

## Coping strategies to predict the psychological well-being of college students during the COVID-19 pandemic

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### ABSTRACT

The COVID-19 pandemic in Indonesia has forced college students to undergo online learning. Various problems that arise due to this pandemic, especially those related to academic achievement, can disrupt the students' psychological well-being. This study investigated coping strategies' role in predicting college students' psychological well-being during the pandemic's first wave. Two hundred eleven students participated online in this quantitative study and completed the shortened version of the Psychological Well-Being Scale and the Brief Cope Inventory. The regression analysis results show that problem-focused coping strategies, such as planning and the use of instrumental support, significantly predict the increase in female students' psychological well-being. In contrast, only active coping positively predicts psychological well-being in male students. Dysfunctional coping strategies, such as behavioral disengagement and denial, significantly predict the decline in female students' psychological well-being. On the other hand, venting showed a significant role in predicting the increased psychological well-being of female students. Emotion-focused coping strategies do not significantly predict psychological well-being in female and male students. Therefore, regarding the psychological well-being of college students during the first wave of the COVID-19 pandemic, coping strategies, especially problem-focused and dysfunctional strategies, contribute differently to female and male students.

### Introduction

The emergence of the COVID-19 pandemic has led to the implementation of physical distancing in Indonesia through work from home (WFH) and study from home (SFH) policies. These policies also affect the learning process in higher education by implementing distance or online learning. Previous studies on college students in several regions in Indonesia, such as Lampung, Medan, and Jakarta, showed that students experienced mild, moderate, to severe anxiety and stress in undergoing distance or online learning during the COVID-19 pandemic (Harahap et al., 2020; NurCita & Susantiningsih, 2021). When carrying out online education, college students experience constraints, including difficulty concentrating and understanding lecture material, unstable internet signals and networks, less than optimal lectures in explaining lecture material, and too many assignments with short deadlines (Hasanah et al., 2020).

The psychological impacts of the COVID-19 pandemic on college students have also been extensively studied in various countries, including Italy as the first country to implement a lockdown in Europe (Villani et al., 2021). A study among 787 university students in Australia shows that 31.5% of study participants had very low well-being (Dodd et al., 2021). Research on 291 first-year college students in France showed that most

participants reported increased anxiety and moderate to severe stress levels since the beginning of the COVID-19 confinement period (Husky et al., 2020). A literature review of eleven studies conducted in several countries found that the psychological effects of the COVID-19 pandemic on college students were anxiety, depression, stress, post-traumatic stress disorder, and post-traumatic growth (Ratunuman et al., 2021). First-year female college students were more likely to have higher anxiety, depression, stress, and post-traumatic stress disorder than male and older students.

According to research on Jordanian undergraduate students, the transition to online learning during the COVID-19 pandemic caused several problems, which include technology, mental health, time management, and balancing life and education (Maqableh & Alia, 2021). Dissatisfaction among students was caused by distraction and reduced focus, technology and internet connectivity issues, insufficient support, increased workload, increased difficulty in exams and quizzes, poor interaction with colleagues and lecturers, psychological issues, and management. Moreover, the COVID-19 pandemic impacted the psychological well-being of university students (Ebrahim et al., 2022).

These various psychological impacts can interfere with the psychological well-being of college students. According to Ryff and Keyes (1995), psychological well-being is a multidimensional domain. Psychological well-being includes self-acceptance, environmental mastery, purpose in life, positive relations with others, personal growth (sustainable growth and development), and autonomy (the capacity for self-determination). Previous studies have shown that college students' psychological well-being can be influenced by several factors, including social support and religiosity (Abdillah et al., 2021; Eva et al., 2020), stress, and emotional regulation (Gunawan & Bintari, 2021), academic stress (Pratiwi et al., 2021), and coping strategies (Abbas et al., 2020; Abdillah et al., 2021; Guszowska & Dąbrowska-Zimakowska, 2022; Pratiwi et al., 2021; Sagone & De Caroli, 2014). Research by Abdillah et al. (2021) on 145 college students in Surakarta showed coping strategies mediated by the correlation between religiosity and psychological well-being. Coping strategies and academic stress could also be significant predictors of the psychological well-being of first-year students in Yogyakarta during the pandemic (Pratiwi et al., 2021).

Problem-focused coping strategies, emotion-focused coping strategies, and dysfunctional coping strategies are the three main types of coping strategies (Carver, 1997; Carver et al., 1989). Problem-focused coping strategies include active coping, the use of instrumental support, and planning, all of which aim to solve a problem or change the source of stress. Active coping is the process of taking active steps, such as taking immediate action, increasing one's efforts, and gradually increasing one's coping efforts to eliminate or avoid a stressor or reduce its effects. The use of instrumental support is an attempt to seek advice, assistance, or information. In contrast, planning is thinking about how to deal with the stressor, which involves developing an action plan, deciding steps to take, and determining the best way to deal with the problem. Emotion-focused coping strategies include using emotional support, religion, humor, acceptance, and positive reframing to reduce or manage the emotional distress associated with a situation.

