Quality of Life Status in Minority Students: A Needs Assessment for the College of Public Health & Health Professions at the University of Florida

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Member Contributions

The members of team 2 all contributed equally to the paper, presentation, IRB protocol, and any other components of the project, while also focusing on specific topics. Each contributing member's individual topics were as follows:

Anna

Student Health Services

Isabella

Overall Health and Optional Questions

Jacqueline

Demographics and Food Security

Megan

Physical & Mental Health

We utilized several essential teamwork skills while completing this project. One of the most important skills was strong and frequent communication. We typically met biweekly to discuss project goals, obstacles, deadlines, and to touch base on our progress. One way we could have maintained even more reliable communication would have been to delegate tasks to avoid any oversight.

Another important teamwork skill was being adaptable to change. This was very important, as one of the most significant lessons we learned was the importance of flexibility and patience. It took much longer than we anticipated to gain access to our target population and receive IRB approval, so it was essential for us all to be flexible and patient.

Abstract

This study examined the needs of college students related to their Quality of Life (QOL), with a specific focus on identifying disparities among racial and ethnic minorities. The study was composed of 41 Likert-style questions that were modeled based on previously validated QOL studies and administered to students (*n=33)*, and survey data were reported in the aggregate as counts and frequencies. There was evidence of an underlying need to expand current mental health resources, specifically with improving resources for stress and anxiety management to prevent risk factors and to improve health outcomes throughout the life course. Frequencies were calculated and utilized to compare participants' responses. This needs assessment would serve well in future research at the University of Florida, specifically in regards to meeting the unmet needs of the student population, particularly minority students.

Introduction

Understanding the needs of university students is a pivotal component of assessing their quality of life and how universities are catering to the needs identified by students (American College Health Association (ACHA), 2018). The World Health Organization (WHO) defines Quality of Life (QOL) as "an individual's perception of their position in life in the context of culture and value systems in which they live and in their relation to their goals, expectations, standards, and concerns" (WHO, 2014). QOL is multidimensional and can be assessed through various measures, but its main dimensions include assessing mental, physical, social, and functional health (Aaronson, 1998). Measurement of QOL is an important component of health status as it relates to chronic diseases (such as diabetes and hypertension) and their associated

risk factors (smoking status, physical activity, and body measurement index) (CDC, 2000). These risk factors for chronic disease are very relevant among the college student population; in fact, Lloyd-Jones and colleagues (2014) found that more than half of college-aged students had at least one risk factor for coronary heart disease (CHD), which increases the risk of developing chronic heart disease. Although these risk factors often appear in adolescence, they continue into adulthood and may be exacerbated by new collegiate experiences that may result in increased intake of food and reduced physical activity, previously identified risk factors that lead to obesity. Given these findings, researchers have concluded that college is an important stage of the life course where risk factors can be identified and addressed to improve health outcomes throughout students' lifetime (Wood et al., 2017).

While several previous studies that have examined the impact of specific health behaviors and conditions on the QOL of college students, or both, relevant research literature reveals that studies utilizing QOL surveys are limited among college students, and are mainly limited among those who identify with a minority group, as well as among graduate and postgraduate students (Ribeiro et al., 2018; Parker & Jones, 1999). Thus, a noticeable gap appears to exist in the research literature in this area. The *National College Health Assessment II*, published by the American College Health Association (ACHA), found that only 49 percent of college students described having "very good" or "excellent" health (ACHA, 2018). Ribeiro and colleagues (2018) emphasized that there is also a gap in the research on many determinants of stress for college students, such as sleep health, depression, anxiety, emotional exhaustion, physical activity levels, and finally, occupational, environmental, and social health.

Additionally, this research is necessary to understand the needs of racial and ethnic minority students. Authors Utsey, Chae, Brown, and Kelly found that ethnic identity and cultural racism were significant predictors of QOL, and that ethnic group identity was the best predictor of QOL examined within the study (2002). Several other studies support the claim that identification with a minority group is significantly correlated with a change in QOL or life satisfaction (Damri & Litwin, 2016; Reyes et al., 2017; Verkuyten, 2008). The literature by Reyes and Verkuyten concluded that minority groups have a significantly lower QOL measure than non-minority counterparts (2017; 2008). Likewise, a study of medical students in the United States found that minority students scored lower on QOL measures than their non-minority counterparts (Dyrbye et al., 2006). Despite this evidence, it remains inconclusive which minority groups experience a disproportionate burden of lower QOL status. No known studies have measured the effects of minority status on QOL of life within undergraduate college students.

