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Coping strategies and psychiatric symptoms among essential professionals during the COVID-19 pandemic: a cross-sectional analysis of a randomized controlled trial

Coping and Psychiatric Symptoms in the Pandemic

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Abstract

Background: Coping strategies are essential for managing stress and emotional well-being, particularly in high-demand settings like healthcare. In high-demand contexts such as the COVID-19 pandemic, coping strategies may play a critical role in shaping mental health outcomes. Understanding how specific strategies relate to psychiatric symptoms is critical for effective interventions.

Methods: This cross-sectional study analyzed baseline data from 3,075 essential workers enrolled in the TelePSI project, a nationwide randomized controlled trial of brief telepsychotherapy. Participants reported coping strategies from a list of 22 options (in a yes/no format). Psychiatric symptoms—depression, anxiety, and irritability—were measured using PROMIS scales. Exploratory factor analysis (EFA) was used to identify coping dimensions, followed by correlation analyses.

Results: The most frequent strategies were watching YouTube (58.3%) and eating sweets (41.6%). EFA revealed two distinct factors: maladaptive (e.g., substance use, overeating) and adaptive strategies (e.g., physical activity, healthy eating). Maladaptive strategies showed weak positive correlations with psychiatric symptoms, while adaptive strategies showed weak negative correlations. Participants with higher symptom severity were more likely to report maladaptive behaviors.

Discussion: The findings reveal associations between coping patterns and mental health outcomes. Adaptive strategies were associated with lower psychological distress, while maladaptive behaviors showed the opposite pattern, indicating the multifactorial nature of mental health in crisis situations.

Keywords: coping , depressive symptoms , anxiety symptoms , quality of life , pandemic.

Introduction

Coping strategies are crucial in the relationship between stress and mental health[1]. They are defined as the ongoing cognitive and behavioral efforts to manage (i.e., reduce, minimize, master, or tolerate) specific external and/or internal demands perceived as challenging or overwhelming[2]. Two general coping strategies are currently well-established: one is defined as problem-focused coping, when the goal is to solve the problem or to take steps to change the *status quo*; the other is emotion-focused coping, which aims to reduce the emotional distress associated with stressful situations[3]. In general, coping with stressful events is essential not only to reduce psychological distress and prevent psychopathology[4], but also to foster psychological resilience and growth. Adaptive coping strategies can help individuals not only to restore equilibrium but also to transform adversity into an opportunity for *posttraumatic growth* — a positive psychological change experienced as a result of the struggle with highly challenging life circumstances[5,6]. In this sense, coping is not limited to symptom

relief, but may play a central role in processes of meaning-making, personal development, and the strengthening of social and existential resources.

In this context, although there are numerous theories about the etiology of certain mental disorders, it is well established that social, environmental, psychological, behavioral, genetic, hormonal, immunological, biochemical, and neurodegenerative factors all play a role[7,8,9]. Among behavioral contributors, lifestyle factors are consistently associated with psychiatric outcomes[10]: poor dietary habits[11], smoking[12], inadequate sleep, and sedentary behavior[13] are important modifiable risk factors for mental disorders. In particular, a review by Berk et al. (2013)[14] emphasized the relevance of lifestyle interventions, noting that physical activity is associated with a moderate to large reduction in depressive symptoms (Cohen's d ≈ 0.80), comparable to the effect sizes of pharmacological or psychotherapeutic treatments. Smoking and substance abuse, on the other hand, are independent risk factors for poor mental health outcomes, while high-quality nutrition appears to be protective against depressive disorders. These findings point to a potential role of investigating lifestyle-related behaviors as central components in the prevention and treatment of psychiatric symptoms. Consistently, lifestyle behaviors have shown small to moderate associations with mental health outcomes in population studies. For example, physical inactivity, smoking, and unhealthy diet have each demonstrated significant correlations with depressive symptoms (r ranging from 0.18 to 0.32), while regular physical activity is associated with lower odds of depression (OR ≈ 0.67).[14] These results reinforce the potential relevance of behavioral patterns—such as coping strategies—in understanding emotional distress.