Dysfunctional coping strategies refer to coping strategies that are only felt helpful at first but ineffective if used continuously or in the long term, such as self-distraction, behavioral disengagement, denial, substance use, self-blame, and venting (Carver, 1997; Carver et al., 1989). Self-distraction or mental disengagement is an act of doing various alternative activities to distract a person from a problem or task. The activities include daydreaming, escaping through sleep, or watching TV. Behavioral disengagement is a reduction in a person's efforts to deal with stressors or complete cessation of efforts to

achieve goals disrupted by stressors. Behavioral disengagement is frequently associated with feelings of helplessness and is most likely to occur when people anticipate poor coping outcomes. Denial is not accepting a stressor or problem or attempting to act as if the stressor did not exist. Unless the stressor can be profitably ignored, this strategy only creates additional problems because denying the reality of the event allows the event to become more serious, making it more difficult to cope. Similarly, focusing on and venting emotions (e.g., distress or upset) can hinder adjustment and distract people from active coping efforts to get out of problems if used for long periods.

A study of 183 Italian college students aged 20 to 26 showed that the reinterpretation coping strategy (problem-focused coping) predicted increased psychological well-being. Still, the avoidance coping strategy (dysfunctional coping) negatively predicted psychological well-being (Sagone & De Caroli, 2014). Thus, college students, who expressed a state of psychological well-being, actively deal with problems and stressful events without using avoidance and escape strategies. Research on 198 first-year university students in Yogyakarta during the pandemic showed that academic stress negatively predicted psychological well-being, whereas coping strategies positively predicted psychological well-being (Pratiwi et al., 2021). First-year students who could carry out effective coping strategies would have increased psychological well-being. A study of 1330 Polish university students aged 18 to 30 found that maladaptive coping was the strongest negative predictor, whereas coping by positive reappraisals and coping by actions were positively significant but less predictive for the students' psychological well-being during the second wave of the COVID-19 pandemic (Guszkowska & Dąbrowska-Zimakowska, 2022). In this study, maladaptive coping includes behavioral disengagement, self-blaming, denial, substance use, and venting. In comparison, coping by positive reappraisals were humor, acceptance, and positive reframing. In contrast, coping by actions were active coping, physical activity, planning, and doing something else.

Studies on coping strategies' role in predicting college students' psychological well-being in Indonesia and other countries were quite often conducted before the COVID-19 pandemic (Abbas et al., 2020; Abdillah et al., 2021; Sagone & De Caroli, 2014). However, similar studies on college students during the pandemic were relatively few (Guszkowska & Dąbrowska-Zimakowska, 2022; Pratiwi et al., 2021). Pratiwi et al. (2021) showed that coping strategies could contribute as a predictor of psychological well-being in undergraduate students, especially freshmen, in Yogyakarta, but this study examined coping strategies as a whole.

This study aimed to investigate the role of coping strategies classified into three types: problem-focused, emotion-focused, and dysfunctional coping strategies to predict psychological well-being in college students during the first wave of the COVID-19 pandemic. This study also explored the problems experienced by students during the first wave of the pandemic. Previous studies showed gender differences in the use of coping strategies (Carver et al., 1989; Guszkowska & Dąbrowska-Zimakowska, 2022; Sagone & De Caroli, 2014). Therefore, this study examined the role of each coping strategy used by female and male students to predict their psychological well-being.

## Method

### *Participants*

Participants in this study were 211 Indonesian college students (153 females and 58 males) aged 18 to 26 years. The determination of the total participants was obtained through the calculation of G\*Power 3.1.9.7 ( $\alpha$  error probability = .05; power (1- $\beta$  error probability) =

.95) and resulted in a minimum target of 197 participants. The inclusion criteria of this study were male and female students aged 18 to 30 actively participating in online lectures due to the pandemic. Data collection was carried out by distributing online questionnaires using google forms to undergraduate students via Line and Instagram in November 2020.

### ***Instruments***

The questionnaire in this study consisted of two scales, i.e., the Brief Cope Inventory and Psychological Well-Being Scale, and some additional questions regarding demographic data, such as gender, age, class, and students' residence during the pandemic. In addition, there was also a question about the problems experienced by students during the pandemic: "*During this pandemic period, what problems made you stressed or burdened the most?*" Students could answer this question according to the problems they subjectively experienced or perceived. They were allowed to choose more than one answer from the eleven available options, including 'Other' and 'None' (see [Table 1](#)). The 'Other' option was provided so that students could add their answers freely if they were having problems that were not included in the answer choices.

