

APPROVAL OF HONORS PROGRAM SENIOR PROJECT

Candidate

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Project Title

The Effect of Pandemic and Childhood Stress and The Impact of Resiliency on College Student's Perceived Academic Performance

This Senior Project is approved as acceptable

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The Effect of Pandemic and Childhood Stress and The Impact of Resiliency on College Student's
Perceived Academic Performance
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Abstract

This research explores the effects of adverse childhood experiences and the stress experienced during COVID-19, moderated by resiliency, on college students' perceived academic outlook. Prior research has established that traumatic experiences and stressors make it more difficult for students to academically excel while resiliency is a known strong protective factor against stress. To further explore the relationship between these variables, I designed a survey to measure resiliency, COVID-19 stress, adverse childhood experiences, and respondents' academic outlook. The results of the analysis using randomly generated data show that COVID-19 stress negatively impacts academic outlook. When combining COVID-19 stress and adverse childhood experiences, the opposite is seen with academic outlook increasing as both stressors increase. The analysis also shows that resiliency has a bigger impact on academic outlook for individuals that have high adverse childhood experiences scores.

Introduction

In a world that focuses so acutely on productivity, there is often the question of what hurts us and what helps us. The topic of the long-term impact of trauma and the benefits of a strong and persistent mindset that obstacles and hardships can be overcome has become a trendy topic, with research coverage featured in several popular news outlets. An article in *The New York Times* highlights how seeing challenges as an opportunity for success or personal growth instead of one for failure can positively shape the outcome of the situation (Tugend, 2020). In the past, researchers have sought to understand how mistreatment during childhood goes on to impact individuals long into adulthood. Though our understanding of how trauma affects us physically and mentally is constantly being updated, the COVID-19 pandemic drastically added to our perceptions of how traumatic events shape us as a society. Understanding how adverse childhood experiences (ACES) and the impact of COVID-19 work together to shape individuals' experiences within education is an under-researched topic that deserves consideration. The effects of COVID-19 will continue to be felt globally, and individuals who have also experienced ACES may be at greater risk of falling through the cracks within the educational system. This paper will also explore the role resiliency or being able to “power-through” obstacles, plays in the relationship between trauma and expected academic outlook.

Literature Review

Research shows that trauma can trigger a range of mental health issues as well as impact educational outlook (Blodgett & Lanigan, 2018; Davies, Read, & Shevlin, 2022; Felitti, et al., 1998; Hinojosa, Nguyen, Sellers, & Elassar, 2019; Kuhar & Kocjan, 2021; Mosley-Johnson, et al., 2019). One form of trauma is adverse childhood experiences (ACES) which can influence an individual's response to stress and increase the likelihood of developing mental illnesses. Adverse

childhood experiences, a term coined by Vincent Felitti (1998), refer to traumatic experiences that have been experienced prior to the age of eighteen. These “adverse experiences” are often repeated abuse from or amongst caretakers, sexual abuse on the individual from anyone at least five years older, and the use of alcohol and drugs within the home (Felitti, et al., 1998). In a study completed in 2022, researchers found that higher scores for adverse childhood experiences are associated with higher levels of anxiety, lower levels of physical and mental health, and lower quality of life (Davies, Read, & Shevlin, 2022). Research also has shown that exposure to ACES is associated with significantly lower life satisfaction than those without ACES (Mosley-Johnson, et al., 2019). This stress and trauma within the home often makes it difficult for individuals to academically excel. Even in schooling as early as elementary years, children who experience ACES are more likely to score below grade level standards compared to those who do not experience ACES (Blodgett & Lanigan, 2018). The impact of ACES can continue into adulthood and college-level academic performance.

Compared to individuals without ACES, those with ACES have been found to lack many of the skills needed to excel in college due to the unique challenges associated with ACES (Hinojosa, Nguyen, Sellers, & Elassar, 2019). Individuals who experience trauma, especially during childhood, often experience a disturbance in self-organization (Kuhar & Kocjan, 2021). Prior research has defined disturbances in self-organization with the following criteria: affective dysregulation, negative self-concept, and disturbed relationships (Kuhar & Kocjan, 2021). This deficiency in self-organization skills is associated with higher frequencies of emotional dysregulation and worse psychological functioning (Kuhar & Kocjan, 2021). Similarly, lacking skills to properly organize oneself in academics, such as well-developed study habits and time management, can directly impact the outlook of individuals in college. If an individual is

struggling academically, their academic outlook will likely suffer. Additionally, the ability to either maintain or develop organization skills in college despite prior difficulties becomes far more difficult when new additional obstacles, such as the global pandemic COVID-19, arise (Gorban, Guba, Mosol, Hrandt, & Lukasevich, 2022).

