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Impact of the COVID-19 Pandemic on Psychological Stress and Academic Motivation on Psychology Graduate Students

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Motivation on Psychology Graduate Students

by

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Doctor of Psychology
in
Clinical Psychology

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Impact of the COVID-19 Pandemic on Psychological Stress and Academic
Motivation on Psychology Graduate Students
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Abstract

Title: Impact of the COVID-19 Pandemic on Psychological Stress and Academic Motivation on Psychology Graduate Students

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Graduate students experience significant amounts of psychological stress in terms of academic and professional settings. In addition, academic performance can fluctuate depending on the circumstance. The COVID-19 pandemic caused significant challenges for mental health, academic motivation, substance use, and other related domains. However, the research specific to psychology graduate students and the impact of COVID-19 is limited, specifically related to performance. Therefore, the current study examined the relationship between the pandemic and its impact on psychology graduate students' psychological health related to depression, anxiety, stress, and experiential avoidance. In addition, the study examined academic motivation related to degree specific requirements and practicum experiences. Overall, this study found that the COVID-19 pandemic impacted mental health, depression, and anxiety related to loneliness and feelings of wellbeing. Students also acknowledged motivations' influence on academic performance. Contributions to the findings, limitations of the exploration, and future research directions are all discussed.

Keywords: demographics, graduate students, psychological stress, loneliness, academic motivation, COVID-19, experiential avoidance, practicum

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Chapter 1 : Introduction

Roughly in early 2020, a novel virus known as coronavirus (COVID-19) has impacted citizens' economic, professional, and personal lives worldwide. The rapid spread of the virus led to it being declared a worldwide pandemic as of March 2020 (World Health Organization [WHO], 2020). Very little was known about COVID-19 and how it transmitted from person to person. There was a substantial effort in the United States, led by the Center for Disease Control and Prevention (CDC), to slow the spread of the virus by wearing facial coverings and practicing physical distancing. Physical distancing, better known as "social distancing," was introduced as a concept that involved keeping a safe amount of physical space between yourself and others outside of the household (CDC, 2020). It was recommended that six feet was the closest proximity that individuals could stand/sit together without potentially transmitting the virus. Scientists decided the safest and best possible option for society was to social distance. In addition, the vaccine was not available until months later, and it was essential to slow the spread of the virus. Suddenly people were isolated at home, working remotely, and children were finding new ways to participate in school while living with a great deal of fear and distress.

To date, 47,145,861 individuals have tested positive for COVID-19 in the United States. Of that, 761,426 people have died. As the number of cases rose, scientists and government personnel began to act. Unfortunately, medical public health emergency orders contribute to psychological effects, including various mental health issues. Further, the world was changing rapidly, and there was a

significant impact on educational institutions. There have been many studies looking at the impacts of stress on graduate students. However, in these unprecedented times, a substantial increase in graduate student stress was noted. This study focuses on clinical psychology graduate students who face unique stressors. While psychology students are considered health care professionals, the designations for their work were not as straightforward as it was for those providing direct medical care. The changes in classrooms, clinical care, and general functioning had a remarkable impact on these students. The following literature review includes a comprehensive overview regarding various psychological stressors and educational challenges faced before and during the COVID-19 pandemic.

Chapter 2 : Review of the Literature

Coronavirus

COVID-19 is a medical illness caused by the SARS-CoV-2 virus (CDC, 2020). The virus accelerated quickly across the globe while scientists were attempting to understand its origination and transmission. It was concluded that it spread from person to person through various modalities, primarily through person-to-person contact (CDC, 2020). Contraction of COVID-19 is typically detectable through the mouth or nose swabs. Symptoms usually appear 2-14 days after exposure. Typical symptoms include fever or chills, cough, shortness of breath, difficulty breathing, fatigue, muscle aches, headaches, loss of taste or smell, sore throat, nausea, or diarrhea (CDC, 2020). These symptoms can become severe, resulting in hospitalization and death. The rapid spread of the disease severely taxed the medical community's ability to provide adequate care for patients.

In the early months of the pandemic, scientists established that both adults and children were at risk of contracting COVID-19. However, due to its ability to impact the lungs, researchers concluded that elderly adults (65 and up) and immune-compromised individuals had the highest risk of contraction with potentially lethal consequences (CDC, 2020). As a result, there was a substantial impact on educational institutions for students, faculty, and staff (Dozois, 2020). School systems, including K-12 and higher education, were forced to be entirely virtual for several months. Parents also had difficulty ensuring their children did not congregate and socialize with peers their age while out of school. In addition, many people,

including those in education, experienced job loss and temporary layoffs. Others were fortunate enough to maintain employment or transition to work from home; however, these transitions were often stressful. Overall, regardless of the hardship, everyone slowly transitioned to "the new normal." However, this new normal was anything but ordinary as society saw the psychological costs of the inevitable changes.

Social Distancing

Finding ways to stay physically distant from others was perhaps the most difficult preventive measure of COVID-19 (CDC, 2020). Its impacts transformed social, professional, and educational settings, as gatherings of more than ten people were discouraged and, at one point, illegal in parts of the United States (CDC, 2020). Events such as concerts or festivals that attracted large crowds were canceled for several months, which persisted even after the vaccine became available. Social gatherings, religious gatherings, and all types of travel were canceled or postponed. Non-essential businesses were closed to maintain social distancing. Some essential services remained open such as grocery stores and restaurants; however, there was much anxiety about accomplishing even these basic life tasks. (Dozois, 2020).

The lack of in-person contact with family and friends dramatically increased due to the COVID-19 pandemic, particularly during lockdown situations (Tasso et al., 2021). College students experienced unique disruptions and adjustments during the height of the pandemic. In-person courses were abruptly canceled and moved online. Students had to leave dormitories and terminate extra-curricular and athletic

programs until further notice. In understanding the impact of social distancing, Ellis, Dumas, and Forbes (2020) studied Canadian adolescents' perceptions of being physically isolated but socially connected through online platforms. Participants reported that school closures, virtual classes, and physical isolation in neighborhoods increased depressive symptoms.

Lukacs (2021) measured college students' wellbeing while practicing social isolation. In this study, students in Hungary who experienced four to six weeks of confinement because of the pandemic saw significant changes in physical activity, relationships with others, financial stability, physical health, future occupational prospects, and general life satisfaction. Further, students felt disproportionately isolated from family and friends, especially international students, and those whose families lived in "hotspots" or dangerously contagious areas that prohibited or discouraged travel. With such an abrupt transition, students experienced heightened levels of psychological stress.

Stress

Stress, in the field of psychology, is referred to as the process of a response to an event that is perceived as demanding or threatening (Lazarus & Folkman, 1984). The process involves primary and secondary responses, allowing individuals to evaluate the stressors' potential harm and perceived impacts. More specifically, stress can be observed through psychological and physiological avenues (da Silva-Sauer et al., 2021). For example, the American Psychological Association's (APA) annual stress report indicated that young adults aged 18-22 reported higher stress

levels than any other age group (APA, 2019). While it cannot be inferred that these stress levels are related to college-specific stressors, the significant vulnerability to heightened stress in college-age individuals emphasizes the importance of psychological flexibility and the ability to maintain a sense of wellbeing.

College students have encountered multi-faceted difficulties concerning academic, professional, and financial responsibilities. However, graduate students enrolled in higher education programs are at increased risk for stress due to higher expectations for achievement and success. Human service graduate degrees, such as psychology, add an extra layer of potential stress as program completion often requires a form of clinical practicum or internship opportunities (APA, 2021).

In an analysis of a group of psychology graduate students, El Ghoroury and colleagues (2012) discovered that over 70% of students reported at least one stressor that interfered with psychological functioning. These stressors included academic responsibilities, financial debt or insecurity, and anxiety about completing assignments quickly and effectively. Students also reported difficulty with balancing personal and professional tasks (El Ghoroury et al., 2012).

Graduate students are usually encouraged to utilize coping strategies, including self-care for managing stress. However, psychology students may experience barriers that hinder their ability to use those mechanisms. Lack of coping mechanisms has often been linked to increased stress and anxiety. For example, in a separate metaanalysis conducted by El Ghoroury (2012), students explained that lack of time and financial costs impacted their coping abilities. However, close

relationships have been a longstanding buffer for psychological stress in students. This is important for individuals who use socialization to cope with stress (Marmarosh et al., 2020). For example, Tompkins and colleagues (2016) measured the importance of close working relationships between graduate students and their faculty mentors concerning perceived social support. These sources of support were dramatically reduced because of isolation during the pandemic.

Results shown that doctoral students reported significantly more academic and socioeconomic support from friends/family and student peers than faculty mentors, which attests to the importance of close relationships with peers and family (Tompkins et al., 2016). Psychological stress typically decreases through social engagement, but the pandemic reduced the ability to engage with others. This isolation was challenging but necessary due to CDC recommendations promoting social distancing (CDC, 2021). While the recommendation was necessary to decrease the likelihood of contracting and spreading COVID-19, it significantly strained peoples' need for human interaction and connectivity. Thus, despite the newly approved vaccines, some social distancing is still encouraged. Moreover, the long-term effect of social distancing is likely still unknown.