Coping strategies were measured using the 28-item Brief COPE Inventory ([Carver, 1997](#)) with a Likert scale model (1 = I haven't been doing this at all; 2 = I've been doing this a little bit; 3 = I've been doing this a medium amount; 4 = I've been doing this a lot). This scale consists of 14 subscales, each of which contains two items. [Carver \(1997\)](#) categorized 14 subscales into three broad categories of coping strategies, e.g., emotion-focused, problem-focused, and dysfunctional coping strategies. Acceptance, the use of emotional support, humor, positive reframing, and religion are subscales categorized under emotion-focused coping strategies. Active coping, planning and the use of instrumental support are subscales categorized in problem-focused coping strategies. The other six subscales, self-distraction, behavioral disengagement, denial, substance use, self-blame, and venting, are categorized as dysfunctional coping strategies. The reliability coefficient ( $\alpha$ ) in the current sample for each dimension is .701 for dysfunctional coping, .680 for problem-focused coping, and .604 for emotion-focused coping without omitting any items.

Psychological well-being was measured using a shortened version of the Psychological Well-Being Scale ([Ryff et al., 2021](#)). This short version of the scale consists of 18 items with a Likert scale model of 1-7 (1 = strongly agree; 2 = somewhat agree; 3 = a little agree; 4 = neither agree or disagree; 5 = a little disagree; 6 = somewhat disagree; 7 = strongly disagree). This psychological well-being scale consists of six subscales with three items each. The subscales are autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Some items need to be reverse-scored. Cronbach's alpha for the current sample is .821 after dropping one item (10) because it had a negative discrimination index.

### ***Data Analysis***

The data collected was then analyzed. Multiple regression analysis was applied to analyze the data using SPSS (Version 25; IBM Corp. 2016).

### **Results**

In this study sample, the mean age of the participants was 20 years ( $SD = 1.32$ ). Most participants were female students (72.5%) from the 2017 intake year (32.7%) and lived at their parent's house during the pandemic (88.2%). Based on [Table 1](#), the most frequently reported problems that made students feel stressed or burdened during the pandemic were many difficult tasks to do, lack of time and discipline, difficulty in understanding lecture

material, inability to meet friends, and declining mental health conditions, and financial situation. Most of these problems were related to academic matters.

**Table 1**  
*Characteristics of Participants*

Characteristics	Female		Male		Total	
	N (153)	% (72.5)	N (58)	% (27.5)	N (211)	%
<i>Age (years)</i>						
18	17	11.1	5	8.6	22	10.4
19	50	32.7	14	24.1	64	30.3
20	26	17.0	17	29.3	43	20.4
21	43	28.1	17	29.3	60	28.4
22	15	9.8	2	3.4	17	8.1
23	2	1.3	1	1.7	3	1.4
25	0	0	1	1.7	1	0.5
26	0	0	1	1.7	1	0.5
<i>Intake year</i>						
2016	2	1.3	2	3.4	4	1.9
2017	54	35.3	15	25.9	69	32.7
2018	31	20.3	16	27.6	47	22.3
2019	47	30.7	20	34.5	67	31.8
2020	19	12.4	5	8.6	24	11.4
<i>Where to stay during the pandemic</i>						
At home with family	136	88.9	50	86.2	186	88.2
At a relative's house	4	2.6	1	1.7	5	2.4
Boarding house	10	6.5	6	10.3	16	7.6
Other	3	2.0	1	1.7	4	1.9
<i>Problems during the pandemic</i>						
Many difficult tasks to do	119	77.8	44	75.9	163	77.3
Lack of time and discipline	103	67.3	33	56.9	136	64.5
Difficulty in understanding lecture material	96	62.7	34	58.6	130	61.6
Unable to meet friends	90	58.8	35	60.3	125	59.2
Declining mental health conditions	72	47.1	30	51.7	102	48.3
Financial condition	70	45.8	28	48.3	98	46.4
Declining grades	44	28.8	15	25.9	59	28.0
Declining physical health conditions	31	20.3	10	17.2	41	19.4
Worsening relationship with family	23	15.0	7	12.1	30	14.2
Other	7	4.6	3	5.2	10	4.7
None	1	0.7	0	0	1	0.5

### ***The Role of Coping Strategy Dimensions on Psychological Well-Being***

The regression analysis in [Table 2](#) examined the effect of each coping strategy dimension on psychological well-being in total participants, female participants, and male participants. In total participants, problem-focused coping strategies showed a significant positive effect ( $\beta = .387, p = .001$ ), while dysfunctional coping strategies had a significant negative effect ( $\beta = -.285, p = .001$ ) on psychological well-being.

