

The Impact of the COVID-19 Pandemic on College Student Wellbeing

The Ohio State University

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Abstract

The COVID-19 pandemic has had a significant impact on society. For college students, there are important questions to ask about the extent to which the pandemic, associated public health measures, and the related economic downturn added to stress and affected students' wellbeing. While we know quite a bit about how many stressors (e.g., housing stress, economic stress, worry about physical and mental health, and worry about grades) affect college students in normal times, we do not know how these stressors played out during the COVID crisis (Ettman, Abdalla, Cohen, Sampson, Vivier & Galea, 2020). To find out, I conducted an exploratory survey of college students at The Ohio State University and collected quantitative and qualitative data on self-reported well-being across three periods: before the pandemic, during the initial lockdown in the spring and summer of 2020, and the fall and winter of 2020-21. Findings suggest that, relative to the pre-pandemic period, many college students experienced declines in self-reported wellbeing that persisted into the fall and winter of 2020-21. Respondents who report a decline in well-being attribute it to a variety of pandemic-related factors, especially disruptions in living situations, social isolation, and worry about health – both their own and the health of loved ones. However, worry about grades actually went down during the pandemic and students report that a variety of supportive measures taken by their instructors and institution helped alleviate academic stress.

The Impact of the Covid-19 Pandemic on College Student Wellbeing

Introduction

The COVID-19 pandemic has had a significant impact on society. Colleges and universities went online, and students suddenly had to move out of campus housing. Lives were lost in great numbers, along with jobs, leading to negative economic impacts. For college students, there are important questions to ask about the pandemic and public health measures, along with economic downturn as a source of stress. How did students experience these events? What aspects of the crisis did students identify as stressors, and of these, which were experiences as especially stressful? Finding answers to these questions can help universities and policymakers better understand how to respond and support college students during times of crisis.

The stress coping literature explores how people identify events as benign, irrelevant, or stressors (Trawalter, Richeson, & Shelton 2009). While we know quite a bit about how potential stressors caused by the COVID-19 pandemic (e.g., housing stress, economic stress, worry about physical and mental health, and worry about grades) affect college students in normal times, we do not know how these potential stressors played out during the COVID crisis (Ettman, Abdalla, Cohen, Sampson, Vivier & Galea, 2020). There is one new study (Son et. al., 2020), which is apparently the first study of COVID impact on college student well-being, that does find students report stress from all of the above factors. However, this study has important limitations. To explore these issues in more depth, I propose to conduct an exploratory survey of college students at The Ohio State University who were enrolled in the spring semester of 2020.

Literature Review

There has not been a public health crisis and economic crisis like COVID-19 since the 1918 Flu pandemic. Despite this, we do have tools for understanding how people experience stressful events. According to Lazarus and Folkman's (1984) transactional model of stress and coping, when faced with an event, individuals go through a series of evaluations where they consider the level of distress to be caused by the events. The initial assessment happens unconsciously and typically depends on the impact of the external stressor, such as what is happening in their current environment (Beck, Clark, 1997; Staal, 2004). Following the initial evaluation, the individuals would then determine whether there is threat to their wellbeing and judge the event as being benign, irrelevant, or a stressor (Trawalter et. al., 2009). If the individual evaluates the event as a stressor, they begin to experience psychological stress and must find a way in which to cope (McCauley, Minsky, Viswanath, 2013).

In response to the H1N1 epidemic in 2009, individuals in the general population experienced mild to moderate concern regarding contraction of the virus (Goodwin, Faines, Myers, & Neto, 2011). Goodwin and colleagues (2011) found that individuals dealt with these concerns by wearing facemasks and avoiding public transit. These actions helped to reduce their anxiety concerning contracting the virus.

Although the COVID-19 pandemic is recent and ongoing, researchers are beginning to examine its impacts on college students. One recent study (Son et. al., 2020) claims to be the first to investigate the impact of the pandemic on college student well-being in the United States. This study documents multiple stressors associated with the pandemic, including housing, worries about health and the health of loved ones, academics, and others but unfortunately, does not attempt to assess the extent to which these factors created stress for college students before

the pandemic. As detailed below, however, most if not all of these problems are known to be important stressors for college students even in “normal” times. Therefore, in order to understand the impact of the pandemic, it’s necessary to compare students’ self-reported stress across time periods. A second weakness of Son et. al. (2020) is that it is based on data collected during the initial lockdown phase of the pandemic only. Therefore, we do not know whether students continued to experience high levels of pandemic-related stress after the initial lockdown phase, and particularly during the reopening of colleges in the fall of 2020.