Depression and Anxiety

Anxiety is one of the most prevalent disorders in the United States (APA, 2020). Generalized Anxiety Disorder (GAD) is a known disorder in the classification of anxiety, having excessive worry and concern about general matters (APA, 2020). Intolerance of uncertainty is a primary symptom of GAD, being unable to tolerate

unknown factors. Before COVID-19, every one out of three people suffered from an anxiety disorder at some point in their lives (APA, 2013). Therefore, it comes as no surprise that individuals found themselves full of worry and concern about the potential impacts of the virus. A direct increase in intolerance of uncertainty appeared to be noted in not only Alonzi's (2020) research but other studies as well.

Concurrently, many people experienced depression, impacting as many as one in seven people (APA, 2020). Depression is mainly categorized by feelings of sadness and hopelessness and can present through various symptoms based on age (i.e., irritability in adolescents) (APA, 2013). Individuals appeared to combine uncertainty and anxiousness with feelings of hopelessness about the pandemic and when it would end, causing significant distress. Gruber, Prinstein, Clark, and Rottenberg (2020) found that people who displayed increased psychological symptoms of depression and anxiety also labeled the pandemic a significant stressor. They discovered that although the proper response to the coronavirus was to "flatten the curve" and focus on saving lives from a public health perspective, the measures directly impacted mental health (Gruber et al., 2020).

Experts in the field acknowledged the COVID-19 pandemic's considerable impact on global mental health, particularly young adults. Young adults, defined as individuals between ages 18- 30, often experience heightened episodes of stress and instability in their professional, academic, and social lives (Alonzi et al., 2020). As a result, it can place them at increased risks for mental health difficulties and emotional distress. Alonzi and colleagues (2020) measured the psychological impact of young

adults' pre-existing mental and physical health conditions. Their sample showed that although only 32.5% of participants had prior mental health diagnoses, 64.5% of participants reported newly developed symptoms due to the pandemic (Alonzi et al., 2020).

Other countries attempted to measure the effects of the pandemic and its impact on psychological stress and mental health symptoms. For example, Dozois (2020) examined anxiety and depression rates in Canadian citizens through a self-report survey. Before COVID-19, only 4-5% of participants endorsed symptoms equivalent to criteria necessary for depression and anxiety disorders. However, during COVID-19, depression and anxiety rates increased to 10% and 20%, respectively, suggesting a 5-15% increase in mental health symptoms. Furthermore, respondents' results indicated that the growth was attributed to social distancing and quarantine (Dozois, 2020).

Continuing review of COVID-19's impact on mental health in other countries, Gao, Zheng, Jia, Chen, and Dai (2020) studied the impact of social media exposure on feelings about the pandemic (i.e., reporting positive case numbers and number of deaths daily). Analysis recorded that almost half of participants noted symptoms related to depression. More specifically, 22% of participants endorsed symptoms consistent with an anxiety disorder, and 19.4% endorsed both disorders comorbidly. Thus, it can be concluded that individuals are both dysphoric and concerned about the impact of COVID-19 and its potential long-term effects on psychological wellbeing (Gao et al., 2020).

Chapter 3 : Additional Impacts

Fear of Exposure

While much discussion has focused on unlikely stressors and biopsychosocial symptoms, fear presented significant challenges (Gruber et al., 2020). Individuals found themselves anxious and frightened at the possibility and threat of contracting the unknown virus. Fitzpatrick and colleagues (2020) assessed potential fear of COVID and fear of contraction. Most participants suggested they were fearful of contracting the virus due to a lack of knowledge of the consequences.

Interestingly, fear of contraction was strongly observed in geographical areas that produced the highest rates of positive cases, such as metropolitan areas (Fitzpatrick et al., 2020). Additional difficulties in fear of contraction were observed as people attempted to acquire basic household needs such as groceries, prescription medications, and toiletries (Dozois, 2020). As a result, household necessities were scarce, and people found themselves at nearly impossible risks of altogether avoiding human contact.

Similarly, perhaps the most substantial concern, aside from contracting the virus, was the concern for a loved one contracting the virus (Lukacs, 2021). In earlier months, research suggested that anyone that was not elderly or immune-compromised had a low probability of being severely harmed by COVID-19. However, students were still susceptible to potentially exposing their elderly relatives (Lukacs, 2021). The fear of exposing their family members to COVID-19 further exacerbated the social disconnect between students and their family

members, as many students refrained from traveling to visit family members during the height of the pandemic (Lukacs, 2021).

Regarding clinical training, it is likely that students who were required to maintain in-person practicum/internship placements experienced significant worry of contracting the virus from coworkers or clients. This is demonstrated in a study focusing on frontline nurses' reported fears of contracting COVID-19. In addition, they reported the fear of the likelihood of exposing their households while fulfilling their ethical and professional duties (De los Santos et al., 2021). Psychology graduate students likely share these same frustrations and fears, attempting to achieve the desired clinical contact hours while fighting to keep themselves and their households safe.

Racial Disparities

A recently discussed factor related to the pandemic is the impact on the African American population. Recent research has been conducted on the disproportionate ratios of contagion and fatality of COVID-19 in African American, Hispanics, and Native American communities, mainly living in lower socioeconomic areas (Fortuna et al., 2020). Statistics produced from the CDC (2020) suggested that African Americans accounted for 34% of positive COVID-19 cases while only representing 13% of the U.S. population. Similarly, Latino and Hispanic populations, particularly in California, represented 25-30% of COVID-19 cases and accounted for over 80% of intensive care units (ICU) at a San Francisco hospital (Fortuna et al., 2020). Diseases are easily transmittable in minority households as they tend to live

with multigenerational family members (Fortuna et al., 2020). As a result, there is less accessibility to practice social distancing when living with multiple individuals under one roof.

Furthermore, minorities generally have poorer physical and mental health than their white counterparts (Fortuna et al., 2020). Research has suggested that minorities are less likely to engage in mental health services for fear of being mistreated or not receiving equal services (Sneed et al., 2020). During COVID-19, a study (Fortuna et al., 2020) reported that about 33% of African Americans feared contraction versus 18% reported from whites. This is no surprise, as African Americans were two times more likely to know someone who was hospitalized or died from COVID-19 (CDC, 2020).

Despite findings that African Americans are more susceptible to contracting COVID-19 and experiencing significant medical effects, African Americans continue to have imbalanced access to testing and vaccination locations than more affluent and conservative counties. While this seems unrelated to graduate student stress, one must acknowledge that higher education has seen substantial increases in minority enrollment and graduation over the last 5-10 years. According to the American Council on Education (ACE, 2021), of the 2015-2016 school year, African Americans comprised 13.5%, while Hispanics comprised 9.2% of graduate student enrollment. As of 2019, African Americans account for 12.1% of first-time graduate student enrollment but only 6.1% of doctoral students. Also, 69.4% of African Americans enrolled in graduate programs are women (ACE, 2021). This will be

important to recognize when determining how to assist and understand minority graduate students' perceptions of impacted psychological stress during COVID-19.

Finances

COVID-19 produced unforeseen economic and financial hardships. During the pandemic, job loss and business closures produced the highest unemployment rates seen in the United States since the Great Depression (Falk et al., 2020). The Federation of American Scientists (FAS) recorded the unemployment rate at 14.8% in April 2020, declining to 6.7% by December 2020. Further, African Americans and Hispanics were significantly impacted by job loss (Fortuna et al., 2020). Falk and colleagues (2020) observed unemployment disparities between races, as racial and ethnic minorities had relatively higher unemployment rates. During April 2020, statistics recorded unemployment rates at 16.7% of black workers and 18.9% of Hispanics, compared to 14.2% of white workers (Falk et al., 2020).

While the government assistance and stimulus packages were helpful with financial difficulties, they could not prevent the stress resulting from job loss (Crayne, 2020). For example, Mimoun and colleagues (2020) determined that individuals placed on furlough (unpaid leave of absence) reported higher distress than individuals who were unemployed even before the pandemic. In addition, the uncertainty of when non-essential businesses would reopen likely produced increased stress levels in furloughed persons (Mimoun et al., 2020).

Substance Use

Substance abuse has been a longtime epidemic in the United States (Acuff et al., 2020). Importantly, it has high comorbidity with several mental health diagnoses (Lin et al., 2020). Lin and colleagues (2020) found life stress as a risk factor for developing and maintaining a substance use disorder. The research analyzed alcohol consumption, tobacco use, and drug use. They found a relationship between the number of stressors and individuals who abuse alcohol and drugs (Lin et al., 2020). The Emerging Adult Theory suggests that adults aged 18-25 are likely to experiment with some sort of substance in their early adult life, whether alcohol or marijuana. The theory asserts that college-aged students view substance use as an activity with little consequence (Smith et al., 2014).

Substance use also increased in working and mid-adult graduate students during the pandemic. Excessive time at home demonstrated an increase in alcohol and substance use (Dozios, 2020). Moreover, it is hypothesized that usual rewards for achievement and leisure, such as physical activity, large social gatherings, and populous entertainment avenues, were replaced with increased alcohol and marijuana use (Acuff et al., 2020). It is unclear how much alcohol and drugs impacted students during the pandemic, as some may be fearful of reporting accurate usage. However, while psychological stress and alcohol use demonstrated an increase, motivation saw a decrease.

Chapter 4 : Academic Motivation

Motivation

Motivation is defined as the process that initiates, guides, and maintains goal-oriented behaviors (Cherry, 2020). It is hypothesized as the construct that causes individuals to act. Further, motivation is generally categorized by three different types: autonomous, controlled, and amotivated (Ratelle et al., 2007). Autonomously motivated individuals usually perform positively by choice or desire to feel pleasure through rewarded achievement. Controlled motivation is conceptualized by acting for regard or behavioral expectation. For example, to avoid punishment or guilt. Finally, amotivated individuals usually have no desire to perform for any specific reason (Ratelle et al., 2007).

