

A Commentary on Drinking to Cope During the COVID-19 Pandemic: The Role of External and Internal Factors in Coping Motive Pathways to Alcohol Use, Solitary Drinking, and Alcohol Problems

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THE CORONAVIRUS DISEASE (COVID-19) pandemic began in March 2020 (World Health Organization, 2020) and has caused unprecedented disruptions to society as we know it. Widespread stay-at-home directives and the closures of nonessential businesses, while necessary to contain the spread of the virus, have wreaked havoc on the economy (Nicola et al., 2020) and contributed to marked increases in negative affect and stress for large portions of the population (Brooks et al., 2020). There has been considerable interest in determining how the pandemic will affect alcohol consumption (e.g., Clay and Parker, 2020), with some predicting a long-term increase in alcohol use due to rising levels of distress and the use of alcohol for self-medication purposes (Rehm et al., 2020). While early results have been mixed, there is some evidence of COVID-19–related increases in alcohol consumption (Stanton et al., 2020 cf. López-Bueno et al., 2020; Scarmozzino and Visioli, 2020), and at least one study showed that individuals who reported high-stress levels due to the pandemic were especially likely to increase their alcohol consumption (Anne et al., 2020). Understanding why some individuals might increase their drinking during the COVID-19 pandemic is important in order to inform alcohol intervention strategies.

The study by Wardell and colleagues is important because it provides a theoretically informed account of coping-motivated drinking during the COVID-19 pandemic. Their focus on drinking to cope is well-founded, as a large body of evidence demonstrates robust associations between drinking to cope with negative mood and heavier alcohol use and more

alcohol problems in both cross-sectional and prospective studies (e.g., Cooper et al., 2016; Kuntsche et al., 2005; Merrill, Wardell, and Read, 2014). For instance, using a nationally representative sample, Crum and colleagues (2013) found that drinking to regulate negative mood subsequently predicted the development and persistence of alcohol use disorder symptoms over time. In the current paper, the authors used cross-sectional data to test a path model in which relevant external (e.g., income loss) and internal (e.g., depression symptoms) factors predicted individual differences in drinking to cope motives, which in turn predicted pandemic-related changes in alcohol consumption and solitary drinking, resulting in alcohol problems. Specifically, the authors asked Canadian adult drinkers ($N = 320$; 54.6% male; mean age 32 years) to complete an online survey assessing work- and home-related factors, psychological factors, and alcohol-related factors over the past 30 days, which covered a time period beginning within 1 month of the initiation of COVID-19 stay-at-home directives in Canada. They also had participants retrospectively recall their alcohol use and whether they engaged in solitary drinking for the 30 days prior to the COVID-19 emergency. Importantly, controlling for pre-pandemic alcohol use and solitary drinking in their path model allowed them to determine whether coping motives were associated with changes in past 30-day alcohol use and solitary drinking (with the presumption that these changes were due to the pandemic).

A clear strength of the study was the selection of factors relevant to the pandemic and associated with coping-motivated drinking based on theory and prior studies. For instance, solitary drinking was hypothesized to be a mediating variable in the path model linking coping motives to alcohol problems. The authors noted the possibility that stay-at-home directives and restrictions in access to public drinking settings might have increased engagement in coping-motivated solitary drinking, a pattern of drinking that has been associated with negative affect and alcohol problems (Creswell, 2020; Mason et al., 2020; Skrzysnki and Creswell, 2020). Based on this prior literature, Wardell and colleagues predicted that coping-motivated drinkers would be at increased risk of solitary drinking during the pandemic and,

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in turn, at increased likelihood of experiencing alcohol-related problems. Importantly, their definition of solitary drinking explicitly excluded drinking when virtually socializing with others, given that many people likely began using virtual means to socialize during the pandemic. This allowed the authors to focus specifically on drinking while physically and virtually alone, which is the recommended definition of solitary drinking (Creswell, 2020; Creswell et al., 2014; Skrzynski and Creswell, 2020).

Several other theoretically based external and internal factors associated with distress during the pandemic and relevant for drinking to cope motives were tested. For instance, given prior literature linking work/income and family stress to drinking to cope motives and alcohol problems (e.g., Frone, 1999; de Goeji et al., 2015; Lambe et al., 2015), Wardell and colleagues examined working from home, living with children under the age of 18, income loss, and unemployment in their path model. Further, Wardell and colleagues also tested depression symptoms and health anxiety, a specific form of anxiety that they hypothesized would be particularly relevant during the pandemic, in their path model. According to Cooper (1994), negative affectivity should theoretically be related to drinking to cope motives given that coping motives are internal and negatively valenced. Consistent with this, several studies document relationships between depressed mood and anxiety and drinking to cope (Cooper et al., 2016), lending credence to the inclusion of these variables in Wardell and colleagues' model. Finally, given associations between loneliness and social disconnection and greater alcohol use (e.g., Cacioppo et al., 2002), and the likely increase in such experiences due to physical distancing guidelines during the pandemic, Wardell and colleagues also examined living alone and social connectedness in their path model.

Of the home- and work-related variables tested, results revealed that having a child under the age of 18 living at home was the only factor associated with greater coping motives for drinking. Consistent with their predictions, both greater depression and lower social connectedness were associated with greater coping motives, but health anxiety was unrelated to coping motives. Coping motives were in turn associated with increased alcohol consumption during the pandemic after controlling for prepandemic alcohol consumption, but contrary to predictions, coping motives were not associated with increased solitary drinking during the pandemic. Also as expected, both increased alcohol consumption and increased solitary drinking during the pandemic were associated with alcohol problems. The authors further tested specific mediational pathways in their model. Results revealed that living with a child under the age of 18, greater depression, and lower social connectedness were all indirectly associated with alcohol problems via a coping motives to alcohol use pathway and directly through coping motives. Further, increased solitary drinking mediated the pathway from living alone to greater alcohol problems, and

increased alcohol use mediated the pathway from income loss to greater alcohol problems.

