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MASKED EMOTIONS: STUDYING THE IMPACT OF THE COVID-19 PANDEMIC ON EMOTIONAL REGULATION IN COLLEGE STUDENTS AND BEYOND

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MENTOR: ROBERT PADGETT

Abstract

Studies regarding the socioemotional selectivity theory have found that upcoming endings lead to a positivity bias in individuals’ executive functioning. The current study seeks to expand upon this theory by studying the impacts of the COVID-19 pandemic on college students and graduates. It was predicted that (a) current students would demonstrate more negative emotionality than pre-COVID students, (b) current students would demonstrate a greater positivity bias than pre-COVID students, and (c) this bias would be more pronounced in current seniors and weaker in current freshmen and college graduates. Participants responded to several scales regarding personality (neuroticism, shyness) and emotional factors (depression, anxiety, optimism/pessimism, loneliness, general affect) and completed working-memory tasks for happy, neutral, and sad human faces. Results revealed that current students performed significantly worse on all conditions of the working memory task; additionally, current students scored significantly lower on optimism and higher on shyness, anxiety, depression, general affect, and neuroticism. Among current students, only loneliness differed significantly, with first-year students being the most lonely. Although findings were inconsistent with the socioemotional selectivity theory, they suggest that overall emotionality can have detrimental effects on executive functioning. Findings that first-year students are significantly more lonely than pre-COVID students and other current students suggests that social-distancing practices are having a particularly negative effect on connectedness for these students.

Key words: COVID-19, college students, emotion regulation, executive functioning, socioemotional selectivity theory

Since the first outbreak of the coronavirus disease 2019 (COVID-19) in the Chinese city of Wuhan, there had been nearly 29 million confirmed cases and approximately 524,000 deaths in the United States alone as of March 11, 2020 (World Health Organization, 2020). Unprecedented attempts to control the disease via physical, or “social,” distancing have shut down normal life. This has included forced
school closures, canceled graduations, and uncertain futures for college and high school graduates as well as current college students as they move into their next stage of life. By mid-March of 2020, more than 1,100 colleges and universities throughout the nation had canceled in-person classes, in addition to multiple cancellations or postponements of spring graduation ceremonies (Smalley, 2020). Though a new school year is officially under way, many questions remain unanswered for college students about what the “new normal” will be under COVID-19 conditions.

The threats to physical health are well documented (Couzin-Frankel, 2020), yet just as important—though perhaps less studied—are the psychological impacts of the virus. A study by Cao and colleagues (2020) conducted on college students in China found a positive association between anxiety symptoms and economic effects, impact on daily life, and delays in academics, demonstrating that the significant changes occurring in multiple areas of life because of the pandemic have led to an increase in anxiety symptoms for college students. Furthermore, anxiety for individuals could be heightened by the reminder of their own mortality as a result of the current pandemic and the increasing mortality rates for all age groups caused by COVID-19 (Usher et al., 2020; World Health Organization, 2020). Additionally, it has been demonstrated that COVID has had a negative effect on cognition. In research conducted on more than 60,000 Chinese residents during the pandemic, Jiang and colleagues (2020) found that individuals tended to show negative cognitive processing bias as demonstrated by a negative attention bias (paying greater attention to negative information relative to neutral or positive information) as well as a negative memory bias (demonstrating a better memory of negative information compared to neutral or positive information) and rumination (repeated thinking and reflection on negative feelings). The researchers found that such measures were related to increased levels of anxiety and depressive symptoms. This research suggests that the pandemic has led to increased negative cognitive processing among individuals, perhaps because of increased social disconnection. Jiang and colleagues also reported that several factors, such as good family functionality, a good work environment, and social activities—factors that are significantly restricted for college students in the United States—decreased levels of depressive and anxiety symptoms. In fact, research has connected impairments in emotional and cognitive functioning in individuals with greater social disconnection due to the social isolation procedures implemented during the pandemic (Bland et al., 2021).