Turning to specific potential stressors in the COVID-19 pandemic, there is literature that explores how many of these potential stressors operate during normal times. Hallett and Freas (2017) found that college students who worry about and feel stress over their housing situation are negatively affected academically (e.g., homework assignment, and attending classes). Numerous other sources of research support these same findings and add that the existing support structures are not enough to mitigate the problem (Hallett, 2010; Goldrick-Rab, Broton, & Gates, 2013; Broton & Goldrick-Rab, 2018; Wood, Harris, & Delgado (2017). Other research suggests that students facing homelessness deal with a variety of complex issues, such as exposure to violence and illegal substances (Hallett, 2010). Research also suggests that housing insecurity leads to higher dropout rates. As students’ immediate needs cannot be meet, they see it as more important to find ways to meet those needs than to remain in college (Hallett, 2010; Goldrick-Rab, Broton, & Gates, 2013; Broton & Goldrick-Rab, 2016; Broton & Goldrick-Rab, 2018). Thus, we know that even in more normal times, housing insecurity poses a challenge and stress to college students. It is important to consider how COVID-19 may have exacerbated that stress, and whether students continued experiencing unusual levels of housing-related stress throughout the pandemic.

The Ohio Student Financial Wellness Survey (McDaniel, Montalto, Regan, and Rehr 2020), analyzed data from college students across Ohio before the pandemic and found that 73.8% of students reported experiencing financial stress (Heckman, Lim & Montalto, 2014). Studies find that financial stress has a significant impact on a student's ability to remain in school. If an individual is struggling financially, they may drop their course load in order to work more or spend less time on coursework (Joo, Durband & Grable, 2008; King, 2006). However, this choice also impacts financial aid which in turn impacts housing and food security. Additional research has found that financial stress can lead to depression (Andrews & Wilding, 2004; Clark-Lempers, Lempers, & Netusil, 1990), anxiety (Andrews & Wilding, 2004), poor academic performance (Andrews & Wilding, 2004; Harding, 2011), and poor overall physical health (Northern, O'Brien, & Goetz, 2010), as well as difficulty progressing toward degree completion (Letkiewicz, in press; Joo, Durband, & Grable, 2008; Robb, Moody, & Abdel-Ghany, 2011). Thus, we have a fair understanding of how college students are impacted by financial stress without the added presence of a pandemic. Given that this is already an issue for students generally, how much more important has financial stress been across the various phases of the pandemic?

There is a small body of literature examining the significance of college students' stress related to family members wellbeing. It finds that when family members are dealing with poor physical or mental health, students experience stress while away at college (Fisher, Kittleson, Ogletree, Welshimer, Woehlke, & Benschhoff, 2000). Furthermore, Bulo and Sanchez (2014) surveyed undergraduate students and found that the top sources of stress experienced by students are family problems and peer relationships. This body of pre-pandemic research indicates that family and peer relationships also contribute to student stress and worry about the well-being of

family and peers. The impact of additional stress related to COVID-19's effect on family or peers is unknown but could be important.

The general process of adapting to college life can be a stressor for many students. Expectations for academic success and school involvement are greater than those experienced in high school (Misra & Castillo, 2004). Academic stress is greater during specific times of the year, i.e., during exams, when grades are posted, when there is a significant amount of content to learn, and towards the ends of semesters (Abouserie, 1994; Archer & Lamnin, 1985; Britton & Tesser, 1991; Kohn & Frazer, 1986). Given the disruptions in academic life that took place in 2020 – both during the initial lockdown and then during re-openings of campus in fall 2020, when more classes were online or in hybrid formats – it is reasonable to ask whether the pandemic increased students' level of academic stress.

In a 2015 study, examining the use of health apps, researchers found that college students indicated a high level of interest and concern for their health (Gowin, Cheney, Gwin & Franklin, 2015). A more recent study conducted by Son, Hegde, Smith, Wang, and Sasangohar (2020), examined College students' mental health impacted by COVID-19 and found that 91% of their participants (195 students at a large public college in the United States) were worried about their physical health as a result of COVID-19. These two studies indicate that college students generally care about their physical health and work to improve it. As a result of COVID, their concern for their physical health impacted their mental health and must surely be a cause of stress.