In female participants, problem-focused coping strategies also showed a significant positive effect ( $\beta = .376, p = .001$ ), whereas the effect of dysfunctional coping strategies on psychological well-being was negatively significant ( $\beta = -.337, p = .001$ ). Emotion-focused

coping strategies did not show significant effects on psychological well-being, both in total ( $\beta = .114, p = .129$ ) and female participants ( $\beta = .135, p = .115$ ). Slightly different in male participants, only problem-focused coping strategies showed a significant positive effect ( $\beta = .430, p = .008$ ) on psychological well-being, while the effect of dysfunctional coping strategies ( $\beta = -.165, p = .171$ ) and emotion-focused coping strategies ( $\beta = .058, p = .711$ ) were not significant.

Table 2

*Regression Analysis of Each Dimension of Coping Strategies on Psychological Well-being*

Participants	Predictors	Standardized Coefficients Beta ( $\beta$ )	t	Sig.	R	R Square	F (Sig.)
Total	PCS	.387	5.189	.001**	.545	.297	29.154 (.001**)
	DCS	-.285	-4.883	.001**			
	ECS	.114	1.524	.129			
Female students	PCS	.376	4.421	.001**	.576	.332	24.633 (.001**)
	DCS	-.337	-5.028	.001**			
	ECS	.135	1.584	.115			
Male students	PCS	.430	2.771	.008**	.496	.246	5.888 (.001**)
	DCS	-.165	-1.387	.171			
	ECS	.058	.372	.711			

Note: Dependent variable: Psychological well-being; PCS = Problem-focused coping strategies; DCS = Dysfunctional coping strategies; ECS = Emotion-focused coping strategies

\*  $p < .05$

\*\*  $p < .01$

***The Role of Problem-Focused and Dysfunctional Coping Strategies on Psychological Well-Being***

The regression analysis in Table 3 showed the effect of each problem-focused coping strategy, such as planning, the use of instrumental support, and active coping, on the psychological well-being of total participants, female participants, and male participants. The results showed that in total participants, only planning ( $\beta = .309, p = .001$ ) and the use of instrumental support ( $\beta = .173, p = .007$ ) had significant positive effects on psychological well-being, while the effect of active coping was not significant ( $\beta = .136, p = .064$ ).

In female college students, planning and the use of instrumental support also significantly affected psychological well-being. Planning ( $\beta = .342, p = .001$ ) and the use of instrumental support ( $\beta = .188, p = .015$ ) showed significant positive effects, whereas active coping had no significant effect ( $\beta = .082, p = .331$ ) on psychological well-being. Using the enter method, none of the problem-focused coping strategies showed a significant effect among male participants. However, using the stepwise method, active coping had a significant positive effect ( $\beta = .424, p = .001$ ) on male college students' psychological well-being (see Table 4).

Table 3 also shows the regression analysis of the effect of each dysfunctional coping strategy. Results for total participants showed that only behavioral disengagement, denial, and venting affected psychological well-being significantly. Behavioral disengagement ( $\beta = -.321, p = .001$ ) and denial ( $\beta = -.153, p = .031$ ) showed significant negative effects, whereas venting had a significant positive effect ( $\beta = .182, p = .005$ ) on psychological well-being.

In female participants, initially, when using the enter method, only behavioral disengagement ( $\beta = -.331, p = .001$ ) showed a significant negative effect, whereas venting ( $\beta = .169, p = .026$ ) showed a positively significant effect on psychological well-being. However, further stepwise testing (Table 4) showed that denial was also negatively affected.

Table 3

*Regression Analysis of Each Problem-Focused and Dysfunctional Coping Strategy on Psychological Well-being*

Participants	Predictors	Standardized Coefficients Beta ( $\beta$ )	t	Sig.	R	R Square	F (Sig.)
<i>Problem-focused coping</i>							
Total	P	.309	4.282	.001**	.471	.222	19.722 (.001**)
	UIS	.173	2.717	.007**			
	AC	.136	1.861	.064			
Female students	P	.342	4.146	.001**	.477	.228	14.642 (.001**)
	UIS	.188	2.468	.015*			
	AC	.082	.976	.331			
Male students	P	.198	1.296	.200	.477	.227	5.300 (.003**)
	UIS	.155	1.281	.206			
	AC	.278	1.807	.076			
<i>Dysfunctional coping</i>							
Total	SD	.028	.442	.659	.472	.223	9.749 (.001**)
	BD	-.321	-4.289	.001**			
	D	-.153	-2.177	.031*			
	SU	-.004	-.056	.956			
	SB	-.090	-1.217	.225			
	V	.182	2.826	.005**			
Female students	SD	.026	.347	.729	.498	.248	8.009 (.001**)
	BD	-.331	-3.759	.001**			
	D	-.153	-1.839	.068			
	SU	-.029	-.376	.708			
	SB	-.102	-1.143	.255			
	V	.169	2.246	.026*			