The emotional and cognitive processing changes demonstrated during pandemic life may have interesting effects on phenomena surrounding socioemotional selectivity theory, which posits that as an individual approaches some sort of life event that marks an ending to a particular life phase, the individual’s emotions become progressively salient (Mather & Carstensen, 2003). More specifically, older adults have been found to demonstrate a positivity bias, meaning that such individuals attend more to positive emotional information than to neutral or
negative emotional information (Charles et al., 2003; Cypryańska et al., 2014; Mather & Carstensen, 2003). It has been suggested that this pattern can be explained by a change in motivational focus that affects cognitive processing. For example, older individuals may become more aware of impending endings and may adjust their focus to more positive information in order to maintain greater emotional well-being (Carstensen et al., 2003). Significantly, research by Pruzan and Isaacowitz (2006) has uncovered the same positivity bias in graduating college seniors relative to first-year students, demonstrating that cognitive aging does not play a role in the motivation behind emotion regulation. In the current pandemic life, the loss of expected endings—for example, graduation ceremonies and celebrations for high school and college seniors, referred to herein as closure activities—has left individuals with anxiety over what is to come next (Cao et al., 2020). In turn, this may prompt the motivation to maintain emotional well-being through emotional selectivity, as demonstrated in the study by Pruzan and Isaacowitz (2006).

This prompts one to ask how college students are coping during these challenging times. Though Cao and colleagues’ (2020) study found a negative relationship between social support and level of anxiety in college students, college students have been largely removed from their social support groups because of the social-distancing orders and cancellation of in-person classes (Smalley, 2020). In fact, a survey conducted by YoungMinds found that 83% of respondents under 25 reported that their mental health had worsened during the pandemic because of school closings, restrictions on social connection, and loss of routine (YoungMinds, 2020).

To date, research related to socioemotional selectivity theory has only considered typical life events that mark endings, such as death or college graduation (Charles et al., 2003; Mather & Carstensen, 2003; Pruzan & Isaacowitz, 2006). The current research is significant because it investigates the role of socioemotional regulation when individuals are denied their closure activities (e.g., end-of-school activities and graduation). Essentially, this research sought to answer the question of what impact missed opportunities have on emotion regulation. As research regarding socioemotional selectivity theory has found that life events marking an ending alter emotion regulation, this research sought to uncover what effect the cancellation of such events had on emotion regulation. Additionally, this research is significant because it took into account an atypical life event happening on a global scale. COVID-19 has disrupted normal life for every individual, particularly for students (Smalley, 2020). This research exemplifies some of the ways in which national events can affect the psychological processes of individuals.

The current study sought to investigate what impact the COVID-19 pandemic has had on college students’ and 2020 college graduates’ cognitive processing of emotional stimuli. Firstly, it was predicted that all current students, regardless of class year, would demonstrate a more negative emotionality than students prior to the pandemic because of the extreme, largely negative, changes to daily living. It was also
predicted that all current students, regardless of class year, would demonstrate a positivity bias, given that there is likely a heightened awareness of their own mortality in addition to lost closure activities, in comparison to students prior to the pandemic (Smalley, 2020; Usher et al., 2020). It was expected that this bias would be even more pronounced in current seniors, given that they were approaching graduation and that the future for these individuals, especially in light of the pandemic, was more likely to be unknown. In contrast, it was predicted that the bias would be weaker in 2020 college graduates and incoming college freshmen; although both groups lost their closure activities, college graduates had moved on to their next phase of life and had likely obtained jobs, while college freshmen were getting ready to begin their college years, meaning that the need to maintain positive emotionality in light of a significant ending in life had passed for these individuals.

Pre- versus Post-Pandemic Comparisons

As noted above, all the students in this study may well show emotional-regulation issues because all current students have experienced a variety of losses due to pandemic restrictions regardless of class year. In order to understand how the pandemic might affect emotional regulation across all students, we wanted to compare not only students nearing graduation with students earlier in their college careers but also performance of current pandemic students to that of students pre-pandemic on the same measures. In order to make such comparisons, we searched the psychological literature for data from past studies (pre-pandemic) that had used at least one or more of the measures used in this study with a similar population of students. We gathered known means for each of the measures employed in this study from the literature across a variety of studies (see Table 1) and entered those known means for comparisons using one-sample t-tests. In addition to hypothesizing differences across years, we hypothesized that all students would show differing levels of emotional regulation compared to pre-pandemic measures.
Table 1. Emotionality and Memory Measures Compared to Known Pre-COVID Values in College Students