According to research, a sense of wellbeing plays a significant role in students' ability to succeed in their college careers. In this study, researchers are defining wellbeing as an individual's ability to cope with a negative event(s), and return to a state of equilibrium (Dodge,

Daly, Huyton, & Sanders 2021). The literature suggests that wellbeing is impacted and impacts students' sleep habits and quality of sleep, nutrition, and physical activity (Pilcher 1998; Bubolz, Brown & Soper 2001; Dresler, Niedermaier, Steiger, & Genzel 2010; Gaultney 2010; Gilbert & Weaver 2010). There is also evidence that a weak sense of wellbeing increases the significance and impact of mental health disorders, such as depression, anxiety, panic disorder, and suicidal ideation (Keyes, Eisenberg, Perry, Dube, Kroenke & Dhingra 2012). If students were struggling with wellbeing due to sleep, nutrition and physical activity and academic pressure before COVID19, as the study conducted by Ridner, Newton, Staten, Crawford & Hall (2016) showed, how much more significant would the impact be due to COVID-19 and across the various phases of the pandemic?

Methods and Data

Sample

The researcher recruited participants from large general elective social science classes from Fall and Spring of 2020 and Spring of 2021, as well as students in the social work department. This occurred through the college's email list serve that has the ability to filter students who were enrolled during the selected time period. The email listserve sent emails to individuals to ensure confidentiality. Recruitment was limited to students who attended OSU during the spring 2020 semester, in order to focus on students who experienced the shutdown as college students. This was not intended to yield a statistically representative sample of college students; however, this study is exploratory in nature. Instead of statistical representativeness the research sought diversity in the sample regarding gender, race, major, socioeconomic status, and health status. This allows for an exploration of how various stressors played out for different kinds of students.

Social work students, in particular, were sampled in order to access populations with upperclassmen as opposed to the general elective classes which are dominated by freshman.

The goal was to gather as many responses as possible. In order to recruit individuals, instructors were asked to circulate emails requesting participants. Email lists available through the College of Social Work were also used for recruitment purposes. The researcher contacted two professors in the large social science general elective classes and requested that they send the survey to their current and past students. All emails to students provided information about the length of the survey (about 30 minutes) and emphasized that participation was completely voluntary and that responses would be anonymous. Students who agreed to participate were given a link to a Qualtrics survey and their responses were totally anonymous. No personal identifying information about the respondents was collected (except for the purposes of the incentives described below). Furthermore, respondents were free to skip any question they did not wish to answer.

These procedures yielded 153 completed survey responses. Of these, 18 were male, 132 Female and 3 Nonbinary or Genderqueer. There was clearly a huge gender skew. In regards to race, 10 respondents identified as Asian, 13 Black or African American, 7 Hispanic, 113 White, 2 Other, 1 chose not to disclose and 7 were of mix or multiple race. With this sample size, the response rate cannot be calculated. This is due to the fact that the exact number of people that it was sent to is unknown. It is hypothesized that it was around 1,000 in the general education class, plus an unknown number of the college of social worker student, this is a fairly low response rate. This being said, it is obviously not a representative sample and not a statically representative sample.

Incentives

Potential participants were informed that after completing the survey, they could choose to be entered into a drawing for one of forty \$20 Target gift cards. At the end of the survey, participants were asked if they wish to enter the drawing. If they chose “yes,” they were taken to a separate Qualtrics survey and invited to enter their contact information (OSU email). Contact information for the purposes of the drawing was kept separate from survey responses to preserve survey anonymity. Contact information for the drawing was saved in a secure folder in OSU OneDrive. If participants chose not to be entered into the drawing, the survey ended. All Target gift cards have been distributed.

Measures

Housing stress

To measure housing stress, respondents were asked what their housing situation was before the lockdown (dorm, apartments, living with parents, etc.) and what kind of housing situation they had to move into as a result of the lockdown on March 22, 2020. The next question asked about their housing situation after campus partially reopened on August 25, 2020. For each time period, respondents were asked to rate the stress related to their housing situation on a scale of 1-5, 1 being not at all stressful and 5 being extremely stressful. This was followed by an open-ended question inviting respondents to explain their answers on the stress question in their own words.

Physical Health

To measure physical health, the survey asked about physical health during three periods of time: January 1, 2020- March 1, 2020, March 22, 2020 to August 25, 2020 and since August 25, 2020,

corresponding to the pre-COVID period, the COVID lockdown period, and the campus partial reopening period. Using a standard measure of self-rated physical health, respondents rated their physical health for each period on a five-point scale from Poor to Excellent. Following this, respondents will indicate if they have been tested for Coronavirus. Those who answered in the affirmative were then asked how many times they were tested and the number of times they received a negative, uncertain, or positive result. Additionally, if they received a positive result, respondents were asked to indicate if they experienced any of the common symptoms (fever, shortness of breath, cough, etc.). Finally, respondents were asked about their level of concern regarding the risk of being exposed to or contracting on a range from ‘not at all concerned’ to ‘extremely concerned.’ The question asks how much this concern has caused them stress on a scale of 1 to 5, with 1 being ‘not at all stressful’ and 5’ being extremely stressful.’