The global-spread of COVID-19 presented its own unique challenges and obstacles as a recent trauma that most individuals experienced (Gorban, Guba, Mosol, Hrandt, & Lukasevich, 2022; Mostafa, Burns, Tang, & Tankersley, 2022; Zalat, Hamed, & Bolbol, 2021). Those that were in education, both instructors and students at any level, were seemingly overnight faced with the task of maintaining educational success standards despite global shutdowns and quarantines (Gorban, Guba, Mosol, Hrandt, & Lukasevich, 2022). Maybe the most challenging obstacle experienced during COVID-19 was the start of emergency remote learning in an education system that has historically consisted of primarily face-to-face instruction. Research has found that many educators held varying attitudes towards technology use in the classroom and were varied in their skill level with using technology as an educational resource even prior to the pandemic (Zalat, Hamed, & Bolbol, 2021). Understandably, the experience of students during the pandemic greatly depended on the implementation of online instruction by their instructors (Zalat, Hamed, & Bolbol, 2021). If instructors were accepting of and possessed the skill to implement virtual learning, students were more likely to report a more positive academic experience (Zalat, Hamed, & Bolbol, 2021). Similarly, individuals who reported sufficient access to technology (i.e., computers, chargers, internet access, website stability, etc.) were more likely to report a positive virtual learning experience (Zalat, Hamed, & Bolbol, 2021). Positive and successful experiences with online learning among students is likely a strong factor in the perceptions of students' academic functioning. One recent study suggests that there is a positive correlation between how college

students perceived their academic performance and their actual academic performance (Mostafa, Burns, Tang, & Tankersley, 2022). For individuals who reported having negative experiences and felt their academic performance suffered due to COVID-19 stressors, this belief may have impacted their outlook and potential future academic efforts.

Though trauma and stress have been found to negatively impact an individual's mental, physical, and emotional health, while also creating a difficult obstacle in education, research has found that resiliency often is able to lessen these influences. In individuals who experience negative impacts of trauma, having the ability to use resiliency and resilient coping strategies have been found to successfully weaken the negative effect of these stressors (Kuhar & Kocjan, 2021). Resilient thinking and coping skills allow individuals the tools to curate a more positive outlook than they might have had otherwise (Yang, Tu, & Dai, 2020). The ability to have resiliency and power through despite past, present, and future stressors can result in individuals having a more positive outlook and mindset throughout their academic careers.

Currently, there is literature on the impact of individuals traumas on academic outlook and success as well as how resiliency can act as a coping factor through stress. Research has found that adverse childhood experiences impact academic outlook, through challenges such as the negative effect of disturbances in self-organization and lack of college-readiness skills. There have been many identified challenges that both students and educators faced during COVID-19 that are found to impact individual's academic success (Gorban et al., 2020; Zalat et al., 2021). While all of these variables and their effect on academic functioning have been researched independently, there has not been literature that sought to understand how all of these fit together as a single story. Therefore, the purpose of this study is to explore how COVID-19 stress and ACES together on academic outlook and how resiliency impacts this relationship.

Theory And Hypotheses

The current literature has found that adverse childhood experiences often have a negative effect on academic outlook in the years and decades following the trauma. Individuals who experience ACES often under-perform in school and university due to the dysfunction in self-organization and college-readiness skills (Blodgett & Lanigan, 2018; Kuhar & Kocjan, 2021). Research on the impact of the unique challenges of COVID-19 have found that individuals were more likely to report a positive experience and outlook when stressors were low (Zalat, Hamed, & Bolbol, 2021). These stressors were challenges such as instructors having a low skill level for technology use and complications with technology (i.e., computers, chargers, internet access, website stability, etc.) (Zalat, Hamed, & Bolbol, 2021). Additionally, individuals with negative experiences with access to adequate and functional technologies for online learning were more likely to report lower academic and GPA scores than individuals with positive experiences (Zalat, Hamed, & Bolbol, 2021). Combining the literature for both COVID-19 stress and ACES, it is expected that high COVID-19 stress, and ACES scores will negatively impact academic outlook which is expressed in the hypotheses below:

- Hypothesis 1: The stress of COVID-19 will have a negative impact on college students perceived academic functioning.
- Hypothesis 2: The stress of COVID-19, when combined with adverse childhood experiences, will have a particularly negative effect on college students perceived academic functioning, compared to COVID-19 stress alone.

