https://doi.org/10.4038/sljn.v2i1.37

SLJN, 2023
Vol. 2, No. 1 (pp. 22-38)

Research Article

Coping Strategies among Undergraduates of the University of Ruhuna, Southern Province, Sri Lanka, during the COVID-19 Pandemic

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Abstract

Background and Objective: Undergraduates could be more prone to psychological problems than the general population when there are significant changes in the educational environment. Confined to indoors during the COVID-19 pandemic, and travel restrictions increased the strain on their mental health, severely affecting their psychological well-being and various coping mechanisms were implemented globally. This study examined the coping strategies used by undergraduates of the University of Ruhuna, Southern Province, Sri Lanka, during the COVID-19 pandemic.

Method: A descriptive, cross-sectional study was done from mid-June to August 2022 using a pre-tested, self-administered questionnaire among undergraduates from randomly selected five faculties. A stratified random sample of 359 undergraduates was invited to fill the socio-demographic details and the coping strategies using the validated 25-item Brief COPE scale. Ethical approval was granted by the Ethics Review Committee, Faculty of Allied Health Sciences, University of Ruhuna. Data analysis was done using SPSS (version 23.0). Descriptive statistics, Chi-square and Fisher's tests were used.

Results: Of the sample, females (62.1%) made up the majority. The mean (±SD) age was 23.67 (±1.6) years. The mean (±SD) adaptive and maladaptive coping strategies were 31.32(±9.08) and 19.31(±5.40) respectively. Among participants, 33.2% reported using high level adaptive coping strategies whereas 9.1% of the participants used high level maladaptive coping strategies. Mostly used adaptive coping strategies were active coping, acceptance and religion while self-distraction was used as a maladaptive coping strategy.

Conclusions: Undergraduates adopted more healthy coping strategies than unhealthy coping strategies. It is suggested that more emphasis should be placed on improving mental health, expanding stress management programs and counselling with innovative strategies implemented to improve psychological well-being.

Keywords: *adaptive coping, COVID-19 pandemic, maladaptive coping, undergraduates*

Sri Lankan Journal of Nursing, 2023, 2 (1): 22-38

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Received: 2nd April 2023; Accepted: 24th June 2023; Published: 30th July 2023

How to cite: Kauashani, T. H. M. & Weeratunga, E. B., (2023). Coping strategies among undergraduates of the University of Ruhuna, Southern Province, Sri Lanka, during the covid-19 pandemic, *Sri Lankan Journal of Nursing*, 2(1), 22-38

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Introduction

COVID-19 is a novel, highly contagious air-borne disease in the world. World Health Organization (WHO) initially declared it as a public health emergency of international concern on 30th January 2020 and a 'Global Pandemic' on the 11th of March 2020 (Hiscott et al., 2020; WHO, 2020). Due to the rising of number of confirmed cases, the Government of Sri Lanka enacted lockdown and travel restrictions across the country. From 2019-2020, the pandemic disrupted educational systems across the world, posing numerous issues that have had a significant negative influence on the education sector (Mustafa, 2020). According to the United Nations/Educational Scientific and Cultural Organization (UNESCO), studies of more than one billion students in 129 countries in the world were affected due to COVID-19 (Sundarasen et al., 2020). Further, schools and universities had closed, all students had to study staying at home and learning activities in school and university sectors were affected (Dodd et al., 2021). Although converted to online teaching/virtual mode, many issues have been encountered by different countries worldwide, because of load shading, slow bandwidth, guardians' financial situation, lack of teacher-student interaction, connectivity issues, improper evaluation and lack of logistical support (Afroz et al., 2021; Palvia et al., 2018). There were other issues such as a lack of experience in teaching online/virtual mode (Mohiuddin, 2020) and difficulties in keeping students in online classes throughout the allocated period (Afroz et al., 2021). Extension of the stipulated time for graduation due to social distancing, and interruption of face-to-face teaching/disruption of academic activities affected future goals and employment opportunities of students (Awoke et al., 2021).