It is essential to understand the needs of both undergraduate and graduate students in colleges around the United States (ACHA, 2018). To create effective public health programs for this population, it is important first to understand what barriers exist to their well-being. In order to establish a baseline, this study will evaluate QOL among students enrolled in the College of Public Health and Health Professions at the University of Florida through a needs assessment. The findings will contribute to the literature and can be employed to inform any existing or future programs for college students' health and well being.

Methods

A community needs assessment was designed to survey minority college students' quality of life, and subsequently identify and address health disparities and inequities among students.

The University of Florida Institutional Review Board approved this study. The survey encompasses topics related to general health, physical and mental health, food security, health services, demographics, and impact of current events on health. A purposive sampling method was employed to administer the survey to students who were at least 18 years of age and enrolled in the College of Public Health and Health Professions (PHHP) and the University of Florida (UF) as either a degree or non-degree seeking students; specifically, students enrolled in undergraduate, graduate, doctoral, and certificate programs.

Qualtrics, a survey software platform, was used to administer the needs assessment and collect data from participating respondents. All questions presented were voluntary, and the participant was allowed to withdraw consent from the survey at any time without penalty. All responses provided by participants are confidential and anonymous. The needs assessment was distributed to the target student population by two community liaisons via email, whereby students voluntarily consented to participate. Responses were self-reported, and survey data were collected between July 29th, 2020, through August 7th, 2020.

Survey Instrument

The needs assessment survey was developed over two months and modeled previously validated survey questions from several QOL surveys. The survey comprises 41 multiple-choice and Likert-style questions that will take respondents approximately 10 minutes to complete. Each question also included a “prefer not to answer” option. Questions that included an “other” option also allowed participants to write in their response.

General, Physical, and Mental Health

Items, or questions, from the CDC Healthy Days Core Module (CDC, 2000) and the 2019 National College Health Assessment III (ACHA, 2019) were used to develop questions about general (9 items), physical (6 items), and mental health (5 items). Students were first asked to self-rate their overall health (Question 3: How would you describe your overall health?) as either (1) poor, (2) fair, (3) good, (4) very good, or (5) excellent.

Food Security and Health Services

Food security questions (7 items) were modeled from the 2012 U.S. Household Security Survey (United States Department of Agriculture, 2012) and the 2019 NCHA III. Questions were selected and modified to assess potential food-security needs in the survey population (USDA, 2000). Similarly, questions about health services, adapted from the 2019 NCHA III (ACHA, 2019), were selected and revised to measure accessibility to health services and determine if students had unmet health needs.

Demographics and Current Events

A demographic section was included to collect data on race, ethnicity, gender, and other characteristics, allowing us to assess any existing health disparities or inequities among at-risk or minority populations. Finally, the survey included a section with two optional multi-answer questions about the impact of the COVID-19 pandemic and the ongoing Black Lives Matter movement on students' well-being.

Statistical Analysis

Frequencies and counts of data were generated using data analysis tools in the Qualtrics survey platform. Cross-tabulations of counts and frequencies were also performed to compare responses from different questions of interest and to investigate any unexpressed relationships.

Results

For the purpose of this report, we selected the most notable findings from each question of our survey to report. According to Fall 2019 estimates, there are approximately 2,500 eligible participants (UF Institutional Planning and Research, 2020). A total of 46 respondents agreed to participate in the survey, but only 33 participants completed the survey and were included in the final analysis after excluding incomplete surveys (n=5) and corrupt responses (n=8) due to a technical error.

Participant Profile and Demographics

Appendix A, Table 1, displays the demographic breakdown of student respondents. Among students that completed the survey, the majority of students were enrolled full-time (93.9%) and were in a graduate or combined master's degree program (54.5%), followed by undergraduate students (42.4%) and doctoral students (3.0%). The vast majority of students fell into the 18-22 years of age category (63.6%), identified as female (81.8%), and were non-Hispanic White (53.8%). Students who are members of the LGBTQIA+ community accounted for only 9.1% of survey respondents; however, most students identified as Allies (51.5%). Students were allowed to select multiple employment statuses that best described them. The majority of responses were for "students" (77.8% of n=33), followed by "employed" (45.5% of n=33) and "volunteers" (21.2% of n=33). Household income was more evenly distributed across categories, but the majority reported having a household income of more than $120,000 (27.3%), between $50,000 and $79,000 (21.2%), and between $20,000 and $49,000 (18.2%). Finally, most students described their current housing situation as living off-campus or in other non-university housing (63.6%).