As it relates to academics, motivation lies on a continuum of self-determination and is often understood through intrinsic and extrinsic factors. Intrinsic motivation is categorized by performing a behavior for internal reasons, such as pleasure and satisfaction. Extrinsic motivation typically refers to doing something for external reasons, such as pleasing family or working to obtain a reward or avoid punishment (Ryan & Deci, 2000; Ratelle et al., 2007). Self-determination theory, first proposed by Ryan and Deci (2002), hypothesizes that autonomous motivation typically reflects a higher quality of regulation and effort. On the other hand, controlled motivation or amotivation, reflects intermediate and lower ends of the continuum. Essentially, individuals who are self-motivated produce higher quality performance than if their purpose was extrinsically motivated.

Upon assessing students' motivation levels, results demonstrated that students who reported high levels of autonomous motivation yielded higher confidence and satisfaction in their academic performance. This suggests that individuals who choose to be independently motivated typically produce better work and report higher job/school satisfaction (Ratelle et al., 2007). It was also noted that individuals motivated by external factors reported more satisfaction as compared to amotivated individuals. Overall, the research suggests that students who believe they are performing well for their pride and pleasure typically perform consistently well and at higher levels (Ratelle et al., 2007).

Academics Related to COVID-19

Much of the recent literature focuses on the pandemic's impact on mental health. However, college students uniquely saw substantial adjustments in academic and professional arenas. College students not only battled the pandemic from an economic and psychological standpoint but also academically (Bedewy & Gabriel, 2015). Before the pandemic, college students battled several stressors impacting their performance (Bedewy & Gabriel, 2015). These included but are not limited to the expectation of well-rounded students who participate in organizations and extracurriculars and obtain high-grade point averages. Psychology graduate students, more specifically, are expected to navigate the balance between coursework and in-person/virtual training experiences (Bedewy & Gabriel, 2015). Thus, staying motivated likely became difficult considering the number of adjustments students encountered due to the pandemic.

One of the biggest challenges of remaining motivated to perform at satisfactory levels was transitioning from in-person instruction to online. Butz and Stupnisky (2016) analyzed the impact of self-determined motivation in students enrolled in hybrid learning environments. This is defined as students who can complete courses online but still engage in in-person practicum/internship experiences. In measuring the students' motivational factors, results determined that students reported more significant levels of self-efficacy and perceived motivation when engaged in classes in-person than when required to complete courses online (Butz & Stupnisky, 2016).

Similarly, intrinsic motivation is related to the quality of teaching, in the sense that students who perceived their teachers as more flexible or engaged while online were more likely to appear more motivated (Dahl & Smimou, 2011). This is even more important for psychology graduate students because several graduate programs require practicum or internship experiences to obtain the degree. Therefore, students must be supported and reassured that they have the capacity and skill to continue meeting personal and program expectations. While universities have worked tirelessly to engage students who are not fully immersed on campus, it remains problematic for students with limited access to technology.

One of the downfalls to the academic modifications necessary to maintain COVID-19 safety precautions is assuming that everyone has access to technology. Lawmakers and medical experts suggested that individuals stay connected through social media and face-to-face platforms such as Zoom. However, they did not

consider the increased demand for technological networks, which hindered access to high-speed quality internet service. This can be problematic, especially in a household with multiple users on the same service. Therefore, the suggestion to stay connected through virtual platforms may have had adverse psychological frustration for many individuals. As the pandemic continues, it is hopeful that as academia transitions back to in-person learning, students will be able to rely on technology and resources provided by the institution.

Chapter 5 : Study Purpose and Rationale

Previous research demonstrated that being exposed to traumatic events can enhance psychological stress and hampers general wellbeing. COVID-19 was declared a pandemic because of the severity and severe health risks posed to society (CDC, 2020). While research has only begun to scratch the surface with understanding the virus, there remains minimal knowledge about the virus's long-term psychological consequences. What is clear is that there was an enormous adjustment and transition that occurred during 2020 (Gruber et al.,2020). The world was introduced to the "new normal:" specifically face coverings and social distancing (CDC, 2020). While other researchers started focusing on the pandemic's effects on children and older adults, little research has been published about its impact on graduate students, specifically psychology students in direct helping professions.

This study aims to examine the impact of the COVID-19 pandemic on psychological stress and academic motivation in psychology graduate students. This study will also investigate contextual factors impacted by the pandemic, such as financial responsibilities, substance use, racial disparities, and fear of exposure. In addition, the study examined demographic variables and novel questions regarding psychological difficulties and levels of motivation during COVID-19. The current study contributed to the literature to better understand the pandemic's impact on psychology graduate students' psychological wellbeing and performance concerning depression, anxiety, social disconnectedness, and academic motivation.

The present study aims to add to the current literature by testing the following hypotheses:

1. Examine the relationship between depression, stress, and wellbeing. High rates of depression and reported stress will be associated with greater negative impacts on wellbeing.
2. Examine the relationship between depression, experiential avoidance, and loneliness. High rates of depression and experiential avoidance will demonstrate a relationship with high levels of social disconnectedness.
3. Examine the relationship between depression, anxiety, and academic motivation. High rates of depression and anxiety will be associated with low levels of academic motivation.
4. Examine the relationship between experiential avoidance, wellbeing, and alcohol use. High levels of experiential avoidance will be associated with decreased overall wellbeing, as well as increased alcohol use.
5. Examine the relationship between in-person practicum and stress. Students who had in-person practicum or internship requirements will report higher levels of stress.
6. Examine the relationship between African American students and perceived stress. Ethnic minority students will report higher levels of stress than white students.

Chapter 6 : Methods

Participants

Participants included doctoral and masters' students enrolled in a psychology-related degree program. Participants were recruited from a variety of sources. Email requests were sent to programs across the country via a psychology listserv. Participants were also recruited via Facebook, LinkedIn, and Reddit forums. Finally, participants were directed to a Qualtrics survey link. Consent was obtained, and participants were presented with instructions to complete the survey. One hundred and thirty students completed the survey.

Measures

Demographic Information.

Standard demographics such as age, identified gender, ethnicity, parent/caregiver status, and relationship status were obtained. Students reported on their specialization, class, and year in the program. Information about practicum/internship experiences was assessed, in addition to specific information about the impact of COVID on their education.

COVID-19 Pandemic Mental Health Questionnaire (CoPaQ).

The COVID-19 Pandemic Mental Health Questionnaire (CoPaQ; Rek et al., 2020) is a multi-faceted self-report questionnaire that measures the personal and social consequences of the COVID-19 pandemic. For this study, each of the following questionnaires was integrated to create the CoPaQ: Depression, Anxiety and Stress Scales (DASS-21), WHO (Five) Wellbeing Index (WHO-5), the UCLA

Loneliness Scale (UCLA), and the Social Network Index (SNI) (Lovibond, S. & Lovibond, P., 1995; The DepCareProject,1998; Cohen et al., 1997; Russell et al., 1978).

The DASS-21 is a 21-item self-report questionnaire that measures anxiety, depression, and stress levels over the past week (Lovibond & Lovibond, 1995). Questions are rated on a 4-point Likert scale ranging from 0 (Did not apply to me at all) to 3 (Applied to me most of the time). For this study, the DASS-21 assessed factors over the past six months. Overall, the DASS-21 is found to be valid and reliable (.93).

The WHO-5 is a 6-item self-report index that assesses one's level of wellbeing over the past week (i.e., how have you been feeling) (The DepCare Project, 1998). For this study, the WHO-5 assessed wellbeing over the last six months. Questions are rated on a 6-point Likert scale ranging from 5 (All of the time) to 0 (At no time). The WHO-5 produced good internal consistency at 0.86.

The UCLA Loneliness Scale is a 20-item self-report questionnaire that assesses subjective feelings of loneliness and social isolation (Russell et al., 1978). Questions are rated on a 5-point Likert scale ranging from 1 (never) to 5 (always). The UCLA Loneliness Scale produced good internal consistency (.89-.94) and test-retest reliability over one year ($r = .73$).

The SNI is a self-report that measures different social relationships according to three aspects of a social network (diversity, size, and size of embedded networks) (Cohen et al.,1997). For this study, questions assessed social relationships among

cohort members and colleagues in the participants' graduate programs. Each question has multiple-choice responses.

Patient Health Questionnaire-9 (PHQ-9).

Depression was measured using the Patient Health Questionnaire-9 (PHQ-9). PHQ-9 is a nine-item self-report measure from the complete PHQ-9 that assesses the presence of psychological distress, more specifically depressive symptoms (Kroenke et al., 2001). The PHQ-9 incorporates the DSM-V depression diagnostic criteria and other depressive symptomology to flag for potential concerns of depression-related disorders. Items are rated on a 4-point Likert scale ranging from 0 (not at all) to 3 (nearly every day). Total scores can range from 0 to 27 to measure depression severity as follows: minimal depression (0-4), mild depression (5-9), moderate depression (10-14), moderately severe depression (15-19), and severe depression (20-27). The PHQ-9 has a Cronbach's alpha of 0.89, demonstrating good reliability and validity (Kroenke et al., 2001).

Acceptance and Action Questionnaire-II (AAQ-II).

