



# The interrelationship between students' choice of coping strategy, types of problems, and demographic factors: An exploratory study

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## ABSTRACT

**Background:** The choice of coping strategies by individuals is influenced by a range of internal and external factors. However, there is limited research on how different types of problems affect these preferences.

**Purpose:** We aim to fill this gap by examining the interplay between coping strategies, problem types, and demographic factors.

**Method:** Using a mixed-method approach, we analyzed secondary data from a survey of Indonesian university students. We analyzed 349 valid responses through three analytical methods. Content analysis was used to identify students' coping methods and the types of problems they faced. We then employed contingency tables and logistic regression to explore the associations among these variables.

**Findings:** We found that high-income students are less likely to experience academic and social problems and more likely to use professional mental health services, that academic problems are linked to active and spiritual coping strategies, that female students are more likely to experience stress regulation problems, and that older students are less likely to employ emotion-regulation strategies.

**Implication:** How students cope with their problems are influenced by the problem they experience and their demographic background. Future research should focus on specific problems and coping strategies to gain deep domain-specific insights.

## KEYWORDS

student; coping;  
academic stress; mixed-  
method; exploratory

## Introduction

In recent years, research has found that a substantial number of Indonesian university students experience poor psychological well-being. About a third to a half (37-57%) of undergraduate students in Indonesia reported high-stress symptoms (Mardea et al., 2021), 25% experienced depression (Astutik et al., 2020) and 51% experienced anxiety (Fauziyyah & Ampuni, 2018). Despite the availability of mental health services, access remains challenged by the lack of accessibility to service information, the limited spread of mental health practitioners, stigma, and lack of mental health literacy among both the public and professionals (Putri et al., 2021). The lack of accessibility to service information makes it difficult for individuals to know where and how to seek help. The limited spread of mental health practitioners means that many areas, especially rural ones, are underserved.

Stigma surrounding mental health issues discourages individuals from seeking necessary treatment due to fear of judgment. Additionally, a lack of mental health literacy among both the public and professionals leads to misunderstanding and mismanagement of mental health conditions, further hindering effective care. Consequently, individuals often resort to coping strategies, with or without professional help. Given the crucial role of healthy and effective coping

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strategies in maintaining good mental health, it is essential to explore how individuals employ various coping strategies to manage stress.

Coping strategies can be categorized in various ways. Connor-Smith et al. (2000) classify them into engagement and disengagement coping. Engagement involves actively addressing a stressor, whereas disengagement coping entails avoiding it. Engagement coping can be further divided into primary and secondary control coping. Primary control coping aims to directly alter the condition or one's emotional response, using methods like problem-solving and emotional regulation. Secondary control coping focuses on adapting to the situation through positive thinking and acceptance. Other researchers categorize coping strategies into four major types: problem-focused (addresses the problem causing the distress), emotion-focused (reduces negative emotions associated with the problem), meaning-focused (uses cognitive strategies to derive and manage meaning of the situation), and social coping (reduces stress by seeking emotional or instrumental support from others; Algorani & Gupta, 2023). Understanding these categories as reflected by the intended population will help in identifying how people manage stress and tailor interventions accordingly. Thus, we aim to first explore the coping strategies that Indonesian students use.

Understanding the factors that influence coping strategies is as important as understanding the types of coping strategies themselves. For instance, gender could significantly impact individuals' choice of coping strategy. Research shows that while both men and women commonly use emotional strategies over problem-solving ones, women tend to use emotional strategies more often than men (Brougham et al., 2009). This finding was supported by a study of 448 undergraduate students in Florida which found that women are more likely to employ emotional coping strategies such as self-distraction, emotional support, instrumental support, or venting more than men (Graves et al., 2021). Conversely, men are more likely to avoid stressors involving interpersonal conflicts (Tamres et al., 2002), whereas women generally seek emotional and social support in similar situations (Tinajero, 2015). This suggests that gender can significantly influence the choice of coping strategies, with men potentially relying more on solitary coping strategies.