Against this background, over the last decade there has been an increase in demand for mental health services, culminating in substantial unmet needs during the SARS-CoV-2 pandemic[15]. A meta-analysis found that the main diagnoses in the general population were internalizing disorders, depression (33.7%) and anxiety disorders (31.9%), indicating higher prevalence in females, younger individuals, those with higher education levels, and people who had a family member with COVID-19[16]. People who were infected with COVID-19 were also at a higher risk of mental health issues, with prevalence rates of anxiety disorders and post-traumatic stress disorder at 34% and depression at 29%[17]. During the COVID-19 pandemic, healthcare professionals faced difficulties adapting to a new routine for patient care, work overload, scarcity of personal protective equipment, challenging decisions regarding

unknown morbidity, fear of infection and transmission, and increased social isolation[18,19]. As a result, these professionals experienced an increase in the prevalence of psychiatric symptoms and mental disorders, with high rates of insomnia (34.4%), anxiety (24%), and depression (22.8%), especially among women and those in the nursing field[18].

During the pandemic, lifestyle habits and coping strategies varied widely, showing no consistent pattern. Studies from Belgium, France, and Switzerland reported both an increase in exercise frequency and sedentary behavior, highlighting this diversity of responses[20,21]. In Italy, overall physical activity decreased significantly, especially among men[22]. Several studies have shown changes in dietary habits, with an increase in unhealthy food intake and overeating[23,24]. There are also reports of increased alcohol consumption[23,25,26] and tobacco use[25,27].

In high-demand contexts such as the COVID-19 pandemic, few studies have examined the coping strategies used by healthcare professionals.[28]. In a study that investigated mental health strategies used by healthcare professionals in Albania during this period, 64% of participants reported having no suggestions or resources to deal with the situation. Only 4.4% mentioned receiving support for their mental well-being from family members, such as emotional encouragement or someone to talk to. Just 1.5% recommended support from colleagues, self-help strategies like physical activity and positive thinking, or relying on trusted sources of information[29]. A meta-analysis conducted during the COVID-19 pandemic identified a significant positive association between *positive religious coping*—such as trust in God, prayer, and spiritual connection—and psychological well-being, whereas *negative religious coping* was associated with worse mental health outcomes[30].

Despite previous studies assessing coping strategies among professionals during stressful periods, little is known about their specific impact on psychiatric symptoms. Therefore, the aim of this study was to evaluate the prevalence of different coping strategies and estimate their associations with internalizing symptoms. Additionally, we examined the factorial structure of the coping instrument used to assess the frequency of these strategies. We hypothesized that adaptive coping strategies would be associated with lower levels of emotional distress, while maladaptive strategies would correlate with higher levels of depression, anxiety, and irritability.

Methods

Study Design and Setting

This cross-sectional analysis used baseline data from a nationwide randomized controlled clinical trial that evaluated brief telepsychotherapy interventions for healthcare professionals and essential workers experiencing emotional distress during the COVID-19 pandemic—the TelePSI project (Mental Health Care through Teleconsultation for Healthcare Professionals in the Context of SARS-CoV-2 Infection)[31,32]. This study was conducted in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines (Appendix 1).

Participants and Recruitment

Participants included healthcare professionals and other essential workers who enrolled in the TelePSI project. Recruitment occurred nationwide through multiple media channels, including television and digital platforms. Eligible individuals completed a registration form and were contacted by the research team for screening. Those reporting suicidal ideation on the PHQ-9 were excluded and referred for psychiatric care. For further details, please refer to Salum et al. (2024)[31].

Ethical Considerations

This study adheres to the Guidelines and Norms Regulating Research Involving Human Beings (Resolution No. 466/12) and follows the ethical principles outlined in the Declaration of Helsinki. It was approved by the Ethics Committee of Hospital de Clínicas de Porto Alegre (protocol 2020-0213). The trial was registered at ClinicalTrials.gov (NCT04635618 and NCT04632082) and conducted in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines.

Measures - Coping Strategies

Before the first session, participants were instructed to report the coping strategies they were employing, selecting from a list of options, using a dichotomous scale with 'Yes' or 'No' responses. This list was defined by a team of senior mental health researchers and experienced clinicians involved in the project, based on relevant literature and clinical expertise to encompass a broad range of adaptive and

maladaptive coping strategies. Participants reported coping strategies from a predefined list covering behavioral, lifestyle, and substance-related responses (Appendix 2), including both adaptive and maladaptive strategies. Sleep-related responses were analyzed descriptively but excluded from the factor analysis, as evidence suggests they may reflect symptomatology rather than deliberate coping strategies.