Experiential avoidance was measured by the Acceptance and Action Questionnaire-II (AAQ-II). The AAQ-II assesses people's willingness to accept their unpleasant thoughts and feelings while behaving congruently with their values to enhance psychological wellbeing (Bond et al., 2011). The AAQ-II has been found to have good internal consistency and good convergent and discriminant validity (Bond et al., 2011). The AAQ-II contains seven items and is rated on a 7-point Likert scale ranging from 1 (never true) to 7 (always true). Lower scores on the AAQ-II reflect

greater psychological flexibility, less avoidance, and the ability to behave more efficiently in the presence of stressful thoughts or feelings.

Academic Motivation Scale (AMS).

Motivation was measured by the Academic Motivation Scale (AMS). The AMS is a 28-item self-report measure that assesses seven domains associated with academic motivation: intrinsic motivation towards knowledge, accomplishments, stimulation, external, introjected, and identified regulations, and lastly, amotivation (Vallerand et al., 1992). The AMS uses a 7-point Likert scale with 1 (does not correspond at all) being the lowest and 7 (corresponds exactly) being the highest. The AMS was initially created to assess the reason for college attendance. However, the measure is modified to meet the goals of this study. The instructions were adjusted to ask participants "why they remained in graduate school during COVID." The original AMS yielded satisfactory levels of internal consistency at .81 (Vallerand et al., 1992).

Alcohol Use Disorders Identification Test (AUDIT).

Alcohol Use was measured by the Alcohol Use Disorders Identification Test (AUDIT). The AUDIT is a 10-item screener for problematic alcohol consumption and drinking behaviors (Babor et al., 2001). Items measure the frequency and quantity of alcohol consumed, dependence symptoms, and potential consequences of drinking. Each item is paired with its own set of multiple-choice responses, scored on a scale from 0 to 4. A total of 8 points indicates consumption levels considered risky. The AUDIT demonstrated adequate validity and high test-retest reliability (r

= .86) (Babor et al., 2001). To best accommodate the purpose of this study, questions will be added in the form of a Likert scale response in other areas of the survey to accommodate for substance use amid the pandemic (e.g., "During the pandemic, would you say your alcohol use has increased?")

Procedures

The investigator obtained approval to conduct the study from the Institutional Review Board (IRB) at Florida Institute of Technology. Participants were recruited through multiple platforms. All participants were presented with an informed consent form and provided electronic consent before entering the survey. In addition, participants were offered an opportunity to provide an email address for five drawings of \$25 gift cards. Survey questions were presented via Qualtrics and were collected in the Summer and Fall of 2021. In addition, information for contacting the investigators was provided.

Chapter 7 : Results

Descriptive Frequencies

A total of 130 psychology graduate students from various schools across the United States participated in the online survey for this study. As shown in Table 1, 90% of participants identified as female ($N = 117$), 6.2% identified as male ($N = 8$), and 3.8% as non-binary ($N = 5$). The age range of participants included between 18-64 years old. Identified ethnicities included 28.5% African American/Black ($N = 37$), 3.1% Asian ($N = 4$), 54.6% Caucasian/White ($N = 71$), 9.2% Hispanic/Latinx ($N = 12$), 0.8% Middle Eastern ($N = 1$), and 3.8% Other/Biracial ($N = 5$). Thus, the sample was fairly diverse. A large number of female participants is likely a reflection of the general trends in the field. Table 1 in Appendix B presents the descriptive statistics for this study.

Statistical Findings

Hypothesis 1: The Relationship between Depression, Stress and Perceived Wellbeing

It was hypothesized that high rates of depression and reported stress will be associated with greater negative impacts on wellbeing. Correlations were calculated to determine relationship. Results indicated high rates of depression ($M = 10.25$, $SD = 5.89$) were negatively correlated with wellbeing ($M = 9.14$, $SD = 4.86$), $r = -.56$, $p < .001$. Similarly, high rates of stress ($M = 7.01$, $SD = 3.60$) were negatively correlated with overall wellbeing ($M = 0.40$, $SD = 0.50$), $r = -.50$, $p < .001$.

Hypothesis 2: The Relationship between Depression, Experiential Avoidance, and Loneliness

It was hypothesized that high rates of depression and experiential avoidance will demonstrate a relationship with high levels of social disconnectedness. Correlations were calculated to determine relationship. Result indicated that high rates of depression ($M = 10.25$, $SD = 5.89$) were positively correlated with experiential avoidance and low psychological flexibility ($M = 12.18$, $SD = 8.64$), $r = .64$, $p < .001$. Moreover, high rates of depression ($M = 10.25$, $SD = 5.89$) was also positively correlated with social disconnectedness and experienced loneliness ($M = 29.76$, $SD = 12.40$), $r = .49$, $p < .001$. Social disconnectedness was also correlated with experiential avoidance ($M = 12.18$, $SD = 8.64$), $r = .43$, $p < .001$, thus supporting Hypothesis 2.

Hypothesis 3: Relationship between Depression and Anxiety on Academic Motivation

It was hypothesized that high rates of depression and anxiety would be associated with low levels of academic motivation. Results indicated a positive correlation between high rates of depression and anxiety ($M = 22.68$, $SD = 13.19$) and feeling less motivated to complete work-related tasks ($M = 2.05$, $SD = 0.91$), $r = .48$, $p < .001$. Similarly, high rates of depression and anxiety ($M = 22.68$, $SD = 13.19$) were positively correlated with participants feeling less motivated to complete their dissertation ($M = 1.21$, $SD = 1.15$), $r = .36$, $p < .001$, thus supporting Hypothesis 4.

Hypothesis 4: Relationship between Experiential Avoidance, Well Being, and Alcohol Use

It was hypothesized that high levels of experiential avoidance would be associated with decreased wellbeing and increased alcohol use. Regarding experiential avoidance and well-being, results indicated that well-being ($M = 9.14$, $SD = 4.87$) was negatively correlated with experiential avoidance ($M = 12.18$, $SD = 8.64$), $r = -.45$, $p < .001$. There was no significant relationship between alcohol use and experiential avoidance. However, regarding alcohol use, there was a positive correlation between participants who demonstrated an increase in their alcohol intake during the pandemic ($M = 1.62$, $SD = 1.28$) and participants who believed their drinking impacted their academic performance ($M = 0.73$, $SD = 0.57$), $r = .59$, $p < .001$.

Hypothesis 5: Relationship between In-Person Practicum and Stress

It was hypothesized that students who had in-person practicum or internship requirements during the pandemic will report high levels of stress. Bivariate correlations were calculated to determine a relationship. Overall findings did not reveal a significant relationship between stress ($M = 7.01$, $SD = 3.56$) and in-person practicum experiences ($M = 0.56$, $SD = 0.50$), $r = -.12$, $p = .18$, thus rejecting Hypothesis 6. However, it should be noted that there was a positive correlation between individuals who were engaging in in-person practicums ($M = .56$, $SD = .50$) and those provided PPE ($M = 0.28$, $SD = 0.45$), $r = .56$, $p < .001$.

Hypothesis 6: Relationship between African American Students and Stress

It was hypothesized that ethnic minority students would report higher levels of stress than white/Caucasian students. This was based on the research supporting ethnic minority students face more adversity and predisposing factors to stress (Earnshaw et al., 2020). Results revealed no significant difference in stress ($M = 7.01$, $SD = 3.60$) between African American participants ($n = 37$) ($M = 2.70$ $SD = 1.47$) and other participants, thus rejecting Hypothesis 7. It can be inferred that there was not enough difference to support that African Americans were more stressed than other races.

Chapter 8 : Discussion

The present study served as a preliminary research effort to better understand psychology students' mental health amid the COVID-19 pandemic. Several factors were assessed, including general mental health, psychological flexibility, and academic motivation during this unprecedented time for students. Several predictors of mental health during usual circumstances have been identified in existing literature, including social support networks, adaptive coping strategies, psychological flexibility (Rettie & Daniels, 2020). In addition, internal and external rewards are also impacted by student motivation, which is associated with students' ability to continue engaging in coursework during stressful times. However, due to the novel nature of the COVID-19 pandemic, there was limited evidence on a pandemic or related external environmental variable on the impact on psychology graduate students' mental health and perceived academic motivation. Therefore, this study explored the predictive power of these factors to demonstrate the consequences of the pandemic on students' mental health, psychological flexibility, and their ability to remain motivated to complete coursework.

Student Psychological Health During COVID-19

Literature since the pandemic has often supported elevated anxiety and depression rates because of factors related to the pandemic (Dozois, 2020). Further, the impacts of uncertainties of quarantine and social media exposure contributed to elevated depression and stress levels in East Asian countries (Gao et al., 2020). The present study found similarly high rates of depression and stress during the

pandemic, including factors related to sleep, restlessness, and worry. Specifically, over a third of the sample (41%) reported having little interest or pleasure in activities at least more than half of the days over three months during the pandemic. Additionally, almost two-thirds of the sample (62%) reported feeling down or depressed at least more than half of the days of the same duration. This finding was predicted given the necessary health regulations that restricted individuals from engaging in extra-curricular activities that previously assisted in promoting and maintaining good psychological and physiological health.

Further, a third of the sample (36%) reported experiencing disruptions of sleep-related worry throughout the pandemic. Similar results revealed students found it hard to wind down or believe they responded to situations with emotions such as agitation. These factors support the reported anxiety and worry that individuals experienced about the uncertainty of the pandemic. Further, almost half of the sample (45%) reported feeling stressed about finances throughout the pandemic. Within those stressed about finances, the students' specified stress included a decrease in work hours (20%), as well as being laid off from work (14%) or having to file for unemployment (11%). Given the financial hardships that society experienced through the temporary shutdown of non-essential businesses (Crayne, 2020), these stressors further support the high degree of stress and depression-related symptoms that the sample tended to exude.