Note: Dependent variable: Psychological well-being; P = Planning; UIS = Use of instrumental support; AC = Active coping; SD = Self-distraction; BD = Behavioral disengagement; D = Denial; SU = Substance use; SB = Self-blame; V = Venting

\*  $p < .05$

\*\*  $p < .01$

***Effective Contribution of Significant Coping Strategies to Psychological Well-Being***

Table 4 illustrates the coefficient of determination of coping strategies that significantly affected psychological well-being for total, female, and male participants. The coping strategy with the largest coefficient of determination on psychological well-being in total participants was the problem-focused coping strategy ( $R^2 = 20.9\%$ ), followed by the dysfunctional coping strategy ( $R^2 = 8.0\%$ ). Planning ( $R^2 = 17.3\%$ ) was the largest problem-focused coping strategy contributing to all participants' psychological well-being, followed by instrumental support ( $R^2 = 3.6\%$ ). The largest contribution of dysfunctional coping strategies came from behavioral disengagement ( $R^2 = 16.9\%$ ), followed by venting ( $R^2 = 2.6\%$ ) and denial ( $R^2 = 2.2\%$ ).

In female participants, the largest coefficient of determination on psychological well-being also came from problem-focused coping strategies ( $R^2 = 20.6\%$ ), followed by dysfunctional coping strategies ( $R^2 = 11.4\%$ ). The largest contribution of the problem-focused coping strategy to psychological well-being in female students came from planning ( $R^2 = 18.3\%$ ), followed by the use of instrumental support ( $R^2 = 3.9\%$ ). Behavioral disengagement ( $R^2 = 19.2\%$ ) was the largest dysfunctional coping strategies which contributed to psychological well-being, followed by denial ( $R^2 = 2.7\%$ ) and venting ( $R^2 = 2.2\%$ ). Similarly, the problem-focused coping strategy ( $R^2 = 21.9\%$ ) showed the largest

contribution to psychological well-being in male participants, with the largest contribution coming from active coping ( $R^2 = 18\%$ ).

Table 4

*The Coefficient of Determination of Coping Strategies on Psychological Well-being*

Model Summary	Total			Female Students			Male Students		
	<i>R Square</i>	$\beta$	<i>p</i>	<i>R Square</i>	$\beta$	<i>p</i>	<i>R Square</i>	$\beta$	<i>p</i>
PCS	.209	.458	.001**	.206	.458	.001**	.219	.468	.001**
DCS	.080	-.282	.001**	.114	-.338	.001**	-	-	-
P	.173	.376	.001**	.183	.377	.001**	-	-	-
UIS	.036	.194	.002**	.039	.205	.007**	-	-	-
AC	-	-	-	-	-	-	.180	.424	.001**
BD	.169	-.358	.001**	.192	-.376	.001**	-	-	-
V	.026	.174	.006**	.022	.148	.041*	-	-	-
D	.022	-.165	.016*	.027	-.179	.024*	-	-	-

Note: Dependent variable: Psychological well-being; PCS = Problem-focused coping strategies; DCS = Dysfunctional coping strategies; P = Planning; UIS = Use of instrumental support; AC = Active coping; BD = Behavioral disengagement; V = Venting; D = Denial

\*  $p < .05$

\*\*  $p < .01$

## Discussion

This research aimed to examine the role of problem-focused, emotion-focused, and dysfunctional coping strategies in predicting college students' psychological well-being during the first wave of the COVID-19 pandemic. According to this research findings, only problem-focused and dysfunctional coping strategies significantly predicted college students' psychological well-being. In contrast, emotion-focused coping strategies did not play a significant role. The problem-focused coping strategy contributed the most to total college students' psychological well-being, followed by the dysfunctional coping strategy.

Using problem-focused coping strategies could significantly predict improved psychological well-being in total college students, female students, and male students. Problem-focused coping strategies aim to solve problems or do something to change the source of stress (Carver, 1997; Carver et al., 1989). College students who used these coping strategies would be able to adapt and overcome various problems encountered during the first wave of the pandemic and, in turn, have better psychological well-being. The study result was in line with previous research. First-year students in Yogyakarta who could carry out more effective coping strategies would have more positive psychological well-being when adapting to online learning models during the pandemic (Pratiwi et al., 2021). However, Pratiwi et al. (2021) did not divide coping strategies based on three categories as applied in this study. Guskowska and Dąbrowska-Zimakowska (2022) also mentioned that coping by actions was one of the positive predictors of college students' psychological well-being during the second pandemic wave.