Measures - Psychiatric symptoms

Psychiatric symptoms were evaluated using self-report instruments from the Patient-Reported Outcomes Measurement Information System (PROMIS), specifically the domains of depression, anxiety, and irritability. Each scale consists of 8 items, rated on a 5-point Likert scale (from "Never" to "Always"), assessing the frequency and intensity of symptoms over the past seven days. The PROMIS measures have been translated and culturally adapted for Brazilian Portuguese, and their psychometric properties have been validated in Brazilian populations[33]. These instruments demonstrate excellent internal consistency (Cronbach's alpha > 0.90) and good construct validity. Low levels of symptoms were characterized by infrequent or mild manifestations that did not significantly affect daily functioning. Conversely, high levels of symptoms reflected more persistent and severe experiences, indicative of significant distress and functional impairment. T-scores were computed for each domain, with higher scores reflecting greater symptom severity. PROMIS T-scores are standardized (mean = 50; SD = 10). For the adult PROMIS emotional distress domains, recommended cut points are: ≤ 55 (none-to-slight), 55.0–59.9 (mild), 60.0–69.9 (moderate), and ≥ 70 (severe)[34,35,36]. These thresholds are widely used to classify symptom intensity; in the present study, however, analyses dichotomized severity using the 25th and 75th percentiles to create low vs. high groups, as described below. We considered mild symptoms as scores indicating occasional or low-intensity emotional experiences that do not substantially interfere with daily functioning, consistent with PROMIS interpretive guidelines. In contrast, moderate-to-severe symptom levels reflect clinically meaningful emotional distress associated with functional impairment and increased likelihood of diagnostic relevance[34,35,36]. This operational definition was used to contextualize symptom distribution and guide the interpretation of associations with coping strategies.

Statistical Analysis

Descriptive analyses examined the distribution of psychiatric symptoms and coping strategies. For the PROMIS domains (depression, anxiety, and irritability), T-scores were computed and symptom severity was categorized into low and high levels based on the 25th and 75th percentiles of each distribution. PROMIS scores were categorized into low and high symptom levels because the sample showed a high overall symptom burden, resulting in a small proportion of minimally symptomatic participants and limiting the feasibility of comparisons across conventional severity strata. Coping strategies were analyzed in two stages. First, an exploratory factor analysis (EFA) evaluated the factorial structure of coping strategies. Because coping variables were dichotomous (Yes/No), pairwise tetrachoric correlations were computed and used as input for the EFA to identify latent dimensions. Factor extraction was performed using the weighted least squares (WLS) method, and factor rotation was conducted using the orthogonal Varimax method. The factor loading matrix is presented in the Supplementary Material (Appendix 3). Next, associations between coping strategies and psychiatric symptoms were examined using Pearson's correlation coefficients. All analyses were performed in R (version 3.5.1), using the lavaan package for factor analysis and base functions for descriptive and correlational procedures. The strength of associations was interpreted using Cohen's conventional criteria, where $r < 0.30$ was considered weak, 0.30–0.49 moderate, and ≥0.50 strong[37,38].

Results

Overall, 3,302 essential workers participated in the study, of whom 2,840 (86%) identified as female, with a mean age of 36.5 years (SD = 9.5). Regarding occupation, 2,939 (89%) were healthcare professionals and 363 (11%) were essential workers from other sectors. Participants were recruited from all five regions of Brazil: 1,189 (36%) from the Southeast, 1,122 (34%) from the South, 495 (15%) from the Northeast, 396 (12%) from the Midwest, and 100 (3%) from the North. Of the initial sample, 3,075 participants consented to using their data and were included in the final analyses after exclusion of cases with missing information.

Frequencies of Coping Strategies

Regarding the frequency of coping strategies, the most commonly reported were watching YouTube videos (58.3%), eating sweets (41.6%), listening to music (41.3%), and spending time with pets (26.2%). “Sleeping improperly” was excluded from subsequent analyses, as participants endorsing this item showed severe sleep disturbance (mean PROMIS T-score = 77.6, SD = 9.9). The five least frequent strategies were playing video games (5.2%), playing a musical instrument (3.2%), using drugs (3.1%), praying (3.0%) and playing board games (2.6%).

The exploratory factor analysis assessed the frequency data from individual coping strategies, revealing a two-factor structure as the model that best fit the data. This two-factor model was consistent with good internal consistency, with strong correlations between the factor scores and the underlying factors (0.92 for Factor 1, 0.90 for Factor 2), suggesting that it is an adequate model for categorizing coping strategies. Factor 1 comprised strategies such as social media use, alcohol consumption, drug use, smoking (tobacco or marijuana), drinking soda, and eating sweets — behaviors classified as maladaptive. Praying was negatively associated with this factor (loading = –0.40), indicating an inverse relationship with maladaptive behaviors. Factor 2 included reading, healthy eating, listening to music, physical exercise, playing a musical instrument, practicing mindfulness, writing, playing board games, engaging in artistic or creative activities, caring for pets, and playing video games — classified as adaptive coping strategies (Figure 1).

