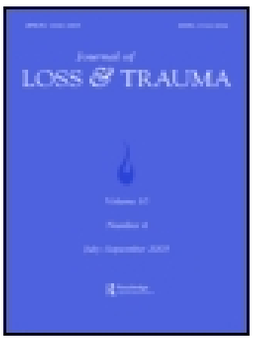

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Coping in the Time of COVID-19: Buffering Stressors With Coping Strategies

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ABSTRACT

Policies to reduce the spread of COVID-19 are negatively impacting the psychological well-being of the general population. This cross-sectional study explores the associations of coping strategies with symptoms of depression and anxiety among adults residing in the United States. Our results showed that participants who turned to religion were less depressed or anxious. Those engaging in substance use, behavioral disengagement, and seeking social support for emotional reasons had increased odds of feelings of depression and anxiety about the future. These findings can be used to tailor intervention and policy-making efforts to reduce the mental health toll in the general population.

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COVID-19; pandemic; coping; stress; mental health

Introduction

On March 11, 2020, the World Health Organization (WHO) declared the coronavirus disease 2019 (COVID-19) a pandemic (WHO Director-General's Opening Remarks at the Media Briefing on COVID-19–11 March 2020, 2020). A month after the declaration, approximately 96% of the U.S. population were under stay-at-home advisories or orders (Ettman et al., 2020). More than a year later, 3.49 million have tested positive for COVID-19 and more than 550,000 Americans have died as a consequence of COVID-19 (CDC, 2020). Stay-at-home advisories or orders have precipitated social isolation and loneliness, contributing to an increase in the prevalence of depression and anxiety symptoms (Czeisler, 2020; Ettman et al., 2020; Horigian et al., 2020; Marroquín et al., 2020). Additional consequences include financial worry due to the economic downturn and the disruption of daily life (Tull et al., 2020). Although government-mandated policies are vital to decreasing the spread of COVID-19, the unintended consequences are negatively impacting psychological well-being in the general population.

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As such, the COVID-19 pandemic, the public health response, and economic downturn has made everyday life challenging and stressful, which may prompt the use of different coping strategies to manage COVID-19–related stress. Coping in the context of stressors has been described in the literature more broadly as either "problem" or "emotion" focused (Folkman & Lazarus, 1985). Problem-focused coping involves resolving the stressful event/circumstance by eliminating the source of the stress or reducing its impact, whereas emotion-focused coping involves individuals changing their response to the stressful event or circumstance, including the prevention or reduction of the psychological impact of the stressful event. A third coping style, avoidant coping, includes strategies focused on avoiding the stressful event or circumstance by seeking support from others or by engaging in other types of activities (such as substance use) (Endler & Parker, 1990).

To date, few studies have determined the types of coping strategies used and their relationship with depression and anxiety symptoms among a general population during the COVID-19 pandemic. The purpose of this study is to explore the associations of different coping strategies including religious coping, use of emotional support, behavioral disengagement, and substance use with symptoms of depression and anxiety among adults residing in the United States in response to a continuous life stressor: the COVID-19 pandemic. We hypothesize that religious coping and use of emotional support will be associated with lower symptoms of depression and anxiety, whereas substance use and behavioral disengagement will be associated with higher depression and anxiety symptoms.

Methods

Dependent variable

Participants were asked to indicate the extent to which they agree or disagree with a list of psychosocial and behavioral factors since the outbreak of the COVID-19 pandemic. Specifically, participants were asked, "Since the outbreak of the COVID-19 pandemic … (1) I have experienced feelings of sadness or depression or (2) I feel negative and/or anxious about the future." Response options were on a 4-point Likert scale ranging from strongly agree to strongly disagree. We created a binary variable of 1 = strongly agree; 0 = strongly disagree/disagree.

Independent variable

Coping was measured with the Cope Inventory (Carver et al., 1989). We modified the instruction in the scale to reflect COVID-19 coping strategies.

Specifically, the instruction was modified as follows: "We are interested in how you have dealt with stress related to the COVID-19 pandemic. Indicate what YOU have usually done since the outbreak of the COVID-19 pandemic." We included items from the Cope Inventory related to the following subscales: religious coping, behavioral disengagement, substance use, and use of emotional support. Scores for each subscale were summed and averaged.

Covariates

Demographics

Participants self-reported their age, gender, race/ethnicity, completed education, marital status, employment status (including whether they lost wages or their employment due to the COVID-19 pandemic), overall health status, and whether they had been tested for COVID-19 and the results of the test.