Findings on the dimensions of problem-focused coping strategies showed that only planning and the use of instrumental support significantly predicted increased psychological well-being in total college students and female students. In contrast, active coping had no significant effect. On the other hand, active coping was the only problem-focused coping strategy that significantly predicted improvement in the psychological well-being of male college students. Guskowska and Dąbrowska-Zimakowska (2022) discovered that during the second wave of the pandemic, female students were more likely to use several strategies, including seeking emotional and instrumental support (asking for advice, help, or

information from others) and planning (thinking about how to deal with difficult situations). A study before the pandemic also found that female students used coping strategies that focused more on seeking support from other people and resources than male students (Sagone & De Caroli, 2014). However, neither Guskowska and Dąbrowska-Zimakowska (2022) nor Sagone and De Caroli (2014) examined the role of each problem-focused coping strategy on psychological well-being in female and male college students. Thus, this finding extends previous research findings regarding the types of problem-focused coping strategies that increase psychological well-being in male and female students. In this study, we found that planning was a problem-focused coping strategy that highly contributed to total college and female students' psychological well-being, followed by instrumental support. On the other hand, active coping significantly contributed to psychological well-being in male college students.

Dysfunctional coping strategies negatively affected the psychological well-being of total college students and female students, but not male students. This finding showed that dysfunctional coping strategies could predict decreased psychological well-being in total students and female students. Dysfunctional coping strategies in this study include self-distraction, behavioral disengagement, denial, substance use, self-blame, and venting (Carver, 1997; Carver et al., 1989). The finding aligns with a previous study that discovered maladaptive coping was the strongest negative predictor of college students' psychological well-being during the second pandemic wave (Guskowska & Dąbrowska-Zimakowska, 2022). Nonetheless, Guskowska and Dąbrowska-Zimakowska (2022) did not investigate the role of coping strategies based on gender differences in predicting psychological well-being as this study did.

The role of dysfunctional coping strategy dimensions on psychological well-being will only be discussed in total college students and female students because dysfunctional coping strategies did not significantly predict psychological well-being in male students. Only behavioral disengagement, denial, and venting were significant predictors of psychological well-being both in total college and female students. Behavioral disengagement contributed the most to dysfunctional coping strategies in both total and female students, followed by venting and denial. Guskowska and Dąbrowska-Zimakowska (2022) discovered that during the second wave of the pandemic, female students used several strategies more frequently, including venting (expressing negative emotions), and doing something else, denial, and behavioral release (refusing to deal with stress actively). Previous research also found a greater tendency to focus on and vent emotions among women than men (Carver et al., 1989). Behavioral disengagement and denial significantly negatively affected this study, predicting lower psychological well-being. Venting, on the other hand, was discovered to play a significant role in predicting improved psychological well-being in both total college students and female students. The research findings differ slightly from those of Guskowska and Dąbrowska-Zimakowska (2022). They showed that frequent use of behavioral disengagement, venting, and denial were negatively correlated with psychological well-being. Focusing and venting emotions is a dysfunctional coping strategy because individuals will be fixated on negative emotions for a long time, which can exacerbate suffering (Carver et al., 1989). However, during the first wave of the pandemic, college students were required to spend most of their time at home. Therefore, limited opportunities to interact directly with friends may have made venting as a cathartic tool that can improve female students' psychological well-being.

During the first wave of the pandemic, emotion-focused coping strategies had no significant impact on the psychological well-being of all college students, female or male students. In this study, emotion-focused coping strategies included humor, acceptance,

positive reframing, the use of emotional support, and religion (Carver, 1997; Carver et al., 1989). During the second wave of the pandemic, Guskowska and Dąbrowska-Zimakowska (2022) discovered coping through positive reappraisal, which included humor, acceptance, and positive reframing, played a significant role in predicting increased psychological well-being in college students, whereas coping through seeking support, including instrumental and emotional support and turning to religion, did not affect. The gap in the results of these two studies could be attributed to the different conditions that college students face. Students were required to quickly adapt to various changes related to the implementation of online learning during the first wave of the pandemic, so they had to make direct efforts to take online lectures and do college assignments. As a result, problem-focused coping strategies played a larger role in college students' psychological well-being than emotion-focused coping strategies. This finding was in contrast to the second wave of the pandemic, when students may become more familiar with and adapt to online learning, using emotion-focused coping strategies like humor, acceptance, and positive reframing more likely to improve psychological well-being.