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean (St. Dev)</th>
<th>Known Mean</th>
<th>One-Sample t (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlook on Life</td>
<td>19.65(5.0)</td>
<td>14.35</td>
<td>11.6(117)***</td>
</tr>
<tr>
<td>Shyness</td>
<td>22.58(10.5)</td>
<td>30.55</td>
<td>-8.2(117)***</td>
</tr>
<tr>
<td>PANAS Negativity</td>
<td>24.45(7.4)</td>
<td>18.10</td>
<td>9.3(117)***</td>
</tr>
<tr>
<td>PANAS Positivity</td>
<td>33.71(7.4)</td>
<td>35.10</td>
<td>-2.0(117)*</td>
</tr>
<tr>
<td>Loneliness</td>
<td>35.30(10.9)</td>
<td>36.21</td>
<td>-0.9(117)</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>56.12(13.1)</td>
<td>50.80</td>
<td>4.4(117)***</td>
</tr>
<tr>
<td>Depression</td>
<td>22.00(11.5)</td>
<td>15.15</td>
<td>6.5(117)***</td>
</tr>
<tr>
<td>Anxiety</td>
<td>33.02(7.8)</td>
<td>34.50</td>
<td>-2.1(117)*</td>
</tr>
<tr>
<td>Faces: Person Neutral</td>
<td>66.22(16.2)</td>
<td>75.25</td>
<td>-4.1(86)***</td>
</tr>
<tr>
<td>Faces: Person Happy</td>
<td>69.70(17.6)</td>
<td>76.72</td>
<td>-3.7(86)***</td>
</tr>
<tr>
<td>Faces: Person Sad</td>
<td>68.82(20.0)</td>
<td>75.60</td>
<td>-3.2(86)**</td>
</tr>
<tr>
<td>Faces: Person Memory</td>
<td>11.10(1.4)</td>
<td>9.8</td>
<td>8.5(86)***</td>
</tr>
</tbody>
</table>

Note: Positive t values indicate post-COVID values higher than pre-COVID values. Negative t values indicate post-COVID values lower than pre-COVID values. PANAS = Positive and Negative Affect Scale.


* p < .05. ** p < .01. ***p < .001.

Method

Participants

In total, 118 current Butler University students and graduates consented to take part in this study. Of these, 106 were current students, with 18 being first-years, 24 second-years, 35 third-years, and 29 fourth-years, and 11 were 2020 psychology graduates. Overall, 16 identified as male and 102 as female; 104 identified as White, and 28 identified as non-White. Students’ ages ranged from 16 to 23, with the average age being 20.38 (SD = 1.37).
Materials

The following scales were used to measure a variety of personality and emotion variables.

Affect

Participants responded to the Positive and Negative Affect Scale (PANAS), constructed by Watson and colleagues (1988). Participants responded to 20 different emotion words and stated the extent to which they had experienced that emotion in the few weeks prior to their participation in the study. Responses were given on a scale of 1 (very slightly or none at all) to 5 (extremely). Cronbach’s alpha was .85 for negative affect and .89 for positive affect. Data on this measure were compared to a sample from research conducted by Watson and colleagues (1988).

Anxiety

The Anxiety subscale of the HEXACO Personality Inventory as established by Lee and Ashton (2004). Participants responded to 20 statements on a scale of 1 (rarely or none of the time) to 4 (most or all of the time). Cronbach’s alpha was .86. Data on this measure were compared to data from research by Lee and Ashton (2006).

Depression

Participants also completed the Center for Epidemiologic Studies Depression Scale (CES-D), a 20-item scale detailing their depressive symptomatology, as established by Radloff (1977). Participants stated the degree to which they felt they had experienced each statement on a scale of 1 (rarely or none of the time) to 4 (most or all of the time). Cronbach’s alpha was .93. Data on this measure were compared to data from work by Simon, DiPlacido, and Conway (2019).

Loneliness

The Revised UCLA Loneliness Scale was used to assess participants’ experiences of loneliness (Russell et al., 1980). Participants responded via a scale of 1 (never) to 4 (often) to 20 items to indicate how often they felt the statements applied to them. Cronbach’s alpha was .93. Results were compared to a sample from research conducted by Rotenberg and Korol (1995).

Neuroticism

The Revised NEO Personality Inventory was used to evaluate the extent of participants’ neuroticism (Costa & McCrae, 1992). Participants responded to 20
statements, indicating the extent to which they felt the statements were very inaccurate (1) to very accurate (5) for them. Cronbach’s alpha was .89. Data from the current sample were compared with a sample from research conducted by Donnellan and colleagues (2006).