Overall Health

Students were first asked to self-report how they described their overall health. Out of the ordinal options given, no participants said their overall health was "poor," 15% (n=5) said "fair," 18% (n=6) said "good," 45% (n=15) said "very good," and 21% (n=7) said "excellent."

Students were also asked to report other, more specific measures that involve their general health and well-being. These specific measures include how often they felt "healthy and energized," if they have a chronic condition, and asked about their substance use behaviors. The frequencies can be found in Appendix A, Table 4.

They also were prompted to select three health concerns that were the most important to them. Out of 15 options, “stress” was the most common item chosen with 23 selections. Nutrition and mental illness tied for second-most selected, with 13 counts each.

Finally, students were asked to select issue areas that might have affected their academic performance in the past 12 months. Out of 20 options given, "stress" and "anxiety" were most frequently selected, each with 20 selections. The next most common items were "COVID-19" and "headaches/migraines," which each had 11 selections, followed by "depression," which had 10.

Physical & Mental Health

Regarding self-reported health, 61% of respondents described their physical health during the past 12 months as “very good” or “excellent.” 12% rated their physical health as “fair” or “poor.” The proportions of total respondents selecting each rating are summarized in Appendix A, Table 2. When rating their mental health over the past 12 months, 18% of respondents

selected “very good” or “excellent,” and 48% selected “fair” or “poor.” These data are summarized in Appendix A, Table 3.

When asked to rate the level of stress experienced during the past 30 days, 52% of respondents selected “high” or “very high.” 15% selected “low” stress, and 33% selected “moderate” stress. No participants reported experiencing no stress in the past 30 days. Relatedly, the top five areas selected by respondents as affecting their stress levels and mental health were procrastination, finances, career, personal appearance, and health of someone close to them.

This section also included questions about physical activity and weight. Physical activity was listed as one of the participants’ top five health concerns. When asked how many times they exercise per week, most respondents reported 1-2 days per week. 91% reported exercising at least once during a typical week. Additionally, 100% of the participants indicated that during the past 12 months, they “sometimes” or “often” wanted to exercise but felt that they did not have time. When asked about any weight goals, 39% reported that they are trying to lose weight, and an additional 36% reported that they are working to maintain their current weight.

Food Security

Among the questions that assessed food security, 24.2% of students report that they ‘sometimes cannot afford to eat balanced meals.’ Cross-tabulations of how students described themselves (race and ethnicity) questions that assessed food security revealed that among students reporting that they “sometimes cannot afford to eat balanced meals” were mostly non-Hispanic white (50%) and Hispanic, Latino/a/x, or Hispanic-White (37.5%). In the last 12 months, 21% of students indicated that they ‘skipped meals’ because there was not enough

money for food. Cross-tabulations revealed that among students that 'skipped meals,' most students identified as non-Hispanic White (57%) and Asian (28.6%).

Health Services

We also assessed students' utilization of health and wellness services to identify unmet or additional needs for services among students. In assessing students' use of health services, of those who sought mental and psychological health services, only 13% sought services on campus while 47% sought services in their hometowns. Students who identified as a minority were less likely to receive mental and psychological services than their non-minority counterparts, 28.5%, and 71.4%, respectively. Of students who visited a healthcare provider, only 25% of respondents had utilized on-campus services while the remaining students sought care in the local community near campus or their hometowns. The top 3 On-Campus Health and Wellness services that all students reported utilizing were: campus recreation facilities, Student Health Care Center, and the Counseling and Wellness Center.

Current Events

This survey asked two optional questions at the very end. The first question asked, "how have you been impacted by the coronavirus pandemic, also known as COVID-19?" Participants were asked to select from a range of 20 options that encompassed likely impacts, challenges, and issues. Figure 1 in Appendix B shows the numeric distribution of the answers selected among all options that were provided. The most commonly selected impacts were (1) Feelings of isolation, (2) Worry, fear, or anxiety for the future, (3) Worry, fear, or anxiety for personal health/safety (4) Worry, fear, or anxiety for loved ones and (5) Loss of motivation/energy/productivity. The second question asked, "how have the recent protests surrounding the deaths of George Floyd,

Ahmaud Arbery, Breonna Taylor, and many other people of color, impacted you?" Figure 2 in Appendix B displays the numeric distribution of responses. Among the options provided, the most commonly selected impacts were (1) Angered, (2) Saddened, (3) motivated to learn more about racism and social justice.