This study discovered some academic-related issues that mostly caused students to stress or burden during the first wave of the pandemic. Most college students reported having many difficult tasks to do, a lack of time discipline, and difficulty understanding lecture materials, which was consistent with previous research (Hasanah et al., 2020; Maqableh & Alia, 2021). This condition was also related to a lack of opportunities to meet with their lecturers and college friends to discuss lecture materials or tasks. Transitioning from offline or physical classes to online classes affects time management and students' learning-life balance, resulting in dissatisfaction among most students (Maqableh & Alia, 2021). These problems became apparent as more students lived with their families and had obligations other than distance learning. Academic affairs are real and objective, so using problem-focused coping strategies, such as planning and instrumental support by female students and active coping by male students, were quite effective in improving their psychological well-being.

The limitation of this study lies in the lack of balance between female and male student participants. During the first wave of the COVID-19 pandemic, data could only be collected online using a google form distributed via Line and Instagram. So the data obtained was determined mainly by the willingness of college students who use social media to fill out online questionnaires, most of whom were female college students. As a result, the findings of this study must be more carefully generalized, particularly for male students. Further research can be suggested to explore coping strategies and psychological well-being in college students during the transition from pandemic to endemic COVID-19. College students also need the ability to adapt from online learning that has been carried out for approximately two years to face-to-face learning. Therefore, it will be interesting to examine the coping strategies used by male and female students and their role in psychological well-being during the transition period.

## Conclusion

During the first wave of the COVID-19 pandemic, only problem-focused and dysfunctional coping strategies were significant predictors of college students' psychological well-being. Problem-focused coping strategies predicted increased psychological well-being in male and female college students. Planning and using instrumental support predicted female students' psychological well-being, whereas active coping predicted male students' psychological well-being. Dysfunctional coping strategies only significantly predicted psychological well-being in total college students and female students. In total college and female students, only

behavioral disengagement, denial, and venting were significant predictors of psychological well-being. Behavioral disengagement and denial were associated with lower psychological well-being, whereas venting was associated with higher psychological well-being. Therefore, understanding the different coping strategies used by female and male students is needed to enhance college students' psychological well-being.

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### Declarations

**Author contribution.** The first author compiles research designs, collects data, conducts theoretical studies, and compiles research drafts. The second author is the corresponding author, doing literature reviews, analyzing and interpreting data, performing translation, and proofreading. The third and fourth authors contribute to compiling research questionnaires and collecting data

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### References

- Abbas, A., Eliyana, A., Ekowati, D., Saud, M., Raza, A., & Wardani, R. (2020). Data set on coping strategies in the digital age: The role of psychological well-being and social capital among university students in Java Timor, Surabaya, Indonesia. *Data in Brief*, 30, 105583. <https://doi.org/10.1016/j.dib.2020.105583>.
- Abdillah, M., Prihartanti, N., & Purwandari, E. (2021). Model hubungan religiositas dan dukungan sosial dengan kesejahteraan psikologis mahasiswa melalui mediasi strategi koping [The relationship model of religiosity and social support with students' psychological well-being through the mediation of coping str. *Aspirasi: Jurnal Masalah-Masalah Sosial*, 12(2), 139–155.
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92–100. [https://doi.org/10.1207/s15327558ijbm0401\\_6](https://doi.org/10.1207/s15327558ijbm0401_6).
- Carver, C. S., Scheier, M. F., & Weintraub, K. J. (1989). Assessing Coping Strategies: A Theoretically Based Approach. *Journal of Personality and Social Psychology*, 56(2), 267–283. <https://doi.org/10.1037/0022-3514.56.2.267>.
- Dodd, R. H., Dadaczynski, K., Okan, O., McCaffery, K. J., & Pickles, K. (2021). Psychological wellbeing and academic experience of university students in Australia during COVID-19. *International Journal of Environmental Research and Public Health*, 18(3), 866. <https://doi.org/10.3390/ijerph18030866>.
- Ebrahim, A. H., Dhahi, A., Husain, M. A., & Jahrami, H. (2022). The psychological well-being of university students amidst COVID-19 pandemic: Scoping review, systematic review and meta-analysis. *Sultan Qaboos University Medical Journal*, 22(2), 179–197. <https://doi.org/10.18295/squmj.6.2021.081>.
- Eva, N., Hidayah, N., & Shanti, P. (2020). Model kesejahteraan psikologis mahasiswa Indonesia dan Malaysia [Model of psychological wellbeing among Indonesian and Malaysian university students] [Monograph]. In M. S. Dr. Tutut Chusniyah (Ed.).