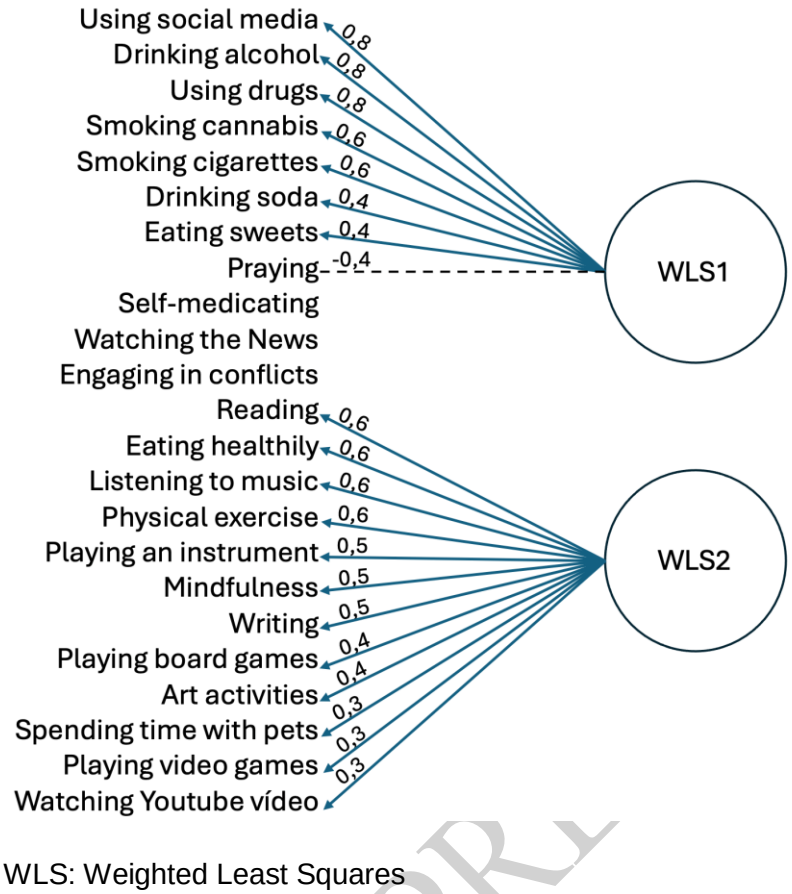


Figure 1. Exploratory factor analysis of coping strategy.

Correlations among individual coping strategies were evaluated to identify commonly co-occurring behaviors. The analysis revealed strong positive correlations between alcohol consumption, drug use, and smoking — suggesting a clustering of substance-related coping strategies. In contrast, praying was negatively correlated with drug and alcohol use, and to a lesser extent, with smoking. Most other strategies showed weak or no significant correlations with each other. These findings provide further insight into the internal structure of coping strategy patterns, independently of psychiatric symptom levels (Figure 2).

