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THE AFTERMATH OF THE PANDEMIC'S EFFECT ON COLLEGE STUDENT DEPRESSION

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by

Lorena Sedano

May 2024

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Approved by:

Erik Schott, Faculty Research Supervisor, Social Work

Yawen Li, MSW Research Coordinator



ABSTRACT

The present study examines how stress from the aftermath of the pandemic has affected college student depression. Using qualitative methods, ten college students voluntarily participated in recorded interviews. During these interviews students shared how the return to normality affected their experiences with depression, and the experiences of other students on campus. The study examined coping mechanisms to their adaptations, student's individual stories, the effects that were viewed on campus, and their experiences during this transition. Students also completed the PHQ-2 and brief questions from the perceived stress scale. During the completion of the PHQ-2, 60% of students reported to have felt down/depressed in the past two weeks at least once a week, 90% students reported to have felt tired or have little energy at least 3 times a week in the past two weeks, and 80% of students reported to have felt trouble concentrating at least once a week in the past two weeks. When answering questions from the perceived stress scale, all students reported to have felt nervous or stressed at least twice a month, and 80% of students reported to have felt no control over the important things in their life. 90% of students shared that they believed that the aftermath of the pandemic affected students' depression in various ways (changes in communication, environment, and routine). The students provided insight into the aftermath of the pandemics effect on students and how these effects have changed students' experiences.

ACKNOWLEDGEMENTS

Thank you to all the students who shared their experiences. Your feelings, thoughts, and ideas are valid. You are all resilient, strong, and your lives matter.

To my friend Pow and my cousin Arturo who inspired me to be kinder to everyone around me and check in on people regardless of how happy they look.

May you rest in peace forever, you will always be in my heart.

Thank you to my family; without you I would not be here. My mom, dad, and younger sister Cristina. Thank you for always believing in me and allowing me to be myself throughout my life. It is because of you that I have always been determined to pursue my dreams. Thank you to my best friend Mauricio for holding down the fort while I furthered my education. To all those teachers, professors, social workers that inspired me to pursue an education when others told me I could not. Thank you for planting a seed of hope. I hope that I can be that representation for future generations, so that they know that the sky is the limit and that they should always pursue their dreams.

Thank you to my grandparents who were never able to go to school but showed me the meaning of hard work and resilience. All of you make me proud each day for being such wonderful human beings. Your strength is embedded within me. I know that you will always be with me in spirit.

I am so thankful for Dr. Schott and his kindness while I finished this project. You are such an inspiration that shows that kindness is powerful. I am so happy that future social work students have your support.

DEDICATION

One of my friends struggled with depression and she sadly passed away during the pandemic. I would send her funny memes to cheer her up or post them on social media weekly. She told me sometimes seeing these would make her day. I still post them whenever I can because life is hard, and I hope that everyone is finding joy in the little things each day. Please don't let anyone or anything bring down your spirit. We are all worthy of wonderful things. This is for you, Pow, and for all those students that have lost their life due to depression.

The path to completing this thesis has not been easy but ever since I was a child I always admired characters that were outsiders. Those that didn't fit into the norms of society but somehow never stopped being kind in the process of figuring out their place in the world. Those characters remained kind even when others were unkind to them, and in turn inspired those around them to be the best versions of themselves. Even though I have always done well in school I always felt as though I was not good enough. I was always doubting myself and questioning whether I truly deserved to be an honor student or questioning whether I truly deserved that award. When I was in community college, they filled me with this doubt and made me feel that I should give up because I did not belong there. Even though I allowed them to plague my thoughts, I never gave up because I knew that if I was given a chance I could do so much more for others. Thank you to CSUSB for giving me that chance. I am really proud of

myself for graduating with my masters degree, for starting on my journey as a social worker, but mostly I'm proud of always staying true to myself.

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CHAPTER ONE

PROBLEM FORMULATION

"Depression or depressive disorders, with the classic condition being major depressive disorder, is a mood disorder characterized by the presence of sad, empty or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function," (Substance Abuse and Mental Health Administration, 2021, p. 2). On college campuses, depression happens at almost twice the rate of the general population. About 16% of college students reported experiencing a major depressive episode, as compared to 8% of the general population (Substance Abuse and Mental Health Administration, 2021). The rates of students suffering from a major depressive episode has steadily been increasing each year. Major depressive episodes have had a 5% increase from the year 2015 to 2019 in college students between the ages of 18-22 (Substance Abuse and Mental Health Administration, 2021). At its deadliest depression can lead to suicidal thoughts. In 2019, 11% of students had thoughts about ending their own life (Substance Abuse and Mental Health Administration, 2021).

There are many intersecting factors that could lead college students towards depression such as financial insecurity, food insecurity, pressure for academic success, stress, undiagnosed mental illnesses, adaptations to new environments, social pressures, and substance abuse (Substance Abuse and

Mental Health Administration, 2021). College students are faced with enormous pressure to do well in school and at the same time they must keep up with other demanding pressures to keep themselves afloat financially, physically, and emotionally. The pandemic created new challenges for students to balance these intersecting roles.

Previous research has demonstrated that there is a correlation between the pandemic, increased levels of stress, and increased levels of depression amongst college students (Birmingham et al., 2021; Son et al., 2020). For example, a research study in the United States found that over 70% of students felt that Covid-19 had raised their levels of stress (Son et al., 2020). The same study found that various stressors that the students were facing during Covid-19 increased the chances of experiencing depressive thoughts, with over 40% of students reporting to have experienced depressive thoughts (Son et al., 2020). Some of the students in this study also reported experiencing increased difficulties in their life because of stressors caused by Covid-19. For example, over 85% of students reported trouble sleeping, around 88% reported not being able to focus, and about 80% were worried about how these experiences would affect their grades (Son et al., 2020).

Some of the difficulties that students reported that affected them during Covid-19 were lack of socialization, obstacles towards their academic success, and increased stress levels because of uncertainty from Covid-19 (Haikalis et al., 2022). Researchers believe that changes that occurred during the pandemic

impacted college students' mental health (Birmingham et al., 2021). Some researchers believe that the return to in person learning after a long period of remote learning could bring new stressors, increase anxiety, and could negatively impact the mental health of students (Haikalis et al., 2022). It is important for clinicians to evaluate these increased stressors and help students by analyzing how their experiences with depression have been impacted by them.