Socioeconomic status (SES) also plays a role in coping strategy choice (Landolt et al. 2002). Individuals with higher SES tend to perceive greater acceptance and support (Tinajero et al., 2015), which serves as a buffer against stressors (Cohen & McKay, 2020). A supportive social environment associated with higher SES provides more resources for coping with daily difficulties. Specifically, higher SES is linked to proactive coping, where individuals view challenges positively and engage constructively (Ouweland et al., 2009). Another relatively underexplored factor influencing coping strategy choice is the type of problem encountered. For example, primary control coping is more strongly associated with perceived social stress than with depressive symptoms (Calvete et al., 2011). Academic stress, in contrast, is more strongly linked to disengaged coping and shows no significant relationship with primary and secondary positive coping (Arsenio & Loria, 2014). Indeed, much theoretical work on coping had frequently set aside how coping interacted with the individual's type of problem. Many proposed frameworks of coping (Lazarus, 2000; Stallman, 2020; Stanisławski, 2019) typically concerns how coping can be categorized or how it relates to the regulation of the individual's psychological state, while discussions on how specific adversities constraint coping strategies are lacking. Earlier works that discuss this, like Parkes (1986), were more focused on more general conceptualizations on how individuals interact with their environment. However, it is unclear how coping varies with the type of problems individuals are currently facing.

Given the various factors that influence the selection of coping strategies, it is imperative to understand these determinants to address current stress-related issues among university students and the general population effectively. By comprehending how coping strategies vary, researchers and practitioners can design and implement tailored interventions that meet the specific needs and experiences of clients. For instance, identifying stressors associated with harmful coping strategies allows for predicting and mitigating additional risks for individuals likely to use unhealthy coping methods. Understanding how demographic factors influence coping strategies can reveal which socio-economic groups are at increased risk. Therefore, this

study aims to explore the factors associated with Indonesian students' preferred coping strategies, focusing on how differences in sex, economic status, and problem types influence coping strategy use. We present the results of an exploratory, mixed-method study where we combine content analysis of open-ended survey responses of university students, before subsequently subjecting contingency tables, and logistic regression.

## Method

### *Study Design & Participants*

This exploratory study used secondary data from a survey initially conducted by our university's faculty of psychology student body association (Lembaga Mahasiswa Psikologi, 2020). The research examined university students' perceived barriers to mental health services and collected data on coping strategies, problems, mental health service utilization, and various socio-demographic data. The survey contained a total of 644 responses. The only inclusion criteria for the original study were that the participants were active students from the university from various faculties and departments. Of the 644 respondents, 295 were excluded from this study due to incomplete responses to questions that are relevant to this study.

The total sample was 349 university students, with valid data from 19 faculties from all academic levels, predominantly at the undergraduate level (89.9%), consisting of 24.9% male and 75.1% female. They were between 19 and 36 years old. Samples came from various ethnicities; most of them were Javanese (72.2%), mixed ethnic (participants that mention more than one ethnicity, e.g., "Javanese-Sundanese", 8.2%), and Sundanese (5.1%). About 82.2% of the sample were Muslim, and 17.8% held other faiths. 20.6% of samples had an income of more than Rp 2.5 million. Detailed participant demographics can be seen in Table 1.

**Table 1**  
*Demographic Data of Participants*

No.	Demographic Aspects	<i>n</i>	%
1.	Age		
	17-19	186	53.3
	20-25	161	46.1
	>25	2	.6
2.	Sex		
	Male	87	24.9
	Female	262	75.1
3.	Ethnicity		
	Javanese	242	72.2
	Mixed	28	8.4
	Sundanese	17	5.1
	Chinese	12	3.6
	Batak	7	2.1
	Minang	8	2.4
	Melayu	4	1.2
	Other	17	5.1
4.	Education		
	Undergraduate	313	89.9
	Diploma	24	6.9
	Masters	11	3.2
5.	Income (in million IDR)		
	< 1	100	28.7
	1 - 1.5	32	9.2
	1.5 - 2.5	145	41.5
	> 2.5	72	20.6

*Note.* Education *n* = 348 due to 1 invalid entry. Ethnicity *n* = 335 due to 14 invalid entries.

### ***Instruments***

The original student body survey contained numerous questions regarding mental health and awareness, but for our present purposes we are interested in 3 variables among the various survey items. The first concerns demographic information, like age, sex, ethnicity, education, and income (or allowance). Respondents were given four options to report income, which are (in million IDR): < 1, 1 – 1.5, 1.5 – 2.5, and > 2.5. The second variable, measured with a single open-ended item, asked the type of problems students experienced, with the following question: “What problem has caused you distress during your time as an undergraduate student? Provide one example”. The last variable, also collected with a single open-ended item, asked about the participants’ choice of coping strategy with the following question: “What strategy do you use to handle the previous problem that you stated?”