Current research has found that in spite of the negative impact ACES may have on academic outlook and success (Blodgett & Lanigan, 2018; Kuhar & Kocjan, 2021), resiliency often lessens the negative effect of trauma (Kuhar & Kocjan, 2021). The role of resiliency in trauma is

understood to be that through experiencing trauma, such as ACES, individuals build resiliency that they may carry into future experiences. Understanding this connection of the origins of resiliency, it is expected that for those who have experienced prior trauma, resiliency would play a larger role as a coping factor than for those who have experienced less. The following hypothesis is based on the current understanding of how trauma and resiliency work together:

- Hypothesis 3: For students with high adverse childhood experiences, resiliency will have a greater impact on perceived academic functioning compared to students with low adverse childhood experiences.

Method

To measure the independent variables and dependent variable of this study, a forty-nine-question survey was created. The survey included questions measuring individual's level of resiliency (Smith, et al., 2008), their stress-response to COVID-19 (Thibault, et al., 2022), the presence of adverse childhood experiences (ACES) (Felitti, et al., 1998), the individual's perception of their own academic outlook, and a few questions regarding demographics. Most of the questions used in this survey were sourced from already established and reliable measures, except those that were created to measure students' perceived academic outlook. These forty-nine questions, including demographic measures, were then put into the online survey system Qualtrics.. For a full copy of survey questions and response choices, see Appendix A.

Dependent Variable

The dependent variable within this study is college student's perceived academic outlook. This variable seeks to measure how students believe they are performing in school, regardless of how they are actually performing. A measure for academic outlook was created for this study, with a five-point scale ranging from strongly disagree (1) to strongly agree (5). These items were

averaged to form a score ranging from 1 (negative academic outlook) to 5 (positive academic outlook). Certain items were reverse-scored as needed so that higher values corresponded to more positive academic outlook.

Independent Variables

Adverse childhood experiences, COVID-19 stress, and resiliency are the independent variables in this study. An already established measure for resiliency was used for this study (Smith, et al., 2008), with a five-point scale ranging from strongly disagree (1) to strongly agree (5). The responses to these items were averaged to form a score ranging from 1 (weaker resiliency) to 5 (higher resiliency). Certain items were reverse scored as needed so that higher values correctly corresponded to higher resiliency scores. Next, an already established measure for COVID-19 stress was used (Thibault, et al., 2022), with a five-point scale ranging from strongly disagree (1) to strongly agree (5). Responses were averaged together to form a score ranging from 1 (lower COVID-19 stress) to 5 (higher COVID-19 stress). The third independent variable, adverse childhood experiences, was measured using Felitti's ACES measure (Felitti, et al., 1998). The response format ranged from yes (1) or no (0), with responses averaged together to form a score of 1 (higher ACES) or 0 (lower or no ACES).

Participants

Using Qualtrics' "generate test responses" tool, 250 theoretical responses were created for analysis. These 250 generated test responses were then copied into the data analysis software Stata. For analysis purposes, several questions within demographics were collapsed. These include gender coded as 0 for male, and 1 for female and "Non-Binary/Queer/Other." Race was coded as 0 for white and 1 for all other responses. For the item asking respondents the current relationship of their two biological/adoptive parents, responses were coded 0 for never

married/other and 1 for married and divorced. Though these questions were collapsed for coding, demographics were controlled for during analysis, so results were not dependent upon them.

Analysis

To analyze the theoretical data generated for the hypotheses, I relied upon an ordinary least squares (OLS) regression model. The OLS regression was conducted to find the effect of each of the independent variables, including COVID-19 related stress, ACES, and demographic characteristics, on students' perception of their academic outlook. These included two interactions with ACES, COVID-19 related stress and resiliency, to determine how ACES modifies the effect of these two variables on academic outlook.

Results

Below, in Table 1, shows the summary of demographics for the computer-generated responses. This chart shows the total number of responses as 250 with the breakdown for each demographic variable. Almost 40% of respondents were women with the other 60% being almost evenly split between men and non-binary/other respondents. Responses were seemingly evenly split among race/ethnicity responses. Residency of respondents, either international or domestic, were split almost evenly 50/50 as well. Respondents reported even split of responses for their parental relationship.