**Optimism and Pessimism**

The Life Orientation Test was established by Scheier and Carver (1985) to measure the extent to which individuals tend to be optimistic or pessimistic in their outlook on life. Participants responded to 12 statements on a scale of 0 (strongly disagree) to 4 (strongly agree). Cronbach’s alpha was .80. Data on this measure were compared to data from research conducted by Scheier, Carver, and Bridges (1994).

**Shyness**

Participants’ degree of shyness was assessed using the Revised Buss Shyness Scale (Cheek, 1983). Participants read and responded to 13 statements using a scale of 0 (strongly disagree) to 4 (strongly agree). Cronbach’s alpha was .91. Data on this measure were compared to data from research conducted by Koydemir and Demir (2008).

An n-back working memory task involving human faces created by Taylor, Hernandez, and Lineweaver (2010) was used to assess participants’ memory for emotions of positive and negative valences. The task included three sections of 90 items each, as well as a final memory-recall task of 12 items. The first section involved human faces portraying neutral emotions. In the second section, human faces portrayed happiness (a positively valenced emotion), and in the third section, human faces portrayed sadness (a negatively valenced emotion). Participants were tasked with saying whether the person in the current trial was the same person depicted two trials prior. In the final task, participants viewed 12 pictures one at a time and indicated whether they had seen the emotion portrayed in any of the first three tasks. Individuals received scores for each emotion task (sad, neutral, and happy), as well as a final combined n-back score.

**Procedure**

Undergraduate students at Butler University were recruited via Sona and had the opportunity to earn extra credit in a psychology course. After completion of the study’s first session, current students received the link to the second session of the study and were given three weeks to complete the second session before their data became void. Butler 2020 graduates of the psychology department were recruited via direct e-mail from the researcher. In return for their participation, each of these
individuals received a $20 gift card. Links to both portions of the study were included in the e-mail for graduates for these individuals to complete at their discretion.

In the first session of the study, participants read and gave informed consent; if they denied consent, the window to the study closed. Once consent was given, participants answered several demographical questions, which included age, year in school (first-year/freshman to graduate student, or college graduate), race, and sex. In addition, graduates were asked to provide an e-mail address so they would receive the gift card. Following the questions on demographics, participants completed seven self-report surveys on the various emotion and personality variables. This portion of the study took place on Qualtrics.

In the second session of the study, participants completed the n-back working-memory task as well as the memory-recall task. Once the final session was completed, current students were granted credit and graduates received their gift cards via e-mail.

Results

Comparison of Pandemic Participants Across Class Years

To compare participants across class years (first-years/freshmen, sophomores, juniors, seniors, and graduates), a one-way multivariate analysis of variance (MANOVA) was performed. That analysis revealed a significant cohort effect (Wilk’s $\lambda = 0.007; F(8, 104 = 1767, p = .001)). This test was followed by a set of one-way ANOVAs for each of the measures of emotionality, which revealed significant cohort differences on loneliness ($F(4, 111) = 3.27, p = .014$) and negative affect ($F(4, 111) = 3.07, p = .019$). For loneliness, post hoc analysis revealed that first-years differed significantly from all other years, with first-years being significantly more lonely than other class years. For negative affect, significant differences occurred between second-years and graduates, and between third-years and fourth-years. There were no significant cohort differences on any of the n-back working-memory measures.

Though failing to reach a level of significance, some factors demonstrated possible trends. Levels of optimism related to life outlook ($F(1, 111) = 2.02, p = .09$) increased by year, with first-years ($M = 17.154, SD = 1.264$) demonstrating a more negative outlook relative to college graduates ($M = 20.125, SD = 1.612$). Within each year, positive affect was consistently greater than negative affect (first-years: positive affect $M = 33.077, SD = 2.049$ and negative affect $M = 23.385, SD = 2.044$; second-years: positive affect $M = 34.632, SD = 1.695$ and negative affect $M = 25.842, SD = 1.691$; third-years: positive affect $M = 34.043, SD = 1.540$ and negative affect $M = 24.217, SD = 1.537$; fourth-years: positive affect $M = 33.524, SD = 1.612$ and negative affect $M = 26.952, SD = 1.608$; graduates: positive affect $M = 33.750, SD = 2.612$ and negative affect $M = 19.875, SD = 2.606$).
Regression analysis revealed that measures of personality and emotion variables predicted overall $n$-back scores ($R^2 = .187; F(8, 75) = 2.15, p = .041$); however, only scores on positivity, as measured by the PANAS scale, were significant in predicting $n$-back scores ($\beta = -.300$, zero-order correlation $= -.281$, $p = .014$). These results are summarized in Table 2 and depicted in Figure 1.