Impacts on Ethnic Minorities

Previous research has suggested that ethnic minority students, defined as minority populations who do not identify as Caucasian/White, have a predisposition to stressful factors. This includes lower socioeconomic status and limited access to resources that help maintain good psychological health. While previous research supported more stress in minority populations, specifically African Americans, the present study could not support those findings. The study produced insufficient power to detect significant differences in perceived stress between African Americans and Caucasians. The sample was composed of almost twice as many Caucasian participants ($n = 71$) than African Americans ($n = 37$). This significantly decreases statistical power in determining differences in perceived stress. Further, the study focused on feeling stressed rather than the number and type of stressors.

Impacts of Social Distancing

Arguably one of the most complicated adjustments during COVID-19 was introducing social distancing, the idea of keeping a physical distance of at least six feet between self and individuals outside of the household (CDC, 2020). Previous literature supported the stress and adjustment of social distancing, decreasing in-person contact with family and friends (Tasso et al., 2021). Further, students often reported reduced physical health and general life satisfaction related to quarantine and isolation (Lukacs, 2021). The present study discovered that individuals who reported more depressive symptoms also experienced stronger feelings of loneliness. Questions were included to assess social support interactions before the pandemic to

account for pre-existing factors. Ninety-six percent of participants reported having at least one close friend in their cohort or everyday life that they believe they can confide in and provide positive interactions. Of the 96%, over three-fourths of this sample (78%) reported interacting and seeing these friends at least once every two weeks before the pandemic. During the pandemic, the respondents reported a decrease in contact, with only 30% of individuals seeing at least one friend every two weeks. Similarly, over one-third of the sample (40%) reported feeling lonely at times during the pandemic. These factors are likely to further maintain the difficulties of loneliness and disengagement during an era of social distancing and isolation.

Experiential Avoidance

Experiential avoidance emphasizes avoiding thoughts and feelings associated with adverse life experiences, also related to psychological inflexibility. Psychological inflexibility involves factors related to an inability to be present and a lack of ability to engage in behaviors associated with values and life directions (Harris, 2019). The present study found that those who are more avoidant also reported lower overall wellbeing. This is understandable as people expressing difficulty with such factors may experience a lower quality of life and wellbeing, specifically if they have problems moving forward. Additionally, the present study also found those who tend to avoid tackling adverse experiences reported higher feelings of social disconnect during the pandemic. This continues to speak to the difficulties experienced with social distancing, particularly for individuals who had

little social support and connectivity in moments of feeling inflexible and cognitively disorganized.

Alcohol Use

Alcohol use has long served as a barrier and buffer to physical and emotional stress (Acuff et al., 2020). It can also serve as a form of avoidance and interfere with daily life activities. While not condoned, it is acknowledged that alcohol use is an expectant behavior, particularly on college campuses (Smith et al., 2014). The present study hypothesized that individuals would increase alcohol use during the pandemic for two reasons: leisure activities or coping mechanisms to combat stressors. However, the study did not support increased alcohol use overall, as one-third of the sample (34%) reported only drinking twice to four times a month. Similarly, a third of the sample (33%) denied any alcohol use. Thus, while alcohol use appeared not to be a stressor for most participants in this study, of the individuals who did report heavy alcohol use, they saw an increase in their usage during the pandemic.

Academic Motivation

Motivation, related to academics, is understood through intrinsic and extrinsic factors. Ryan and Deci (2002) proposed that autonomous motivation reflects higher quality of effort and performance. However, students saw significant adjustments in academic and professional areas due to the pandemic, making it extremely difficult to maintain similar motivation and performance (Bedewy & Gabriel, 2015). In the present study, almost half of the sample (47%) reported that it

was sometimes difficult to remain motivated to complete coursework during the pandemic. This is not particularly surprising given the factors impacting navigation to online coursework and remaining engaged through connectivity platforms such as Zoom and Microsoft Teams (Cherry, 2020). Further, almost one-fifth of the sample (19%) felt less motivated at times to complete their dissertation than they originally were before the pandemic. While this is not a large portion of the sample, this could be attributed to the variation of program status across participants, as 41% of participants were in the first year of their psychology degree program.

The present study also demonstrated that those who reported higher symptoms related to depression and anxiety also felt less motivated to complete school and work-related tasks during the pandemic. This further speaks to the lack of motivation and lack of attention/concentration, and experienced restlessness associated with depression and anxiety. Related, most of the sample reported that they seldom (41%) or never (11%) felt supported from their academic program during the pandemic. While "support" was not measured, the lack of perceived support could have contributed to students' disengagement from class engagement and coursework. This also likely impacted individuals' desire to maintain and exceed the level of performance once achieved before the pandemic. The present study highlights the need for discussion to determine actions that programs could take to increase supportive interaction and relations throughout challenging times.

Practicum Experiences

The present study focused on psychology graduate students to highlight the unique variable of maintaining in-person practicum and internship training requirements while navigating coursework and classes online. Specific training sites, such as inpatient psychiatric hospitals, medical centers, and assessment clinics required in-person client interaction throughout the pandemic. The present study suggested that students who engaged in in-person practicum and internship experiences would report higher stress levels. However, students did not report that this was an issue. In addition, most students working in these settings were provided with personal protective equipment (PPE), which may have lowered students' perceived stress related to training experiences.

While the overall hypothesis could not support students with in-person practicum and internships were more stressed than other participants, students endorsed other stressors and adjustments related to practicum. For example, 45% of individuals reported decreased clinical hours, while 28% reported reduced confidence to perform their tasks effectively. This suggests that the pandemic restrictions impacted academic motivation levels and confidence levels in practicum and internship experiences.

Limitations

While the current study contributed to an important area of research, several limitations were present. First, the researcher failed to collect geographical information of the sample, which could provide insight into the participants'

experiences based on their geographic area. For example, students in certain states or geographical areas of the United States could have experienced stress and COVID-19 differently based on that state or university's response to the pandemic. Further, the COVID-19 measure, CoPaQ, is relatively new and has limited research in its validity and reliability. Moreover, an original hypothesis of the study focused specifically on reported anxiety and fear of exposure related to COVID-19. Unfortunately, the study lacked a definitive anxiety measure separate from other variables, which may have further detracted from the ability to ascertain the level of anxiety independent of the pandemic.

Further, one of the hypotheses was focused on examining African Americans' perceived stress levels. The sample was relatively proportionate to the United States' ethnic makeup. However, there were not enough participants who identified as African American to definitively develop enough power to assess the hypothesis. Future studies should further evaluate specific issues related to identity that impact minority students.

Implications and Future Directions

Given the findings of this study, it appears that psychology graduate students experienced many consequences to their mental health during the COVID-19 pandemic. Specifically, participants recorded high rates of depression and loneliness more than any other psychological impact. Future directions would analyze the impact of COVID-19 on physiological health, given the temporary shutdown of gymnasiums and areas that typically provide space for physical activity.

Further, over 90% of participants reported feeling minimal support from their programs related to the pandemic. Further research should analyze students' definitions of support and what they believe would be helpful to their mental health and academic standing if a similar educational disruption occurs. Lastly, the present study analyzed psychology graduate students based on their unique circumstances related to practicum and internship experiences. Given that the effects of the pandemic could impact the course of training, additional longitudinal research should consider the long-term impact on graduate training.

Conclusion

In conclusion, given the evolving nature of COVID-19, considerable research still needs to be conducted to gain a comprehensive understanding of the long-term consequences of the pandemic, which may have shifted with the recently developed COVID-19 vaccine. However, despite the work that continues to understand the pandemic, this study plays an invaluable role in demonstrating the widespread mental health impacts of this global pandemic and how its impacted psychology graduate students. It remains unclear when society will return to life before COVID-19. Nonetheless, this research was a critical insight into graduate students' experiences and implications for moving forward.

References

- Acuff, S. F., Tucker, J. A., & Murphy, J. G. (2020). Behavioral economics of substance use: Understanding and reducing harmful use during the COVID-19 pandemic. *Experimental and clinical psychopharmacology*.
- Alonzi, S., La Torre, A., & Silverstein, M. W. (2020). The psychological impact of pre-existing mental and physical health conditions during the COVID-19 pandemic. *Psychological trauma: theory, research, practice, and policy*.
- American Psychiatric Association. *Diagnostic and statistical manual of mental health disorders* (5th ed.). Arlington, VA: American Psychiatric Association, 2013.
- Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *The Alcohol Use Disorders Identification Test Guidelines for Use in Primary Care*.
- Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The perception of academic stress scale. *Health Psychology Open*, 2(2), 1-9. doi:10.1177/2055102915596714
- Bond, F., Hayes, S., & Baer, R. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire–II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy*.
- Bonanno, G. A., Brewin, C. R., Kaniasty, K., & La Greca, A. M. (2010). Weighing the costs of disaster: Consequences, risks, and resilience in individuals, families, and communities. *Psychological Science in the Public Interest*, 11, 1–49. <http://dx.doi.org/10.1177/1529100610387086>
- Brougham, R. R., Zail, C. M., Mendoza, C. M., & Miller, J. R. (2009). Stress, sex differences, and coping strategies among college students. *Current Psychology*, 28(2), 85-97. doi:10.1007/s12144-009-9047-0
- Butz, N. T., & Stupnisky, R. H. (2016). A mixed methods study of graduate students' self-determined motivation in synchronous hybrid learning environments. *The Internet and Higher Education*, 28, 85-95.