Data analysis

We used bivariable and multivariable logistic regression models to determine the independent association of the different coping strategies with feelings of depression and anxiety, adjusting for covariates with a p value $<$ .10 at the bivariable analysis. The dependent variables for these logistic regression models were feelings of depression and anxiety, and the primary independent variables were the four coping subscales. All statistical analysis was conducted using SAS version 9.4 (SAS Institute Inc., Cary, North Carolina, USA).

Results

Sample characteristics

The study sample comprised 446 adults living in the United States. The median age of the sample was 60 years old (interquartile range = 47, 67), with most being female (61%), being White (86%), having a college degree or higher (54%), being married or living together (64%), and being employed (57%). Forty-six percent reported excellent/very good health; 23% reported that they had been tested for COVID-19, of whom only 3 reported a positive COVID-19 test result. A majority reported that they experienced feelings of sadness or depression (64.5%) and felt negative and/or anxious about the future (65.0%). The most frequently used coping strategy was religious coping (mean = 2.34, standard deviation [SD] = 1.1), followed by use of emotional support (mean = 2.10, SD = 0.8) and

Table 1. Association of coping styles with symptoms of distress.

	Feelings of sadness or depression aOR (95% CI)	Negative and/or anxious about the future aOR (95% CI)
Coping styles		
Religious coping	0.80 (0.64, 1.02)	0.74 (0.58, 0.93)
Use of emotional support	1.77 (1.27, 2.45)	1.46 (1.06, 2.02)
Substance use	3.59 (1.47, 8.74)	1.68 (0.83, 3.38)
Behavioral disengagement	3.09 (1.85, 5.17)	3.27 (1.92, 5.58)

Note. Models were adjusted for age, sex, employment status and overall health status.
aOR = adjusted odds ratio; CI = confidence interval.

behavioral disengagement (mean = 1.51, SD = 0.6). Substance use coping was the least-used coping strategy (mean = 1.23, SD = 0.5).

Coping strategies and symptoms of distress

Coping with religion was the only coping style associated with decreased odds of feelings of sadness or depression and negative and/or anxious about the future, although only the latter was significant (adjusted odds ratio [aOR] for feelings of depression = 0.80, 95% confidence interval [CI]: 0.64, 1.02 and feelings of anxiety, aOR = 0.74, 95% CI: 0.58, 0.93; Table 1). Use of emotional support was significantly associated with increased odds of feelings of sadness/depression (aOR = 1.77, 95% CI: 1.27, 2.45) and feeling anxious about the future (aOR = 1.46, 95% CI: 1.06, 2.02, Table 1). Behavioral disengagement and substance use showed increased odds of feelings of sadness/depression and anxiety about the future.

Discussion

In this study of COVID-19–related coping strategies and their association with feelings of depression and anxiety among adults in the United States, we found that participants who engaged in religious coping were less likely to feel depressed or have anxiety symptoms. Participants engaging in other coping strategies including substance use, behavioral disengagement, and seeking social support for emotional reasons had increased odds of feelings of depression and anxiety about the future.

Our finding that religious coping with COVID-19 stress is associated with reduced odds of feelings of depression and anxiety is consistent with the literature (Ano & Vasconcelles, 2005; Ellison et al., 2001; Koenig, 2009; Robbins & Francis, 2000; Weber & Pargament, 2014). In one of the few studies related to COVID-19 conducted in the United States, religious coping and trust in God correlated with reduced COVID-19–related stress among a sample of Orthodox Jews in the United States (Pirutinsky et al., 2020). The mechanisms underlying links between religious coping with reduced symptoms of distress are multifaceted but include two emotion

regulation strategies: positive reappraisals and coping self-efficacy (Thomas & Savoy, 2014; Vishkin et al., 2016). Specifically, individuals who engage in religious coping use the comfort and meaning to life from their religious beliefs to reinterpret stressful/traumatic situations positively (i.e., positive reappraisal) and to increase their confidence that they can cope with the stressful/traumatic events (i.e., coping self-efficacy) (Dolcos et al., 2021).