Table 1. Sample Demographics

Gender	
• Men	74
• Women	98
• Non-Binary/Other	78
Race/Ethnicity	
• Black/African American	140
• Asian	152
• White	140
• Hispanic/Latino	147
• Native American/Alaska Native	145
• Native Hawaiian/Pacific Islander	132
• Other	128
Student Residence	
• Domestic	130
• International	120
Parental Relationship	
• Married	81
• Divorced	84
• Never Married/Other	85

The data analysis related to hypothesis 1, as seen below in Table 2, revealed that the effect of the stress of COVID-19 on academic outlook scores had a coefficient of -0.265 and a standard error of $.335$. Using the established 0.05 and 0.01 threshold, the interaction test yielded a p-value of 0.430 , indicating a non-statistically significant result.

Table 2: Regression Analysis of Variables on Academic Outlook

	Academic Outlook
COVID-19 STRESS	-0.265 (0.335)
COVID-19 STRESS \times ACES	0.020 (0.037)
RESILIENCY	-0.194 (0.217)
ACES	-0.112 (0.132)
RESILIENCY \times ACES	0.023 (0.025)
GENDER (1=FEMALE)	0.114 (0.067)
RACE (1=NON-WHITE)	0.150* (0.066)
INTERNATIONAL STUDENT (1=YES)	0.101 (0.065)
PARENTS RELATIONSHIP (1=MARRIED/DIVORCED)	0.046 (0.040)
CONSTANT	3.857 (1.182)
R^2	0.049
N	250

* $p < 0.05$; ** $p < 0.01$

Standard Errors in Parentheses

The analysis findings related to hypothesis 2, as seen above in Table 2 and below in Chart 1, revealed that the interaction between COVID-19 stress and ACES on academic outlook had a coefficient of 0.020 with a standard error of 0.037 . Using the established 0.05 and 0.01

thresholds, the interaction test resulted in a p-value of 0.592, again indicating a non-significant result.

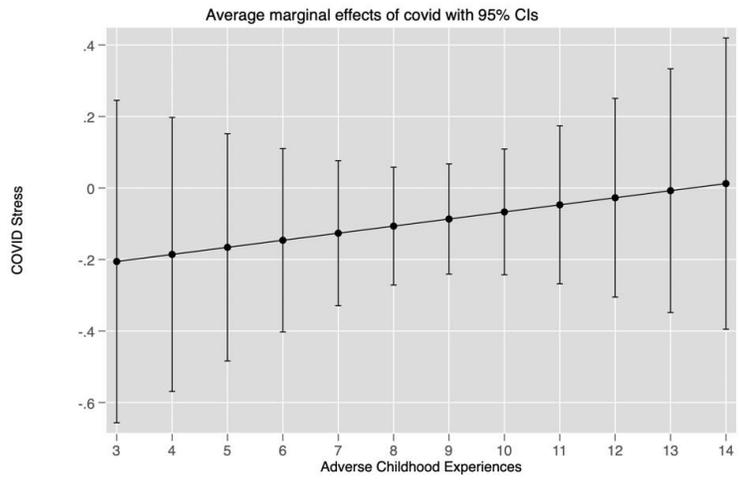


Chart 1. COVID-19 & ACES Interaction

The analysis of data related to hypothesis 3, as seen above in Table 2 and below in Chart 2, for the impact of resiliency on the effect of ACES on academic outlook, yielded a coefficient of 0.023 and a standard error of 0.025. The p-value, using the same prior thresholds, was found to be 0.362, indicating a non-significant result.