Some micro level problems that this issue creates are that students may be facing new challenges and need proper interventions to help them address these challenges. At the macro level greater awareness could be brought to the growing number of students that are suffering from depression and the stressors brought on by the aftermath of the pandemic that have affected their levels of depression. The findings from this study will contribute to the social work practice at the micro level in that they may help clinicians expand their knowledge on students' experiences with stress from the aftermath of covid-19 and how this has affected students' levels of depression. This could help clinicians find proper interventions and coping mechanisms that could help students that are facing depression and new changes in their environment after Covid-19.

If clinicians help students find proper coping mechanisms to deal with stressors that could affect their levels of depression this could prevent worsening symptoms of depression. Therefore, my research question is as follows: What is the aftermath of the pandemic's effect on college students' experiences with depression?

CHAPTER TWO

LITERATURE REVIEW

Introduction

A major stressor that has affected college students' mental health is the stress of going back to normal after the pandemic. While college students spent two years of their life living through a pandemic that radically changed how people lived their everyday life, the change has brought on new stressors with its return to normality. Currently about 16% of college students suffer from depression, and the aftermath of the pandemic may have brought on new stressors that students had not experienced before (Substance Abuse, 2021). This literature review analyzes prevalence of depression, impact of the pandemic on stress and depression, correlations between stress and depression, and theories that may help explain the impact of this issue.

Prevalence of Depression

During 2020, in the United States 21 million people reported to have suffered from a depressive episode (National Institute of Mental Health, 2020). This means that about 8% of the US population had experienced a minimum of one depressive episode (National institute of mental health, 2020). Depression does not just affect the United States, it is also one of the most prominent mental health issues globally. In 2021, about 3% of the world was affected by

depression and 280 million people worldwide suffered from depression (World Health Organization, 2021). About 75% of lower income countries receive no help for symptoms of depression or other mental health issues (World Health Organization, 2021).

According to the world health organization people's levels of depression were elevated during the covid-19 pandemic. Covid-19 heightened the occurrence of depression by 25% worldwide (World Health Organization, 2022). Many things led to this increase such as loss of employment, reduced hours of employment, financial instability, fear of infection with Covid-19, fear of loved ones falling ill, increased levels of loneliness, loss of normal daily activities, and decreased socialization (World Health Organization, 2022). Some of the people with the highest risk of depression were young adults and teenagers (World Health Organization, 2022). This led to a greater risk of other mental health problems and suicidal ideation.

Prevalence of Depression Amongst College Students

Within the past ten years mental health diagnoses have increased in college campuses across the United States from a little over 20% to 35% (Lattie et al., 2019). Many students that are attending college campuses are in their early adulthood and 75% of mental health issues will emerge by early adulthood from ages 18-24 (Lipson et al., 2022). Some students may be unaware that they have a problem and may attribute feelings of sadness or despair to having a

normal level of stress to do well in school. This lack of awareness may contribute to the underutilization of mental health resources on college campuses. Although depression, stress, and anxiety are the top reasons why students utilize the mental health resources on college campuses across the United States, these resources are still not being utilized to their full potential (Center for Collegiate Mental Health., 2020). A research study in 2019, also found that less than 30% of college students suffering from mental health issues that lasted over a year received help from mental health resources (Lipson et al., 2021).

Prevalence of Stress

"Stress can be defined as any type of change that causes physical, emotional, or psychological strain. Stress is your body's response to anything that requires attention or action" (World Health Organization, 2021). Stress could change people's mood, their appetite, their energy level, their sleeping patterns, and it could increase the chances of drug or alcohol use (Centers of Decease Control and Prevention, 2022). Stress may vary from small everyday hassles, acute stressors (usually occurring one time), episodic stressors (occurring regularly), chronic stress (stress occurring for a prolonged time), to stressful life events (major events that cause hardships in a person's life) (Hepworth et al., 2017, p. 267-269).

Every year the American Psychological Association conducts a national survey to see the rates of stress amongst the population, and possible stressors for each year (American Psychological Association, 2020). During 2019, 70% of adults in the U.S. said that mass shootings were one of their greatest stressors, followed by healthcare access, and political issues (American Psychological Association, 2019). Amongst adults that were surveyed in 2020, there were 78% of adults that felt that the pandemic was one of the greatest stressors in their life, 67% felt that their current stress levels were higher during the pandemic, and over 70% of people felt that the pandemic created the most devastating impact in the United States that they had ever experienced (American Psychological Association, 2020). Some of the challenges that elevated people's stress during the pandemic were loss of loved ones, illness amongst themselves or those around them, loss of employment, decreased funds, and fear of the unknown (American Psychological Association, 2020).

Prevalence of Stress Amongst College Students

During their time in college, students may face stress in various ways.

Some common factors that students have discussed to cause them stress are the strive for academic success, transitioning into adulthood, scheduling conflicts, time management, assignment overload, and their relationships with loved ones (Barbayannis et al., 2022). In 2015, the American College Health Association found that about 75% of students reported feeling stressed out while being in school (Liu et al., 2019). The number of young adults feeling overwhelmed with

stress seems to increase as time goes by. Since 2012, young adults have reported higher levels of stress when compared to all other age groups (American Psychological Association, 2015). In 2020, 87% of college students in a national survey reported that school was the main reason why they felt stressed (American Psychological Association, 2020).

Everyday stressors could affect how students cope to achieve success and happiness in their daily activities. During 2013, about 10% of students reported that stress did not allow them to achieve the academic success that they had strived for, and over 50% felt that not being able to manage their time sufficiently caused them stress (Shankar & Park, 2013). Stress also affects how students feel, the emotions that they express towards others, reactions towards social situations, and it may even affect their personal relationships with the people that they love. Over 25% of students felt that they lost their temper due to stress, almost 30% felt that they rushed on assignments due to stress, and over 15% of students did not follow through with plans with their loved ones due to stress (Shankar & Park, 2013).

Connections Between Stress and Depression

Although stressful events could bring positive effects amongst college students (e.g., getting a new job, starting an internship) they could also bring negative effects (e.g., risk of negative impacts to mental and physical health).

Stressful events have led to a higher risk of developing depressive symptoms amongst college students in different studies (Sokratous et al., 2013; Hetolang & Amone-P'Olak, 2018). A study by the University of Berkley revealed that about half of the graduate students that they surveyed said that they had gone through a stressful event that affected their mental and physical health as well as their ability to do well in school (University of California, 2006). This same study revealed that about 10% of that same student population had experienced suicidal ideation (University of California, 2006). Another study among college students revealed that students that were highly competitive for academic success had a 40% higher risk of suffering from depression (Posselt & Lipson, 2016).