Health Behaviors

To measure health behaviors, respondents indicated how often they had engaged in specific behaviors since the onset of COVID 19 and the campus shutdown on March 22,2020. They were asked about wearing a mask in public places and attending gatherings where 6 feet physical distancing cannot be maintained. Respondents select one of either: ‘Never, sometimes, usually, or always’. The researcher also inquired about hand washing and/or use of hand sanitizer. Respondents can again select one of either: ‘less than usual, no more than usual, slightly more than usual or more than usual. This section ends with an open-ended question about any other COVID exposure prevention health behaviors they engage in. These are important questions to ask in order to gauge the extent to which respondents regard COVID as benign or irrelevant.

Academic stress

To measure academic stress the respondents are asked to rate the amount of stress schoolwork and grades on a scale of 1 to 5, with 1 being not at all stressful and 5 being extremely stressful. This question was asked for the same three time periods referenced above: the pre-COVID period, the lockdown period, and the campus reopening period. Following each, there was an open-ended opportunity for respondents to explain their answer choices. The researcher also asked whether respondents sought accommodations from instructors during the shutdown, and if so if they felt they were reasonably accommodated.

Employment/Income stress

To measure employment and income, the researcher began by asking respondents if they were working for pay prior to the COVID shutdown. Again, for each of the three time periods referenced above, respondents were asked about stress from personal income situation on a 1 to 5 scale, with 1 being not at all stressful and 5 being extremely stressful. Each of these questions was followed by an open-ended question allowing respondents to explain their answer choices.

Parents'/Significant other Occupation and income

The researcher begins by asking if the respondent was financially independent on their parents and/or a significant other. Then they were asked if parents and/or significant others were working during the same three periods: prior to the shutdown on March 22, 2020, during the lockdown period, and during the campus partial reopening period. Respondents were also asked whether parents and/or significant others lost a job, got reduced hours or income, or got furloughed as a result of the pandemic. Those who answered in the affirmative were asked how long the job loss or income reduction lasted. Then, for each of the three time periods referenced above, on a scale of 1 to 5, with 1 being not at all stressful and 5 being extremely stressful, and

ask how stressful the employment and income situation of parents and/or significant others was for the respondent. Each question was followed by an open-ended opportunity to explain the answer.

Wellbeing

To measure wellbeing, respondents were asked if they have ever been diagnosed or treated for depression or anxiety. They were also asked if they have ever been diagnosed and or treated for another type of mental illness. Following this, they were asked to think about the period immediately before the pandemic (i.e., January 2020 to March 2020) and answer a series of questions based upon the HERO wellness scale (Yaklin, Jain, Cole, Raison, Rolin, & Jain, 2020): On average, how happy did you feel, how enthusiastic did you feel, how resilient did you feel, how optimistic did you feel, how would you have rated your mental wellness then? Each of these can be rated on a scale of 1 to 5 with 1 being not at all or poor and 5 being extremely or excellent. Then respondents were asked to consider the weeks between the campus shutdown on March 22, 2020 up to the start of the Autumn semester on August 25, 2020 and to answer the same series of questions. Respondents were asked to consider the time since campus partially reopened on August 25, 2020 till the time they were taking the survey to answer those same questions a third time. For each time period, there is an open-ended question providing an opportunity for respondents to explain their answers.

Analysis

Because this is an exploratory study with a non-random sample, the researcher did not attempt to assess population prevalence of various sources of stress, and did not try to model statistically how various sources of stress affect students' well-being. Instead, the researcher took a more

exploratory approach. First, the researcher compared students' average wellbeing scores across the three time periods (pre-lockdown, lockdown and the reopening) to see if there seem to be big changes during the lockdown and reopening compared to the pre-pandemic period. The time periods were tested for statistical significance. The responses were isolated to show the respondents who experienced a decline in wellbeing. Second, the domains of housing stress, increased stress of health, academic stress, and income stress were considered giving a sense of which problems seem to have been important sources of stress for students during the pandemic. The researcher used the qualitative data collected by the open-ended survey questions to support this analysis. After examining these responses and coding for themes, the researcher used this qualitative data in two ways. First, the qualitative responses provided context for the quantitative survey responses and helped in the interpretation. In other words, if students were reporting qualitatively that they experienced a great deal of stress *because* of things that were happening as a result of the pandemic, the researcher could be more confident that changes in responses to the quantitative stress questions across time periods were meaningful relative to the pandemic. Second, the qualitative responses provided additional information about key ways that each domain played out and *how* they contributed to students' stress – information which cannot be obtained from the quantitative measures alone.

