Sabbatical Report

Fall 2023

CT State Community College Students' Well-Being During the COVID-19 Pandemic and Now

Andrea Levy, PhD, MBE

Introduction

In March 2020, the World Health Organization classified the novel COVID-19 virus as a pandemic. The next few years would become an unprecedented period in history, having profound adverse effects on every aspect of life: physical and mental health, social engagement, employment, financial security, and education. Specifically, with the COVID-19 virus having killed over a million people in the U.S., nearly everyone has either lost a loved one, had a very ill loved one, was themselves very ill, and/or lived in fear of this fate. Furthermore, the public health measures that were implemented (e.g., stay-at-home orders, quarantine requirements, etc) were critical for mitigating the spread of the virus, but resulted in delayed medical care and untreated mental and physical health problems, job and therefore income loss, prolonged separation from loved ones, social isolation, domestic violence, food insecurity, housing instability, and more.

With schools closed for months and even years at a time, children faced even further consequences. During developmentally critical periods, children were isolated from others, impeding their ability to develop important social skills and to obtain social support. Furthermore, they either missed out on educational instruction altogether, or were taught in the extremely limited setting of virtual learning, and many did not have the internet and computer access with which to participate. Children also lost access to numerous critical school resources such as free school lunches (often their only source of nutrition), tutoring, disability and mental health support services, opportunities for physical activity, etc. For low-income students and students of color, for whom these services are often particularly essential, the losses have been especially great.

Studies have begun to examine the impact of these disruptions, and the results demonstrate unequivocally that the impact has been devastating. Regarding mental health, studies have reported significant increases loneliness, anxiety, depression, suicidal ideation and behavior, extreme grief reactions, and difficulty sleeping among children and adolescents (Murata et al., 2021; Shi et al., 2020, Xie et al., 2020). Within the classroom, school surveys indicate increases in absenteeism and behavioral problems (e.g., disruptive classroom behavior) (Institute of Education Sciences, 2022). In fact, American Academy of Pediatrics, American Academy of Child and Adolescent Psychiatry and Children's Hospital Association jointly declared child and adolescent

mental health a national emergency during the pandemic (American Academy of Pediatrics, 2021).

The educational impact has been devastating as well. Studies have shown little to no learning progress during remote learning, with children from disadvantaged backgrounds making even less progress than their peers (Engzell et al., 2021). According to the National Center for Education Statistics, in the first two years of the pandemic, nine year olds showed the biggest drop in reading scores seen in 30 years, and math scores declined for the first time ever (The Associated Press, 2022). As a result of the pandemic, it is estimated that over 100 million more children will fall below the minimum proficiency level in reading (UNESCO, 2021) and that 23.8 million children and adolescents will drop out of school (UNICEF, 2021).

Colleges are now serving the first waves of students who experienced such learning losses and mental health declines during the pandemic. A recent front page New York Times article, "The Pandemic Generation Goes to College. It Has Not Been Easy" (Fawcett, 2022) addressed this very issue. The article reports that "In interviews across the country, undergraduates discussed how their disjointed high school experiences have trailed them in their first years of college...". One such student, who was a junior when COVID-19 hit, said that she floundered in algebra in her first year of college because "I missed out on a lot during those two years." And as a result, Stanley Litlow, a visiting professor of public policy at Duke University and a former deputy chancellor of the New York City public schools, declared that "the swirl of issues 'all demonstrate that we've got a crisis." (Fawcett, 2022).

Beginning this year and for many years to come, institutes of higher education, like Connecticut State Community College (CSCC), are inheriting this crisis. It is therefore critical that we understand the educational, social, economic, and emotional experiences of our students during the COVID-19 pandemic and the educational, social, economic, and emotional challenges that they currently face as a result. Thus, the purpose of this study was to assess CSCC students' educational, social, economic and emotional status during the COVID-19 pandemic and now, and to identify demographic differences in these measures. Such understanding better prepares and enables CSCC faculty and staff to meet the needs of the years of "pandemic generation" students that will be enrolling on our campuses.