Discussion

The goal of our study was to assess priorities related to QOL among college students, fill the gap in data collection and research on QOL among college students, and analyze data to identify any disparities and inequities among vulnerable subgroups. Based on our literature review, we found limited research regarding QOL among college students. To our knowledge, our study is the first to collect a baseline for QOL among college students, focusing on identifying differences among racial and ethnic minorities.

There were several limitations of our study that may have impacted our findings, with one of the most significant being a small sample size. Given our limited access to the community, we were only able to distribute the survey to students in Public Health undergraduate and graduate programs, rather than the entire College of Public Health and Health Professions, which resulted in a sample size of just 33 students. As a result, the data may not be generalizable to a larger and more general population of college students. Given our small sample size, more than half of the participants did not identify as a racial or ethnic minority, which may have contributed to the lack of significant differences among those surveyed. In addition, the survey was only open for a short period: July 29th through August 7th of 2020. Students only received the survey once from community liaisons and did not receive a reminder to complete the survey. There was also an error in the skip logic when the survey was initially

distributed, which may have resulted in a loss of participants during the first hour of distribution. An additional limitation arose due to the nature of our needs assessment; a wide array of QOL topics were assessed, and thus we were unable to draw specific conclusions about the relationships between variables. Finally, self-report response bias could have skewed answers, as many of the survey questions relied on respondents' evaluation of their health and QOL, as opposed to using an objective measure.

Based on our findings, we found that our data would be a useful tool and starting point for researchers at the University of Florida for future research seeking to answer more specific questions related to quality of life for students. Although our study yielded a low response rate, it still provided valuable information about QOL among college students in the College of Public Health and Health Professions at the University of Florida. While the data cannot be generalized to the rest of the student body, it demonstrates the need for future research assessing related topics amongst all students. In conducting future research related to QOL, one of the main focuses should include improving current mental health initiatives for students and increasing mental health counseling resources on-campus for stress and anxiety management. Additionally, research should focus on investigating the disparity in seeking higher education within public health fields. Our study's results showed no significant differences among racial and ethnic minorities compared to their non-minority counterparts.

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Appendix A

Table 1

Summary of Demographic Characteristics

Characteristics	N	%
Gender		
Female	27	81.8
Male	6	18.2
Race [a]		
Indigenous American or Native American	1	2.8
Asian	6	16.6
Black or African American	2	5.6
Middle Eastern, West Asian, or North African	1	2.8
Non-Hispanic White	21	53.8
Hispanic, Latino/a/x, or Hispanic-White	5	13.9
Enrollment status		
Part time	2	6.0
Full time	31	93.9
Degree program		
Doctoral	1	3.0
Graduate or Combined Masters	18	54.5
Undergraduate	14	42.4
Age Category (years)		
18-22	21	63.6
22-26	7	21.2
26-30	4	12.1
30-34	0	0
35-39	0	0
40 and over	1	3
Member of LGBTQIA+ community		
Yes	3	9.1
No	13	39.4
No, but I identify as an Ally	17	51.5

Note. $N = 33$ (n = # subjects for each condition).

[a] Participants were able to select multiple responses, so total is greater than 33 ($n > 33$).

Table 1 (continued)

Summary of Demographic Characteristics

Characteristics	N	%
Employment status [a]		
Employed	15	45.5
Self-employed/Freelance	3	9.1
Interning	2	6.1
Out of work and looking for work	3	9.1
Out of work but not currently looking for work	2	6.1
Homemaker	0	0
Student	26	78.8
Volunteer	7	21.2
Military/Forces	0	0
Retired	0	0
Unable to work	1	3.0
Household income		
Less than $20,000	3	9.1
$20,000 - $49,000	6	18.2
$50,000 - $79,000	7	21.2
$80,000 - $119,000	5	15.2
More than $120,000	9	27.3
Don't know	2	6.1
Prefer not to answer	1	3.0
Current housing situation [a]		
Campus or university housing	4	12.1
Off-campus or other non-university housing	21	63.6
Parent/guardian/other family member's home	11	33.3
Temporarily staying with a relative, friend, or "cough surfing" until I find housing.	1	3.0
Homeowner	2	6.1
Shelter	0	0
I currently do not have a place to live	0	0

Note. $N = 33$ (n = # subjects for each condition).