There seems to be a correlation between depression and stress, or stressful events experienced by people. In the late 1970's Brown and Harris found that people suffering from depression had almost twice the risk of having serious stressors in their life (Hammen, 2005). Brown and Harris also found 80% of the people that had depression, had a prior stressful event happen to them (Hammen, 2016). It is important to note that not everyone that has a stressful life changing event will begin to experience symptoms of depression but there will be a greater risk of depression following a stressful life event (Hammen, 2016). Stressful life events could include deaths of loved ones, accidents, illnesses, wars, and major social events (Hammen, 2016).

Theories Guiding Conceptualization

To best understand the relationship between depression among college students and how Covid-19 affected their experiences with depression, it's best to look at systems theory and the ecological systems model. Systems theory allows us to look at the different intersecting systems in a person's life that can affect how people behave. The different systems may include loved ones, jobs, schools, religions, social interactions, income status, and the environment in which a person resides in (Kirst-Ashman, 2017, p.22). Systems theory focuses on the person being part of the society in which they live in and how these different systems can affect the way that people live their life (Kirst-Ashman, 2017, p.22).

Systems Theory also discusses how people's interactions with the different systems in their life may contribute to negative experiences and these negative experiences can cause issues in their lives (Van Heugten, & Gibbs, 2015, p. 32). The ecological systems model was created in the late 1970's by a psychologist named Urie Bronfenbrenner (Van Heugten, & Gibbs, 2015, p. 32). Bronfenbrenner divided the model into five different systems. The first system being the micro system (experiences at the individual level with relationships, families, friends, and classmates), the mesosystem (focuses on the experiences at the individual level and their connections to each other), exosytems (experiences with organizations and institutions), macrosystems (connections in

political, social, and cultural environment), and chronosystem (different impactful moments in someone's lifespan) (Van Heugten, & Gibbs, 2015, p. 32).

Chronosystems which is a subsystem of the ecological systems model that explains that impactful social changes happening in the world around us can change the way that we develop during major phases of our life (Hosek et al., 2008). Students that are in college are in a major transitional phase of their life because they are entering young adulthood. The pandemic's influence on students may have significantly changed their development through this stage of their life. After students became accustomed towards one way of life for two years, they had to drastically change their way of living to adapt to things going back to normal. This was another major event happening in their life within a period of time that already brought on several changes to their lives.

Summary

Some major themes that have been explored in this literature are how stress and depression have both increased during the pandemic, how stress can elevate the prevalence of depression, how systems theory and the ecological systems model helps explain how different intersecting factors may attribute to a higher prevalence of depression during major events happening in the world. Some of the things that this research study explored are how the return to normalcy after covid-19 affected college student's experiences with depression

and if stressors created by these changes affected student's levels of depression.

CHAPTER THREE

METHODS

Introduction

The goal of this study was to examine how stress from the aftermath of the pandemic affected college student depression. This study gained students' feedback on how the return to normality after the pandemic affected their experiences with depression. This study examined coping mechanisms to these adaptations, student's individual stories, and student's experiences during this transition. This study was examined with qualitative methods.

Study Design

The purpose of this study was to provide a description of what students experienced during the aftermath of the pandemic. The study explored the relationship between stress and depression amongst college students. The research method that was used was interviews with college students. This method was utilized because I wanted to explore how the aftermath of the pandemic affected student's experiences with depression. This helped me learn more about these experiences and explore strategies for students' adaptation to post pandemic life.

Using interviewing methods was useful with this study because it provided more depth on students' experiences at this university. This helped me gain a

better understanding of how the aftermath of the pandemic affected students' levels of depression. Some advantages of using this research method were that interviews allowed control over the environment where interviews were being conducted. The interviews were conducted at the student's home through zoom. This was where students felt most comfortable being interviewed. It also gave students a chance to orally express their perspectives and their experiences.

Some limitations were that interviewing participants was more time consuming, when compared to a survey. This meant that time needed to be calculated to transcribe data, to ensure that the transcription was authentic.

Another limitation was that interviewing was a more intimate method for collecting information. Some students were not always open to sharing personal details about their life and their experiences. The students were assured that they could skip questions at any time or stop their participation all together if they felt uncomfortable. Using this qualitative approach, we learned from the students' perspectives, but we were limited to the information that the students felt comfortable sharing during the interview.

Sampling

The sample included college students that were currently enrolled either part time or full-time, that had experienced depression, and were over the age of 18. Ten students were interviewed for this study. The study was conducted on this specific population and their experiences with depression following the

aftermath of the pandemic. Nonprobability sampling was used for this study with an emphasis on purposive sampling. Purposive sampling uses methods of sampling where subjects must meet specific standards to be used within the sample. For example, in this study students had to be current students, be enrolled at least part time at the University, and have experienced depression during their time in college. Students were notified of the screening questions about depression in the flyer before their participation in this study to ensure transparency. This also ensured that the study was completed within the time that was permitted.

Data Collection and Instruments

Data was collected through interviews with students at the university. A semi-structured approach was utilized to interview students. Questions were closed-ended and open-ended, this allowed students to elaborate on their experiences. Interviews were conducted remotely through zoom. The students were audio recorded but were asked to use an anonymous pseudonym to conceal their identity. The audio will be destroyed three years after the data has been collected.

Instruments that were used to determine if students had felt symptoms of depression during the past few weeks were the Patient Health Questionnaire (PHQ-9). Brief questions were asked to see if students had felt depressed, had trouble concentrating, and if they had felt excessively tired in the past two weeks.

This tool was created in 1999 by Robert L. Spitzer, Janet W.B. Williams and Kurt Kroenke to screen people for depression based on their past two weeks (Kroenke et al., 2001). The perceived stress scale was also utilized to help measure how participants experienced stress over the past month and how it has affected them. This scale measures people's perceptions about the stress that they have experienced and how this stress has impacted their lives within the past month.

Procedures

A flyer was sent via email, social media and passed out at the university so that eligible students could sign up for the study. Virtual interviews with college students were held in December 2023. Dates, times, and locations of interviews with interviewees varied depending on the student's availability and convenience. Before the interviews students signed a consent form where all aspects of the study were discussed including the purpose of the study. Students were asked to fill out a questionnaire that asked for information about their demographics such as age, race/ethnicity, income level, and education level. Afterwards students had the opportunity to pick a time and location to be interviewed that best meet their availability.