### ***Analytic Approach***

The study involved a two-pronged, data-driven analytic approach. For the qualitative data, which encompassed coping strategies and student problems, we used content analysis following Vaismoradi and Snelgrove (2019). Initially, all researchers (A.H.A., A.K.P.) and an assistant (F.A.) independently familiarized themselves with the data and identified keywords. The team then convened to finalize these keywords and discuss potential codes. Subsequently, A.H.A. and F.A. independently coded the dataset using the agreed-upon coding framework. The results were compared, and any discrepancies were resolved through team discussions. Finally, the entire group consolidated the codes into overarching categories, creating discrete classifications for coping strategies and student problems.

The process yielded seven coping strategies and four types of problems. We created 11 dummy variables for each of these categories. For example, if a response was categorized as ‘social coping,’ it was coded as 1 for the social coping variable and 0 for the remaining six coping variables. The same approach was applied to the problem variables. Each response was restricted to a single category to avoid *p*-hacking concerns.

Following the qualitative categorization, we conducted preliminary quantitative analysis using Pearson correlations, followed by contingency tables for significant associations. Contingency tables are frequency tests that examine whether one category of a nominal variable co-occurs with another nominal variable category. Significant results indicate that two categories of different nominal variables appear together. Our primary interest was the odds ratio of co-occurrence between two categories. Pearson correlation analysis was performed first because larger contingency tables (beyond 2x2) cannot precisely pinpoint co-occurring categories. Additionally, 2x2 contingency tables allow for the computation of the odds ratio for two variables co-occurring. We also conducted logistic regressions to compute odds ratios for associations between dummy variables and continuous variables, such as income.

## **Result**

### ***Qualitative Analyses***

A total of 349 responses were recorded for the coping strategies and types of problem data. Based on the categorization process, we found that students’ coping strategies can be categorized into five categories (Table 2), with none of the respondents reporting no coping strategy. The following are the reported coping strategies: professional aid describes respondents who visit mental health professionals; active self-coping describes respondents who independently solve or reduce the severity of their problems; passive self-coping describes respondents who, on their own, do not attempt to work through their issues, instead resorting to unconstructive methods like distraction; social coping describes respondents who cope by immersing themselves in other people; lastly, religious/spiritual coping describes respondents whose coping strategies involve religious/spiritual activities.

Table 2 shows that the most used coping method is broadly passive self-coping (30.7%), followed by social coping (20.3%), while in particular, behavioral distraction (18.9%) is the most

used, followed by self-disclosure (15.5%). Meanwhile, the least used coping method was broadly not coping in any particular way (None, 5.7%), and in particular mental disengagement and suppression (both 1.1%), followed by unhealthy coping (1.4%).

**Table 2**  
*Coded Coping Strategy*

No.	Coping strategy	<i>n</i>	%	Response examples
1.	None	20	5.7	“None”
2.	Professional aid	39	11.2	“I have done counseling with a psychologist.”
3.	Emotion regulation	41	11.7	
	Calming	19	5.4	“I try to calm myself down and take a temporary break.”
	Crying	18	5.2	“Crying”
	Suppression	4	1.1	“I keep it to myself.”
4.	Active self-coping	36	10.3	
	Cognitive reappraisal	13	3.7	“Think about positive things that I can still do”
	Self-evaluation	9	2.6	“Spend time assessing how best I can balance duty and rights.”
	Self-management	14	4	“I force myself to get things done quickly.”
5.	Passive self-coping	107	30.7	
	Behavioral distraction	66	18.9	“Sleeping all day or watching movies.”
	Mental disengagement	4	1.1	“I try not to think about it too frequently; keep it as far away as possible from my mind.”
	Social disengagement	32	9.2	“Not meeting/communicating with people for approximately more than a day.”
	Unhealthy coping	5	1.4	“Overeating”
6.	Social coping	70	20.3	
	Self-disclosure	54	15.5	“Talking to a friend about the problem.”
	Social distraction	17	4.9	“I’ll just meet up with someone, no matter who it is.”
7.	Religious/spiritual coping	35	10	“Always do things that make myself closer to God”.
Total		349	100	

As for the types of problems, the responses were coded into four main categories. *Academic problems* are respondents who reported having difficulties with their academic life. *Social problems* are those who report social difficulty maintaining relationships or connecting with others. *Stress regulation problems* are those who experience unpleasant emotions or stressors.