- Centers for Disease Control and Prevention. (2020, November 17). *Social Distancing: Keep a Safe Distance to Slow the Spread*. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>
- Cherry, K. (2020) Individualistic Cultures and Behavior. *VeryWellMind*. Retrieved from: <https://www.verywellmind.com/what-are-individualistic-cultures-2795273>
- Cohen, S., Doyle, W. J., Skoner, D. P., Rabin, B. S., and Gwaltney, J. M., Jr. (1997). Social ties and susceptibility to the common cold. *Journal of the American Medical Association*, 277, 1940-1944. *Journal of the American Medical Association*, 277, 1940-1944.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385–396. <http://dx.doi.org/10.2307/2136404>
- Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest*, 15, 37–70. <http://dx.doi.org/10.1177/1529100614531398>
- Crayne, M. P. (2020). The traumatic impact of job loss and job search in the aftermath of COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S180.
- da Silva-Sauer, L., Basso Garcia, R., Pereira da Silva, Thaís Mykaella, Barbosa de Melo, C., & Fernández-Calvo, B. (2021). Relationship between psychological resilience, perceived stress, depression, and physical health in community-dwelling older adults. *Psychology & Neuroscience*, 14(2), 132-144. doi:<http://dx.doi.org.portal.lib.fit.edu/10.1037/pne0000254>
- Dahl, D. W., & Smimou, K. (2011). Does motivation matter?. *Managerial Finance*, 37(7), 582.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.

- De los Santos, Janet Alexis A., & Labrague, L. J. (2021). The impact of fear of COVID-19 on job stress, and turnover intentions of frontline nurses in the community: A cross-sectional study in the Philippines. *Traumatology: An International Journal*, doi: <http://dx.doi.org.portal.lib.fit.edu/10.1037/trm0000294>
- Dozois, D. J. (2020). Anxiety and depression in Canada during the COVID-19 pandemic: A national survey. *Canadian Psychology/Psychologie canadienne*.
- Earnshaw, V. A., Brousseau, N. M., Hill, E. C., Kalichman, S. C., Eaton, L. A., & Fox, A. B. (2020). Anticipated stigma, stereotypes, and COVID-19 testing. *Stigma and Health*, 5(4), 390-393. doi: <http://dx.doi.org.portal.lib.fit.edu/10.1037/sah0000255>
- Earnshaw, V. A., Smith, L. R., Chaudoir, S. R., Lee, I.-C., & Copenhaver, M. M. (2012). Stereotypes about people living with HIV: Implications for perceptions of HIV risk and testing frequency among at-risk populations. *AIDS Education and Prevention*, 24, 574 –581. <http://dx.doi.org/10.1521/aeap.2012.24.6.574>
- El-Ghoroury, N. H., Galper, D. I., Sawaqdeh, A., & Bufka, L. F. (2012). Stress, coping, and barriers to wellness among psychology graduate students. *Training and Education in Professional Psychology*, 6(2), 122.
- Ellis, W. E., Dumas, T. M., & Forbes, L. M. (2020). Physically isolated but socially connected: Psychological adjustment and stress among adolescents during the initial COVID-19 crisis. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 52(3), 177.
- Erikson E. H. (1982). *The life cycle completed*. New York: W.W. Norton & Company.
- Falk, G., Carter, J. A., Nicchitta, I. A., Nyhof, E. C., & Romero, P. D. (2020). Unemployment rates during the COVID-19 pandemic: In brief. *Congr Res Serv*, 2-16.

- Fitzpatrick, K. M., Harris, C., & Drawve, G. (2020). Fear of COVID-19 and the mental health consequences in America. *Psychological trauma: theory, research, practice, and policy*.
- Fortuna, L. R., Tolou-Shams, M., Robles-Ramamurthy, B., & Porche, M. V. (2020). Inequity and the disproportionate impact of COVID-19 on communities of color in the united states: The need for a trauma-informed social justice response. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(5), 443-445. doi: <http://dx.doi.org.portal.lib.fit.edu/10.1037/tra0000889>
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *PLoS ONE*, 15, e0231924. <http://dx.doi.org/10.1371/journal.pone.0231924>
- Gavidia-Payne, S., Denny, B., Davis, K., Francis, A., & Jackson, M. (2015). Parental resilience: A neglected construct in resilience research. *Clinical Psychologist*, 19, 111–121. <http://dx.doi.org/10.1111/cp.12053>
- Golub, S. A., & Gamarel, K. E. (2013). The impact of anticipated HIV stigma on delays in HIV testing behaviors: Findings from a community-based sample of men who have sex with men and transgender women in New York City. *AIDS Patient Care and STDs*, 27, 621–627. [http://dx . doi.org/10.1089/apc.2013.0245](http://dx.doi.org/10.1089/apc.2013.0245)
- Gruber, J., Prinstein, M. J., Clark, L. A., Rottenberg, J., Abramowitz, J. S., Albano, A. M. & Forbes, E. E. (2020). Mental health and clinical psychological science in the time of COVID-19: Challenges, opportunities, and a call to action. *American Psychologist*.
- Harris, R. (2019). ACT made simple: Second Edition: An easy-to-read primer on Acceptance and Commitment Therapy. *Oakland, CA: NewHarbinger*.
- Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology*, 64(6), 1152-1168. <https://doi.org/10.1037/0022-006X.64.6.1152>

- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Kutana, S., & Lau, P. H. (2020). The impact of the 2019 coronavirus disease (COVID-19) pandemic on sleep health. *Canadian Psychology/Psychologie canadienne*.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Lin, S., Fried, E. I., & Eaton, N. R. (2020). The association of life stress with substance use symptoms: A network analysis and replication. *Journal of Abnormal Psychology, 129*(2), 204-214. doi: <http://dx.doi.org.portal.lib.fit.edu/10.1037/abn0000485>
- Lovibond, S.H. & Lovibond, P.F. (1995). *Manual for the Depression Anxiety & Stress Scales*. (2nd Ed.) Sydney: Psychology Foundation.
- Lukács, A. (2021). Mental wellbeing of university students in social isolation. *European Journal of Health Psychology, 28*(1), 22-29. doi: <http://dx.doi.org.portal.lib.fit.edu/10.1027/2512-8442/a000065>
- Marmarosh, C. L., Forsyth, D. R., Strauss, B., & Burlingame, G. M. (2020). The psychology of the COVID-19 pandemic: A group-level perspective. *Group Dynamics: Theory, Research, and Practice, 24*(3), 122.
- Millar, B. M., Adebayo, T., Dellucci, T. V., Behar, E., & Starks, T. J. (2020). Keeps me awake at night: The potential of the COVID-19 pandemic to affect sleep quality among sexual minority men in the USA. *Psychology of Sexual Orientation and Gender Diversity*.
- Mimoun, E., Ben Ari, A., & Margalit, D. (2020). Psychological aspects of employment instability during the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*, S183-S185. doi: <http://dx.doi.org.portal.lib.fit.edu/10.1037/tra0000769>

- Murphy, M. J., Levant, R. F., Hall, J. E., & Glueckauf, R. L. (2007). Distance education in professional training in psychology. *Professional Psychology: Research and Practice*, 38(1), 97.
- Nisrutha, D. (2018). Motivational factors and its impact on students' performance in higher education: A Review. *Parikalpana: KIIT Journal of Management*, 14(1), 105-119.
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking Rumination. *Perspectives on Psychological Science*, 3, 400–424. <http://dx.doi.org/10.1111/j.1745-6924.2008.00088.x>
- Ratelle, C. F., Guay, F., Vallerand, R. J., Larose, S., & Senécal, C. (2007). Autonomous, controlled, and amotivated types of academic motivation: A person-oriented analysis. *Journal of educational psychology*, 99(4), 734.
- Regional Office for Europe WHO. Use of Well-Being Measures in Primary Health Care - The DepCare Project. Health for All, Target 12, 1998 [<http://www.who.dk/document/e60246.pdf>]
- Rek, S., Freeman, D., Reinhard, M., Keeser, D., & Padberg, F. (2020). The Covid-19 Pandemic Mental Health Questionnaire (CoPaQ): Introducing a comprehensive measure of the psychosocial impact of the coronavirus crisis. DOI 10.17605/OSF.IO/3EVN9
- Rettie, H., & Daniels, J. (2020). Coping and tolerance of uncertainty: Predictors and mediators of mental health during the COVID-19 pandemic. *American Psychologist*.
- Russell, D., Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. *Journal of personality assessment*, 42(3), 290-294.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54–67.

- Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: An organismic dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 431–441). Rochester, NY: University of Rochester Press.
- Safai, Y. (2020a). Anxiety and depression likely to spike among Americans as coronavirus pandemic spreads. *ABC News*. Retrieved from <https://abcnews.go.com/Health/anxiety-depression-spike-americans-coronavirus-pandemic-spreads/story?id=69749677>
- Safai, Y. (2020b). Unemployment, isolation: COVID-19=s mental health impact. *ABC News*. Retrieved from <https://abcnews.go.com/Health/unemployment-isolation-covid-19s-mental-health-impact/story?Id=69939700>
- Saltzman, L. Y., Hansel, T. C., & Bordnick, P. S. (2020). Loneliness, isolation, and social support factors in post-COVID-19 mental health. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S55-S57. <http://dx.doi.org/10.1037/tra0000703>
- Skinner, H. A. (1982). The drug abuse screening test. *Addictive Behaviors*, 7(4), 363–371. [https://doi.org/10.1016/0306-4603\(82\)90005-3](https://doi.org/10.1016/0306-4603(82)90005-3)
- Smith, D. C., Bahar, O. S., Cleveland, L. R., & Davis, J. P. (2014). Self-perceived emerging adult status and substance use. *Psychology of Addictive Behaviors*, 28(3), 935-941. doi: <http://dx.doi.org.portal.lib.fit.edu/10.1037/a0035900>
- Sneed, R. S., Key, K., Bailey, S., & Johnson-Lawrence, V. (2020). Social and psychological consequences of the COVID-19 pandemic in african-american communities: Lessons from michigan. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(5), 446-448. doi: <http://dx.doi.org.portal.lib.fit.edu/10.1037/tra0000881>
- Tasso, A. F., Hisli Sahin, N., & San Roman, G. J. (2021). COVID-19 disruption on college students: Academic and socioemotional implications. *Psychological Trauma: Theory, Research, Practice, and Policy*, 13(1), 9.

- Tompkins, K. A., Brecht, K., Tucker, B., Neander, L. L., & Swift, J. K. (2016). Who matters most? The contribution of faculty, student-peers, and outside support in predicting graduate student satisfaction. *Training and Education in Professional Psychology, 10*(2), 102.
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and psychological measurement, 52*(4), 1003-1017.
- Vargas, I., Friedman, N. P., & Drake, C. L. (2015). Vulnerability to stress-related sleep disturbance and insomnia: Investigating the link with comorbid depressive symptoms. *Translational Issues in Psychological Science, 1*(1), 57-66. doi: <http://dx.doi.org.portal.lib.fit.edu/10.1037/tps0000015>
- Watson, D., Clark, L. A., & Tellegan, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063–1070.
- Watson, P. J., Brymer, M. J., & Bonanno, G. A. (2011). Postdisaster psychological intervention since 9/11. *American Psychologist, 66*(6), 482.
- Wolters, C. A., & Benzon, M. B. (2013). Assessing and predicting college students' use of strategies for the self-regulation of motivation. *The Journal of Experimental Education, 81*(2), 199-221.
- World Health Organization. (2020, March 11). *Coronavirus disease 2019 (COVID-19) situation report 51*. https://www.who.int/docs/default-source/coronavirus/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10

Appendix A

Demographics

1. What is your age?
 - a) 18-24 years old
 - b) 25-34 years old
 - c) 35-44 years old
 - d) 45-54 years old
 - e) 55-64 years old
 - f) 65-74 years old
 - g) 75 years or older
 - h) Prefer not to say

2. What best describes your gender identity?
 - a. Male
 - b. Female
 - c. Transgender Male
 - d. Transgender Female
 - e. Non-binary
 - f. Prefer to self-describe
 - g. Prefer not to say

3. What best describes your ethnicity?
 - a. African American/Black
 - b. Asian
 - c. Caucasian
 - d. Hispanic/Latino
 - e. Middle Eastern
 - f. Native Hawaiian/Pacific Islander
 - g. Native American/Alaska Native
 - h. Other (please fill)
 - i. Prefer not to say

4. Current Legal Relationship Status?
 - a. Single/Never Married
 - b. Married
 - c. Separated/Divorced
 - d. Widowed
 - e. Prefer not to say

5. Which best describes your current recognized relationship status?
- f. Single
 - g. Live-in companion/partnership
 - h. Inconsistent/sporadic partnerships
 - i. In a Committed Relationship
 - j. Married
 - k. Separated/Divorced
 - l. Widowed
 - m. Prefer not to say
6. Do you consider yourself a parent?
- a. Yes
 - b. No
 - c. Prefer not to say
7. Which of the following best describes the degree you are pursuing?
- a) Terminal Master's Degree
 - b) Doctor of Psychology (Psy.D.)
 - c) Doctor of Philosophy (Ph.D.)
 - d) Doctor of Education (Ed.D.)
 - e) Other
8. Please indicate the specific degree/concentration you will obtain:
- _____
9. What is your current status in the program?
- a) 1st year
 - b) 2nd year
 - c) 3rd year
 - d) 4th year
 - e) 5th year
 - f) 6th or more
10. Are you currently practicing in practicum or internship placements?
- a) Yes
 - b) No
11. Were you required to complete practicum/internship in person during COVID-19?
- a) Yes
 - b) No

12. Were your placement/hours requirement affected by COVID-19?
- a) Yes
 - b) No
13. Which of the following ways was your placement experience affected by COVID-19? Check all that apply.
- a) Decrease in clinical hours
 - b) Transition to tele-health
 - c) Period of time where practicum was terminated (please specify)
 - d) Level of confidence/knowledge in practicum position was affected
 - e) My experience was not affected by COVID-19
 - f) Other
14. Which of the following ways was your financial status/income affected by COVID-19?
Check all that apply.
- a) I was laid-off/lost my job
 - b) I lost my teaching assistantship (T.A.) or resident assistantship (R.A.) due to virtual courses.
 - c) I had to file for unemployment to maintain my original or similar annual income.
 - d) I was stressed about finances as a result of the pandemic.
 - e) My financial status/income was not affected by the COVID-19
 - f) Other

COVID-19 Additional Questions

Instructions: Below you will find a list of statements. Please rate how true each statement is for you by choosing the response that best represents how often you experience each situation.

Not Applicable	Never true	Very seldom true	Seldom true	Sometimes true	Frequently true	Almost always true	Always true
0	1	2	3	4	5	6	7

1. My drinking increased during the lockdown phase of the pandemic.
2. I was concerned about my drinking during the duration of the pandemic.
3. My drinking impacted my academic performance.
4. My substance use increased during the pandemic.
5. I experienced disruptions in sleep as a result of worrying about the pandemic.
6. I lost graduate funding and tuition stipends (T.A., R.A., other) as a result of COVID-19.
7. I felt less motivated to complete work-related or academic tasks.
8. Caring for my children made it more difficult to stay motivated on work-related or academic tasks during COVID-19.
9. My motivation to complete my dissertation/doctoral research project was impacted by COVID-19.
10. I felt my program provided adequate guidance and support during navigating academic changes as a result of the COVID-19 pandemic.

CoPaQ Questionnaire

DASS-21 - Questions regarding your wellbeing

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you **over the past six months**. There are no right or wrong answers. Do not spend too much time on any statement.

0 = Did not apply to me at all

1 = Applied to me to some degree, or some of the time

2 = Applied to me to a considerable degree or a good part of time

3 = Applied to me very much or most of the time

1. I found it hard to wind down.
2. I was aware of dryness of my mouth.
3. I couldn't seem to experience any positive feelings at all.
4. I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion).
5. I found it difficult to work up the initiative to do things.
6. I tended to overreact to situations.
7. I experienced trembling (e.g., in the hands).
8. I felt that I was using a lot of nervous energy.
9. I was worried about situations in which I might panic and make a fool of myself.
10. I felt that I had nothing to look forward to.
11. I found myself getting agitated.
12. I found it difficult to relax.
13. I felt down hearted and blue.
14. I was intolerant of anything that kept me from getting on with what I was doing.
15. I felt I was close to panic.
16. I was unable to become enthusiastic about anything.
17. I felt I wasn't worth much as a person.
18. I felt that I was rather touchy/sensitive.
19. I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat).
20. 20. I felt scared without any good reason.
21. I felt that life was meaningless.

WHO-5 - Assessment of your wellbeing

Please indicate for each of the five statements which is closest to how you have been feeling over the **last two weeks**. Notice that higher numbers mean better wellbeing.

- 5= All of the time
- 4- Most of the time
- 3- More than half of the time
- 2- Less than half of the time
- 1- Some of the time
- 0- At no time

1. I have felt cheerful and in good spirits
2. I have felt calm and relaxed
3. I have felt active and vigorous
4. I woke up feeling fresh and rested
5. My daily life has been filled with things that interest me.

UCLA- Assessment of loneliness

Indicate how often each of the statements below is descriptive of you.

- 1= never
- 2= rarely
- 3= sometimes
- 4= often
- 5= always

1. I feel in tune with the people around me. *
2. I lack companionship.
3. There is no one I can turn to.
4. I do not feel alone.
5. I feel part of a group of friends. *
6. I have a lot in common with the people around me. *
7. I am no longer close to anyone.
8. My interests and ideas are not shared by those around me.
9. I am an outgoing person. *
10. There are people I feel close to. *
11. I feel left out.
12. My social relationships are superficial.
13. No one really knows me well.
14. I feel isolated from others.

15. I can find companionship when I want it. *
16. There are people who really understand me. *
17. I am unhappy being so withdrawn.
18. People are around me but not with me.
19. There are people I can talk to. *
20. There are people I can turn to. *

SNI - Assessment of your social network

This questionnaire is concerned with how many people you see or talk to on a regular basis, including those within your degree program. Please read and answer each question carefully. Answer follow-up questions where appropriate.

1. How many people do you consider a "friend" in the program? (meaning people that you feel at ease with, can talk to about private matters, and can call on for help) **(If 0, skip to question 5)**

- a. 0 b.1 c. 2-3 d. 4 or more

2. **Before COVID-19** was declared a pandemic, how many of these friends did you physical see or have contact with at least once every 2 weeks, outside of professional obligations?