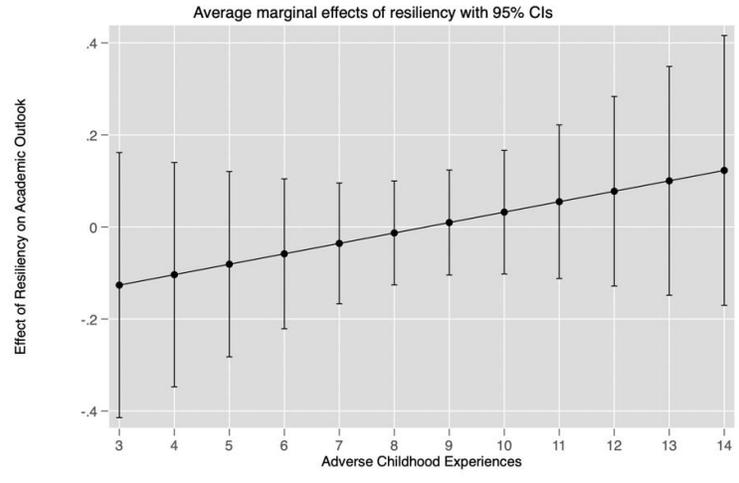


Chart 2. Resiliency & ACES Interaction

As seen above in Table 2, the regression table shows that the coefficient for resiliency in reference to academic outlook was -0.194 and the standard error was .2217. The p -value for this variable was found to be 0.371, which represents a non-significant result. The demographics had several findings, as shown in Table 1, with gender having a coefficient of 0.114 and a standard error of 0.067. Gender also showed a p -value of 0.090 and a non-significant result. The regression involving race on academic outlook, interestingly, yielded a coefficient of 0.140 and a standard error of 0.066. The regression for race and academic outlook shows that the p -value was 0.024, resulting in a statistically significant result. The coefficient for the regression of the variable international on academic outlook was 0.101, and the standard error was 0.065. The p -value was 0.121, meaning a non-significant result. Finally, the coefficient found for the regression analysis between respondents who reported their two biological/adoptive parents were either married or divorced was 0.046 and the standard error was 0.040. The p -value for variable “married” was 0.253, resulting in a non-significant result.

Discussion

The first hypothesis predicted that the stressors of COVID-19 would have a negative effect on respondents' academic outlook. The data results suggest that the stress of COVID-19 negatively predicted academic outlook, which supports the second hypothesis. This finding is in line with previous literature on the role of positive experiences with technology as a predictor of positive academic outcomes (Zalat, Hamed, & Bolbol, 2021). There are many stressors from the COVID-19 pandemic that could play a role in individual's academic outlook (i.e., adequate access to technology, positive instructor experience, etc.), though the impact of specific stressors cannot be assessed using this survey. Factors such as switching to virtual learning and the impact of technology access and quality all work together to impact the effect of COVID-19 on academic outlook for individuals.

The second hypothesis expected that the effect of both the proximal stress experienced during COVID-19 semesters and the presence of the distal stress of adverse childhood experiences (ACES) on respondents perceived academic outlook would be negative. The hypothesis specifically predicted that higher levels of both COVID-19 stress and ACES had a negative impact on individual's academic outlook than COVID-19 stress alone. The results found that although stress of COVID-19 and ACES were positively associated, together they seem to have a positive effect on perceived academic outlook. This is the opposite of what was predicted, meaning that the data does not support the hypothesis. Though this finding was not in line with previous research, it does help shape our understanding of the role proximal and distal stressors have on academic outlook. This finding may in part not align with findings from Blodgett and colleagues (2018) as well as the findings of Kuhar & Kocjan (2021) due to the

impact of resiliency for both proximal and distal stressors, though this assumption cannot be made certain from this dataset.

The third hypothesis test predicted that for individuals with high adverse childhood experiences, resiliency will have a greater impact on perceived academic functioning compared to those with low adverse childhood experiences. Put simply, for individuals who report higher scores for adverse childhood experiences, resiliency will have a greater positive effect on academic outlook. As predicted, our hypothesis was supported by the dataset which showed that for individuals with higher ACES scores, resiliency did play a more important role than for those with lower ACES scores. These findings are consistent with previous research that have found resiliency to be successful in lessening the negative effect of ACES on individual's success and outlook in academics (Kuhar & Kocjan, 2021). This may be due in part to the notion that resiliency is often attributed to having experienced hardship or other difficulties in the past. For these individuals, leaning on resiliency as a way to cope rather than just going through an experience may be more effective than it could be for those who have not faced those specific challenges.

Interestingly, female respondents from this theoretical dataset reported more positive academic outlook than male respondents. This is the opposite of what was expected as current research has found that despite often outperforming men academically, women's academic achievements often go under-recognized which likely could affect their academic outlooks (Bloodhart, Balgopal, Casper, Sample McMeeking, & Fischer, 2020). The analysis of this data also showed that non-white respondents reported more positive academic outlook than white respondents. This finding, while statistically significant, was also the opposite of what was

expected due to the many difficulties non-white individuals often face during education within the United States of America.