During the interview students went over informed consent, confidentiality, and a brief statement about the purpose for which the study was being conducted. Participants had time during the interview to ask questions about the

study and they were also informed that they may leave the study at any point, if they felt that they would rather not participate. Each interview took anywhere from 15 minutes to forty-five minutes. Each interview was audio recorded either through zoom or by computer recording. After the interview was conducted the students were thanked for their participation in this study and they were also given a list of mental health resources.

Protection of Human Subjects

Participants were protected by keeping any identifying information anonymous and creating a pseudonym to protect the participants identity. Each participant was interviewed one on one, and this provided greater anonymity which was kept between the participant and researcher. Confidentiality was discussed with participants including risks and limitations. Participants were asked not to use identifying names of people close to them. All participants were asked to sign an informed consent form (appendix a), a questionnaire (appendix b), and the creation of a pseudonym before their interview. Participants were asked for informed consent before the start of their interview, and they were briefed on a statement of purpose for the study. Participants pseudonyms were used when transcribing and collecting necessary data. Approximately three years after the study has been completed, all audio recordings, and documentation for the study will be deleted.

Data Analysis

The data that was collected from the interviews with students used narrative analysis. This allowed an analysis of participants' experiences with depression during the aftermath of the pandemic and how these experiences impacted their lives. All interviews conducted with participants were recorded and the dialogue from the interviews was transcribed. Afterwards, an analysis was conducted on how participants relayed their personal stories, significant events that happened after the pandemic, common themes that recurred, and experiences that may have caused stress in the participants' lives during this period.

Active listening was used to make sure there was accuracy in the way that participants were telling their stories. This ensured the validity of the stories that were being provided by the participants. A word document of each participant's transcribed interview was collected with the participant's pseudonym and placed into a folder that consisted of all interview transcriptions from participants. The researcher examined the transcriptions to view themes in the data and how students' experiences with depression were affected after the pandemic.

Summary

This study explored how stress from the aftermath of the pandemic affected college students' levels of depression. It utilized interviews with students to view how the aftermath has affected their experiences with depression. The

use of qualitative methods helped expand on students' perspectives and it also narrated the impact of these experiences.

CHAPTER FOUR

RESULTS

During a one-month period (December 10th-December 30th) ten student participants (2 males, and 8 females) were found by networking through social media. All ten participants completed a demographic sheet and an interview about their experiences with depression during college before and after the pandemic. One participant identified as Caucasian, two identified as Caucasian Hispanic, and seven participants identified as Latinas/Hispanic. All the students were at least in their first year of college and the participants ranged in age from 19-34. The data was analyzed with excel and Microsoft word. With this software interviews were manually coded. Some of the common themes that came up in the research were students' individual experiences with depression, their experiences with depression during their time in college, the aftermath of the pandemics effect on stress.

During the interviews students were asked questions about their perception/knowledge of depression and stress, their experiences with depression/stress before and after the pandemic, and how they view the effects of depression and stress on campus before and after the pandemic. The students were given a debriefing statement and told that they were welcome to skip any questions that they felt uncomfortable with. Most students answered all the questions, but some students decided to opt out of some questions that they

wished not to answer. When the students were asked to give their perceptions and knowledge of depression some answered that depression impaired normal functioning, and it could make people have a negative emotional or mental state. Students' perception of stress was that it's something that gives people anxiety about finishing assignments or tasks, but they believed stress to be more short term while depression was more long term.

Table 1. PHQ-2 Questions

PHQ-2: Question	% of Students	None reported
Down/Depressed 1X per week	60%	40%
Tired/little energy 3X per week	90%	10%
Trouble concentrating 1X per week	80%	20%

Table 2. Perceived Stress Scale Questions

Perceived Stress Scale Question	% of Students	None Reported
Nervous or Stressed 2X in the past month	100%	0
Not in control 1X in the past month	80%	20%

Table 3. Aftermath of the Pandemic's Effect on Depression

Did the aftermath effect depression		Types of Effects on Students
Did not affect students	10%	Created more resources

	Change in environment, routine,
Affected Students	90% communication

Table 4. Aftermath of the Pandemic's Effect on Stress

Did the aftermath of the pandemic increase stress	% of students	Effects of Stress
Stress increased		Inflation, communication, socialization, and transitions.
Stress did not increase	30%	Helped with socialization

PHQ-2 and Perceived Stress Scale

The PHQ-2 was completed on the students, 60% of students reported to have felt down/depressed in the past two weeks at least once a week, 90% of students reported to have felt tired or have little energy at least 3 times a week in the past two weeks, and 80% students reported to have felt trouble concentrating at least once a week in the past two weeks. When answering questions from the perceived stress scale, all students reported to have felt nervous or stressed at least twice in the past month, and 80% of students reported to have felt no control over the important things in their life at least once in the past month.

Experiences with Depression

When the students were asked about their individual experiences with depression some students shared that depression caused them to have an

impairment to their normal functioning or their daily routines. This caused them to have little to no self-care. Some felt no motivation to complete assignments or other important tasks. One participant stated, "When, I was feeling depressed. It made me feel very sad, it made me feel like I didn't know if I could accomplish the things that I set out for myself. I felt like maybe I won't be able to do it. I just felt down."

Other students shared that during their darkest moments with depression they had experienced thoughts of suicide. Many of these students had to search for positive coping mechanisms, a good support system, bringing awareness of how they felt to the people around them, and some even turned to spirituality to help them in their time of need. Some of the students being interviewed described the transition into adulthood as a difficult transition. Some participants shared that they came to the realization that adulthood comes with endless responsibilities, and others had loved ones that had high expectations for them to be successful. Failure did not seem like a possibility for the students. This added to the pressure, and the depression, that they experienced during their time in college. One student stated that because she came from immigrant parents her parents expected her to be successful, and for her to utilize all the opportunities that she had been given as a citizen of the United States.

Depression in College

During their time in college some of the students experienced feeling less motivation, did not practice self-care, had changes in mood, felt mentally absent, had transitional difficulties, experienced pressure to do well in school, and felt tired. Some students experienced declining health during their experiences with depression. The students shared that they were not eating healthy foods, they were doing less physically, felt tired, and often lacked sleep. Some students felt that it was difficult to balance school, and push through assignments while feeling down. Some felt mentally absent as though they were on auto pilot. The students shared that they knew they had to accomplish their goals, but they had little motivation to do so. One participant shared, "I just I lose interest and like all of a sudden things just don't seem worth it or important even though I know that they are. It just, it makes it really, really, difficult for me to do something. So instead of trying to put all of my effort into it. I just, you know, I'm just trying to just finish it, and turn it in and it's just, it's just a chore." Another participant shared, "And I feel like when I was really depressed was when I really struggled in school. Like I wasn't able to get good grades, I wasn't completing assignments. I felt like I was just kind of aloof or not physically there, like I was physically there but mentally I was not. And it was just the biggest struggle ever."