Table 2. Multiple Regression Analysis of Emotionality and Memory Measures on Overall Executive Functioning (Total $n$-Back Score)

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>Zero-Order Corr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlook on Life</td>
<td>-.009</td>
<td>-.140</td>
</tr>
<tr>
<td>Shyness</td>
<td>.132</td>
<td>.136</td>
</tr>
<tr>
<td>PANAS Negativity</td>
<td>-.281</td>
<td>-.128</td>
</tr>
<tr>
<td>PANAS Positivity</td>
<td>-.300*</td>
<td>- .281**</td>
</tr>
<tr>
<td>Loneliness</td>
<td>.057</td>
<td>.027</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.247</td>
<td>.136</td>
</tr>
<tr>
<td>Depression</td>
<td>-.290</td>
<td>-.018</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.091</td>
<td>-.075</td>
</tr>
</tbody>
</table>

Note: $R^2 = .187; F(8, 83) = 2.15, p = .041$.

* $p < .05$. ** $p < .01$. 
Figure 1. Mean Level of Reported Feelings of Loneliness and Negativity as a Function of Year in School

**PANAS Negativity and Loneliness**

![Bar chart showing mean levels of reported feelings of loneliness and negativity as a function of year in school.]

*Note:* Protected post hoc tests show that first-year students reported feeling more loneliness than did other groups, which did not differ from each other. Seniors reported higher levels of negative affect than did college graduates.

**Comparison of Results for Pandemic Students and Pre-Pandemic Students**

Using one-sample t-tests to compare n-back and memory data to those of students prior to the pandemic, it was found that current students fared significantly worse on working-memory tasks in comparison to pre-COVID students for neutral faces ($M = 68.22$, $SD = 16.172$; $t(86) = -4.056$, $p < .000$), happy faces ($M = 69.70$, $SD = 17.569$; $t(86) = -3.726$, $p < .000$), and sad faces ($M = 68.82$, $SD = 20.052$; $t(86) = -3.156$, $p = .002$). Current students performed significantly better than pre-COVID students on the memory task, however ($M = 11.10$, $SD = 1.423$; $t(86) = 8.546$, $p < .000$).

In regard to the measures on affect, anxiety, depression, loneliness, neuroticism, optimism and pessimism, and shyness, current students were significantly different from pre-COVID students on optimism and pessimism ($M = 19.653$, $SD = 4.978$; $t(117) = 11.572$, $p < .000$), shyness ($M = 22.578$, $SD = 10.532$; $t(117) = -8.225$, $p < .000$), affect (negative: $M = 24.449$, $SD = 7.428$; $t(117) = 9.285$, $p < .000$; positive: $M = 33.712$, $SD = 7.438$; $t(117) = -2.027$, $p = .045$), neuroticism ($M = 56.119$, $SD = 13.115$; $t(117) = 4.405$, $p < .000$), depression ($M = 22$, $SD = 11.467$; $t(117) = 6.489$, $p < .000$).
and anxiety ($M = 33.017, SD = 7.795; t(116) = -2.058, p = .042$). Differences on the loneliness measure were insignificant between current students and pre-pandemic students. These differences are presented in Table 1.

**Discussion**

The current study sought to investigate what effect the COVID-19 pandemic has had on the cognitive processing of emotional stimuli by current college students and 2020 college graduates. The study used n-back and memory tasks to assess college students’ and graduates’ memory for neutral, positive (i.e., happy), and negative (i.e., sad) human faces. It was predicted that all current students would demonstrate a more negative emotionality than pre-COVID students. Additionally, it was predicted that all current students, regardless of class year, would demonstrate a positivity bias when compared to students prior to the pandemic but that this bias would be more pronounced in current seniors and weaker in 2020 college graduates and incoming college freshmen. Results regarding these predictions were mixed, however.