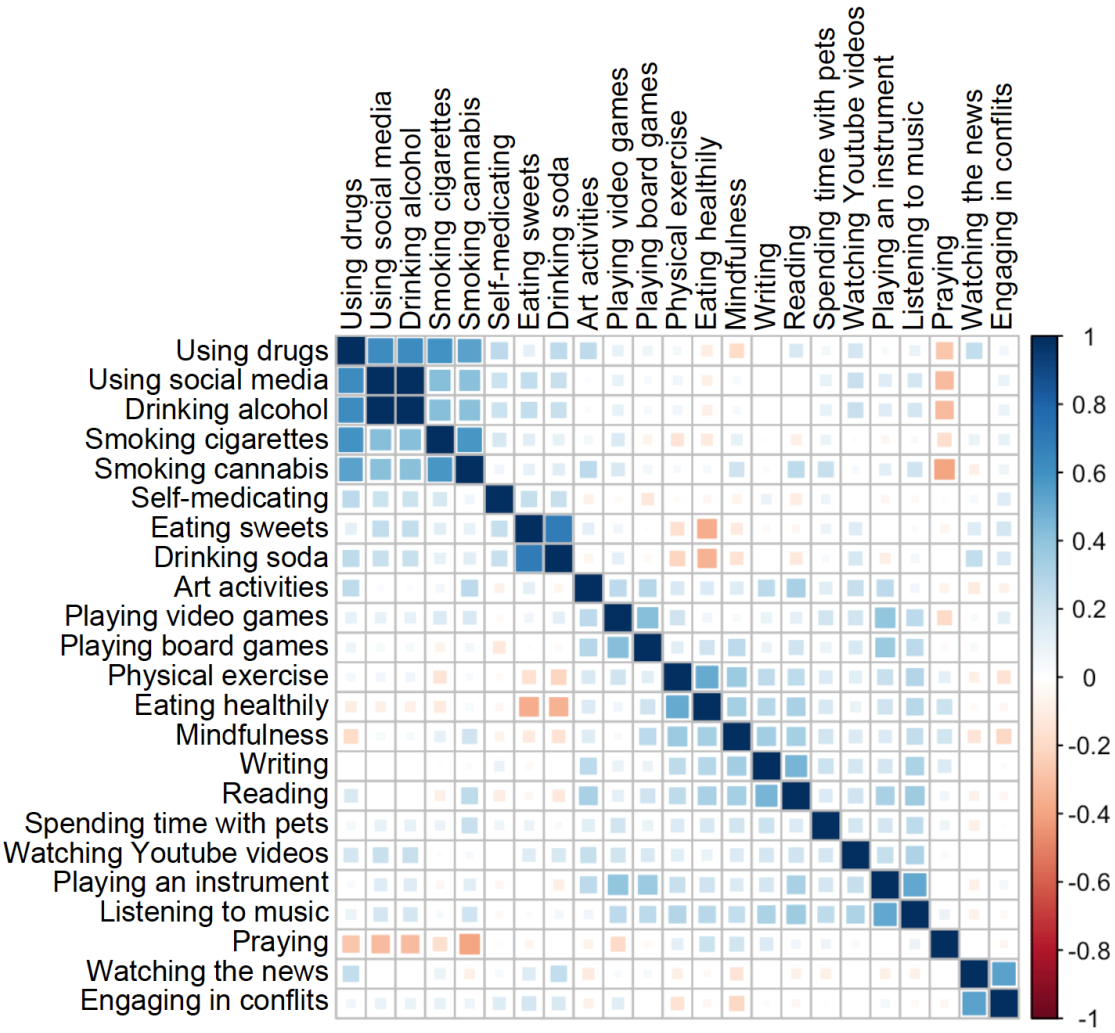


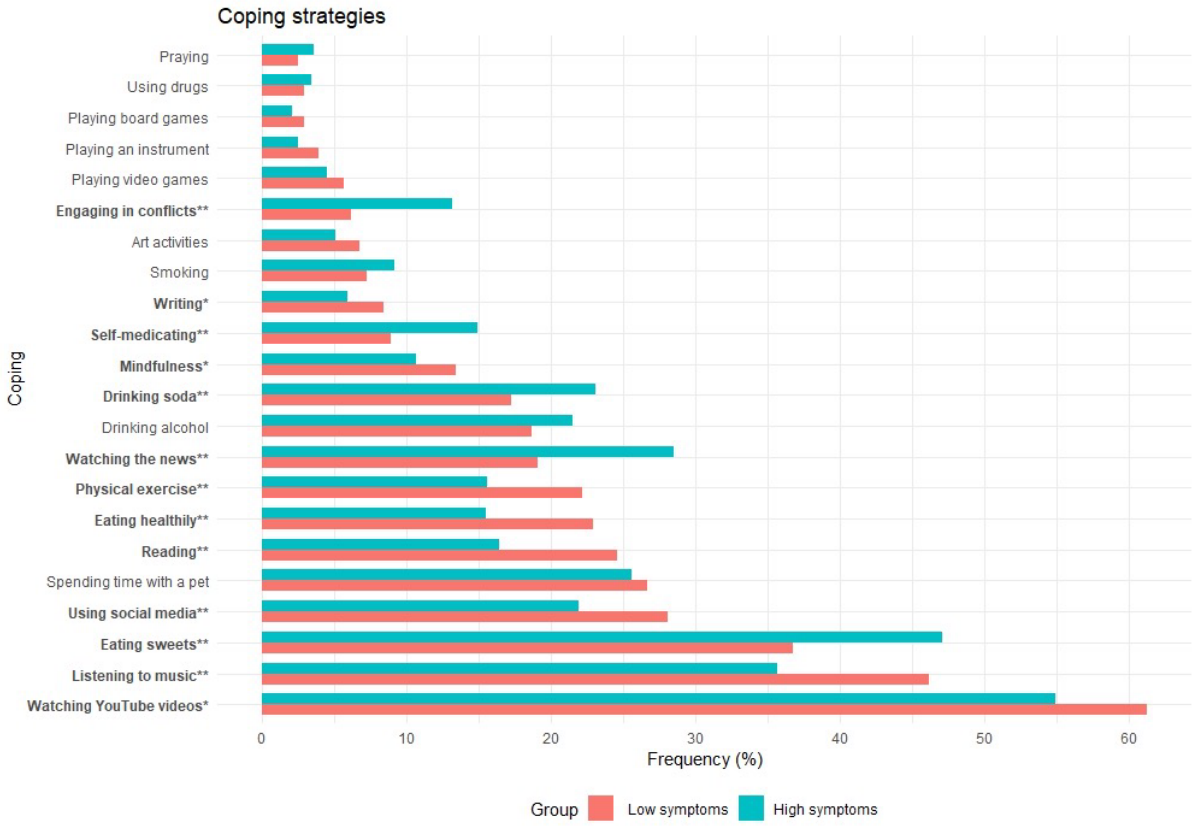
Figure 2. Correlogram of tetrachoric correlations among coping strategies