Conclusion

Understanding how resiliency can work to lessen the negative effects of stressors of all kinds to positively shape a person's outlook and experience is extremely valuable. With a future moving towards demanding higher education levels for employability in many career fields (Norris, 2019), finding ways to increase individual's opportunities within education despite their past hardships is vital. Though the data from this research project was computer generated and purely hypothetical, it serves to explore some of the possible relationships between both distal and proximal stressors on individual's current outlooks. From the analysis of this hypothetical data, it was found that when combined, the stress of COVID-19 and ACES seem to have a positive effect on individual's academic outlook. Consistent with the current literature, this data also suggests that the stress of COVID-19 has a negative impact on academic outlook. Finally, our findings suggest that for individuals who have higher ACES scores, resiliency has a greater impact on perceived academic outlook than for those who had lower ACES scores.

A few limitations in the research came up during this project, most importantly is the fact this dataset was computer generated and therefore does not reflect real human responses. There are a few questions throughout this survey that were answered in ways inconsistent with other questions. This inconsistency would likely have not resulted nearly as often if the data had been collected from a real group of respondents. Theoretical datasets are useful for exploratory means, but unfortunately no solid conclusions can be made from them. Another limitation of this hypothetical data is that the N (total number of observed responses) was only 250. Future research on this topic should aim to use real human respondents to collect data so that applicable conclusions might be made. It is also advisable that future researchers find a way to make the ACES questionnaires (Felitti, et al., 1998) less emotionally disturbing. This recommendation

comes not only from the researcher but the IRB that oversaw the application as well. A potential solution would be to have a licensed professional, such as a practitioner, administer the ACES measure questions to respondents. Similarly, researchers should be sure to provide abundant resources for respondents who may feel troubled by the measure's questions and topic.

At the start of the COVID-19 pandemic, I was a second semester freshman in college. I would spend the following two school years trying to regain my sense of safety while desperately trying to keep my academics up. I, as with many of my close friends, found it difficult to stay focused on my assignments. Being an undergraduate psychology major at the time, I found myself worrying for the individuals who not only had to face the pandemic but also the trauma of their homelife at the same time. Many of the people closest to me have experienced ACES and it has seemed to me they either excel in everything they face, or they're locked in fear at every turn. Seeing this, I began to wonder what the combined effect of the ACES and COVID-19 stress had on how they perceived the state of their academics to be. Thus, this study sought to add to current literature on how trauma and stressors can impact academic outlook and resiliency's role in that relationship. Though conclusions were based on randomly generated data, the results suggest that when acting alone, COVID-19 stress negatively impacts academic outlook. On the contrary, when COVID-19 stress combines with adverse childhood experiences, academic outlook increases. These individuals who have adverse experiences during childhood are more likely to rely on resiliency than those without high ACES scores.

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Appendix A. Survey Packet

PLEASE READ: Some of the following content may be minorly uncomfortable for some respondents. If at any time you feel the need to stop and seek help, the following FREE resources are available:

For NCWU Resources: Visit <https://ncwc.edu/campus-life/resources/counseling-services/> to set up an appointment with the counseling center.

For OTHER resources: Contact the Suicide & Crisis Lifeline by dialing 988, or 711988 for those with a hearing difficulty, to be connected with a trained counselor **24/7**.

Smith Brief Resilience Scale (Smith et. al., 2008)

Please answer the following questions by choosing the answer choice you feel best fits you.

1. I tend to bounce back quickly after hard times.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
2. I have a hard time making it through stressful events.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
3. It does not take me long to recover from a stressful event.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
4. It is hard for me to snap back when something bad happens.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
5. I usually come through difficult times with little trouble.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree

6. I tend to take a long time to get over set-backs in my life.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree

COVID-19 Stress Measure (Conrod et. al, 2022)

Please answer the following questions concerning the feelings/thoughts/beliefs you experienced during the COVID-19 Pandemic school semesters (Spring 2020 through Spring 2022).

7. I was worried about catching the virus.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
8. I was worried that I couldn't keep my family safe from the virus
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
9. I was worried that our healthcare system wouldn't be able to protect my loved ones.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
10. I was worried that people around me would infect me with the virus.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
11. I was worried that grocery stores would close down.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree

12. I was worried that foreigners were spreading the virus in my country.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
13. I had trouble concentrating because I kept thinking about the virus.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
14. Disturbing mental images about the virus popped into my head against my will.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
15. I had trouble sleeping because I worried about the virus.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
16. I searched the internet for treatments for COVID-19.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
17. I asked health professionals (e.g., doctors, pharmacists) for advice about COVID-19.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree

Academic Outlook Measure

Please answer the following questions by choosing the answer choice you feel best fits you.