Some of the students described feeling exhausted during their time in college and feeling drained. There was little time for self-care when it was taking much of their time to focus on finishing assignments and trying to rest after a depressive episode. One student describes experiencing insomnia during her

experience with depression. She stated that this lasted a couple of months and even when prescribed medication she was still unable to get her sleep schedule back on track. This participant stated, "I feel like mentally, I didn't feel like I can, concentrate on my homework, but I still did it because I wanted to get good grades. And my physical health, it was making me not be able to sleep. I even had to go to the doctor so he could prescribe me sleeping pills, but the sleeping pills didn't really help. So, it was very difficult. I think it was like maybe like 3, 3 months that I couldn't sleep very well. Probably 5 times a week. I would only get 3 to 4 hours of sleep."

The students were asked how much of an issue depression was on their campus 90% of students shared that depression was a big issue on their campus. Some believed that depression on campus is underreported due to fear of stigma following students. Others believe that the issue is about 50/50 on college campuses. Some students believe that going through college without facing hardships or leaving unscathed is nearly impossible.

Aftermath of the Pandemics Effect on Depression

About 90% of the students felt that the aftermath of the pandemic affected depression in college campuses. Some of the common themes amongst students during the aftermath of the pandemic were changes in the environment or in routine, inconsistencies, adjustments, communication issues, an increase in social awkwardness, and inflation. Some of the students felt that the aftermath

brought more resources and more creative ways to service mental health issues. For example, telehealth services, and more convenient ways to get quicker access to treatment. Still other students felt that the changes brought an increase in depression because people were expected to keep going, even when most of the world had been through many inconsistent changes. When speaking about how depression was affected during the aftermath of the pandemic one student recalled that, "I think it affected it. I think negatively because it was like basically like a year or 2 of your life gone. Like, you just had to jump back into the world like nothing happened, but a lot of things happened. Our world got shut down and we just kind of had to keep hustling. And like in our society, especially the United States, our society really is like just continue hustling and bustling until you know, you're dead basically."

When students were asked why they believed that depression was affecting college students, many students answered that they believed that academic pressure, inflation, and an unawareness of the resources on campus were some of the biggest issues. Some students believed that there could be better ways to advertise resources by tabling every month on campus, sending emails to all students, and just providing further awareness to students. One student described that she had difficulty accessing mental health resources on campus because of the screenings and steps she had to take before she was able to receive any services. She stated that some people may be discouraged

by utilizing these resources because of the amount of time it takes to get through the door.

Aftermath of the Pandemics Effect on Stress

Around 70% of students thought that the aftermath of the pandemic affected students' experiences with stress. Some of the themes that emerged from the students' experiences and observations were that inflation, transitions, socialization, communication, and changes brought on by the aftermath caused increased stress. Some students stated that coming back to in person classes caused a lot of social anxiety and people did not know how to speak to each other anymore. So, there was a lot of social awkwardness from students. Some students did not want to work with each other in groups, and some even dreaded staying for longer periods of time on campus. On the other hand some students felt that the aftermath brought on positive changes, for example more flexibility from professors, and more opportunities for people to socialize. Students shared that professors were more understanding following the aftermath of the pandemic. They believed this to be a positive change in the aftermath of the pandemic and this could ease students' stress during their time in college.

One student shared that the changes had not been stressful to navigate.

They even enjoyed some of the changes brought on by the aftermath of the pandemic for e.g. students being more mindful, people being more hygienic, and professors allowing for a hybrid model in their classes when there was bad

weather. They shared that these changes helped students by easing some of the stress that they felt post pandemic. Other students shared that online communication grew, and this allowed them to have more opportunities to socialize online with people that they normally would not have the opportunity to socialize with.

When the students were asked how they believed that students were coping with these changes after the pandemic the students were split in their opinions. Some students believed that the students were coping as best as they could, and others believed that the students were having a difficult time with these changes. One student shared that some students are not coping with the changes, they are just trying to get through each day. Another student shared that some students' mental health issues increased after the pandemic, but others might be transitioning well. One student shared that she hoped that the options that were given to students during the pandemic stay after the pandemic because it gives students more options on how they would like to pursue their education.

CHAPTER FIVE

DISCUSSION

When discussing depression and stress during their time in college students narrowed down to four themes their individual experiences with depression, their experiences with depression during their time in college, and the aftermath of the pandemics effect on stress & depression. Some sub themes that were discussed by students about their experiences with depression are feelings of isolation even when they had the opportunity to socialize. Some students felt as though they barely had the energy to get out of bed and when opportunities came to go out, they would rather stay home. This correlates with some of the literature reviews data about students not following up with plans with their loved ones due to their mental health. Other students had childhood traumas that emerged again in their adulthood that led them to feel more depressed. They had experienced an underlying sadness for a long time and college intensified these feelings. Other students felt that they lost some of their inspiration to practice things that once brought them joy. They felt as though these things that they once loved became a nuisance because their prime focus was their education.

Some explanations for this could be that students had little to no energy to do things that they loved, and they wanted to use this energy on things that they felt were more important than their self-care. Even though they felt as though

they had little energy, they pushed through with their assignments because of their commitment to their education. Some students shared that their assignments almost became chore-like, but they managed to finish them because this was what determined their success. As one student noted she had sacrificed many years of her life pursuing her education, so she felt that she had to keep going no matter what. Another student added that he needed this degree to get a better job in the future, if not he may face financial insecurity.

Some other subthemes that were discussed with students about depression during their time in college were the pressure to fulfill many demanding roles and having no time to take a break. Many had other jobs and competing commitments, this made it harder when they were facing depression. One student shared that he wanted to have time to relax but he couldn't because of his job, his relationship with others, and the amount of homework he had to complete. He discussed that there was no time for him to take a break, even when he was trying to manage his time as best as he could.

Another student shared that she felt very tired all the time and that even though her depression did not affect her grades, she felt as though she was struggling to maintain her academic success. Many students felt the pressure to do well in school, but they did not have time to take breaks or have some time for themselves. When dealing with their depression it was a lot of work for them to keep themselves afloat. So, this on its own was an extra job that they had to maintain, which gave them less time to take care of themselves and do those

things that once brought them joy. Many times, practicing mindfulness can reduce stress and allow people to feel as though they can focus on one thing at a time. The students could have benefitted from more workshops on mindfulness when dealing with their depressive symptoms and give students tools to be more self-aware.