Unequal access to online/distance learning, changes and discontinuation of academic calendars and clinical placements, increased teaching-learning gap, fewer facilities for online learning, disruption on professional development, and impossibility to hold accurate clinical evaluations and standard operationalization procedures were also reported regarding nursing education in Sri Lanka (Ilankoon et al., 2020). Further, nursing education in India too has been affected drastically due to the pandemic and major challenges were; disturbances in clinical practice, frequent variations to academic plans, learning gaps between current and conventional methods before the pandemic (Kalal & Rana, 2022).

Most undergraduates in Sri Lanka reside in boarding places in addition to the university hostels. Due to lockdown, they had to continue their education within their homes, using different coping/adaptation methods, losing their usual peer groups, discussions, practical sessions, library facilities and entertainment activities (Hayashi et al., 2022; Ilankoon et al., 2020; Perera & Abeysekera, 2022). COVID-19 has dramatically affected people's mental health and behaviors (Browning et al., 2021), generating enormous anxiety and hesitation (Husain, 2020; UNESCO, 2020). Youths/university undergraduates were identified as a population weak in mental

health when compared to the general population (Diehl et al., 2018). A high prevalence of mental illness; especially prone to feelings of loneliness with psychological disorders (e.g. depressive symptoms, anxiety, stress) among them than the adult population (Arsandaux et al., 2021; Dodd et al., 2021; Husky et al., 2020).

COVID-19 has affected people's emotions as well as their coping strategies (Huang et al., 2020). Coping is described as the thoughts and procedures that individuals use to deal with stressful occasions (Folkman et al., 1987). They can be both behavioral and psychological, methods that people employ to master, reduce, tolerate or minimize stressful events (Noorbakhsh et al., 2010). There are various classifications of coping strategies reported in literature, for example, positive and negative coping (Mario et al., 2021), problem-focused and emotion-focused coping, active/approach and avoidant coping, adaptive and maladaptive coping (Carver et al., 1989; Folkman & Lazrus, 1985). Out of these, adaptive coping is defined as constructive or positive/healthy mechanisms which traditionally benefit or positively impact the lives of those who use them (e.g. planning, engaging religious activities/meditation, informational support, listening to music) (Thompson et al., 2010) and maladaptive coping are destructive or negative/unhealthy mechanisms which often cause adverse concerns including some of the mental health challenges (e.g. denial, emotional venting, substance abuse, overeating) (Makarowski et al., 2020; Thompson et al., 2010). Negative coping strategies were associated with poor mental health conditions and positive coping strategies were linked with better psychological health (Dave & Tanya, 2008; Hollifield et al., 2008; Wang & Wang, 2019).

Effective coping techniques are essential for managing distress and building resilience during a crisis similar to the COVID-19 epidemic, leading to either poor or improved health outcomes (Polizzi et al., 2020). Inability to manage chronic stress adequately diminishes professional or academic competence, especially among students (Algorani & Gupta, 2021).

Sri Lankan universities are located across the country, and their differences are based on factors such as history, geographical location, regionalism, university size, residential pattern, and political ideology, as such; they have their own subcultures (Mahees, 2020). However, COVID-19 has changed the normal teaching and learning activities in universities in Sri Lanka to online/virtual modes as in other countries but, technical problems on internet/connectivity issues and lack of respective devices among needy students had been reported (Hayashi et al., 2022; Ilankoon et al., 2020; Kalal & Rana, 2022; Perera & Abeysekera, 2022) in addition to a lack of experiences regarding online teaching among academics (Ilankoon et al., 2020). Undergraduates of public universities in Sri Lanka have low opportunities of having such devices and internet facilities because of their low socio-economic status (Mahees, 2020) which has also been reported from other countries (Duarte et al. 2020; Jing et al., 2021). It has been found

that low socio-economic situation of undergraduates has an influence on their psychological health as well (Duarte et al. 2020; Hayashi et al., 2022; Ilankoon et al., 2020; Perera & Abeysekera, 2022) and they had to cope with their individual anxieties, stress, insecurity, and the changes of traditional teaching/learning process during the pandemic (Awoke et al., 2021; Li et al., 2021; Rogowska et al., 2020).