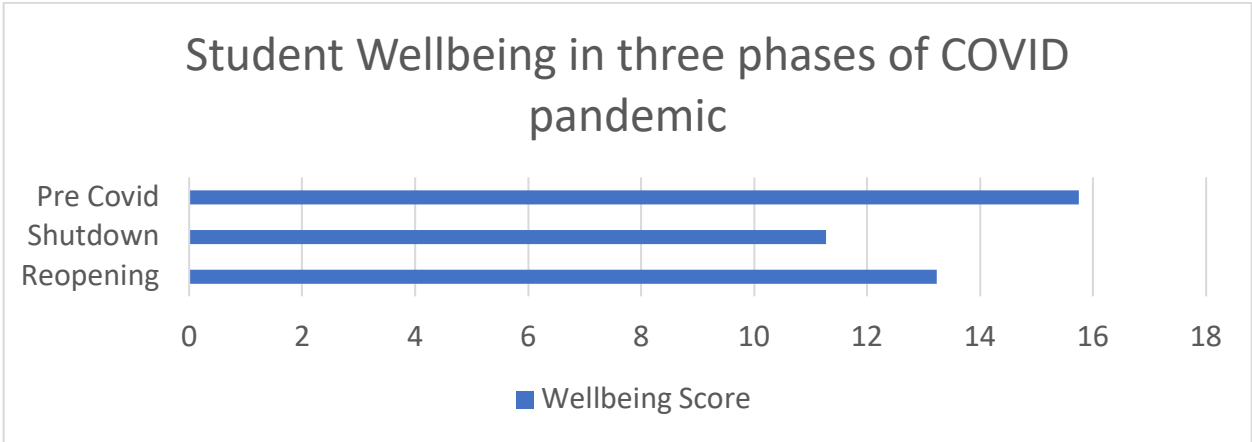
Results

The results indicate that the average wellbeing score that students reported in each of the three periods dropped during the campus shutdown period from March 22, 2020 to August 25. There was a small rise during the reopening period in the fall on August 25, 2020. However, this is still

a lot lower than it was in the Pre-COVID period of January 1, 2020- March 1, 2020. This can be seen in Figure 1 below.

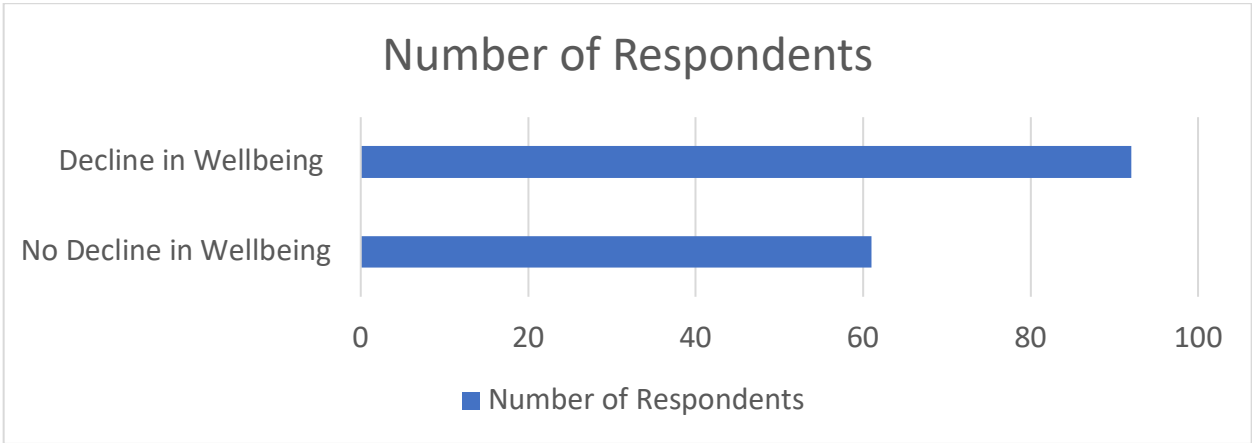
A two tailed T test was conducted on the differences among these scores. They are all extremely significant at the $p < .0001$ level. This indicates that they are all different and it is highly unlikely that these differences are due to random error.