Methods

Recruitment and survey

In October 2023, all current students at CSCC were sent two emails inviting them to participate in an anonymous online survey. The survey asked questions about 17 elements of their educational, social, economic, and emotional well-being during the COVID-19 pandemic and currently, on a 1-7 scale where 1=extremely good and 7=extremely bad (e.g., mental health, physical health, physical safety, housing security).

Participants were told to skip items that did not apply to them (e.g., a participant who was not in school during the pandemic would skip the question about their motivation for school during the pandemic). The survey also assessed participants' demographic characteristics (age, race/ethnicity, gender identity, sexual orientation), in what school grade they were in when the pandemic began (March 2020), with whom they lived during the pandemic, and how many people close to them passed away from COVID-19. Students were asked to complete the survey only if they were 18 years of age or older. The study received approval from the CT State Community College Institutional Review Board. No compensation was given for completion of the survey.

Statistical analyses

Descriptive statistics were used to describe the sample population demographics and the 17 measures of well-being during the pandemic and now. In analyses of differences between racial/ethnic, gender identity, and sexual orientation groups, the majority group (whites, male/female, heterosexuals) was compared to groups created by combining all other groups within the characteristic. For instance, differences by sexual orientation were examined by comparing heterosexuals to all other groups (asexual, bisexual, gay, lesbian, pansexual, queer, and other). These combined groups were created because each individual group (e.g., lesbian) contained too few participants for statistically valid comparisons. Independent samples t-tests were used to compare the majority group to the combined minority group on the 17 measures of well-being for race, gender identity, and sexual orientation. Pearson correlations were used to assess the relationship between each measure of well-being and age.

Results

Participants

A total of 1,227 students completed the survey. Data from 20 participants was removed because they indicated that they were below the age of 18. This left a final sample size of 1,207. Participants had a mean (SD) age of 26.48 (11.15) years (range 18-100). The majority identified as a man or a woman, heterosexual, and White and were in high school in March 2020 (see Table 1). Over one-third of participants had at least one person close to them die of COVID-19 (34.2%) and 16.0% lost two or more people close to them. Each of the 12 CT State Community College campuses were represented in the sample (see Table 1).

Table 1. Participants' characteristics

Characteristic

Age	(mean, SD)
	26.48 (11.15)
Race/ethnicity	(%, N)

American Indian or Alaskan Native	.4%, 5
Asian	4.6%, 56
Black or African American	10.6%, 128
Hispanic or Latinx	22.6%, 273
Multiple races	6.5%, 79
Native Hawaiian or other Pacific Islander	.3%, 4
White	51.6%, 623
Other	2.2%, 24
Missing	1.2%, 15
	,
Gender identity	(%, N)
Man	24.4%, 294
Non-binary	4.8%, 58
Transgender man	2.1%, 25
Transgender woman	.5%, 6
Woman	65.8%, 794
Other	2.4%, 23
Missing	.6%, 7
	,
Sexual orientation	(%, N)
Asexual	4.9%, 59
Bisexual	15.3%, 185
Gay	1.6%, 19
Heterosexual or straight	61.6%, 744
Lesbian	2.9%, 35
Pansexual	5.2%, 63
Queer	2.8%, 34
Other	4.5%, 53
Missing	2.2%, 27
Tribbing.	2.270, 27
CT State campus	(%, N)
Asnuntuck	2.9%, 35
Capital	4.6%, 56
Gateway	12.5%, 151
Housatonic	2.5%, 30
Manchester	16.7%, 202
Middlesex	5.6%, 68
Naugatuck Valley	16.0%, 193
Northwestern	3.7%, 45
Norwalk	10.4%, 125
Quinebaug Valley	3.7%, 45
Three Rivers	10.8%, 130
Tunxis	9.8%, 118
Missing	.7%, 9
1111001115	/0, /
Where in school in March 2020	(%, N)
THE CHI SCHOOL III IIIII CHI 2020	(/ 0, 11)