As can be seen in Table 3, the highest percentage of problems were mental health problems in general (37.8%), followed by academic problems (25.8%), stress regulation (24.15%), and social problems trailing fourth (12.3%). In particular, the three highest percentages were mental

disorder symptoms (33%; we coded it as ‘symptoms’ because the diagnosticity of the respondents’ conditions is unclear), trailed by excessive stress (15.8%), and high academic demand (14.6%). The disorder symptoms mainly refer to participants who have elaborated on several problems that mimic the typical symptoms of mental health problems. For example, students might have expressed recurring problems with low mood, loss of appetite, negative thoughts, and low motivation, which are often associated with symptoms of depression.

**Table 3**

*Types of Problem Category*

No.	Types of problem	<i>n</i>	%	Example response
1.	Academic problems	90	25.8	
	Disappointment	15	4.3	“I felt down, particularly during the final thesis stage.”
	Insecurity	21	6	“Lack of self-confidence, and being constantly insecure that I’m not smart.”
	Amotivation	12	3.4	“I have no motivation to study despite my parents’ high expectations for me to become a successful person.”
	Excess demand	51	14.6	“There are so many workloads but so few lessons that I could actually understand.”
2.	Mental health problems	132	37.8	
	Disorder symptoms	115	33	“Crying for no reason, sudden mood changes, feeling that nobody could listen to me, overthinking”
	Self-harm/suicidal tendencies	17	4.9	“Wanting to commit suicide.”
3.	Social problems	43	12.3	
	Interpersonal conflict	24	6.9	“Stress from breakup”
	Social isolation	19	5.4	“I don’t want to meet anybody, and I’d rather be alone. I don’t want to reply to chats or texts from groups or my friends. Feeling pressured.”
4.	Stress regulation problems	84	24.1	
	Emotional reg. issues	20	5.7	“Sudden plunge or soar of emotions for no clear reasons.”
	Excessive stress	55	15.8	“Stressed and pressured by the overwhelming amounts of work.”
Total		349	100	

**Correlation of Dummy Variables**

We describe the significant results of the Pearson correlations between dummy variables below, omitting associations between problems and between coping strategies. For the tabular illustration, readers should refer to the supplementary materials. First, income was associated with academic ( $r = -.12$ ), social ( $r = -.14$ ), and mental health problems ( $r = .12$ ) in addition to social coping ( $r = -.12$ ) and professional aid ( $r = .12$ ). Age is correlated with emotion regulation ( $r = -.10$ ),

and sex is associated with stress regulation problems ( $r = .11$ ). Second, associations between problem and coping are found, which are (problem-coping): academic-active self-coping ( $r = .12$ ), academic-professional aid ( $r = -.17$ ), academic-religious/spiritual ( $r = .11$ ), stress-professional aid ( $r = -.11$ ), and mental health-professional support ( $r = .27$ ). Notably there is no significant association between “passive self-coping” and “none coping” with any other variables. Following these results, associations with income are then tested in logistic regression models, while associations between problem and coping are tested in individual contingency tables.

When we saw the results of the analyses, we did not expect income to be positively correlated with mental health problems. It would make it seem like people with higher income are more likely to experience mental disorders. However, individuals who reported having mental health problems may do so because some professionals have designated their conditions as clinically such. When we control for professional aid, the mental health problem is uncorrelated with any of the above variables except for ‘None’ coping ( $r = .12, p = .03$ ). The correlation with income becomes non-significant ( $r = .09, p = .09$ ). As such, it is not that income is associated with mental disorders, but individuals of greater income are more likely to visit professionals, which in turn makes them more likely to report experiencing mental disorders due to professionals designating them as such.

Additionally, we may ask whether the significant associations between professional aid with academic stress and mental health problems would change if we control for the income variable. There was no substantial change for academic ( $r = -.16, p < .01$ ), stress regulation ( $r = -.13, p = .02$ ) and mental health problems ( $r = .26, p < .001$ ). It is the case that for problems other than mental health problems (e.g., symptomatic conditions), respondents typically do not seek professionals for support.