Symptom Severity and Factor Structure of Coping

The 25th and 75th percentiles of the PROMIS scores were used to classify participants with low and high symptom levels, respectively. For depression, the 25th percentile was 57.9 and the 75th was 66.4 (M = 62.27, SD = 7.03; median = 62.5). For anxiety, the 25th percentile was 65.5 and the 75th was 73.1 (M = 69.32, SD = 6.04; median = 68.8). For irritability, the 25th percentile was 56.8 and the 75th was 69.4 (M = 62.85, SD = 9.65; median = 62.9). To evaluate the association between coping strategies and symptom severity, Pearson's correlation coefficients were calculated between the percentage of coping strategies used within each factor (adaptive and maladaptive) and T-scores for depression, anxiety, and irritability.

The percentage of maladaptive coping strategies showed weak but statistically significant positive correlations with depression ($r = 0.049$, $p = 0.012$), anxiety ($r = 0.065$, $p < 0.001$), and irritability ($r = 0.084$, $p < 0.001$). In contrast, the percentage of adaptive coping strategies demonstrated weak but significant negative correlations with depression ($r = –0.194$, $p < 0.001$), anxiety ($r = –0.187$, $p < 0.001$), and irritability ($r = –0.156$, $p < 0.001$), indicating that higher use of adaptive strategies was associated with lower symptom severity.

The associations between coping strategies and the presence of psychiatric symptoms (i.e., depression, anxiety, and/or irritability) are presented in Figure 3. The associations between coping strategies and the presence of psychiatric symptoms (i.e., depression, anxiety, and/or irritability) are presented in Figure 3. Overall, participants with higher symptom severity reported a higher frequency of maladaptive coping behaviors and a lower frequency of adaptive strategies. Participants with more severe symptoms were significantly more likely to report engaging in maladaptive behaviors such as eating sweets (47.1% vs. 36.8%, $p < 0.001$), drinking soda (23.1% vs. 17.3%, $p < 0.001$), self-medicating (14.9% vs. 8.9%, $p < 0.001$), watching the news excessively (28.5% vs. 19.1%, $p < 0.001$), and engaging in interpersonal conflicts (13.2% vs. 6.2%, $p < 0.001$). In contrast, adaptive strategies—including physical exercise (15.6% vs. 22.2%, $p < 0.001$), listening to music (35.7% vs. 46.2%, $p < 0.001$), reading (16.4% vs. 24.6%, $p < 0.001$), and healthy eating (15.5% vs. 22.9%, $p < 0.001$) — were reported less frequently by participants with higher symptom severity.



Statistically significant differences are highlighted in bold. *p<0.05; **p<0.001.

Figure 3. Frequencies of coping strategies by severity of internalizing symptoms.