Research studies conducted during previous pandemics such as H1N1 in 2009, showed special coping strategies related to those pandemics (Taha et al., 2014). A study with university undergraduates during the severe acute respiratory syndrome (SARS) pandemic in 2003 emphasized the importance of coping as a protection mechanism (Main et al., 2011). During those periods, people used fewer active coping strategies (focused on problems) and further avoidable coping strategies (focused on emotions) (Gan et al., 2004).

Undergraduates from different settings have reported about their coping strategies during COVID-19 (Babicka-Wirkus et al., 2021; El-Monshed et al., 2021). The most common avoidant coping strategy of Vietnam medical undergraduates was engaging in other activities to distract the problem, while Sri Lankan non-state university undergraduates have used individual and group activities as coping strategies (Ravishanka et al., 2021).

The aim of this research study was to examine coping strategies among undergraduates of the University of Ruhuna, Southern Province of Sri Lanka, during the COVID-19 pandemic.

Methods

Study design and setting

A descriptive, cross-sectional study was conducted during the COVID-19 pandemic from mid-June to August 2022, among undergraduates of the five faculties selected, of the University of Ruhuna. It is the main university situated in the Southern province of Sri Lanka currently having more than 10,000 undergraduates.

Sample and sampling

The calculated sample size was 383.62 using the formula (n= Z2 P (1-P) /d2 (Lwanga & Lemeshow, 1991). The final sample size was 422 after adding a 10% non-response rate. A stratified random sampling method was used. Among the ten faculties of the University of Ruhuna, Faculty of Allied Health Sciences (FoAHS), Engineering (FoE), Humanities and Social Sciences (FoHSS), Management and Finance (FoMF) and Faculty of Medicine (FoM) were selected using a random table. Out of each faculty, undergraduates from each academic year were selected randomly using student registers, considering each faculty as a stratum.

Study instrument

Investigators developed a self-administered questionnaire as a Google Form consisting of (a) socio-demographic details and (b) coping strategies as a mean of reaching the undergraduates during the pandemic.

Brief COPE scale (Coping Orientation to Problems Experienced Inventory) by Carver et al. (1989), which was translated into Sinhala and cross-culturally validated into Sri Lankan context by Weeratunga et al. (2022) was used to collect data on coping strategies. Although the original Brief COPE scale had 28 items, the Sinhalese version has only 25 items (without items - 3, 18, and 28). It has two main sub-scales namely, adaptive coping (14 items) and maladaptive coping (11 items). The adaptive coping (AC) sub-scale consisted of active coping (items 2 and 6), religion (items 20 and 25), planning (items 13 and 23), acceptance (items 18 and 22), positive reframing (items 11 and 16), emotional support (items 4 and 14), and instrumental support (items 9 and 21). The maladaptive coping (MC) sub-scale consisted of self-blame (items 12 and 24), self-distraction (items 1 and 17), venting (items 8 and 19), denial (only item 7), behavioral disengagement (items 5 and 15) and substance use (items 3 and 10).

Since each item could receive a maximum of four points, the Brief COPE score was calculated by adding the responses to all the questions. According to the scoring system of the original edition (Carver et al., 1989), marks were allocated for each response in the scale as follows: (a) 'I have not been doing this at all' = 1 mark, (b) 'I have been doing this a little bit = 2 marks, (c)'I have been doing this a medium amount' = 3 marks and (d) 'I have been doing this a lot = 4 marks. Higher scores indicated either higher adaptive coping or higher maladaptive coping (Carver et al., 1989). Adaptive coping strategies are identified as healthy coping mechanisms while maladaptive coping strategies are considered as unhealthy coping mechanisms. Final scores of AC and MC strategies were further identified as low-level (responses a + b = total 3) and high-level (responses c + d = total 7).

The questionnaire was pre-tested using ten undergraduates to solve the wording issues and to check the understandability.

Data collection

The working e-mail addresses of all undergraduates were obtained after permission was granted from each of the selected faculties. The questionnaire prepared as a Google Form and an e-link were sent to invite the selected undergraduates through e-mail. The questionnaire was accessible to only those who had read the information sheet and given consent to participate. Further, participants were given the option of answering the questionnaire either in English or Sinhala. The filled Google Forms were received by the principal investigator through e-mail.