**Contingency Tables Results**

We conducted a number of contingency tables based on the significant preliminary correlations. Here we present the results of the chi-squared significance test and the odds ratios for each of the contingency tables, below in Table 4. Readers interested in the frequency and expected counts should refer to supplementary materials. The chi-squared tests are all significant. As for the odds ratios, numbers above 1 indicate that the types of problem and coping method co-occurs (positive association), while numbers below 1 indicate that they do not regularly co-occur (negative association). With the results of the contingency table below, two problem x coping associations are negative, between academic problems are and professional aid (odds ratio = .14) and stress x professional aid (odds ratio = .33). There were 3 positive associations: academic problems x active self-coping (odds ratio = 2.27), academic problem x spiritual (odds ratio = 2.09), mental health problems x professional aid (odds ratio = 5.83). Additionally, those with excessive stress were associated with sex (0 = male, 1 = female; odds ratio = 1.90).

**Table 4**  
*Contingency Tables Between Types of Problem and Coping Strategies*

No.	Variables (Problem x Coping)	Chi-squared Statistics			Odds Ratio
		$\chi^2$	df	p	
1	Acad x ASC	5.29	1	.03	2.27
2	Acad x Prof	9.79	1	.00	.14
3	Acad x Spiri	4.11	1	.04	2.09
4	MH x Prof	24.92	1	<.001	5.83
5	Stress x Prof	4.58	1	.03	.33
6	Stress x Sex	4.03	1	.04	1.90

*Note.* Acad = academic problems. ASC = active self-coping. Stress = stress regulation problems. MH = mental health problems. Prof = professional aid.

**Logistic Regression Results**

We report the results of the logistic regressions below in Table 5. The results provide an odds ratio for each continuous variable to predict the categorical dependent variables.

**Table 5**  
*Five Logistic Regression Models*

<i>Dependent Variables</i>	<i>b</i>	<i>SE</i>	$\beta$	OR	<i>z</i>	Wald Test		
						Wald Stats.	<i>df</i>	<i>p</i>
<i>Academic problem</i>								
Intercept	-.44	.30	-1.08	.64	-1.46	2.13	1	.14
Income/Allowance	-.30	.14	-.28	.74	-2.15	4.61	1	.03
<i>Social problem</i>								
Intercept	-.97	.40	-2.04	.38	-2.44	5.94	1	.01
Income/Allowance	-.51	.20	-.47	.60	-2.51	6.30	1	.01
<i>Social coping</i>								
Intercept	-.69	.33	-1.41	.50	-2.11	4.43	1	.04
Income/Allowance	-.34	.16	-.31	.71	-2.19	4.80	1	.03
<i>Professional aid</i>								
Intercept	-2.94	.45	-2.12	.05	-6.47	41.89	1	< .001
Income/Allowance	.39	.18	.36	1.47	2.18	4.76	1	.03
<i>Emotion-regulation</i>								
Intercept	4.10	2.80	-2.10	60.46	1.47	2.15	1	.14
Age	-.32	.015	-.56	.73	-2.17	4.70	1	.03

Note. *N* = 349. OR = Odds Ratio.

**Discussion**

Our results demonstrate the intricate relationships among students' choices of coping strategies, the types of problems they face, and their demographic characteristics. We found that students' coping mechanisms vary depending on the nature of the problems they encounter. Additionally, both the selection of coping strategies and the types of problems are influenced by demographic factors such as socioeconomic status, age, and gender. As noted in the introduction, there is a lack of a comprehensive framework connecting coping strategies and problem situations. To address this, we draw from diverse research areas related to various demographic factors and our categorization of individual problems. We discuss how these elements interrelate, particularly with coping strategies. Finally, we suggest directions for future research to explore the nuanced interrelationships between specific coping strategies, particular adversities, and distinct environmental factors.

**Income**

Income demonstrates a nuanced relationship with various aspects of well-being, showing negative associations with academic and social problems, social coping, and positive associations with seeking professional aid. Our measure of economic conditions relied on self-reported income from allowances or work payments, distinct from socioeconomic status (SES). However, we will contextualize our findings in light of previous SES research.