[a] Participants were able to select multiple responses, so total is greater than 33 (n > 33).

Table 2
Summary of Physical Health Ratings

Rating	N	%
Poor	1	3.0
Fair	3	9.1
Good	9	27.3
Very Good	16	48.5
Excellent	4	12.1

Table 3
Summary of Mental Health Ratings

Rating	N	%
Poor	1	3.0
Fair	15	45.5
Good	11	33.3
Very Good	5	15.2
Excellent	1	3.0

Table 4

Overall health self-reports

Rating	N	%
How often felt "very healthy and full of energy," past 30 days		
Never	1	3
Rarely	5	15.2
Sometimes	13	39.4
Very often	14	42.4
Always	0	0
Diagnosed with chronic condition		
Yes	6	18.2
No	26	78.8
Don't Know/Recall	1	3
Average # alcoholic drinks per week		
None	14	42.4
1-3	14	42.4
4-7	5	15.2
7-10	0	0
10+	0	0
How often use tobacco products		
Never	27	88
Former user	0	0
Rarely or social user	6	18.2
Sometimes	0	0
Often	0	0
Every day	0	0
How often use recreational drugs		
Never	17	51.5
Former user	0	0
Rarely or social user	11	33.3
Sometimes	1	3
Often	2	6
Every day	2	6

Note. N=33 (n= # subjects for each condition).

Table 5

Summary of Food Security Questions by Race and Ethnicity: How often are the following statements true?

	Race and Ethnicity					
	Indigenous American or Native American	Asian	Black or African American	MENA or West Asian	Hispanic, Latino/a/x, or Hispanic-White	Non-Hispanic White
I cannot afford to eat balanced meals.	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Always						
Very Often						
Sometimes	1 (12.5)	1 (12.5)			3 (37.5)	4 (50.0)
Rarely		1 (8.3)	2 (16.7)	1 (8.3)	1 (8.3)	8 (66.7)
Never		4 (30.8)			1 (7.7)	9 (69.2)
The food I bought just didn't last and I didn't have money to get more						
Always						
Very Often						
Sometimes			1 (25.0)		2 (50.0)	2 (50.0)
Rarely		1 (14.3)			1 (14.3)	5 (71.4)
Never	1 (4.5)	5 (22.7)	1 (4.5)	1 (4.5)	2 (9.1)	14 (63.6)

Note. Paricipants were able to select multiple responses, so some row percentages are greater than 100%. Additionally, no respondents reported *always* or *very often* for either question.

Figure 1.