7 th grade	.2%, 3
8 th grade	.3%, 4
9 th grade	13.4%, 162
10 th grade	15.4%, 186
11 th grade	11.8%, 143
12 th grade	9.4%, 113
College	24.7%, 299
Graduate school	.6%, 7
Not in school	23.4%, 283
Missing	.6%, 7
Who lived with during pandemic*	(%, N)
Alone	5.6%, 67
With parents	69.3%, 837
With spouse/partner	19.3%, 233
With children	16.0%, 193
With other (friend, stranger, relatives)	48.0%, 579
Number of people close to them who died	
of COVID-19	(%, N)
None	64.8%, 782
One	17.9%, 216
Two or three	12.0%, 144
Four or more	4.0%, 47
Missing	1.5%, 18

^{*}Participants could select more than one answer

Well-being during the pandemic and now

More than a third (and in many cases, more than half) of participants reported that each of the following was bad, very bad, or extremely bad for them during the pandemic: mental health (60.3%), stress (66.5%), physical health (39.6%), physical activity level (53.7%), sleep health (45.4%), social life (62.3%), feeling of belonging socially (58.5%), loneliness (63.9%), job security (35.0%), financial security (33.9%), confidence in academic ability (51.8%), motivation for school (60.1%), and study skills (58.3%)(Figure 1). Students' well-being has improved since the pandemic; the percent reporting being bad, very bad, or extremely bad now dropped in every category compared to during the pandemic and more than a third reporting doing bad, very bad, or extremely bad now on only stress (46.9%), sleep health (36.5%), and loneliness (34.4%). Furthermore, paired sample t-tests of participants' responses about how they are doing now compared to how they were doing during the pandemic revealed that on every measure except for food security (for which the difference was not statistically significant), participants are doing significantly better now ($t \ge 2.09$, $p \le .037$ for all) (Figure 1).

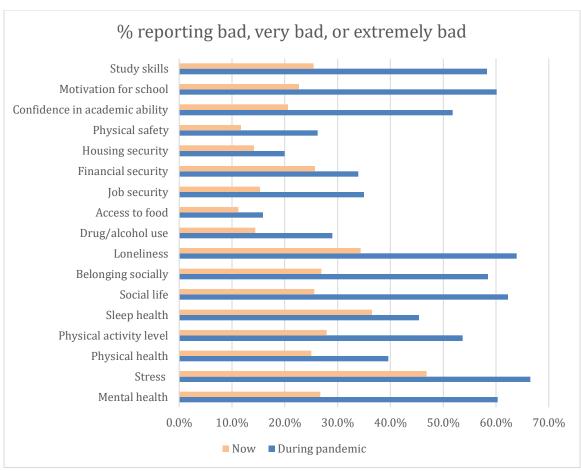


Figure 1. Participants' well-being on each measure during the pandemic and now (October 2023)

Well-being during the pandemic in minorities vs non-minorities

As shown in Figures 2, 3, and 4, racial, gender identity, and sexual orientation minorities faired worse during the pandemic for most of the measures of well-being. Racial minorities reported doing significantly worse compared to whites on mental health, stress, physical health, physical activity, sleep health, access to food, financial security, housing stability, feeling of physical safety, and confidence in academic ability ($t \ge 2.46$, $p \le .014$ for all) during the pandemic (Figure 2). Gender identity minorities reported significantly worse mental health, stress, physical health, physical activity, sleep health, social life, feeling of belonging socially, loneliness, feeling of physical safety, confidence in academic ability, motivation for school, and study skills ($t \ge 2.51$, $p \le .012$) during the pandemic compared to those identifying as male or female (Figure 3). Participants identifying as a sexual orientation minority reported doing worse during the pandemic on mental health, stress, physical health, physical activity level, sleep health, social life, feeling of belonging socially, loneliness, drug/alcohol use, feeling of physical safety, confidence in academic ability, motivation for school, and study skills ($t \ge 2.34$, $p \le .019$)

during the pandemic compared to those identifying as heterosexual (Figure 4). No other differences were found between any of the group pairs.