Compared to pre-COVID students, current students demonstrated significantly different scores for all three emotion conditions. It was predicted that current students would have a greater memory for positive relative to neutral or negative emotions, but this was not the case; current students performed worse on all conditions relative to students before the pandemic. These results were in spite of the fact that, though insignificant, each class of current students consistently demonstrated higher positive affect scores than negative affect scores. While this doesn’t support the findings of socioemotional selectivity theory as predicted based on previous research (Charles et al., 2003; Cypryańska et al., 2014; Mather & Carstensen, 2003), it does suggest that various emotional factors may affect executive functions. Research has found connections between executive dysfunction and depression and anxiety (Warren et al., 2020), neuroticism (Sutin et al., 2019), and negative affect (Shields et al., 2017). Indeed, within this study, current students demonstrated higher levels of shyness, negative affect, neuroticism, anxiety, and depression relative to pre-COVID students.

Additionally, current students demonstrated decreased levels of positive affect. This is consistent with research linking negative cognitive processing and memory biases to increased levels of anxiety and depressive symptoms during the pandemic (Jiang et al., 2020).

Interestingly, current students did not differ significantly in loneliness compared to pre-COVID students as may have been predicted given the current social-isolation procedures in place to control the spread of the virus. The lack of this significant difference may indicate that current students have adjusted to these procedures.
The predictions that bias would be more pronounced in current seniors and weaker in 2020 college graduates and incoming college freshmen were not supported. Socioemotional selectivity theory would predict that because current seniors are approaching graduation and college freshmen and college graduates have just graduated and are entering a new phase of life, current seniors would demonstrate the positivity bias and current freshmen and college graduates would not; the absence of this finding is inconsistent with previous research (Pruzan & Isaacowitz, 2006). It may be that the current environment created by the pandemic has given students something beyond impending endings to worry about, therefore overshadowing any need to maintain positivity. Indeed, it was found that scores on the positive affect scale were the only significant indicator of total scores on the n-back task reflecting all three types of emotions; with every increase in positive emotionality, there was a corresponding decrease in total n-back scores, which is inconsistent with previous research into socioemotional selectivity theory (Charles et al., 2003; Cyprynańska et al., 2014; Mather & Carstensen, 2003). Although it was predicted that the loss of closure activities (e.g., graduation) and other activities (e.g., school events) would induce a positivity bias as students attempted to maintain a happy disposition, students may be less focused on lost opportunities and more concerned with the negative effect that these losses have on their mental health overall (Bland et al., 2021; Cao et al., 2020; Jiang et al., 2020).

Within current students specifically, a significant difference occurred in experiences of loneliness between first-years and all other years, with first-years demonstrating the highest levels of loneliness overall. It is not uncommon for college freshmen to feel lonely after their transition to college; however, finding that current freshmen during the pandemic are feeling more lonely than pre-pandemic freshmen suggests that current social-distancing procedures have impeded these students’ formation of connections with other students on campus and suggests that more steps may need to be taken to help these students acclimate to college life, regardless of how much longer the pandemic lasts. This is consistent with other findings regarding college freshmen during the pandemic (Arslan, 2021; Williams, 2020).

Limitations of the current study could point to further research in testing the effects of the pandemic on socioemotional functioning. First, because this study was conducted nearly one year into the pandemic, this population of individuals may have grown accustomed to the “new normal” of the pandemic, therefore blurring any differences in socioemotional functioning among students of different years. Indeed, 2020 college graduates have likely adjusted one year after their graduation and have moved on to their next phase of life; current seniors, now only a few months away from graduation, have likely determined what they will do following their graduation; and other undergraduate students have likely grown accustomed to the new social-distancing practices required of them. Second, this study lacked racial diversity, with only 23% of participants identifying as non-White, and because COVID has been
shown to disproportionately affect people of color (Karaca-Mandic et al., 2020), it may be important to conduct a similar study of students of color. Finally, this study was conducted on a small private university campus in the Northwest, therefore limiting its generalizability. Further research may consider performing a national study on the socioemotional well-being of college students.

Even so, the current research indicates that current college students are functioning at a lower emotional well-being, leading to decreased executive functioning. As the country is far from returning to the normal it used to know, it is likely that the effects of social-distancing practices implemented during the pandemic will continue to have negative effects on college students for the foreseeable future, and steps must be taken for improvements in mental health to occur.
References


influence of limited time horizon on positivity effects among young adults using eye-tracking. *Psychological Reports, 115*(3), 813–827. https://doi.org/10.2466/02.pr0.115c28z8