Conversely, we found that other coping strategies including substance use, behavioral disengagement, and use of emotional support were associated with higher odds of COVID-19–related symptoms of distress. Substance use and behavioral disengagement coping strategies have been found to exacerbate symptoms of stress, anxiety, and depressive symptoms (Coiro et al., 2017). Moreover, alcohol and drug use can also pose deleterious health outcomes, including increased likelihood of addiction (Camí & Farré, 2003), cardiovascular disease (O'Keefe et al., 2018; Rehm et al., 2017; Toma et al., 2017), and overall poor well-being (Appleton et al., 2018; Jacob et al., 2021). Our finding related to use of emotional social support is at odds with prior research (Gariépy et al., 2016; Santini et al., 2020; Wang et al., 2018). Use of and perceived emotional support has been previously associated with lower depression symptoms among men with HIV infection (Deichert et al., 2008) and individuals with adverse childhood experiences (Brinker & Cheruvu, 2017). It is possible that use of emotional support was associated with increased odds of symptoms of distress in this study because those who used emotional support had greater COVID-19–related stress and found it difficult to cope on their own and relied on others to manage their COVID-19–related stress (Hagan et al., 2017). Our finding could also suggest that individuals who sought emotional support to cope with COVID-19–related stress may not have received adequate support, due to social distancing and stay-at-home orders, which increased isolation. This is plausible since COVID-19–related stress was widespread and those who often give support to others, or caregivers, may be experiencing stress themselves.

While this study has several strengths, there are few limitations. Our sample was generally older, less racially/ethnically diverse, and more educated than the general U.S. population. Therefore, findings in this study are not generalizable to the U.S. population. Second, psychological distress were assessed using a single question which does not indicate clinically relevant elevated depression and anxiety symptoms. Third, we assessed a limited type of coping types from the Brief COPE Scale. Last, our data were obtained via self-report; therefore, we encourage future research in this area to use multiple sources of data such as clinical diagnosis and medical charts.

Conclusions

In this study comprising predominantly older Americans during the COVID-19 pandemic, religious coping was associated with reduced odds of reporting psychological distress. Conversely, other coping strategies were associated with increased odds of psychological distress. These findings underscore the important role religion plays in psychological well-being. Given the promising results shown by religious-focused therapies on psychological well-being (Gonçalves et al., 2015; Hook et al., 2010), our findings further serve to increase motivation to incorporate religious beliefs into psychosocial therapy to improve psychological distress.

Disclosure statement

The authors declare that there is no conflict of interest.

Notes on contributors

Dr. Chukwuemeka Okafor is an assistant professor of epidemiology in the Department of Public Health at Baylor University. Dr Okafor's research interests focuses on the epidemiology of substance use among persons living with or at risk for HIV infection and other vulnerable populations. He is interested in the design, implementation, and evaluation of substance use interventions for these populations. His research also involves bridging behavioral measures (particularly substance use) with biological markers of clinical outcomes in epidemiologic and intervention science.

Karla J. Bautista is a graduating master of public health student with a concentration in community health. She is an advocate for promoting resilience and advancing equity at a community level through community-engaged research, cross-sector collaboration, and community engagement. She currently holds multiple positions in local nonprofits that focus on education, economic development, and mental health in the Spanish-speaking population. She received her bachelor of science in biology from Baylor University.

Dr. Matt Asare is an assistant professor of behavioral sciences in the Department of Public Health at Baylor University. Dr. Asare's research interest is in the area of health disparities relating to cancer control and prevention, patient–provider relationship, cultural humility and responsiveness, and sexual education. His scholarship is grounded in theories to facilitate pro-health behavior changes at the individual and community levels, especially among racial and ethnic minorities and underserved populations.

Dr. Ijeoma Opara is an assistant professor of racism and health in the Department of Social and Behavioral Sciences at Yale School of Public Health. Dr. Opara is also the founding director of The Substance Abuse and Sexual Health (SASH) Lab (www.oparalab.org). Dr. Opara defines herself as a community-based participatory researcher with experience in working with youth and community organizations dedicated to reducing substance use in urban communities. Dr. Opara received her PhD in family science and human development from Montclair State University, a master of social work from New York University, a master of public health from New York Medical College, and a bachelor of arts in psychology from New Jersey City University.