Figure 1



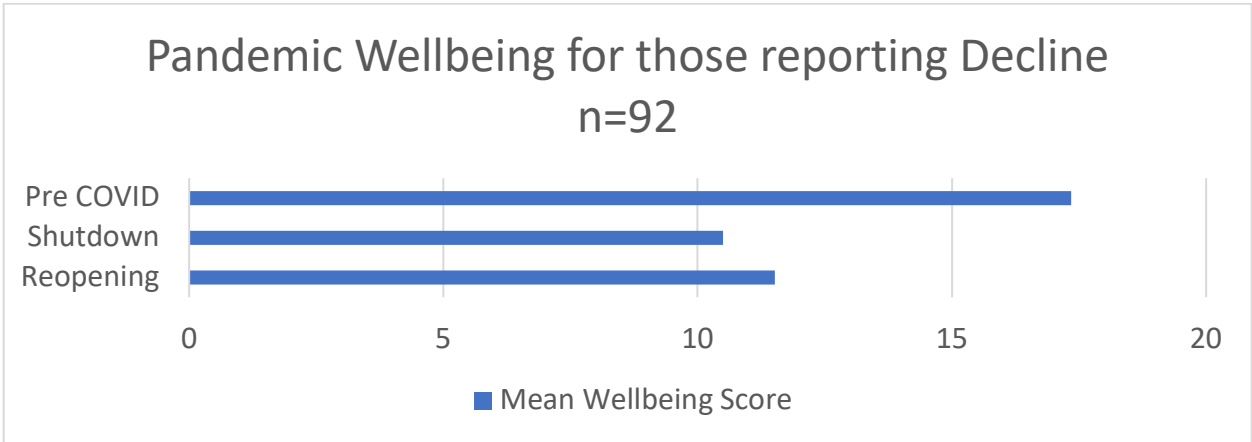
Not all respondents experienced a decline in well-being. As shown in Figure 2, 60% reported a decline, while 40% reported no decline. These results show that respondents reported big declines in their wellbeing during the campus shutdown on March 22, 2020 to August 25, 2020 related to the pre-COVID wellbeing scores from January 1, 2020- March 1, 2020.

Figure 2:



Focusing on the respondents who reported a decline in wellbeing will provide insight into reasons that contributed to that decline. As shown in Figure 3, there were 92 respondents reporting a decline in wellbeing of the 153 individuals who participated.

Figure 3:

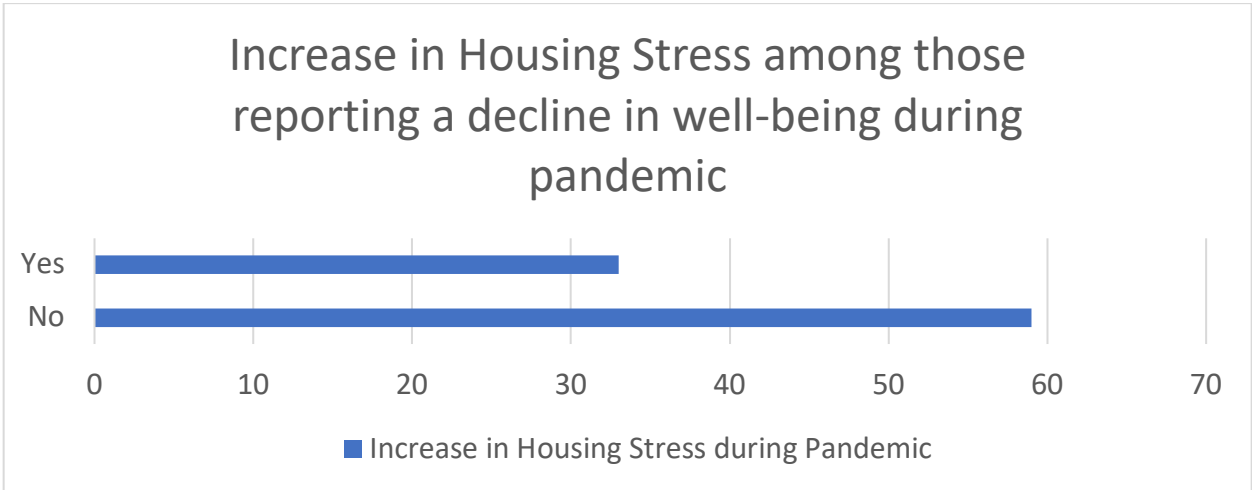


What were some of the main sources of stress for those who reported a decline in wellbeing? Looking first at housing stress during the pandemic, housing stress from pre-COVID to the reopening of campus period was examined for these 92 individuals. Figure 4 below shows

an increase in housing stress between those two periods for those reporting an overall decline in well-being. Thirty-six percent of those who experienced a decline in wellbeing experienced an increase in housing stress. Those who did not experience an increase in housing stress may still have experienced housing stress, but did not report an increase in housing stress relative to the pre-COVID period. This will be the continued theme throughout each of the categories that follow.