Data analysis

The Statistical Package for Social Science (SPSS) version 23.0 was used. Marks given for the responses obtained for each item in the Brief COPE scale were computed separately for both adaptive (low and high levels) and maladaptive (low and high

levels) coping strategies. Socio-demographic characteristics and coping levels were analyzed using descriptive statistics and tabulated as frequencies and percentages using tables and graphs. Further, AC and MC strategies were presented as means (±SD). Chi-square and Fisher's exact tests were used to tabulate categorical variables and to check for associations. All results were regarded as statically significant at $p < 0.05$.

Ethical considerations

The Ethics Review Committee, Faculty of Allied Health Sciences, University of Ruhuna, granted ethical approval (Reference no: 61.11.2021). All participants were made aware of the aim of the study and its methodology. Each participant was identified using a code number to protect their privacy and anonymity, their rights were respected, and confidentiality of information was strictly maintained. Data were accessible only to investigators, and confidentiality was protected using passwords.

Results

Socio-demographic details of the sample

Only 359 undergraduates were included in the final analysis and the response rate was 85%. The socio-demographic details of undergraduates and monthly income of their parents are shown in Table 2. The majority were females (62.1%), and the mean (±SD) age was 23.67 (±1.62) years.

Table 1: Socio-demographic profile of the participants and their parents' income (N=359)

Variable	Frequency (n)	Percentage (%)
Gender		
Female	223	62.1
Male	136	37.9
Name of the Faculty		
FoAHS	102	28.4
FoE	76	21.2
FoHSS	62	17.3
FoMF	61	17.0
FoM	58	16.2
Academic year		
1st year	96	26.7
2nd year	88	24.5
3rd year	84	23.4
4th year	91	25.4
Parents' income (LKR)		
≤ 20,000 - 39,999	136	37.8
40,000 - 59,999	90	25.1
60,000 - 79,999	60	16.7
80,000 - 99,999	27	7.6
>100,000	46	12.8

FoAHS=Faculty of Allied Health Sciences, FoE=Faculty of Education, FoHSS=Faculty of Humanities and Social Sciences, FoMF=Faculty of Management and Finance, FoM=Faculty of Medicine

Levels of AC and MC strategies among participants

The mean (±SD) values of AC (n=349) and MC (n=352) strategies were 31.32(±9.08) and 19.31(±5.40) respectively. Two hundred and thirty-three participants (64.9%) have used low-level AC strategies while 116 (32.3%) participants used high-level AC strategies (Figure 2). Three hundred and twenty (89.1%) participants have used the low-level MC strategies whereas 32 (8.9%) used high-level MC strategies (Figure 1).

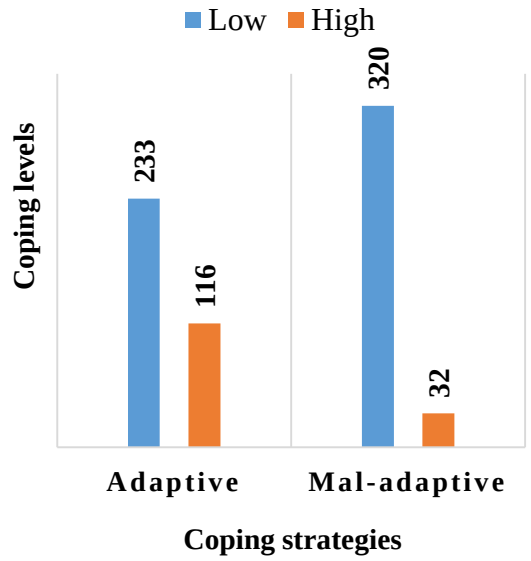

Figure 1: Levels of AC and MC strategies among participants

Table 2 describes the self-reported coping strategies used by participants of all five faculties. The mostly used items (strategies) in different sub-scales of the Brief COPE scale were; active coping (item 6- n=62; 17%), acceptance (item 18- n=60; 17%), and religion (item 20- n= 53; 15%). Among AC strategies, item 22 (I've been learning to live with it) was used by 74 (21%) participants followed by items 6, 18, and 20. When considering MC strategies, they have used more self-distraction strategies; item 1 (n=44; 12%) and item 17 (n=57; 16%).