References

Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology*, *61*(4), 461–480. https://doi.org/10.1002/jclp.20049

Appleton, A., James, R., & Larsen, J. (2018). The association between mental wellbeing, levels of harmful drinking, and drinking motivations: A cross-sectional study of the UK adult population. *International Journal of Environmental Research and Public Health*, *15*(7), 1333. https://doi.org/10.3390/ijerph15071333

Austenfeld, J. L., & Stanton, A. L. (2004). Coping through emotional approach: A new look at emotion, coping, and health-related outcomes. *Journal of Personality*, *72*(6), 1335–1364. https://doi.org/10.1111/j.1467-6494.2004.00299.x

Brinker, J., & Cheruvu, V. K. (2017). Social and emotional support as a protective factor against current depression among individuals with adverse childhood experiences. *Preventive Medicine Reports*, *5*, 127–133. https://doi.org/10.1016/j.pmedr.2016.11.018

Camí, J., & Farré, M. (2003). Drug addiction. *New England Journal of Medicine*, *349*(10), 975–986. https://doi.org/10.1056/NEJMra023160

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (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

CDC (2020, March 28). COVID *data tracker*. Centers for Disease Control and Prevention. https://covid.cdc.gov/covid-data-tracker

Coiro, M. J., Bettis, A. H., & Compas, B. E. (2017). College students coping with interpersonal stress: Examining a control-based model of coping. *Journal of American College Health*, *65*(3), 177–186. https://doi.org/10.1080/07448481.2016.1266641

Czeisler, M. É. (2020). Mental health, substance use, and suicidal ideation during the COVID-19 Pandemic—United States, June 24–30, 2020. *MMWR. Morbidity and Mortality Weekly Report*, *69*. https://doi.org/10.15585/mmwr.mm6932a1

Deichert, N. T., Fekete, E. M., Boarts, J. M., Druley, J. A., & Delahanty, D. L. (2008). Emotional support and affect: Associations with health behaviors and active coping efforts in men living with HIV. *AIDS and Behavior*, *12*(1), 139–145. https://doi.org/10.1007/s10461-007-9214-y

Dolcos, F., Hohl, K., Hu, Y., & Dolcos, S. (2021). Religiosity and resilience: Cognitive reappraisal and coping self-efficacy mediate the link between religious coping and well-being. *Journal of Religion and Health*. https://doi.org/10.1007/s10943-020-01160-y

Ellison, C. G., Boardman, J. D., Williams, D. R., & Jackson, J. S. (2001). Religious involvement, stress, and mental health: Findings from the 1995 Detroit Area Study. *Social Forces*, *80*(1), 215–249. https://doi.org/10.1353/sof.2001.0063

Endler, N. S., & Parker, J. D. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, *58*(5), 844–854. https://doi.org/10.1037/0022-3514.58.5.844

Ettman, C. K., Abdalla, S. M., Cohen, G. H., Sampson, L., Vivier, P. M., & Galea, S. (2020). Prevalence of depression symptoms in US adults before and during the COVID-19 pandemic. *JAMA Network Open*, *3*(9), e2019686. https://doi.org/10.1001/jamanetworkopen.2020.19686

Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, *48*(1), 150–170. https://doi.org/10.1037//0022-3514.48.1.150

Gariépy, G., Honkaniemi, H., & Quesnel-Vallée, A. (2016). Social support and protection from depression: Systematic review of current findings in Western countries. *The British Journal of Psychiatry*, *209*(4), 284–293. https://doi.org/10.1192/bjp.bp.115.169094

Gonçalves, J. P. B., Lucchetti, G., Menezes, P. R., & Vallada, H. (2015). Religious and spiritual interventions in mental health care: A systematic review and meta-analysis of randomized controlled clinical trials. *Psychological Medicine*, *45*(14), 2937–2949. https://doi.org/10.1017/S0033291715001166

Hagan, T. L., Fishbein, J. N., Nipp, R. D., Jacobs, J. M., Traeger, L., Irwin, K. E., Pirl, W. F., Greer, J. A., Park, E. R., Jackson, V. A., & Temel, J. S. (2017). Coping in patients with incurable lung and gastrointestinal cancers: A validation study of the brief COPE. *Journal of Pain and Symptom Management*, *53*(1), 131–138. https://doi.org/10.1016/j.jpainsymman.2016.06.005

Hook, J. N., Worthington, E. L., Davis, D. E., Jennings, D. J., Gartner, A. L., & Hook, J. P. (2010). Empirically supported religious and spiritual therapies. *Journal of Clinical Psychology*, *66*(1), 46–72. https://doi.org/10.1002/jclp.20626

Horigian, V. E., Schmidt, R. D., & Feaster, D. J. (2020). Loneliness, mental health, and substance use among US young adults during COVID-19. *Journal of Psychoactive Drugs*, *0*(0), 1–9. https://doi.org/10.1080/02791072.2020.1836435