Some of the students discussed using therapy services and having a positive experience with one-on-one therapy. They shared that these services have changed their coping skills and allowed them to have more self-awareness of triggers that may worsen their depression. Many of the students shared that although they knew some of the resources offered on campus, they did not know the extent of the resources offered and how to access them. One student shared that when she sought services, she was dissuaded by the questionnaires that she had to fill out beforehand. She shared that this made her feel uneasy about the services. When discussing some of the mental health resources on campus, one student felt very empowered by hearing the list of resources. She stated that she would relay this information to some of her friends on campus that were struggling.

Some subthemes that emerged from students' discussion about depression and the aftermath of the pandemic were inflation. Many students felt that inflation was a big factor in students' increased stress and depression. Since things increased in such a rapid rate students found this difficult to keep up with. Some students even feel less hope to be able to someday own a home or be

able to afford to live an average life. These worries have increased stress for students' hope for the future. Some students felt as though things changed too rapidly after they had experienced almost two years of their life living on pause. One student shared that she did not look at the gas pump anymore when getting gas because seeing how much money she was spending on gas each week was causing her distress.

Some explanations to this could be that many people were receiving more financial support during the pandemic and a lot of those resources disappeared after the pandemic. Having this combined with an increase in prices that changed from one month to the next, may have led students to feel as though they could not keep up with their financial demands. Many students talked about how classes online seemed more economical because their commute to school became a financial burden. Some students stated that at times they drove anywhere from two hours to four hours to get to school each day. Students said that they felt as though this was a loss of their time, where they could be working or doing their homework. So, they felt that having hybrid options helped them economically and academically.

Other students felt that the aftermath of the pandemic may have caused students to feel more stressed out and increased their levels of depression because of changes to their routine and their environment. They had felt safe in their environment at home for two years and now they had to go to in person learning or an in person work environment. Some students believed that this

caused students difficulty, for e.g. getting used to being on campus again, not knowing where things were located on campus, working with others again, and not being around a supportive network like their families throughout the day. One student shared that she often felt stressed because she had to be in school all day after only having online classes for so long. The student shared that she did not want to eat out because she had no money to spend, and she also craved to have a homecooked meal not what they served on campus. Being hungry and having to wait until she got home to eat caused her more stress. She reflected that she never had to deal with this during the pandemic. She already had her routine down and getting used to so many different things at once caused her to feel stressed out.

In the literature we were able to see that chronosystems which is a subsystem of systems theory, discusses how in chronosystems impactful changes happening in our social world can impact people's development in major phases of their life. We discussed here that college students are in a transitional phase because it's many students' introduction to adulthood. Many students began feeling more depressed as they realized that they had the responsibilities of adulthood. Students felt affected by the pandemics lingering effects and this affected their environment, their socialization, and even their communication patterns. These transitions changed the development of the students and in some cases, it set them back because they had to learn to do those things once again. After two years of life being one way, they had to go back to the normal

routine that they had done in that past but this time it was difficult to adjust to. Students faced hardships because they lost a sense of communication with others. Social interactions became tedious for them and challenging. These changes during the pandemic affected the students in a pivotal developmental period in their life when they were transitioning into adulthood.

Something that was unexpected in the discussion of students' knowledge of depression is how many students had a good wealth of knowledge of stress and depression. Many students have been hearing the terms stress and depression since their time in middle school or high school. So, they all had a good basis of knowledge on what stress and depression meant to them. They were able to distinguish between both and talk about how each effect students differently. When completing the PHQ-2 and the stress scale most of the students were having trouble concentrating and often felt tired. Some explained that it was circumstantial things that had happened on top of their schoolwork, and others shared that it was because of finals at school. Most of the students had good coping mechanisms and knew how to ask for help if things ever felt overwhelming for them.

It was also surprising to hear that most of the students had not sought professional support for their mental health. Very few students spoke about seeking therapy or support. Some students shared that they felt great after seeking therapy and after receiving professional support they knew what things triggered them to spiral out of control. A few of the students wanted resources on

campus to have better advertisement in the university. One student shared that through a friend she was able to find out that they could make accommodations for students struggling with their mental health such as anxiety or depression when taking exams or presenting presentations. She stated that she wished that she would have known this information since her first semester of school.

Some of the limitations for this study were that it was time limited. This made it more difficult to find participants, finding good time availability for participants, asking students personal questions about their mental health, and having a small sample size. Future research should allow for more time to find participants. Also, providing further research on students that have not experienced depression and their perception of the issue. Lastly, perhaps in the future having a group of students talk about the issue together and observing their interactions would be helpful.

Recommendations for Social Work

Mental health practitioners working in school settings whether it's college campuses or K-12th education should have a greater emphasis on mental health and the effects of the aftermath of the pandemic. This could be done in various ways by surveying students anonymously and asking them how they feel about their mental health status. Many of the students being interviewed were very honest about how they had been feeling for the past few weeks/ months and even with their personal struggles with depression/ stress. An anonymous survey

could provide a check in with students to see if they are utilizing good coping skills and how much of an issue depression and stress is on each college campus. This could provide a better understanding of the scope of the issue on each campus.

Colleges should have better advertisements for their mental health resources because many students did not know where to look for the resources. Some students knew of the resources, but they did not know that the mental health resources on campus were free to students. Many students went through struggles with their mental health without seeking professional support. This may have caused students to face more hardships than they would have if they had professional help. Perhaps, schools could have more tabling events on pathways to class that could provide flyers or stickers with information on them. Many of the caps workshops and groups were online during the pandemic but currently many are offered in person. Not everyone on campus can make these groups or workshops because many of the students on campus are commuting from different areas or they must work and go to school.

In addition, more training should be given to students about better coping mechanisms for depression, and stress. Many students that go through these issues stop taking care of themselves and this causes them to emphasize their negative feelings. If the importance of self-care and time management is taught to students early on, they may see that it's important to always make time for the things that bring them happiness. These things, although seemingly mundane or

unimportant can help the students feel hopeful about their future and know what to do when things trigger them to feel stressed and depressed.

Lastly, the pandemic brought on some good changes for e.g. more understanding from professors, and the use of a hybrid model when students were unable to attend class. These alternatives have increased the positive relationship between professors and students. Students feel as though their professors are kinder and more understanding. This is a positive change that many students have been happy to report. The pandemic helped students gain greater knowledge of technology and how to keep in touch with people even when the world was on pause.