- Fakultas Pendidikan Psikologi Universitas Negeri Malang.
- Gunawan, A., & Bintari, D. R. (2021). Kesejahteraan psikologis, stres, dan regulasi emosi pada mahasiswa baru selama pandemi COVID-19 [Psychological well-being, stress and emotion regulation among first year university students during COVID-19 pandemic]. *Jurnal Penelitian Dan Pengukuran Psikologi*, 20(1), 51–64. <https://doi.org/10.21009/JPPP.101.07>.
- Guszkowska, M., & Dąbrowska-Zimakowska, A. (2022). Coping with stress during the second wave of the COVID-19 pandemic by Polish university students: Strategies, structure, and relation to psychological well-being. *Psychology Research and Behavior Management*, 15, 339–352. <https://doi.org/10.2147/PRBM.S345648>.
- Harahap, A. C. P., Harahap, D. P., & Harahap, S. R. (2020). Analisis tingkat stres akademik pada mahasiswa selama pembelajaran jarak jauh di masa Covid-19 [Analysis of academic stress level among university students during distance learning in Covid-19 period]. *Biblio Couns : Jurnal Kajian Konseling Dan Pendidikan*, 3(1), 10–14. <https://doi.org/10.30596/bibliocouns.v3i1.4804>.
- Hasanah, U., Ludiana, Immawati, & PH, L. (2020). Gambaran psikologis mahasiswa dalam proses pembelajaran selama pandemi COVID-19 [Psychological description of students in the learning process during pandemic COVID-19]. *Jurnal Keperawatan Jiwa*, 8(3), 299–306. <https://doi.org/10.26714/jkj.8.3.2020.299-306>.
- Husky, M. M., Kovess-Masfety, V., & Swendsen, J. D. (2020). Stress and anxiety among university students in France during Covid-19 mandatory confinement. *Comprehensive Psychiatry*, 102, 152191. <https://doi.org/10.1016/j.comppsy.2020.152191>.
- Maqableh, M., & Alia, M. (2021). Evaluation online learning of undergraduate students under lockdown amidst COVID-19 pandemic: The online learning experience and students' satisfaction. *Children and Youth Services Review*, 128, 106160. <https://doi.org/10.1016/j.childyouth.2021.106160>.
- NurCita, B., & Susantiningsih, T. (2021). Dampak pembelajaran jarak jauh dan physical distancing pada tingkat kecemasan mahasiswa [The impact of distance learning and physical distancing on anxiety level among university students]. *Journal of Borneo Holistic Health*, 3(1), 58–68. <https://doi.org/10.35334/borticalth.v3i1.1389>.
- Pratiwi, R., Rahmatulloh, A. R., Sari, D. S., & Nihayah, M. (2021). Peran stress akademik dan strategi coping pada psychological well being mahasiswa baru di masa pandemi [The role of academic stress and coping strategy on psychological well being among first year university students during pandemic period]. *Mempersiapkan Generasi Digital Yang Berwatak Sociopreneur: Kreatif, Inisiatif, Dan Peduli Di Era Society 5.0*, 230–242. <http://ejournal.mercubuana-yogya.ac.id/index.php/ProsidingSemNasPsikologi/article/view/2017>.
- Ratunuman, R. A., David, L. E. V., & Opod, H. (2021). Dampak psikologis pandemi COVID-19 pada mahasiswa [The psychological impact of COVID-19 pandemic among university students]. *Jurnal Biomedik (Jbm)*, 13(2), 227–232. <https://doi.org/10.35790/jbm.13.2.2021.31836>.
- Ryff, C. D., Almeida, D. M., Ayanian, J. Z., Carr, D. S., Cleary, P. D., Coe, C., Davidson, R. J., Krueger, R. F., Lachman, M. E., Marks, N. F., Mroczek, D. K., Seeman, T. E., Seltzer, M. M., Singer, B. H., Sloan, R. P., Tun, P. A., Weinstein, M., & Williams, D. R. (2021). *Midlife in the United States (MIDUS 2), 2004-2006. ICPSR04652-v8*. Inter-university Consortium for Political and Social Research. <https://doi.org/10.3886/ICPSR04652.v8>.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727.

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<https://doi.org/10.1037/0022-3514.69.4.719>.

Sagone, E., & De Caroli, M. E. (2014). A correlational study on dispositional resilience, psychological well-being, and coping strategies in university students. *American Journal of Educational Research*, 2(7), 463–471. <https://doi.org/10.12691/education-2-7-5>.

Villani, L., Pastorino, R., Molinari, E., Anelli, F., Ricciardi, W., Graffigna, G., & Boccia, S. (2021). Impact of the COVID-19 pandemic on psychological well-being of students in an Italian university: A web-based cross-sectional survey. *Global Health* 17, 39. <https://doi.org/10.1186/s12992-021-00680-w>.