Respondents attributed housing stress in the pre-COVID period to things such as finances and affordability. They also identified living away from home for the first time and having landlord and roommate problems as contributing to stress. During the campus shutdown period, these respondents attributed the stress they felt to things such as the stress of having to move unexpectedly, having to pay rent without income and the stress of having to move back home. Finally, during the re-opening period respondents attributed stress to not feeling safe in the dorms due to COVID risk, and to being around too many people. They also identified the stress of having to move again and roommates not taking proper precautions as leading to stress.

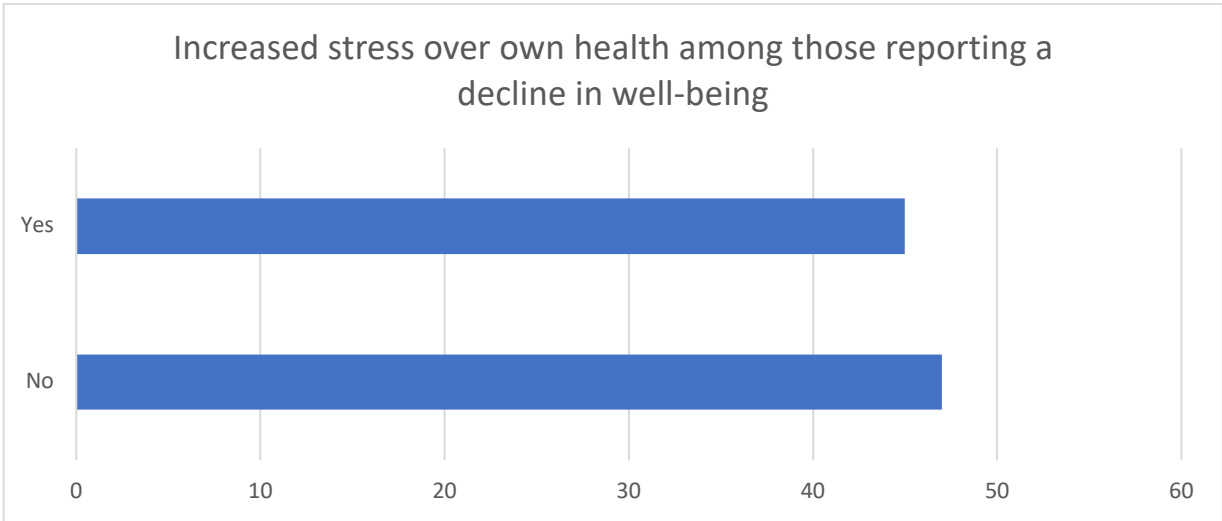
Figure 4:



The next category examined is respondents' increased stress over the risk to their own health. The stress respondents felt over their own physical health from the pre-COVID period was compared to that of the re-opening period. As shown in Figure 5, of the 92 respondents reporting a decline in wellbeing, 45 reported a least a moderate amount of stress from the risk to their own health posed by the pandemic.

Some of the factors identified as contributing to their stress was their fear of getting sick and the fear of not knowing how COVID-19 would affect them. Others identified that they were in a vulnerable population and this contributed to increased stress. Still others identified that the long-term unknown consequences of COVID-19 caused them the most stress.

Figure 5:

