION

This study highlights significant gender differences in coping strategies, resilience resources,

and mental health symptoms among undergraduate university students. Males exhibited greater vulnerability to psychological distress, exacerbated by reliance on maladaptive coping strategies, while females demonstrated stronger resilience but faced unique challenges, particularly in managing depression. These findings underscore the importance of developing gender-sensitive mental health interventions that address the specific needs of male and female students, fostering resilience and adaptive coping to promote well-being in the university context.

REFERENCES

- Tavakoly Sany SB, Aman N, Jangi F, Lael-Monfared E, Tehrani H, Jafari A. Quality of life and life satisfaction among university students: Exploring, subjective norms, general health, optimism, and attitude as potential mediators. *J Am Coll Health*. 2023;71(4):1045-52. Epub 20210709. doi: 10.1080/07448481.2021.1920597. PubMed PMID: 34242514.
- Porru F, Schuring M, Bültmann U, Portoghese I, Burdorf A, Robroek SJW. Associations of university student life challenges with mental health and self-rated health: A longitudinal study with 6 months follow-up. *J Affect Disord*. 2022; 296:250-7. Epub 20210923. doi: 10.1016/j.jad.2021.09.057. PubMed PMID: 34624809.
- Campbell F, Blank L, Cantrell A, Baxter S, Blackmore C, Dixon J, Goyder E. Factors that influence mental health of university and college students in the UK: a systematic review. *BMC Public Health*. 2022;22(1):1778. Epub 20220920. doi: 10.1186/s12889-022-13943-x. PubMed PMID: 36123714; PubMed Central PMCID: PMCPC9484851.
- Sigal M, Plunkett SW. Gender and Ethnic Differences in University Students' Attitudes about Mental Health Services. *Journal of College Student Mental Health*. 2024;38(2):275-92. doi: 10.1080/87568225.2023.2179286.
- Anis-Farahwahida MK, Hussain S, Ruslan M, Raji N. A Comparative Analysis of Gender Differences in University Student Mental Health Across Cultures. *International Journal of Research and Innovation in Social Science*. 2024; VIII:1774-9. doi: 10.47772/IJRISS.2024.8100154.
- Gitay MN, Fatima S, Arshad S, Arshad B, Ehtesham A, Baig MA, et al. Gender Differences and Prevalence of Mental Health Problems in Students of Healthcare Units. *Community Ment Health J*. 2019;55(5):849-53. Epub 20180825. doi: 10.1007/s10597-018-0304-2. PubMed PMID: 30145668.
- García-Campanario I, Viñolo Gil MJ, Vanlinthout LE, Pérez Pérez C, O'Ferrall González C. Gender Differences Regarding Self-Perceived Physical and Mental Health in Spanish University Sports and Physical Therapy Students after Termination of the COVID-19 Lockdown Period. *Healthcare (Basel)*. 2024;12(2). Epub 20240112. doi: 10.3390/healthcare12020191. PubMed PMID: 38255079; PubMed Central PMCID: PMCPC10815373.
- Seehuus M, Moeller RW, Peisch V. Gender effects on mental health symptoms and treatment in college students. *J Am Coll Health*. 2021;69(1):95-102. Epub 20190912. doi: 10.1080/07448481.2019.1656217. PubMed PMID: 31513464; PubMed Central PMCID: PMCPC7065949.
- Li M, Su H, Liao Z, Qiu Y, Chen Y, Zhu J, et al. Gender Differences in Mental Health Disorder and Substance Abuse of Chinese International College Students During the COVID-19 Pandemic. *Front Psychiatry*. 2021; 12:710878. Epub 20210817. doi: 10.3389/fpsy.2021.710878. PubMed PMID: 34484003; PubMed Central PMCID: PMCPC8415825.
- Graves BS, Hall ME, Dias-Karch C, Haischer MH, Apter C. Gender differences in perceived stress and coping among college students. *PLOS ONE*. 2021;16(8): e0255634. Epub 20210812. doi: 10.1371/journal.pone.0255634. PubMed PMID: 34383790; PubMed Central PMCID: PMCPC8360537.
- Tasket ME, Neal AM. Differences between College Males and Females' Coping Mechanisms in Relation to the COVID-19 Pandemic. *Issues Ment Health Nurs*. 2024;45(10):1090-6. Epub 20240808. doi: 10.1080/01612840.2024.2370929. PubMed PMID: 39116412.
- Rivera-Ledesma A, Suárez NPC, Sánchez INP, Lena MM-L. SCL-90 R: Distrés psicológico, género y conductas de riesgo. [SCL-90 R: Psychological distress, gender and risky behaviors.]. *Universitas Psychologica*.

2013;12(1):105-17.

- Nojomi M, Gharayee B. Medical students and mental health by SCL-90-R. *Med J Islam Repub Iran*. 2007; 21:71-8.
- Gempp R, Avendaño C. Datos Normativos y Propiedades Psicométricas del SCL-90-R en Estudiantes Universitarios Chilenos. *Terapia Psicológica*. 2008; 26:39-58. doi: 10.4067/S0718-48082008000100004.
- Wottrich S, Mocellin L, Ferrão C, Bueno R, Vargas L. Coping strategies adopted by students and professors in the COVID-19 pandemic context: a cross-sectional study. *ABCS Health Sciences*. 2023;48. doi: 10.7322/abcshs.2022006.2051.
- Theodoratou M, Farmakopoulou I, Kougioumtzis G, Kaltsouda A, Siouti Z, Sofologi M, et al. Emotion-focused coping, social support and active coping among University students: gender differences. *Journal of Psychology & Clinical Psychiatry*. 2023; 14:5-9. doi: 10.15406/jpcpy.2023.14.00720.
- Bano AH. Perceived stress and coping strategies among graduate university students: Role of Gender. *Humanities*. 2024;4(3):52-7.
- Mustafa SMS, Hamzah LM, Alias NF. Stress Coping Strategies among University Students in Malaysia. *International Journal of Academic Research in Progressive Education and Development*. 2023;12(3).
- Shukla N, Shukla A. Gender Variations in Coping Strategies for Challenges Faced by University Students. *Mind and Society*. 2023; 12:65-72. doi: 10.56011/mind-mri-122-20238.