Discussion

This study examined coping strategies employed by healthcare professionals and other essential workers during the COVID-19 pandemic and their associations with internalizing psychiatric symptoms - namely, depression, anxiety, and irritability. The results support a clear distinction between adaptive and maladaptive coping strategies, each demonstrating distinct relationships with mental health outcomes. Our sample, composed mainly of healthcare professionals, frequently engaged in both adaptive (e.g., listening to music, engaging in physical exercise, practicing mindfulness) and maladaptive coping strategies (e.g., eating sweets, drinking soda, self-medicating) during the pandemic. The exploratory factor analysis revealed a two-factor structure aligned with the a priori classification proposed by the research team, which distinguished strategies as either adaptive or maladaptive. This empirical confirmation supports the theoretical rationale used to group coping strategies.

Although the correlations between maladaptive coping strategies and psychiatric symptoms were statistically significant, their magnitude was weak. This suggests that while these behaviors may contribute to psychological distress, other contextual or individual factors likely play a substantial role. Specifically, participants who engaged in behaviors such as alcohol consumption, self-medication, and conflict-seeking exhibited higher levels of depression, anxiety, and irritability. Conversely, individuals who engaged in adaptive behaviors, including mindfulness, physical activity, and creative activities, demonstrated lower psychiatric symptom scores. These findings are consistent with prior studies that indicate the protective role of adaptive coping strategies in mitigating mental distress[4,14].

Compared to previous studies assessing coping strategies among healthcare workers[28,29], our results align with findings that suggest a reliance on personal and behavioral strategies rather than social support or institutional interventions. For instance, Kamberi et al. (2021)[29] reported that most healthcare professionals lacked structured coping strategies (such as formal psychological support or organized programs), with only a small percentage actively engaging in structured self-support mechanisms such as exercise or positive thinking. Our study reinforces these observations by demonstrating that many participants resorted to individual-based coping strategies, with relatively low engagement in social and religious coping strategies.

Notably, the prevalence of substance use was relatively low in this sample. This finding may be partly explained by the high proportion of healthcare professionals, who may be more aware of the risks associated with substance use, as well as by potential social desirability bias, leading to underreporting of stigmatized behaviors. Another relevant aspect of our findings concerns religious coping, with praying showing a negative association with maladaptive coping strategies. This aligns with previous research suggesting that religious and spiritual practices may function as protective factors against unhealthy coping strategies[42]. However, in contrast to much of the literature — which identifies religious coping as one of the most prominent strategies in times of stress[43] — our sample reported praying as one of the least frequently used strategies. However, this finding should be interpreted with caution, as religious coping was assessed using a single item referring to private prayer. Religious coping is a multidimensional construct that includes practices not captured in the present measure, such as religious reframing, seeking spiritual or community support, and

participation in collective religious activities[44]. Moreover, much of the evidence linking religiosity to better mental health outcomes is based on institutional religious participation rather than private practices alone[45]. Finally, healthcare professionals have been shown to report lower levels of religiosity compared to the general population, which may have contributed to the low frequency of religious coping observed in this study[46,47]. Taken together, these factors indicate that conclusions regarding religious coping in the present sample should be considered exploratory and context-dependent.

Despite the valuable insights provided by this study, several limitations must be acknowledged. The primary limitation is its cross-sectional design, which precludes any inference about causality between coping strategies and psychiatric symptoms. Additionally, the sample was predominantly composed of female participants (86.3%) and healthcare professionals (89%), which may limit the generalizability of the findings to more diverse populations. The study relied exclusively on self-reported measures, which may have introduced information bias—particularly recall bias and social desirability bias—as participants could have underreported maladaptive behaviors or overreported socially desirable coping strategies. Furthermore, the online recruitment method may have led to selection bias, potentially attracting individuals who were either more psychologically distressed or more engaged with mental health topics. It is also worth noting that the small effect sizes observed indicate that coping strategies alone explain only a limited proportion of variance in psychiatric symptoms, underscoring the multifactorial nature of emotional distress. These methodological limitations should be considered when interpreting the results.

Future research should aim to explore longitudinal associations between coping strategies and mental health outcomes, as well as to investigate potential interventions that could enhance adaptive coping among healthcare professionals. Moreover, further refinement of coping classifications, considering individual differences and contextual factors, may improve the accuracy of predictive models for psychiatric symptomatology.

In conclusion, while the correlations between coping strategies and psychological symptoms were generally weak, our findings indicate that coping strategies play an important role in mental health outcomes during high-stress periods. These findings collectively suggest that adaptive strategies were associated with lower psychological distress, whereas maladaptive strategies showed a tendency to

correlate with higher distress. Although other factors may be more influential, there is still a need for interventions that promote healthy coping and resilience-building, particularly in periods of high stress.