However, few of the participants have used the MC strategies such as "I've been using alcohol or other drugs to make myself feel better" (item 3) and "I've been using alcohol or other drugs to help me get through it" (item 10) which indicates a risk for their health and well-being as well as academic performance.

Levels of coping strategies used by participants

Considering the use of high-level AC and low-level MC coping levels (Table 3), thirty-five participants in the 23-age group used high-level AC strategies and 92 participants of same age group used low-level MC strategies than other age groups. Out of female participants, 74 used high-level AC strategies and 203 used low-level MC which is more than their male counterparts. Out of FoAHS participants, 32 used high-level AC strategies and 99 used low-level MC strategies compared to participants from other faculties. Participants from fourth year (n=34) used high-level AC strategies while 85 participants from first year used low-level MC strategies. Most participants (n=76) who engage in sports activities have used high-level AC and those who do not engage in sports activities (n=200) used low-level MC strategies. Participants whose parents had a monthly income of 40,000 - 59,999 LKR (n=33) have used high-level AC strategies and 107 participants whose parents had a monthly income lower than 20,000 LKR have used low-level MC strategies.

Table 2: Self-reported coping strategies used by participants[#]

Adaptive coping (AC) strategies	n	%
2. I've been concentrating my efforts on doing something about the situation I'm in.	43	12.0
4. I've been getting emotional support from others.	26	7.0
6. I've been taking action to try to make the situation better.	62	17.0
9. I've been getting help and advice from other people.	46	13.0
11. I've been trying to see it in a different light, to make it seem more positive.	42	12.0
13. I've been trying to come up with a strategy about what to do.	44	12.0
14. I've been getting comfort and understanding from someone.	23	6.0
16. I've been looking for something good in what is happening.	37	10.0
18. I've been accepting the reality of the fact that it has happened.	60	17.0
20. I've been trying to find comfort in my religion or spiritual beliefs.	53	15.0
21. I've been trying to get advice or help from other people about what to do.	23	9.0
22. I've been learning to live with it.	74	21.0
23. I've been thinking hard about what steps to take.	40	11.0
25. I've been praying or meditating.	20	6.0
Maladaptive coping (MC) strategies	**n**	**%**
1. I've been turning to work or other activities to take my mind off things.	44	12.0
3. I've been using alcohol or other drugs to make myself feel better.	7	2.0
5. I've been giving up trying to deal with it.	14	4.0
7. I've been refusing to believe that it has happened.	38	11.0
8. I've been saying things to let my unpleasant feelings escape.	26	7.0
10. I've been using alcohol or other drugs to help me get through it.	2	0.5
12. I've been criticizing myself.	16	4.5
15. I've been giving up the attempt to cope.	14	4.5
17. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	57	16.0
19. I've been expressing my negative feelings.	16	4.5
24. I've been blaming myself for things that happened.	12	3.3

Frequency (n); Percentage (%) # Multiple answers elicited

Associations between socio-demographic characteristics and coping strategies

Participants in all age groups have significantly used low-level MC strategies compared to the use of high-level MC strategies as shown in Table 3 (p=0.003). With regard to gender, female participants significantly used low-level MC strategies compared to the use of high-level MC strategies (p=0.01). Participants in all faculties have shown a significant use of low-level AC strategies compared to the use of high-level AC strategies (p=0.03).

However, there were no significant differences in the use of coping strategies among participants from any academic year.

Usage of high-level and low-level AC strategies were significantly high among participants who engage in sports activities compared to the participants who do not engage in sports activities (p=0.009). Further, income of parents had a significant impact on the use of both low-level and high-level MC strategies (p=0.000) compared to the use of AC strategies.

Discussion

Healthy coping strategies perform a fundamental role in controlling stress and other psychological ailments and advancing resilience, during COVID-19 crisis. It is thought that the sort of coping used in certain situations as reported in some life-threatening conditions like cancers (Hagan et al., 2017; Weeratunga et al., 2021; Weeratunga et al., 2022), has a varied effect on health, leading to either poor or improved health outcomes (Polizzi et al., 2020).