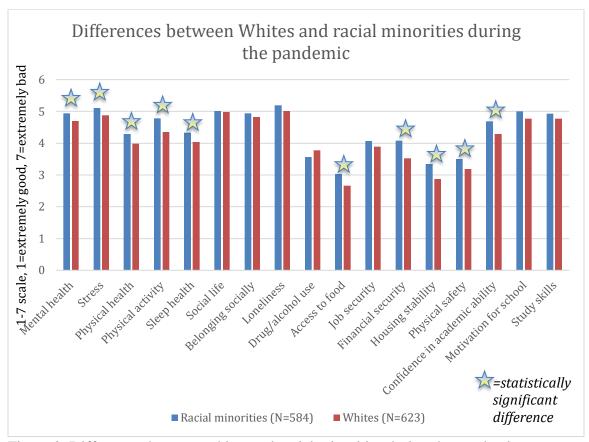


Figure 2. Differences between whites and racial minorities during the pandemic

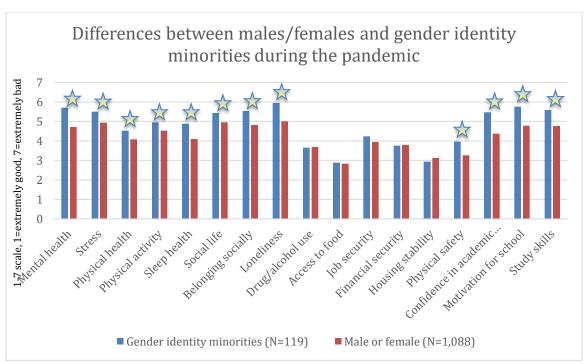


Figure 3. Differences between males/females and gender identity minorities during the pandemic

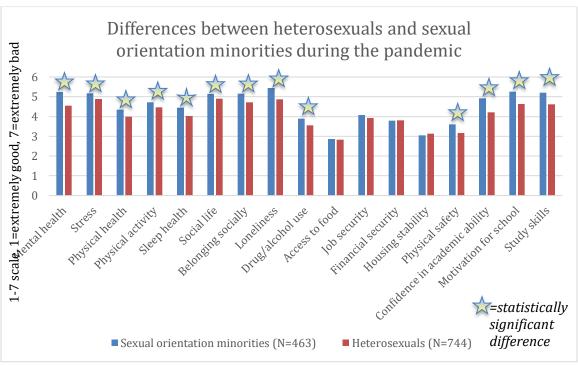


Figure 4. Differences between heterosexuals and sexual orientation minorities during the pandemic

Well-being now in minorities vs non-minorities

As shown in Figure 5, currently (October 2023) racial minorities are doing as well as whites on most measures, but are worse off with respect to access to food, financial security, housing stability, and confidence in their academic ability ($t \ge 2.66$, $p \le .008$). Gender identity minorities report doing worse currently on most measures: mental health, stress, physical health, physical activity level, sleep health, feeling of belonging socially, loneliness, drug/alcohol use, feeling of physical safety, confidence in academic ability, motivation for school, and study skills ($t \ge 2.17$, $p \le .031$) (Figure 6). Likewise, compared to heterosexuals, sexual orientation minorities are currently fairing worse on all of the same measures as gender identity minorities ($t \ge 2.21$, $p \le .028$) (Figure 7).