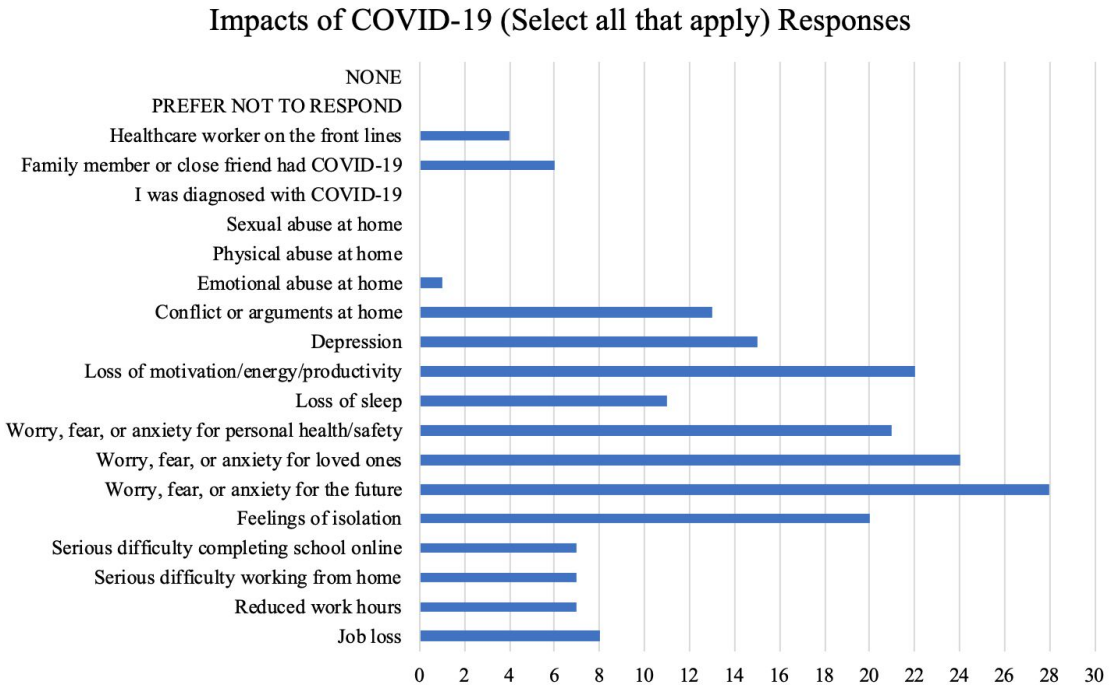
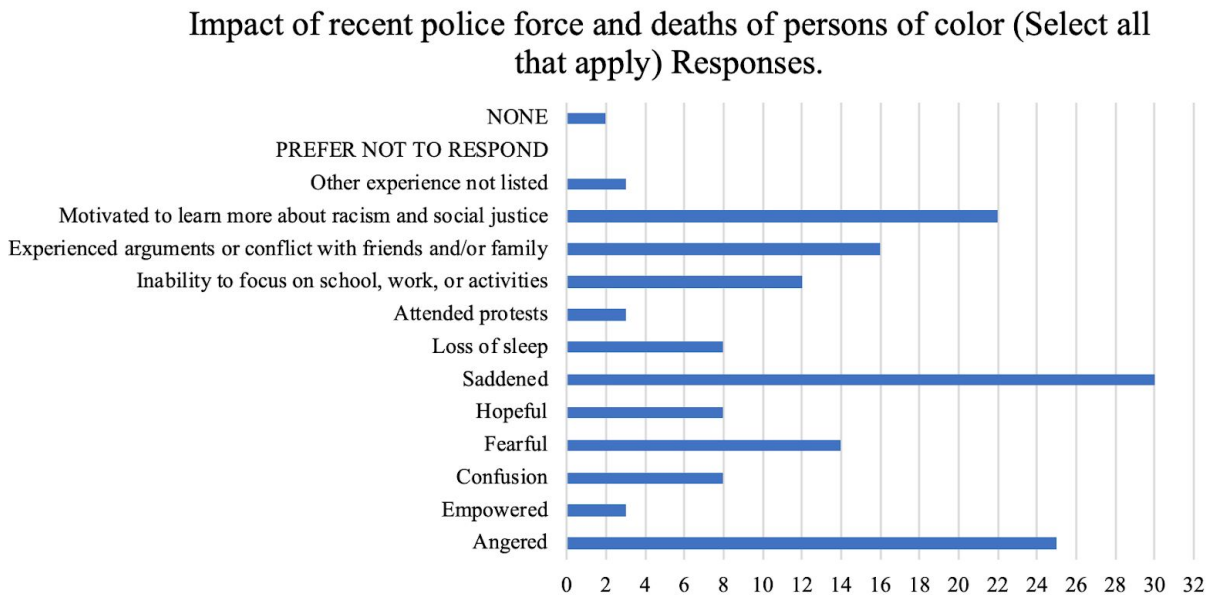

Impacts of COVID-19 (Select all that apply) Responses
NONE
PREFER NOT TO RESPOND
Healthcare worker on the front lines
Family member or close friend had COVID-19
I was diagnosed with COVID-19
Sexual abuse at home
Physical abuse at home
Emotional abuse at home
Conflict or arguments at home
Depression
Loss of motivation/energy/productivity
Loss of sleep
Worry, fear, or anxiety for personal health/safety
Worry, fear, or anxiety for loved ones
Worry, fear, or anxiety for the future
Feelings of isolation
Serious difficulty completing school online
Serious difficulty working from home
Reduced work hours
Job loss
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

Figure 2.


Impact of recent police force and deaths of persons of color (Select all that apply) Responses.
NONE
PREFER NOT TO RESPOND
Other experience not listed
Motivated to learn more about racism and social justice
Experienced arguments or conflict with friends and/or family
Inability to focus on school, work, or activities
Attended protests
Loss of sleep
Saddened
Hopeful
Fearful
Confusion
Empowered
Angered
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32