Jacob, L., Smith, L., Armstrong, N. C., Yakkundi, A., Barnett, Y., Butler, L., McDermott, D. T., Koyanagi, A., Shin, J. I., Meyer, J., Firth, J., Remes, O., López-Sánchez, G. F., & Tully, M. A. (2021). Alcohol use and mental health during COVID-19 lockdown: A cross-sectional study in a sample of UK adults. *Drug and Alcohol Dependence*, *219*, 108488. https://doi.org/10.1016/j.drugalcdep.2020.108488

Koenig, H. G. (2009). Research on religion, spirituality, and mental health: A review. *The Canadian Journal of Psychiatry*, *54*(5), 283–291. https://doi.org/10.1177/070674370905400502

Marroquín, B., Vine, V., & Morgan, R. (2020). Mental health during the COVID-19 pandemic: Effects of stay-at-home policies, social distancing behavior, and social resources. *Psychiatry Research*, *293*, 113419. https://doi.org/10.1016/j.psychres.2020.113419

O'Keefe, E. L., DiNicolantonio, J. J., O'Keefe, J. H., & Lavie, C. J. (2018). Alcohol and CV health: Jekyll and Hyde J-Curves. *Progress in Cardiovascular Diseases*, *61*(1), 68–75. https://doi.org/10.1016/j.pcad.2018.02.001

Pirutinsky, S., Cherniak, A. D., & Rosmarin, D. H. (2020). COVID-19, mental health, and religious coping among American orthodox Jews. *Journal of Religion and Health*, *59*(5), 2288–2301. https://doi.org/10.1007/s10943-020-01070-z

Rehm, J., Gmel, G. E., Gmel, G., Hasan, O. S. M., Imtiaz, S., Popova, S., Probst, C., Roerecke, M., Room, R., Samokhvalov, A. V., Shield, K. D., & Shuper, P. A. (2017). The relationship between different dimensions of alcohol use and the burden of disease—An update. *Addiction*, *112*(6), 968–1001. https://doi.org/10.1111/add.13757

Robbins, M., & Francis, L. J. (2000). Religion, personality, and well-being: The relationship between church attendance and purpose in life. *Journal of Research on Christian Education*, *9*(2), 223–238. https://doi.org/10.1080/10656210009484908

Santini, Z. I., Jose, P. E., Cornwell, E. Y., Koyanagi, A., Nielsen, L., Hinrichsen, C., Meilstrup, C., Madsen, K. R., & Koushede, V. (2020). Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): A longitudinal mediation analysis. *The Lancet Public Health*, *5*(1), e62–e70. https://doi.org/10.1016/S2468-2667(19)30230-0

Thomas, E., & Savoy, S. (2014). Relationships between traumatic events, religious coping style, and posttraumatic outcomes. *Traumatology: An International Journal*, *20*(2), 84–90. https://doi.org/10.1037/h0099380

Toma, A., Paré, G., & Leong, D. P. (2017). Alcohol and cardiovascular disease: How much is too much? *Current Atherosclerosis Reports*, *19*(3), 13. https://doi.org/10.1007/s11883-017-0647-0

Tull, M. T., Edmonds, K. A., Scamaldo, K. M., Richmond, J. R., Rose, J. P., & Gratz, K. L. (2020). Psychological outcomes associated with stay-at-home orders and the perceived impact of COVID-19 on daily life. Psychiatry research, 289, 113098.

Vishkin, A., Bigman, Y. E., Porat, R., Solak, N., Halperin, E., & Tamir, M. (2016). God rest our hearts: Religiosity and cognitive reappraisal. *Emotion*, *16*(2), 252–262. https://doi.org/10.1037/emo0000108

Wang, J., Mann, F., Lloyd-Evans, B., Ma, R., & Johnson, S. (2018). Associations between loneliness and perceived social support and outcomes of mental health problems: A systematic review. *BMC Psychiatry*, *18*(1), 156. https://doi.org/10.1186/s12888-018-1736-5

Weber, S. R., & Pargament, K. I. (2014). The role of religion and spirituality in mental health. *Current Opinion in Psychiatry*, *27*(5), 358–363. https://doi.org/10.1097/YCO.0000000000000080

WHO Director-General's opening remarks at the media briefing on COVID-19—11 March 2020 (2020). *[Media Briefing]*. World Health Organization. https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19--11-march-2020