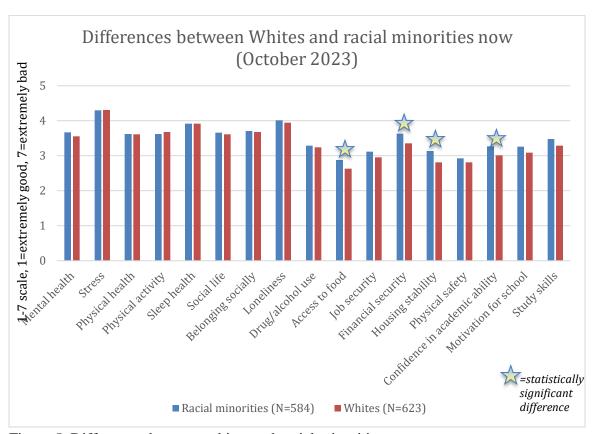


Figure 5. Differences between whites and racial minorities now

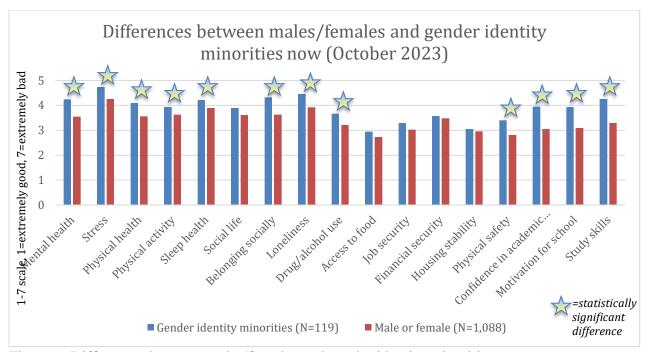


Figure 6. Differences between males/females and gender identity minorities now

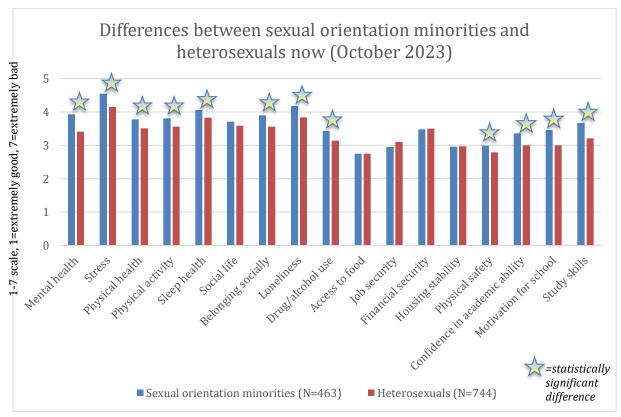


Figure 7. Differences between heterosexuals and sexual orientation minorities now

Pearson correlations revealed that during the pandemic, younger participants experienced worse mental health, stress, physical health, physical activity, social life, feeling of social belonging, loneliness, job security, confidence in their academic ability, motivation for school, and study skills ($r \le -.061$, $p \le .036$ for all). However, older participants faired worse during the pandemic in terms of access to food, housing stability, and feeling of physical safety ($r \le -.081$, $p \le .006$ for all). Similar trends are seen in participants' current well-being; younger participants reported that they are currently experiencing worse mental health, stress, loneliness, confidence in their academic ability, motivation for school, and study skills ($r \le -.064$, $p \le .033$ for all), whereas older participants reported worse access to food, job security, financial security, and housing stability ($r \ge .093$, $p \le .002$ for all).

Discussion

The results of this study demonstrate significant challenges for many CSCC students during the pandemic, and for a substantial minority, currently. Overall, racial, gender identity, and sexual orientation minorities were worse off on many of the measures of well-being both during the pandemic and now, but the reverse was not true for any of the measures of well-being. Generally, younger participants were and still are worse on more psychological and academic measures whereas older participants were and still are worse on economic measures.