Undergraduates of the current study mainly used AC strategies compared to MC strategies to minimize the effects of stress to make the situation better. Acceptance, active coping, and religion were the mainly used AC strategies and the commonly used MC strategy was self-distraction. Religious activities may also have had a positive effect on coping of undergraduates as described by Alosaimi et al. (2018). Significantly, a lower number of undergraduates used MC strategies. A very significant positive outcome of this study was a very low proportion of undergraduates had engaged in risk behaviours such as use of illicit drugs or alcohol.

The characteristics of undergraduates in the current study are in line with similar studies from several other countries. The age range of the current sample was between 23-24 years similar to the study by Weerarathna et al., (2022). Most of the participants were female and similar demographic features were reported in other countries such as studies of Ethiopia (Awoke et al., 2021), China (Huang et al., 2020; Li et al., 2021; Miao et al., 2021) and Brazil (Patias et, al., 2021).

The overall mean (±SD) score of AC strategies used by undergraduates in the current study was 31.32 (±9.08) similar to the figures reported by health sciences undergraduates in Ethiopia (33.76±6.64) (Awoke et al., 2021).

Table 3: Associations between socio-demographic variables and levels of AC and MC strategies

Variable	AC strategies		MC strategies	
	Low	High	Low	High
Age (in years)	(n=233)	(n=116)	(n=320)	(n=32)
21	28	16	44	00
22	45	18	67	06
23	64	35	92	09
24	57	21	66	12
25	39	26	51	05
*p-value**	*0.11*		*0.003*	
Gender	(n=233)	(n=116)	(n=320)	(n=32)
Female	139	74	203	13
Male	94	42	117	19
p-value	*0.26*		*0.01*	
Faculty	(n=233)	(n=116)	(n=320)	(n=32)
FoAHS	68	32	99	02
FoE	57	19	65	11
FoHSS	41	13	48	08
FoMF	33	28	53	08
FoM	34	24	55	03
*p-value**	*0.03*		*0.05*	
Academic year	(n=233)	(n=116)	(n=320)	(n=32)
1st year	61	32	85	11
2nd year	56	32	78	10
3rd year	60	18	78	03
4th year	56	34	79	08
p-value	*0.23*		*0.38*	
Engaged in sports	(n=233)	(n=112)	(n=316)	(n=32)
Yes	143	76	200	22
No	90	36	116	10
p-value	*0.009*		*0.67*	
Parents' income (LKR)	(n=216)	(n=110)	(n=297)	(n=32)
≤20,000 - 39,999	78	32	107	03
40,000 - 59,999	52	33	70	17
60,000 - 79,999	33	25	50	09
80,000 - 99,999	19	08	24	03
>100,000	34	12	46	00
*p-value**	*0.22*		*0.000*	

p<0.05, Fisher's exact test*

FoAHS=Faculty of Allied Health Sciences, FoE=Faculty of Education, FoHSS=Faculty of Humanities and Social Sciences, FoMF=Faculty of Management and Finance, FoM=Faculty of Medicine

AC=Adaptive coping, MC= Maladaptive coping

Even though some studies have used coping scales which are different from the current study, the findings reported were similar. A study from China on coping strategies of nursing students using the Simplified Coping Style Questionnaire (SCSQ) has reported a similar mean coping score (30.39±8.96) and it was further reported that they have mostly used positive coping methods (Mario et al., 2021).

Higher coping scores (39-52) than the current study was reported among Polish undergraduates which has been measured using Coping Inventory for Stressful Situations (CISS) consisting of task-oriented, emotion-oriented, and avoidance-oriented coping styles which is different from the current study (Rogowska et al., 2020). Similar to the MC strategies used in the current study, the frequently used maladaptive coping styles by Polish undergraduates were avoidance-oriented (e.g. distraction) and task-oriented styles such as cognitively reforming and resolving the problem to change the situation, aiming on task and planning (Rogowska et al., 2020).