Conflict of Interest Declaration

The authors declare no conflicts of interest related to this study.

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Supplementary Material

Appendix 1. STROBE Statement—Checklist

	Item No	Recommendation	
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	Title, Abstract
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	Title, Abstract
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Introduction, p.1
Objectives	3	State specific objectives, including any prespecified hypotheses	End of Introduction, p.2
Methods			
Study design	4	Present key elements of study design early in the paper	Methods – 'Study Design and Setting', p.2
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Methods – 'Study Design and Setting', p.2
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants	Methods – 'Participants and Recruitment', p.2
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Methods – 'Measures', p.2–3
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	*Methods – 'Measures', p.3*
Bias	9	Describe any efforts to address potential sources of bias	Discussion – 'Limitations', p.9
Study size	10	Explain how the study size was arrived at	Not reported (N/A)

Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Methods – 'Statistical Analysis', p.4
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	Methods – 'Statistical Analysis', p.4
		(*b*) Describe any methods used to examine subgroups and interactions	Methods – 'Statistical Analysis', p.4
		(*c*) Explain how missing data were addressed	Discussion – 'Limitations', p.9
		(*d*) If applicable, describe analytical methods taking account of sampling strategy	N/A
		(*e*) Describe any sensitivity analyses	N/A
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	Results – beginning, p.5
		(b) Give reasons for non-participation at each stage	Results – beginning, p.5
		(c) Consider use of a flow diagram	
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Table 1, p.6
		(b) Indicate number of participants with missing data for each variable of interest	Table 1, p.6
Outcome data	15*	Report numbers of outcome events or summary measures	Results – p.5–8
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg,	Tables 2 and 3; Results

		95% confidence interval). Make clear which confounders were adjusted for and why they were included	
		(*b*) Report category boundaries when continuous variables were categorized	Table 1, p.6
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Results – factor analysis, correlations, p.6–7
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Discussion – beginning, p.8
Discussion			
Key results	18	Summarise key results with reference to study objectives	Discussion – beginning, p.8
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	Discussion – 'Limitations', p.9
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Discussion – p.8–9
Generalisability	21	Discuss the generalisability (external validity) of the study results	Discussion – 'Limitations', p.9
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Final page – Acknowledgments/Funding

Appendix 2. List of coping strategies assessed in the TelePSI project

Meditation / mindfulness
Praying
Writing
Using social media (talking with friends or family)
Watching YouTube videos
Physical exercise
Playing a musical instrument
Listening to music
Taking care of pets
Playing video games
Reading books
Engaging in artistic activities
Playing board games
Sleeping improperly
Eating healthy
Eating sweets
Drinking soda
Drinking alcohol
Smoking cigarettes (tobacco)
Smoking marijuana
Using other types of drugs
Self-medicating
Listening to / reading the news
Engaging in interpersonal conflicts
Using the internet for news

Appendix 3. Factor loadings from exploratory factor analysis of coping strategies

Coping Strategy	Factor 1	Factor 2	h^2	u^2
Using social media	0.78	0.02	0.62	0.38
Drinking alcohol	0.78	0.02	0.62	0.38
Using drugs	0.75	0.00	0.57	0.43
Smoking cannabis	0.60	0.19	0.41	0.59
Smoking cigarettes	0.59	-0.07	0.35	0.65
Drinking soda	0.42	-0.26	0.23	0.77
Eating sweets	0.40	-0.20	0.19	0.81
Praying	-0.38	0.14	0.15	0.85
Self-medicating	0.29	-0.14	0.10	0.91
Watching the news	0.15	-0.18	0.05	0.95
Engaging in conflicts	0.21	-0.15	0.06	0.94
Reading	0.02	0.60	0.36	0.64
Eating healthy	-0.23	0.59	0.38	0.62
Listening to music	0.16	0.57	0.37	0.63
Physical exercise	-0.08	0.55	0.31	0.69
Instrument	0.12	0.54	0.32	0.68
Mindfulness	-0.07	0.53	0.29	0.71

Writing	-0.01	0.49	0.24	0.76
Board games	0.06	0.42	0.18	0.82
Art activities	0.14	0.40	0.19	0.82
Time with pets	0.14	0.33	0.14	0.86
Playing video games	0.22	0.33	0.17	0.83
YouTube videos	0.22	0.32	0.16	0.84