The results of this study must be considered within its limitations. First, the sample is a small percentage (3.4% - 1,207/34,991) of the entire CSCC student population and may be biased in certain ways. For instance, it is possible that students who were better off, or who were worse off, during the pandemic were more likely to complete the survey. Second, participants' report of their well-being during the pandemic may be inaccurate due to the fallacies of memory over time, or it may be dishonest due to the sensitivity of some of the questions, though the anonymity of the survey should mitigate this issue.

Nevertheless, the results of this study reveal serious and pervasive challenges for the CSCC student body during the pandemic and to a lesser but still significant extent, now. Importantly, these challenges are especially prevalent and severe among racial, gender identity, and sexual orientation minorities. These challenges can seriously impede student success, and therefore, these results highlight important areas of intervention. Specifically, some students faced and still face challenges in meeting their most basic life needs (e.g., physical safety, housing and food security). Many students also report mental health, stress, and social concerns that are in need of our attention. It is also important to address academic issues (e.g., lack of confidence, lack of study skills, etc) that many students deal with. Although it is reassuring that the number of students who report these challenges has declined since the pandemic, the often serious issues that they faced

during the pandemic quite likely have lingering consequences today. The success of our current students and students in years to come depends on our ability to address these challenges.

References

American Academy of Pediatrics (2021, October 19). AAP-AACAP-CHA declaration of a national emergency in child and adolescent mental health. American Academic of Pediatrics. https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-anational-emergency-in-child-and-adolescent-mental-health/

Engzell, P., Frey, A., & Verhagen, M. D. (2021). Learning loss due to school closures during the COVID-19 pandemic. Proceedings of the National Academy of Sciences, 118(17). https://doi.org/10.1073/pnas.20223 76118

Fawcett, E. (2022, November 1). The pandemic generation goes to college. It has not been easy. The New York Times. https://www.nytimes.com/2022/11/01/us/covid-college-students.html

Institute of Education Sciences. (2022). School responses to COVID-19. Institute of Education Sciences. https://ies.ed.gov/schoolsurvey/

Levy, A.G., Thorpe, A., Scherer, L.D., Scherer, A., Drews, F.A., Butler, J.M., Burpo, N., Shoemaker, H., Stevens, V., & Fagerlin, A. (2022). Misrepresentation and Nonadherence Regarding COVID-19 Public Health Measures. JAMA Netw Open, 5(10):e2235837. doi:10.1001/jamanetworkopen.2022.35837

Murata, S., Rezeppa, T., Thoma, B., Marengo, L., Krancevich, K., Chiyka, E., Hayes, B., Goodfriend, E., Deal, M., Zhong, Y., Brummit, B., Coury, T., Riston, S., Brent, D.A., & Melhem, N.M. (2021). The psychiatric sequelae of the COVID-19 pandemic in adolescents, adults, and health care workers. Depress Anxiety, 38, 233-246.

Shi, L., Lu, Z.A., Que, J.Y., Huang, X.L., Liu, L., Ran, M.S., Gong, Y.M., Yuan, K., Yan, W., Sun, Y.K., Shi, J., Bao, Y.P., & Lu, L. (2020). Prevalence of and risk factors associated with mental health symptoms among the general population in China during the coronavirus disease 2019 pandemic. JAMA Netw Open, 3(7):e2014053.

The Associated Press. (2022, September 1). Reading and math scores fell sharply during pandemic, data show. National Public Radio.

https://www.npr.org/2022/09/01/1120510251/reading-math-test-scores-pandemic

UNESCO. (2021). Education: From school closure to recovery. https://en.UNESCO.org/covid19/educationresponse.

UNICEF. (2021). Responding to COVID-19: UNICEF annual report 2020. UNICEF. https://www.unicef.org/reports/unicef-annual-report-2020

Xie, X., Xue, Q., Zhou, Y., Zhu, K., Liu, Q., Zhang, J., Song, R. (2020) Mental health status among children in home confinement during the coronavirus disease 2019 outbreak in Hubei Province, China. JAMA Pediatr, 7:2–4.