The Coronavirus Pandemic: Associations of College Students' Financial Situations and Optimism with Mental & Physical Health

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INTRODUCTION

- The coronavirus pandemic has led to an altered society, putting college students and their families in unprecedented situations. The rise in unemployment and concerns about the overall economy may be impacting student finances.
- Such cumulative and individual stressors may lead to a time of crisis for students over time.
- Increased depression and anxiety are common responses to such stressful situations (Rosenfeld et al., 2020). Apart from the prevention of spreading the disease itself, proper attention should be given to various mental health issues and the overall quality of life of students.
- Previous research indicates that more severe mental health problems are prevalent in adults under thirty-five years and people with a lower income relative to those with a higher level of income. People with a higher level of income were associated with higher levels of happiness and a decreased risk of mental health (Pieh et al., 2020).
- However, optimism may be a valuable resource for coping with stressors. Optimistic versus pessimistic individuals have a higher quality of life, show less distress, and have better physical functioning. For example, people who were less optimistic showed deterioration in their health, but an optimistic attitude slowed these processes (Wrum and Benyamini, 2014).
- The purpose of this study is to examine how college students’ financial situations during the pandemic are related to mental and physical health, as well as how optimism moderates this relationship.
- We hypothesized that worse financial situations would be associated with higher levels of depression, anxiety, and physical symptoms, but that optimism would buffer against worse outcomes.

METHOD

- **Participants**
  - Participants were 293 students between the ages of 18-42 years at a private university in Southern California (M_{age} = 21.4, SD_{age} = 3.08).
  - Among participants, 17% were male and 83% were female. Moreover, 4.4% were Hispanic, 39.1% were White, 40.5% were Asian American, and 16% described their race/ethnicity as “other.”
- **Procedures**
  - Students self-reported their financial situation, depression, anxiety, physical symptoms (e.g., nausea, headaches), and optimism in an online study during May 2020.
  - Linear regression models tested associations between financial situations and physical and mental health symptoms as well as with optimism as a potential buffer.

MEASURES

- **Financial Situation**
  - Two questions related to school finances were asked and rated on a scale from 0 (strongly disagree) to 4 (strongly agree):
    - "My financial situation has been negatively impacted by the Coronavirus Pandemic."
    - "I am worried about my ability to pay for school in the upcoming school year."

- **Mental & Physical Health**
  - **Center for Epidemiologic Studies Depression Scale (CESD-10)** (Radloff, 1977)
    - This self-report measure of depression is a 10-item scale.
    - The total score was calculated by finding the sum of all 10 items.
    - Items were rated on a scale from 0 (rarely or none of the time) to 3 (all of the time), for example:
      - "I was bothered by things that usually don’t bother me."
  - **Generalized Anxiety Disorder Scale (GAD-7)** (Spitzer et al., 2006)
    - This was a 7-item scale that asked how often problems were bothering a student over the past two weeks.
    - Items were rated on a scale from 0 (not at all) to 4 (nearly every day), for example:
      - "feeling nervous, anxious, or on edge"
  - **Cohen-Hoberman Inventory of Physical Symptoms (CHIPS Scale)** (Allen et al., 2017)
    - This was a 33-item scale. Participants were asked to rate how much a particular symptom had bothered or distressed them. The scores were summed across all 33 items. It was rated on a scale of 0 (not been bothered) to 4 (extreme bother).
    - It included symptoms that are psychological and physical in nature, such as:
      - "felt nervous or depressed"
      - "headache"
      - "weight loss"

- **State Optimism**
  - This was a 7-item scale that assessed state optimism, which describes optimism that can change based on a situation or contextual factors (Milestone et al., 2019). It asked how participants feel right now at the present moment (1 = strongly disagree, 5 = strongly agree) with questions such as:
    - "Right now, I expect things to work out for the best"

RESULTS

<table>
<thead>
<tr>
<th>OUTCOMES</th>
<th>PREDICTORS</th>
<th>INTERACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Situation</td>
<td>Optimism</td>
<td>Interaction</td>
</tr>
<tr>
<td>Depression</td>
<td>B 95% CI p</td>
<td>B 95% CI p</td>
</tr>
<tr>
<td>0.26 (0.83, 2.15) &lt; 0.01 (0.60, -3.01) &lt; 0.01</td>
<td>0.06 (0.21, 0.90) 0.22</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>B 95% CI p</td>
<td>B 95% CI p</td>
</tr>
<tr>
<td>0.24 (0.76, 2.09) &lt; 0.01 (0.48, -3.32, -2.13) &lt; 0.01</td>
<td>0.05 (0.31, 0.84) 0.32</td>
<td></td>
</tr>
<tr>
<td>Physical Symptoms</td>
<td>B 95% CI p</td>
<td>B 95% CI p</td>
</tr>
<tr>
<td>0.18 (1.43, 6.31) 0.002 (0.33, -9.40, -4.65) &lt; 0.01</td>
<td>-0.01 (-2.75, 2.18) 0.62</td>
<td></td>
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</tbody>
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- Results indicated that, as expected, a worsening financial situation and an increase in worry about paying for school significantly predicted higher levels of depression, anxiety, and physical symptoms.
- By contrast, greater optimism predicted lower levels of these mental and physical symptoms.
- However, the effect of financial situation on students’ mental and physical health did not depend on optimism.

CONCLUSION

- In the current study, there were associations between worsening financial situations and higher levels of depression, anxiety, and physical symptoms. Although optimism was inversely related to worse mental and physical health, the effect of financial situations on a students’ mental and physical health did not depend on optimism.
- Previous research has shown that mental health issues were prevalent in pre-pandemic epidemiological data (Rosenfeld et al., 2020). During the pandemic, mental health problems worsened. It is possible that students in this study struggled to be optimistic during the pandemic, resulting in lower optimism scores relative to pre-pandemic cohorts (Milestone et al., 2019).
- In fact, the mean optimism score for this pandemic sample was 21.5 whereas a pre-pandemic sample of healthy college students had a mean of around 23, suggesting that students may have been even less optimistic during the pandemic (Milestone et al., 2019).
- Some students may have more stressful financial situations than other students. It is also possible that the pandemic and financial situation of one’s parents is not directly under the control of an individual college student.
- Further investigation on how financial situations and optimism relate to mental and physical health is crucial to not only improve the quality of life for college students, but to also help in creating and implementing effective mental and physical health interventions.

References

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