Taken together, these results underscore the importance of coping motives in understanding pandemic-related increases in alcohol use, which in turn were associated with greater alcohol problems. The findings add to a large literature base linking coping motives to unhealthy alcohol use and more alcohol-related problems (Cooper et al., 2016), and are consistent with early theorizing about why alcohol use might increase during the COVID-19 pandemic (i.e., for self-medication of negative affect; Rehm et al., 2020) and recent data suggesting that individuals who report higher levels of perceived stress during the pandemic are especially likely to increase their alcohol use (Anne et al., 2020). Findings demonstrating that coping motives mediated the links between greater depression symptoms/lower social connectedness and increased alcohol consumption during the pandemic highlight the importance of these individual difference factors in coping pathways to drinking (Cooper et al., 2016; Skrzynski et al., 2018).

It is noteworthy that of the work- and home-related stressors in the path model, only having a child under the age of 18 living at home was uniquely associated with drinking to cope motives. Parenting stress due to COVID-19 is extensive (Russell et al., 2020) and has the potential to have longstanding consequences for the well-being of families and children, especially if caregivers turn to problematic coping behaviors such as substance use (Prime, Wade, and Browne, 2020). The paper by Wardell and colleagues importantly showed that living with a child under the age of 18 was associated indirectly with alcohol problems via greater coping motives and increased alcohol use. As the authors note, these findings highlight the need for additional research on interventions that focus specifically on the unique needs of parents.

Finally, coping motives were not associated with increases in solitary drinking during the pandemic, but solitary drinking did show the hypothesized association with greater alcohol problems, replicating many prior studies (Skrzynski and Creswell, 2020). These findings suggest that individuals likely began drinking more while alone as a result of widespread stay-at-home directives and the closures of nonessential businesses (including bars and restaurants), rather than drinking to cope with negative affect (or because of some other variable that was not tested). However, regardless of the reasons for the pandemic-related increases in solitary drinking, this pattern of alcohol consumption was still uniquely associated with greater alcohol problems even after accounting for increased alcohol use and coping motives, underscoring the importance of solitary drinking in understanding risk of negative consequences (Creswell, 2020). It is also noteworthy that men (versus women) and non-White (versus White) participants reported greater increases in solitary drinking during the pandemic, suggesting the need for future research to focus on demographic variables and other individual difference factors (e.g., racial/ethnic discrimination; Glass et al.,

2020) linked to this risky drinking behavior (see also Creswell, 2020).

LIMITATIONS AND FUTURE DIRECTIONS

Like all studies, the study by Wardell and colleagues is not without limitations. First, as described above, this was a cross-sectional observational study using self-report surveys to assess constructs of interest. Although the methods and results are a good starting point to gauge COVID-19's effects on drinking behavior, we will need prospective longitudinal data to be able to more reliably understand how internal and external factors predict changes in alcohol use and related problems over time. In addition, research that assesses some of the more nuanced factors (e.g., depression, anxiety) via interview or with administrative data (e.g., electronic health records) will also increase the reliability and validity of findings. Second, studies that assess these constructs over a longer period of time may reveal findings that differ from the present study's results. Wardell and colleagues measured variables of interest closer to the start of the COVID-19 pandemic; studies that look at how these constructs relate over a longer time frame may reveal paths not originally significant. For example, it may take time (e.g., months) for individuals to lose their job (most of the sample in the present study was still employed to some degree), become depressed, and/or develop anxiety about their health as more information is revealed and more restrictions enacted related to COVID-19. Thus, relationships not originally significant (e.g., income loss and coping motives; coping motives and solitary drinking) may become so over time. Third, other psychopathology besides depression and health anxiety are related to increased alcohol use and problems, such as social anxiety disorder, posttraumatic stress disorder, and personality pathology (Bachrach and Read, 2017; Creswell et al., 2016; Grant et al., 2005). Modeling a broader range of this pathology and changes in symptoms over time may reveal pathways to both coping motives and unhealthy alcohol use for individuals who are most vulnerable. Last, the present study did not model and control for other drinking motives known to predict alcohol use and consequences (e.g., social, enhancement motives). The authors acknowledge that their sample size did not allow them to model these constructs; thus, future work interested in motivational pathways to unhealthy alcohol use should ensure their sample size is adequate to test these relationships. Without controlling for other motives, it is difficult to know whether significant direct and mediational pathways are unique to coping motives.

Despite these limitations, this study is a good starting point for understanding the possible etiology of increased and unhealthy drinking behavior among adults living during a global pandemic. As discussed above, studies that employ prospective designs over a longer time period, use a broader range of assessment modalities, measure and control for additional important constructs, and include a larger sample of participants will help us to understand the possibly

devastating impact COVID-19 and its sequelae have on drinking outcomes. On a broader scale, it will also be important for future work to look at how this pandemic affects drinking behavior by country, as unemployment, stay-at-home orders, infection rates, and mortality rates differ substantially across the world. Although ambitious, studies assessing and testing similar pathways predicting alcohol use and consequences using internationally diverse samples will help us understand not only how to intervene, but also where.

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