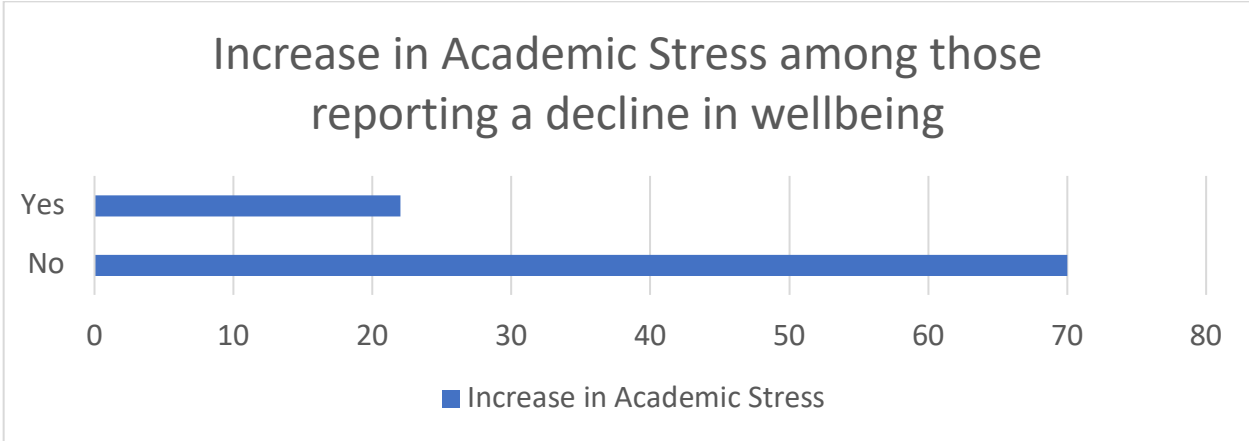


The next category to examine is the increase of academic stress for those reporting a decline in wellbeing. As shown in Figure 6, 22 of the 92 respondents who reported a decline in wellbeing attributed it to an increase in academic stress. There wasn't a major decline in

academic stress from the broader sample, but that this shows it that some individuals did experience an increase in academic stress. However, open-ended comments reveal that overall the university did a great job handling the COVID-19 pandemic academically.

The students who reported an increase in academic stress indicated that trying to do zoom classes and homework was a challenge, especially when living in a noisy home environment. They also indicated that some professors began to assign extra work for students and that some professors were unaware of how to operate online classes that led to a lot of frustration. Some respondents indicated that stress resulted from feeling a being disconnected and unable to concentrate on online classes, and a few reported a lack of support and guidance from professors. However, other students commented that professors did a great job of being accommodating despite everything but they just still struggled with the online format.

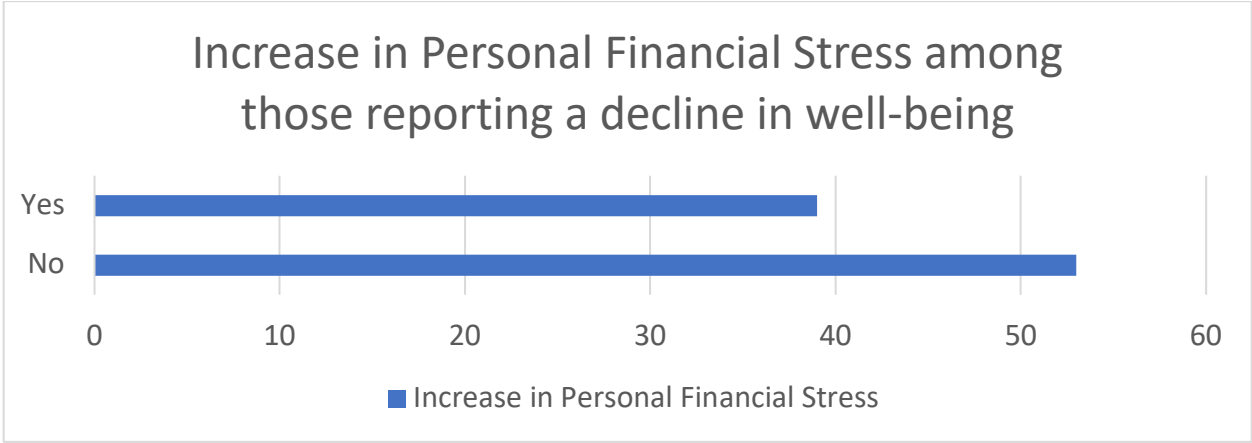
Figure 6:



The next and last section to focus on is respondents increase in personal financial stress. Figure 7 shows that 39 of the 92 respondents who experienced a decline had an increase in financial stress in the period of pre-COVID compared to the re-opening of campus. This was

attributed to respondents now having a job or losing a job due to COVID. Some respondents experienced a cut in hours and others expressed that they had to leave their jobs due to COVID and their place of employment not following guidelines. Another indicated stress related factor to finances was being exposed to COVID at work and having to miss a significant time due to it.

Figure 7



Conclusions

While this survey doesn't give us statistically representative sample or results it does provide insight into how students were feeling and what was contributing to stress pre-COVID, during the shutdown of campus, and the re-opening of campus. We can see how that stress impacted student wellbeing across those three time periods.

Sixty percent of respondents reported a decline in wellbeing. The detailed questions and open-ended questions revealed that the pandemic was responsible for increase stress for these respondents. Furthermore, this study goes beyond the previous work of Son et. al., (2020) by asking respondents to compare the pre and post pandemic stress levels on a variety of scales.

Lastly, The Ohio State University, particularly the College of Social Work, did a good job responding to the pandemic academically.

Limitations

This study had several limitations. The participation numbers were low and the sample was not randomized. The sample was drawn from a large, midwestern university so results cannot be generalized to all college populations. Future research could add to the knowledge base by addressing these issues.

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