Examining social outcomes, we found that income was inversely associated with social problems and social coping. Research suggests that SES is associated with psychosocial resources and also psychosocial well-being (Ajrouch et al., 2005; Campbell et al., 1986; de Laat et al., 2015; Yun et al., 2020). These factors may contribute to improved physical and mental health outcomes



through mechanisms like stress buffering (Stringhini et al., 2012; Tinajero et al., 2015). These findings align with our results showing fewer social problems among higher-income individuals. However, we also observed a contradictory association wherein higher income was linked to less reliance on social coping strategies. These differences might be influenced by the COVID-19 pandemic, during which the original survey was conducted, with varying access to resources at home potentially reducing the need for coping through social activities and self-disclosure among higher-income individuals.

The literature consistently highlights the robust association between poor economic conditions and mental health challenges. Low SES has been linked to increased psychological distress (Mulia et al., 2008), predisposing individuals to various risks such as depression and substance use disorders (McLeod & Shanahan, 1996; Murali & Oyebode, 2004). While some studies found no direct association between SES and psychological distress (Verger et al., 2009; Wang & Geng, 2019), childhood SES (i.e., early life SES determined by parent's SES) appears to exert a greater influence on daily well-being than present SES. This dynamic is potentially reflected in respondents' reported monthly allowance. Nevertheless, we found no differential associations between income and mental health problems after controlling for professional aid.

Furthermore, income exhibits a negative association with academic problems. While specific research linking economic conditions to academic stress is limited, broader literature underscores associations between economic conditions, including SES, and various academic outcomes. Higher SES is positively related to academic achievement (Berkowitz et al., 2017; Sirin, 2005) and academic motivation (Dowson & McInerney, 1998). Meanwhile, individuals from lower social classes often face challenges in adapting to the academic environment (Stephens et al., 2014). It is possible that lower-income students encounter greater academic hurdles and stress due to heightened pressure to succeed in higher education. In general, creating a conducive academic environment for lower-income students is a persistent challenge in higher education (Stephens et al. 2012). Crucially, this may interact with how low-income students are less likely to visit professional mental health services, such that the provision of accessible mental health services in universities to be more difficult.

### ***Academic Problems***

Academic problems showed significant associations with active self-coping and religious/spiritual coping strategies. Previous research has underscored the effectiveness of problem-focused coping, such as active self-coping, in enhancing academic performance (Julal, 2013; Struthers et al., 2000). It is plausible that many students have recognized the efficacy of active self-coping through their experiences and have employed it to tackle academic challenges. A pertinent question for future inquiry would be to explore the psychological factors that prompt students to engage in constructive coping behaviors like active self-coping when confronted with academic difficulties.

Additionally, academic problems were found to be significantly associated with religious/spiritual coping strategies. Scholars have established a connection between religiousness/spirituality and effective emotion regulation (Aldwin et al., 2014). It's not at all clear why academic problems would be conducive to religious/spiritual coping. Associations with active coping appear intuitive, given that it is "problem-focused" and can directly relate to how students manage their academic demands. Religion often prescribes specific emotional goals and furnishes resources for effective emotion regulation (Vishkin et al, 2013), which may serve as a protective factor for individuals grappling with academic burdens. However, this remains speculative, and additional quantitative studies can examine whether this association is robust, but qualitative studies of students' religious life may be more illustrative as to how students contextualize their academic life within their religious beliefs.

### ***Age and Sex Differences***

Older respondents are less likely to use emotion regulation coping strategies. This finding suggests that for older respondents, the significance of their problems may not lie primarily in the emotions they evoke. Research indicates that positive affect tends to increase with age

(Mroczek, 2001), and older adults generally report higher levels of positive emotions (Livingstone & Isaacowitz, 2021). This helps explain our results, as our category focused on regulating or expressing negative emotions (e.g., crying). Additionally, older adults report finding it easier to regulate their emotions (Orgeta, 2009), which might result in fewer reports of using emotional regulation strategies since they find it less relevant at their life stage. It's also important to consider that our sample included respondents with an age gap of up to 40 years, suggesting that differences in emotion regulation strategies could also be present among younger age groups, such as those aged 17-20 and 21-25.