Conclusions

Over 90% of students interviewed felt that the aftermath of the pandemic affected their own or other students' depression, and around 70% of students thought that the aftermath of the pandemic affected students' experiences with stress. Results from this study showed that students felt that they were affected by the aftermath of the pandemic in multiple ways. This affected their socialization, communication, and their levels of stress and depression after adjusting to a new routine. Further research should be conducted to gain a better understanding of how these issues may continue to affect students' development in the future. There should be a greater emphasis on mental health on college campuses, especially following the aftermath of the pandemic.

APPENDIX A CONSENT FORM

INFORMED CONSENT

The study in which you are asked to participate is designed to examine how stress from the aftermath of the pandemic has affected college student depression. The study is being conducted by Lorena Sedano, a graduate student, under the supervision of Dr. Erik Schott, Assistant Professor in the School of Social Work at California State University, San Bernardino (CSUSB). The study has been approved by the Institutional Review Board at CSUSB.

PURPOSE: The purpose of the study is to examine how stress from the aftermath of the pandemic has affected college student depression.

DESCRIPTION: Participants will be interviewed on how stress from the aftermath of the pandemic has affected their levels of depression. This includes brief questions screening their perceived stress and experiences with depression in the past two weeks. The interview will also consist of questions about the aftermath of the pandemic's effect on their experiences in college, how these experiences have affected them, examples of how post pandemic life can affect students in general, and some brief questions on their demographics. Students will be audio recorded through zoom but will be asked to turn their cameras off for confidentiality.

PARTICIPATION: Your participation in the study is totally voluntary. You can refuse to participate in the study or discontinue your participation at any time without any consequences.

CONFIDENTIALITY: Your participation in the interview will remain confidential, and data will only be reported with an anonymous pseudonym. No identifying information will be used for this study.

DURATION: It will take one hour to participate in the interview.

RISKS: There are potential short-term and long-term risks, but they are minimal and will be mitigated. Although minimal, there may be some discomfort in answering some of the questions. Participants are not required to answer and can skip the question/s or end their participation at any time. Participants will not be reprimanded for skipping questions or choosing not to participate in the study if it makes them feel uncomfortable. The participants will not face risks of being exposed to covid-19 because the interview will be done completely online through zoom.

BENEFITS: There will not be any direct benefits to the participants, however the findings and information will contribute to our knowledge in this area of research.

CONTACT: If you have any questions about this study, please feel free to contact Dr. Erik Schott at (909) 537-7480 or through email at erik.schott@csusb.edu.

RESULTS: Results of the study can be obtained from t (http://scholarworks.lib.csusb.edu/) at California Stat	e University,	San Bernardino after May 2024
I agree to have this interview be audio recorded:	YES	NO
I understand that I must be 18 years of age or older to understand the consent document and agree to parti		•
Name	Date	

APPENDIX B DEMOGRAPHICS QUESTIONNAIRE

Demographics Sheet for Research Project

Thank you for your participation in this interview. Please check the most appropriate answer for each question. Please remember you do not have to answer any question for any reason.

Please do not write your name on this page. Please choose a pseudonym (a fake nick name that does not have any identifying

information to you. E.g. Chuckie Cheese).

Chosen pseudonym					
What is your age:			What is your gender:		
What is/are your race	(s)/ethnicity?				
Years enrolled at scho	ool:				
Class Standing:	Where do you live?	Are you a t	ransfer student? 🗖 Yes	□ No	
☐ Freshman ☐ Sophomore ☐ Junior	☐ on-campus housing ☐ off-campus housing alo ☐ off-campus housing wi	ne/with roommates th fam	om where?		
☐ Senior	□ other		you a □ full-time □ part-ti you an international student		
What is your primary □ Drive □ Bus □ Walk □ Carpool □ Dropped off by fami □ Taxi / Ride sharing a		Do you work? Yes	s		
Which college are yo	u affiliated with?	What is the	e highest degree you expect	to earn?	
☐ College of Arts and a ☐ College of Education other master's	Letters		☐ Bachelor of Arts or Scien ☐ Master of Arts, Master of	се	
		Brown)	☐ MBA ☐ M.D. (Medicine) ☐ Ph.D. or Ed.D. ☐ Other:		
	our education? (check all that appl		_		
☐ Work part-time☐ Work full-time	☐ Family ☐ Student loans	☐ Scholarship☐ Personal savings	□Work-study. □Other		
□ lower than 10,000	ncome? (check which applies) □ 11,000-24,000 □ 25. □ 100,000+ □ N		-70,000 □Other		
 □ No formal education □ Elementary (1-5) □ Middle school □ Some high school □ High School (9-12) 	☐ MA/MS/MBA ☐ Ph.D. or Ed.D. ☐ Professional (M.D. or J.D.) ☐ Other:	Are you	married? □ Yes □ No		
☐ Some college (no de		Do you have any children? □ Yes □ No Do you have any other dependents? □ Yes □ No			

APPENDIX C INTERVIEW QUESTIONS

THE AFTERMATH OF THE PANDEMIC'S EFFECT ON COLLEGE STUDENT DEPRESSION

(INTERVIEW GUIDE/QUESTIONS)

Interview (read to participants after you have reviewed consent form with them, and they have sent it back to you signed).

This project is interested in documenting the experiences of students at this University. Specifically, in students' experiences with depression, perceived stress, and how the aftermath of the pandemic has affected their experiences. The interview will involve you answering questions about your experience at this University in relation to your experiences with depression and how the aftermath of the pandemic has affected your experiences in your everyday life. Please remember that you can refuse to answer any question for any reason and withdraw at any time. Do I have your consent to move forward with the interview?

Background

- 1. Fill out the demographics sheet provided to participants before the interview.
- 2. I would like to start by asking you a little more about your experience at this University?

Follow up questions (wait for participant to answer and then ask follow up questions)

- a. What made you decide to pursue an education at this University?
- b. How was the transition into this University?
- c. What has been your greatest challenge as a student?
- d. What do you think is your greatest accomplishment as a student?

Depression and stress

Before we start with the interview questions, I would like to know a little about your experience with depression and stress. These are very brief questions, but if at any time you feel uncomfortable answering any of these questions you could skip to the next question or stop the interview at any time. Please feel free to skip a question, ask questions, or stop me at any moment. PHQ-9 questions and Perceived Stress Scale.

