



An Analysis of Coping Mechanisms During COVID-19



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Abstract:

Media outlets have reported significant increases in maladaptive coping behaviors among physicians as a means of coping with pandemic-related stress. While the burden experienced by physicians during the pandemic is indisputable, the increase in maladaptive coping mechanisms during the COVID-19 pandemic may not be significantly elevated. **We seek to demonstrate that the coping mechanisms used by physicians to alleviate stress during the pandemic may be comparable to those used prior to the pandemic**, hypothesizing that, during times of stress, people generally lean heavily on their existing coping mechanisms (maladaptive or otherwise) as opposed to developing new ones. Though it is likely that some physicians developed new maladaptive coping mechanisms to manage the stress of the COVID-19 pandemic, we theorize that this is not the case for the medical community at large and likely only applies to a small percentage of physicians.

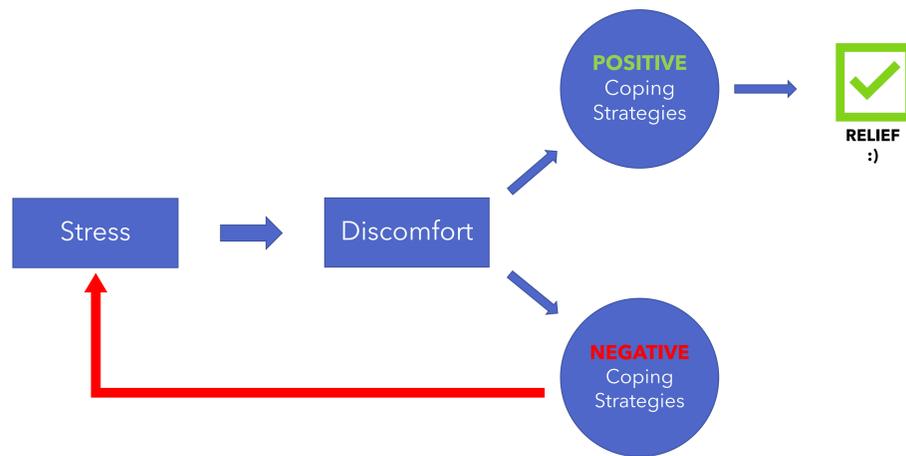
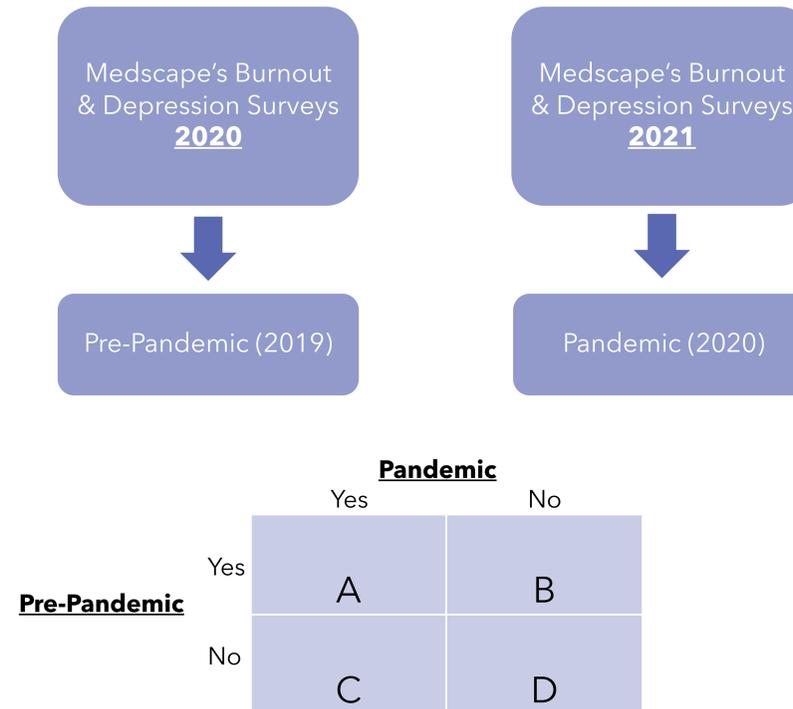


Figure 1: Cycle of Stress and Coping Strategies. This figure highlights the cycle of how maladaptive (negative) coping mechanisms are able to fuel a cycle of stress and comfort. The 'breaking' of the cycle is through positive coping behaviors which subsequently relieves the situation at hand.

Methods:



Note: The 2020 survey results were used as the baseline, pre-pandemic standpoint (as the 2020 survey reflects data collected in 2019) and the 2021 survey reflected mid-pandemic coping strategies.

Results:

Constructive Behaviors:

| How do Physicians Cope with Burnout? | Odds Ratio (Pandemic/Pre-pandemic) | 95% Confidence Interval |
|--------------------------------------|------------------------------------|-------------------------|
| Exercise | 1.13 | 1.08-1.18 |
| Play or listen to music | 1.20 | 1.14-1.26 |
| Eat junk food | 1.09 | 1.04-1.15 |
| Other | 1.00 | 0.93-1.08 |

Table 1: Constructive Behaviors. This table displays the OR and 95% CI for the question "How do Physicians Cope with Burnout" specifically for constructive behaviors.

Results:

Maladaptive Behaviors:

| How do Physicians Cope with Burnout? | Odds Ratio (Pandemic/Pre-pandemic) | 95% Confidence Interval |
|---|------------------------------------|-------------------------|
| Isolate myself from others | 0.92 | 0.88-0.97 |
| Eat junk food | 1.09 | 1.04-1.15 |
| Drink alcohol | 1.11 | 1.05-1.18 |
| Binge Eat | 1.06 | 1.00-1.13 |
| Use prescription drugs | 1.52 | 1.30-1.77 |
| Smokes cigarettes/use nicotine products | 0.67 | 0.56-0.77 |
| Other | 1.00 | 0.93-1.08 |

Table 2: Maladaptive Behaviors. This table displays the OR and 95% CI for the question "How do Physicians Cope with Burnout" specifically for maladaptive behaviors.

Conclusions:

Overall, stress-induced coping mechanisms amongst physicians were similar before and after the pandemic. After analyzing survey responses of ~28,000 physicians across 29 specialties, the notion that the pandemic prompted the use of maladaptive coping mechanisms is not well-represented in this analysis. "Use of prescription drugs" was increased however there is no data on what drugs were used. It's seen that anti-depressants were more frequently prescribed during the pandemic (potentially attributing to this—therefore this may not be a 'maladaptive behavior') however due to the lack of clarity for this question in the Medscape survey it is unknown.

We were not able to draw any conclusions about increase in pre-existing maladaptive behaviors (ex. increase in tobacco use among pre-pandemic smokers) from the data available. It is possible that those with maladaptive coping mechanisms did indulge in these behaviors more.