Sex differences in experiencing stress are well-documented, with hormonal variations contributing to greater stress dysregulation in women. This makes them more susceptible to higher stress levels and more likely to fall into clinical categories of psychiatric disorders (Bale & Epperson, 2015; Bangasser & Valentino, 2015). Our finding that women experience greater difficulties with stress regulation aligns with these studies. Women are generally more relational than men (Kashima et al. 1995), which might influence their social coping strategies. However, our results contradict some findings that suggest women are more likely to engage in social coping (Hobfoll et al., 1994; Menéndez-Espina, 2019). While we discussed various coping strategy differences between men and women in the introduction, the literature remains inconclusive (Brougham et al., 2009). Our non-significant results could be due to the modest effect sizes of the associations (Tamres et al., 2002).

### ***Professional Aid***

Respondents who sought professional aid did so primarily for mental health problems. Interestingly, individuals facing academic or stress regulation problems were less likely to seek professional aid. This trend persisted even after accounting for economic conditions. Economic barriers are a serious issue in providing mental health services (Knapp et al., 2006), but well-off individuals would not necessarily visit professional services despite being easily affordable. The decision to see mental health professionals may be related to perceived expensiveness, which was shown to predict the likelihood of recommending health care services (Cheng et al., 2006). It may interact with other variables such as perceived benefits, needs, ethnicity, and social class (Eisenberg et al., 2007). Future research should aim to investigate how costs, perceived expensiveness, and other variables act as barriers to mental health services. For instance, if individuals perceive the price of seeking professional help to be cheap, they might be more likely to access it when they face mental health problems. Still, our results also show that there is room for non-clinical counseling to play a role in maintaining individuals' mental health by helping to deal with non-clinical categories of problems. This may reflect a further need to increase service accessibility even further.

### ***Conceptual Frameworks of Coping***

Theoretical explanations of coping are often too broadly related to other psychological systems (e.g., personality dynamics, Parkes, 1986; degree of healthiness, Stallman, 2020) or too specific to be applicable across different domains (e.g., social context of coping, Lazarus 2006; teacher stress, Herman et al., 2020). Despite decades of developing broad frameworks for coping, there remains a lack of universally accepted framework (Stanisławski, 2019). This difficulty in organizing findings in a non-domain-specific manner may be related to broader issues concerning the lack of theory in psychological science (Muthukrishna & Henrich, 2019). For example, according to Folkman and Lazarus's (1980) classic categorization of problem and emotion-focused coping, our coded coping category 'active self-coping' would fall into problem-focused coping. However, as Stanislawski (2019) discussed, most coping strategies can technically be considered "problem-focused". Such theoretical disagreements continue to persist in coping research.

It may be more productive for researchers to study specific types of adversity, coping strategies, and demographics in a narrow manner, akin to our current method. Such an investigation would be highly domain-specific, aiming to understand critical environments like

education and can be leveraged for targeted interventions. Taking a bottom-up approach can be more flexible and lead to findings more directly relevant to the context under study, particularly as available categorical frameworks lack consensus and may conceal unique characteristics of said context. Hence, common coping frameworks may not always be useful, especially where granularity or specificity of various coping strategies may be of interest.

### **Limitations**

As an exploratory study, our research has several limitations. Given the numerous variables and associations we examined, there is an increased risk of *p*-hacking. Most of our significant *p*-values are at  $< .05$ , with very few at  $< .01$ . Consequently, our results should not be considered definitive evidence but rather as providing direction for future research and potential hypotheses that require further testing through hypothesis-driven studies. Additionally, while studies on coping strategies typically use established psychological measures, our approach coded open-ended qualitative data into a single coping strategy, although respondents may report more than one. This method has the benefit of capturing only the most salient coping strategies reported by respondents, but it does not allow for the assessment of multiple coping strategies simultaneously.

### **Conclusion**

We found that high-income students are less likely to experience academic and social problems, all the while being more likely to use professional mental health services. Students experiencing academic problems are more likely to employ active and spiritual coping strategies. Lastly, we found that female students are more likely to experience stress regulation problems and that older students are less likely to employ emotion-regulation strategies. Our study is limited in its exploratory nature and how we code open-ended questions on coping to be a single strategy. In the future, a more focused research on how particular coping strategies interrelate with specific adversities and environmental factors can provide deep and illustrative frameworks to understand coping dynamics, which can be especially useful in critical settings like education.

### **Ethical Approval Statement**

The original study was approved by the ethics committee of the Faculty of Psychology, Universitas Gadjah Mada, clearance number 4912/UN1/FPSi.1.3/SD/PT.01.04/2020.

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