18. You feel that you are currently not where you want to be academically.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree

19. When faced with challenges, you find it difficult to bounce back academically.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
20. I am able to find the time to pursue my academic goals.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
21. You find it difficult to remain focused on schoolwork despite upcoming deadlines.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
22. You are finding that it is becoming easier to reach your academic goals over time.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
23. You feel that you can maintain similar levels of academic achievement despite the unique challenges of a particular semester.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
24. You receive final grades similar to what you expected/predicted at the beginning of the semester.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree
25. You feel confident in your ability to achieve the desired grade in your courses.
 - a. Strongly disagree
 - b. Disagree
 - c. Neutral
 - d. Agree
 - e. Strongly agree

Adverse Childhood Experiences Measure (Felitti et. al., 1998)

Please answer the following questions in reference to prior to your 18th birthday.

26. Did a parent or other adult in the household often or very often swear at, insult, or put you down?
 - a. Yes
 - b. No
27. Did a parent or other adult in the household often or very often act in a way that made you afraid that you would be physically hurt?
 - a. Yes
 - b. No
28. Did a parent or other adult in the household often or very often push, grab, shove, or slap you?
 - a. Yes
 - b. No
29. Did a parent or other adult in the household often or very often hit you so hard that you had marks or were injured?
 - a. Yes
 - b. No
30. Did an adult or person at least 5 years older ever touch or fondle you in a sexual way?
 - a. Yes
 - b. No
31. Did an adult or person at least 5 years older ever have you touch their body in a sexual way?
 - a. Yes
 - b. No
32. Did an adult or person at least 5 years older ever attempt oral, anal, or vaginal intercourse with you?
 - a. Yes
 - b. No
33. Did an adult or person at least 5 years older ever actually have oral, anal, or vaginal intercourse with you?
 - a. Yes
 - b. No
34. Live with anyone who was a problem drinker or alcoholic?
 - a. Yes
 - b. No
35. Live with anyone who used street drugs?
 - a. Yes
 - b. No
36. Was a household member depressed or mentally ill?
 - a. Yes
 - b. No
37. Did a household member attempt suicide?
 - a. Yes
 - b. No

38. Was your mother (or stepmother) sometimes, often, or very often pushed, grabbed, slapped, or had something thrown at her?
 - a. Yes
 - b. No
39. Was your mother (or stepmother) sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?
 - a. Yes
 - b. No
40. Was your mother (or stepmother) ever repeatedly hit over at least a few minutes?
 - a. Yes
 - b. No
41. Was your mother (or stepmother) ever threatened with, or hurt by, a knife or gun?
 - a. Yes
 - b. No
42. Did a household member go to prison?
 - a. Yes
 - b. No

Demographic Questionnaire

Please answer each of the following questions by selecting the answer choice that best applies to you.

43. What is your gender identity?
 - a. Female
 - b. Male
 - c. Non-Binary/Queer/Other
44. To which of the following racial/ethnic groups do you belong? (Mark all that apply)
 - a. Black or African American
 - b. Asian
 - c. White
 - d. Hispanic or Latino
 - e. American Indian or Alaska Native
 - f. Native Hawaiian or Other Pacific Islander
 - g. Other: _____
45. How many years have you been at NCWU?
 - a. One
 - b. Two
 - c. Three
 - d. Four
 - e. Five or More
 - f. I do not attend NCWU

46. What year did you graduate from high school?
- a. 2015 or prior
 - b. 2016
 - c. 2017
 - d. 2018
 - e. 2019
 - f. 2020
 - g. 2021
 - h. 2022
47. Are you an international student?
- a. Yes
 - b. No
48. Do you primarily reside with:
- a. One biological/adoptive parent
 - b. Two biological/adoptive parents
 - c. One biological/adoptive parent and one step-parent
 - d. None of the above
49. Which of the following describes the current relationship between your two biological/adoptive parents?
- a. Married
 - b. Divorced
 - c. Never Married/Other

This completes the survey, thank you for your time. **If you feel that you need support, please contact the following FREE resources:**

For NCWU Resources: Visit <https://ncwc.edu/campus-life/resources/counseling-services/> to set up an appointment with the counseling center.

For OTHER resources: Contact the Suicide & Crisis Lifeline by dialing 988, or 711988 for those with a hearing difficulty, to be connected with a trained counselor **24/7**.