- 3. During the past few weeks have you felt down, or depressed? If so, how many days per week do you think that you felt this way?
- 4. During the past few weeks did you experience feeling tired or having little energy? If so, how many days per week do you think that you felt this way?
- 5. During the past few weeks did you experience trouble concentrating on things, such as reading a book, completing homework, or watching television. If so, how many days per week do you think that you felt this way?
- 6. In the last month, how often have you felt nervous and stressed?
- 7. In the last month, how often did you feel that you were not able to control the important things in your life?

Knowledge of Depression

8. We have heard "depression" and "stress" used in different ways. Have you heard the terms before? (Give them time to answer the prompt and then give them the definition of both terms). Follow up questions:

- a. Where did you hear these terms? (If participant answered yes)
- b. Have you learned about depression during your time in college?
- c. What is your perception of these terms?

According to the World Health Organization, "depression is characterized by persistent sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities." "Stress can be defined as any type of change that causes physical, emotional, or psychological strain. Stress is your body's response to anything that requires attention or action" (World Health Organization, 2021).

Follow up questions:

 Does this change your perception of these terms? (If so, how does it change your perception?)

Experiences with depression -

9. What has been your experience with depression?

Follow up questions:

- a. How long have you felt this way?
- b. Have you shared your experiences with someone else or in a therapy setting?
- c. How did these experiences make you feel during this time?
- 10. Can you describe your experience with depression during your time in college?
- a. How did depression affect your physical and mental health while you were in school?
- b. How did these experiences affect your academics?
- c. How did depression affect you in your everyday life? (This could be your day-to-day activities, your lifestyle or routine).
- d. How did depression affect your relationship with others?
- 11. How do you think the return to normal after the pandemic affected your experiences with depression? (For e.g., return to in person classes, rise in costs, and other changes brought on by the aftermath of the pandemic.)

Follow up questions:

- a. Has the return to normal affected your physical health?
- b. Has this affected your academics?
- c. Have these experiences affected you in your everyday life?
- 12. How do you think the return to normal after the pandemic affected your experiences with stress? Follow up questions:
 - a. Do you think the return to normal after the pandemic has been a smooth transition? Why or why not?
 - b. What are some changes post pandemic that have been stressful to manage?
 - c. What are some changes post pandemic that have been easy to manage?

Effects of Depression on campus

13. Given your experience and the definition of depression & stress, how much of an issue do you think depression & stress is for college students?

Follow up questions:

- a. Why do you think this is happening?
- b. Why do you think that these issues are affecting college students?
- c. Are there resources on campus that could help?
- 14. How do you think the aftermath of the pandemic has affected students' experiences with depression on campus?

Follow up questions:

- a. Has this changed students' communication with others after the pandemic? How or how not?
- b. Do you think post pandemic changes for e.g., return to in person classes or jobs have changed these experiences?
- c. What are other experiences that you have noticed during the aftermath of the pandemic? How do you think that these experiences affected students' experiences with depression?

- 15. How do you think the aftermath of the pandemic has affected students' experiences with stress? Follow up questions:
 - a. How do you think these transitions have affected students' everyday lives?
 - b. How do you think that students are coping with these transitions? E.g., transition to in person classes, change in environment, and communication after the pandemic.
- 16. Can you share a story or an example that illustrates the impact of depression & stress on students that you have witnessed?
- 17. Before we leave, I would like to share some resources on campus that could be helpful to anyone struggling with stress and depression. For example, the wellness center on campus is open and conducts several helpful workshops each semester. Sometimes they are in person or on zoom. These can be found on our campus website. There are also groups on campus that meet every week with topics such as depression, anxiety, first generation students, and more. We can also schedule appointments to see a counselor one on one. All of these resources are free to all students and often free counseling is also offered to members of the county.
- 18. We have reached the end of our questions. Is there anything you would like to add regarding depression on campus?
- 19. Do you have any questions for me?

Thank you for taking the time to participate in this interview with me. Your participation in this interview has been very helpful.

Sources:

World Health Organization. 2021. Depression. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/depression

APPENDIX D IRB APPROVAL LETTER

IRB-FY2023-213 - Initial: IRB Admin./Exempt Review Determination Letter

November 27, 2023

CSUSB INSTITUTIONAL REVIEW BOARD

Administrative/Exempt Review Determination Status: Determined Exempt IRB-FY2023-213

Erik Schott Lorena Sedano CSBS - Social Work California State University, San Bernardino 5500 University Parkway San Bernardino, California 92407

Dear Erik Schott Lorena Sedano:

Your application to use human subjects, titled "THE AFTERMATH OF THE PANDEMIC'S EFFECT ON COLLEGE STUDENT DEPRESSION" has been reviewed and determined exempt by the Chair of the Institutional Review Board (IRB) of CSU, San Bernardino. An exempt determination means your study had met the federal requirements for exempt status under 45 CFR 46.104. The CSUSB IRB has weighed the risks and benefits of the study to ensure the protection of human participants.

This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses. Investigators should consider the changing COVID-19 circumstances based on current CDC, California Department of Public Health, and campus guidance and submit appropriate protocol modifications to the IRB as needed. CSUSB campus and affiliate health screenings should be completed for all campus human research related activities. Human research activities conducted at off-campus sites should follow CDC, California Department of Public Health, and local guidance. See CSUSB's COVID-19 Prevention Plan for more information regarding campus requirements.

You are required to notify the IRB of the following as mandated by the Office of Human Research Protections (OHRP) federal regulations 45 CFR 46 and CSUSB IRB policy. You can find the modification, renewal, unanticipated/adverse event, study closure forms in the Cayuse IRB System. Some instructions are provided on the IRB Online Submission webpage toward the bottom of the page. Failure to notify the IRB of the following requirements may result in disciplinary action. The Cayuse IRB system will notify you when your protocol is due for renewal. Ensure you file your protocol renewal and continuing review form through the Cayuse IRB system to keep your protocol current and active unless you have completed your study.

- Ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.
- Submit a protocol modification (change) if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before being implemented in your study.

- Notify the IRB within 5 days of any unanticipated or adverse events are experienced by subjects during your research.
- Submit a study closure through the Cayuse IRB submission system once your study has ended.

If you have any questions regarding the IRB decision, please contact Michael Gillespie, the Research Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval number IRB-FY2023-213 in all correspondence. Any complaints you receive from participants and/or others related to your research may be directed to Mr. Gillespie.

Best of luck with your research.

Sincerely,

King-To Yeung

King-To Yeung, Ph.D., IRB Chair CSUSB Institutional Review Board

KY/MG

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