High percentages of undergraduates in the current study have used low-level AC strategies (66.76%) and low-level MC strategies (90.9%) indicating that many of them were prone to use more AC/healthy coping strategies. It has been reported that positive/healthy coping strategies had an impact on reducing suicide ideation and increasing self-esteem, emotion regulation and academic achievement over time (Heffer & Willoughby, 2017). Hence, undergraduates of the current study might have better knowledge about coping strategies and better selection of AC/healthy coping strategies, or they might have used better-coping strategies unintentionally (Heffer & Willoughby, 2017). Usage of more adaptive strategies indicates that most of the health science and other undergraduates were applying effective coping to face stress, which correlated with improved physical health outcomes (De la Fuente et al., 2022; Moxham et al., 2020). This also confirms that it can be due to inclusion of related components such as soft skills/counseling programmes/stress management workshops in health sciences undergraduate curricula (Handbook/Prospectus of FoAHS, 2021).

Main coping strategies used by the undergraduates in the current study were AC strategies such as active coping, acceptance and religion, while self-distraction strategies were the most used MC strategies. Similarly, self-distraction, acceptance, and active coping were reported as major coping strategies from Nepal undergraduates (Rijal et al., 2023). In another study, religion attained the greatest mean(±SD) score followed by planning and acceptance, but substance use was the minimum stress coping strategy (Awoke et al., 2021). Similar to the current study, undergraduates in Ethiopia and Nepal have used other AC strategies such as emotional support, active coping, use of informational support, planning, positive reframing, and acceptance (Awoke et al., 2021; Rijal et al., 2023). In addition to ‘self-distraction’ used in the current study, the most reported MC strategies from Ethiopia and Nepal were denial, behavioral disengagement, venting and self-blame (Awoke et al., 2021; Rijal et al., 2023).

Similar to the current study, the least used coping strategy was substance use reported from Nepal and Qatar (Rijal et al., 2023; Slah Eddine & Adawi, 2020). Further, acceptance, religion and planning were the three best important coping strategies used by medical students in Qatar (Slah Eddine & Adawi, 2020) compared to substantial usage of such similar strategies in the current study. Furthermore, positive coping strategies and social support were also considered as good coping strategies used by Chinese medical students (Li et al., 2021).

Coping strategies used by current undergraduates such as active coping, acceptance, and positive reframing were also reported among people who were in institutional quarantines in Sri Lanka who have different socio-demographic characteristics. The least used coping strategies of them were, substance use (15.5%) which is higher than the current study and self-blame (26.3%) (Rohanachandra et al., 2022). In contrast, consultant physicians from Saudi Arabia have highly used religious coping for stress (79.6%) while use of alcohol /substance use was the less frequently used coping strategy (28.0%) (Alosaimi et al., 2018).

In addition, non-state undergraduates in Sri Lanka reported that they had used some individual (e.g. listening to music, watching movies/television series, reading and sleeping) and group activities (e.g. spending time with family members, talking with friends, engaging in sports with relations) to cope with stress due to COVID-19 which helped to minimize psychological issues and to maintain academic work (Ravishanka et al., 2021; Weerarathna et al., 2022). Similarly, an online study conducted in state universities, Sri Lanka, among medical undergraduates, reported family relationships/staying with family members (73.4%) as the main coping strategy (Rohanachandra et al., 2021). However, validity of the tool used to measure coping strategies is not mentioned in this study.

Limitations

Data were gathered using an online questionnaire which may limit the impressions, responses, and unique aspects of undergraduates. Further, the study only enrolled undergraduates of selected five faculties of a single institution, which may limit the generalizability of the findings to all undergraduates in Sri Lanka.

Conclusions

Undergraduates of the selected five faculties of the University of Ruhuna have used more adaptive/healthy coping strategies than maladaptive/unhealthy coping strategies during the COVID-19 pandemic. Among the adaptive and maladaptive coping strategies, most undergraduates used effective strategies compared to some maladaptive strategies such as substance use and self-blame. This study gives an insight into the types of coping strategies that were adapted by undergraduates.

The results of this study will be helpful in developing interventions to introduce effective coping strategies in the universities, including professional assistance to cope with pandemic-related psychological disturbances. Further research using qualitative approaches is recommended to obtain in-depth responses.

Funding statement

This research project received no specific grant from any funding agency.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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