- a. 0 b.1 c. 2-3. d. 4 or more

3. **During COVID-19** how many of these friends did you physically see or have contact with at least once every two weeks?

- a. 0 b.1 c. 2-3. d. 4 or more

4. **During COVID-19**, how many of those friends did you talk to on the phone at least once every two weeks?

- a. 0 b.1 c. 2-3. d. 4 or more

5. Are either of your parents/caregivers living? **(If neither, skip to question 7).**

- a. neither b. mother only. C. father only. D. both

6. **Before COVID-19**, on average, how often did you see your parents/caregivers in person?

- a. daily b. weekly c. twice a month d. monthly e. every 2-3 months f. 4-6 months g. 6 months or more

6. **During COVID-19**, on average, how often did you see your parents/caregivers in person?

a. daily b. weekly c. twice a month d. monthly e. every 2-3 months f. 4-6 months g. 6 months or more

7. How many of your neighbors do you visit or talk to at least once every 2 weeks?

a. 0 b. 1-2 C. 3-5 D. 4 or more

8. Do you belong to any groups in which you talk to one or more members of the group about group- related issues at least once every 2 weeks? **Examples include social clubs, recreational groups, professional organizations, groups concerned about ethical/legal psychological dilemmas.**

a. no b. yes

The Patient Health Questionnaire – 9 (PHQ-9)

Over the last two weeks, how often have you been bothered by any of the following?

Not at all	Several days	More than half the days	Nearly every day
0	1	2	3

- _____ 1. Little interest or pleasure in doing things.
- _____ 2. Feeling down or depressed.
- _____ 3. Trouble falling or staying asleep.
- _____ 4. Feeling tired or having little energy.
- _____ 5. Poor appetite or overeating.
- _____ 6. Feeling bad about yourself – or that you are a failure or have let your family down.
- _____ 7. Trouble concentrating on things, such as reading the newspaper or watching the television.
- _____ 8. Moving or speaking so slowly that other people could have noticed. Or the opposite- being so fidgety or restless that you have been moving around a lot more than usual.
- _____ 9. Thoughts you would be better off dead, or of hurting yourself.
- _____ 10. If you checked off any of the problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with people?
- a) Not difficult at all b) Somewhat difficult c) Very difficult
d) Extremely difficult

Acceptance and Action Questionnaire – II

Instructions: Below you will find a list of statements. Please rate how true each statement is for you by choosing the response that best represents how often you experience each situation.

Never true	Very seldom true	Seldom true	Sometimes true	Frequently true	Almost always true	Always true
1	2	3	4	5	6	7

- _____ 1. My painful experiences and memories make it difficult for me to live a life that I would value.
- _____ 2. I am afraid of my feelings.
- _____ 3. I worry about not being able to control my worries and feelings.
- _____ 4. My painful memories prevent me from having a fulfilling life.
- _____ 5. Emotions cause problems in my life.
- _____ 6. It seems like most people are handling their lives better than I am.
- _____ 7. Worry gets in the way of my success.

Academic Motivation Scale

WHY DID YOU GO TO GRADUATE SCHOOL?

Using the scale below, indicate to what extent each of the following items presently corresponds to one of the reasons why you pursued graduate school.

Does not correspond at all	Corresponds a little		Corresponds moderately	Corresponds a lot		Corresponds exactly
1	2	3	4	5	6	7

WHY DID YOU GO TO GRADUATE SCHOOL?

1. Because with only an undergraduate degree, I would not find a high-paying job later on.
2. Because I experience pleasure and satisfaction while learning new things.
3. Because I think that a masters/doctorate degree will help me better prepare for the career I have chosen.
4. For the intense feelings I experience when I am communicating my own ideas to others.
5. Honestly, I don't know; I really feel that I am wasting my time in school.
6. For the pleasure I experience while surpassing myself in my studies.
7. To prove to myself that I am capable of completing my college degree.
8. In order to obtain a more prestigious job later on.
9. For the pleasure I experience when I discover new things never seen before.
10. Because eventually it will enable me to enter the job market in a field that I like.
11. For the pleasure that I experience when I read interesting authors.
12. I once had good reasons for going to graduate school; however, now I wonder whether I should continue.
13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.
14. Because of the fact that when I succeed in education, I feel important.
15. Because I want to have "the good life" later on.
16. For the pleasure that I experience in broadening my knowledge about concentrations which appeal to me.

17. Because this will help me make a better choice regarding my career orientation.
18. For the pleasure that I experience when I feel completely absorbed by what certain authors have written.
19. I can't see why I go to graduate school and frankly, I couldn't care less.
20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.
21. To show myself that I am an intelligent person.
22. In order to have a better salary later on.
23. Because my studies allow me to continue to learn about many things that interest me.
24. Because I believe that a few additional years of education will improve my competence as a worker.
25. For the "high" feeling that I experience while reading about various interesting subjects.
26. I don't know; I can't understand what I am doing in school.
27. Because graduate school allows me to experience a personal satisfaction in my quest for excellence in my studies.
28. Because I want to show myself that I can succeed in my studies.

Alcohol Use Disorders Identification Test (AUDIT)

Instructions: The following questions ask about your alcohol use. **Please note: One drink equals: 12 oz beer, 5 oz wine, 1.5 oz liquor**

1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
3. How often do you have four or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily

8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, in the last year
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, in the last year

Appendix B

Table 1

Descriptive Frequencies for Demographic Variables

Baseline characteristics	n	%	Full Sample		
			<i>N</i>	<i>M</i>	<i>SD</i>
Gender			130	1.98	.317
Male	8	6.2%			
Female	117	90%			
Non-binary	5	3.8%			
Age			130	1.86	.594
18 – 24 years old	29	22.3%			
25 – 34 years old	93	71.5%			
35 – 44 years old	6	4.6%			
45 – 54 years old	1	0.8%			
55 – 64 years old	1	0.8%			
Race/Ethnicity			130	2.70	1.47
African American/Black	37	28.5%			
Asian	4	3.1%			
Caucasian/White	71	54.6%			
Hispanic/Latinx	12	9.2%			
Middle Eastern	1	0.8%			
Other	5	3.8%			
Relationship Status			130	2.44	1.31
Single	40	30.8%			
Married	17	13.1%			
Live in companion/partner	37	28.5%			
Relationship Living Separate	30	23.1%			
Casually Dating	4	3.1%			
Other (Long Distance)	2	1.5%			
Parent or Guardian			130	1.92	.268
Yes	10	7.7%			
No	120	92.3%			
Caregiver for Disabled			130	1.94	.241
Yes	8	6.2%			
No	122	93.8%			
Anticipated Degree			130	2.29	1.33
Doctor of Psychology (Psy.D.)	38	29.2%			

Doctor of Philosophy (Ph.D.)	61	46.9%			
Master of Science (M.S.)	9	6.9%			
Degree Program			130	.62	.486
Clinical Psychology	81	62.3%			
Counseling Psychology	9	6.9%			
School Psychology	9	6.9%			
General Psychology	2	1.5%			
Clinical Mental Health Masters	8	6.2%			
Marriage and Family Therapy	3	2.3%			
Industrial/Organizational	3	2.3%			
Other	20	15.4%			
Academic Year			127	2.24	1.32
1 st Year	53	40.8%			
2 nd Year	24	18.5%			
3 rd Year	28	21.5%			
4 th Year	13	10%			
5 th Year	7	5.4%			
6 th Year or more	2	1.5%			
Practicum/Internship			130	.74	.441
Yes	96	73.8%			
No	34	26.4%			
In-Person Practicum			130	.56	.498
Yes	73	56.2%			
No	57	43.8%			
PPE Equipment			130	.28	.453
Yes	37	50.6%			
No	36	49.3%			
Practicum Impacts			130	.54	.50
Decrease in Clinical Hours	58	44.6%			
Transition to Telehealth	70	53.8%			
Practicum was Halted	35	26.9%			
Level of Confidence Decrease	36	27.7%			
No Impact	7	5.4%			
Financial Impact			130	.45	.50
Stressed about Finances	59	45.4%			
Laid off from Work	18	13.8%			
Decrease in Work Hours	26	20%			
Lost Assistantship	1	0.8%			
Filed Unemployment	15	11.5%			
No Impact	52	40%			

Table 2*Descriptive Frequencies for Questionnaire Measures*

Questionnaire	<hr/>			
	Minimum	Maximum	<i>M</i>	<i>SD</i>
DASS-21	0	59	22.68	13.19
WHO-5	0	25	9.14	4.86
UCLA Loneliness Scale	7	61	29.76	12.40
SNI	0	12	5.62	3.01
PHQ-9	0	26	10.25	5.89
AMS	21	98	53.52	16.66
AAQ	0	36	12.18	8.64
AUDIT	0	11	2.92	2.28

Table 3*Means, Standard Deviations, and Correlations for All Variables*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Depression	10.25	5.89	-							
2. Stress	7.01	3.60	.667**	-						
3. Wellbeing	9.14	4.86	-.562**	-.499**	-					
4. Exp Avoidance	12.18	8.64	.640**	.586**	-.452**	-				
5. Loneliness	29.76	12.40	.492**	.335**	-.466**	.434**	-			
6. Anxiety	7.59	5.49	.649**	.783**	-.447**	.651**	.388**	-		
7. Alcohol Use	2.92	2.28	.116	.080	-.058	.156	-.068	0.25	-	
8. Motivation	53.52	16.66	.072	.162	.119	.124	.027	.299**	-.014	-

Note. * $p < .05$, ** $< .01$.