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The Effects of Stepped Care on Burnout for University Counseling Center Clinicians

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THE EFFECTS OF STEPPED CARE ON BURNOUT FOR UNIVERSITY

COUNSELING CENTER CLINICIANS

by

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A Dissertation
Submitted to the Graduate School,
the College of Education and Human Sciences,
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ABSTRACT

The ability of university counseling centers (UCCs) to meet the increased demand for service by students is becoming an increasing concern. While UCCs are seeing more students than ever, this increased demand has not been met with an increase in resources. As such, UCC clinicians are at a greater risk for developing burnout. However, according to the Demand – Control – Support Model, this risk could be reduced if UCC staff were afforded higher degrees of control over the resources they do have and received adequate support and acknowledgement for the work they accomplish. Through surveying 339 UCC clinicians in the United States, this study investigated whether clinicians at UCCs who have implemented a Stepped Care model for service delivery report lower degrees of burnout and greater degrees of job satisfaction and organizational commitment through the lens of the Demand – Control – Support model. While the Stepped Care group was not found to differ from the No Stepped Care group on burnout, job satisfaction, or organizational commitment, this study provided support for most of the proponents of the Demand – Control – Support Model. Specifically, job demands were significantly related to burnout and job satisfaction; control was significantly related to burnout, job satisfaction, and organizational commitment; and support was significantly related to job satisfaction and organizational commitment. Control over one's job and organizational support were also analyzed as potential moderators in the relationships between job demands and burnout, job satisfaction, and organizational commitment, however, these variables were not found to serve as statistically significant buffers in these relationships.

Keywords: University counseling centers (UCCs), increased demand, burnout, Demand – Control – Support Model, Stepped Care, job satisfaction, commitment

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DEDICATION

For my Lord and Savior, Jesus. You provided me with strength, peace, and comfort

through every part of this journey. Apart from You, I could not accomplish all that I do.

For my husband, Marcus who supported me through late nights and early mornings. You

contributed to my efficiency in this multi-year project by taking care of meals, household

duties, reminding me to take breaks as needed, and extending to me patience and grace

when I was operating on little sleep. For my trusty and loyal companion, Bigfoot. You

kept me company through long hours of writing, gently reminding me to stretch my legs

and go outside with you for much needed sunshine and fresh air. I dedicate this project to

you three, you are my family and heart.

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LIST OF ABBREVIATIONS

Abbreviation	Definition
ACS	Affective Commitment Scale
AUCCCD	Association for University and College Counseling Center Directors
CBI	Copenhagen Burnout Inventory
CCMH	Center for Collegiate Mental Health
CFI	Comparative fit index
CLI	Clinical Load Index
COVID-19	Coronavirus Disease-2019
CMIN	Chi-square Value
CSS	COVID Stress Scales
DCSQ	The Swedish Demand – Control – Support Questionnaire
GFI	Goodness-of-fit Index
OJS	Overall Job Satisfaction
PSS	Perceived Stress Scale
RMSEA	Root Mean Square Error of Estimation
SDS	Standardized Data Set
SPOS	Survey of Perceived Organizational Support
UCCs	University Counseling Centers

CHAPTER I - THE EFFECTS OF STEPPED CARE ON BURNOUT FOR

UNIVERSITY COUNSELING CENTER CLINICIANS

In recent years, university counseling centers (UCCs) across the United States have been said to be in a mental health "crisis" (Grasgreen, 2012; Novotney, 2014; Wilkinson et al., 2017; Xiao et al., 2017). Challenges faced by today's UCCs are copious, with many studies finding increased demands, fewer resources, long waitlists, and ultimately dissatisfied clinicians and clients as some of the significant, current challenges (Smith et al., 2007). By successfully defining today's challenges in college mental health, UCCs can develop plans to address such challenges in ways that protect not only the wellbeing of the students, but of the clinicians as well. While factors leading to burnout among those working in the mental health field cannot be totally predicted or avoided, intentionally addressing workplace challenges and identifying solutions can aid in the identification of factors that contribute to burnout (i.e., antecedent variables), and measures that may be taken to decrease the likelihood of clinicians experiencing negative antecedents that result in burnout (Kovach et al., 2009).

Empirical investigations have formed a clearer picture of the contemporary college counseling atmosphere and its challenges, which has led to the development of various programs and service delivery protocols, such as Stepped Care, that attempt to ease current challenges and successfully meet students' needs (Cornish et al., 2017; Haaga, 2000). Stepped Care, as a service delivery protocol, aims to address students' concerns by disseminating resources based on students' needs and degree of autonomy, reserving the most resource-intensive treatments for those students who would most benefit. While many efforts have been made in recent years to implement Stepped Care

protocols at UCCs, little research has been conducted to investigate its effects on clinicians. To fill this oversight, the current study evaluated whether Stepped Care implementation affected burnout amongst UCC clinicians. Additionally, through the lens of the Demand – Control – Support Model (Johnson & Hall, 1988; Karasek, 1979; Karasek & Theorell, 1990), this study evaluated whether the clinicians' perceived degree of control over their job duties, as well as their perceived degree of support in their work roles, correlated with their degree of reported burnout, organizational commitment, and job satisfaction. Whether support and job control served as moderators for the stress brought on by increased demands was also investigated.

Literature Review

Challenges faced by UCCs Today

Research has revealed increases in the number of students requiring mental health services prior to entering college, the number of students seeking services once enrolled in college, and number of sessions required to meet students' needs (Abrams, 2020; Haas et al., 2003; Reilly, 2018; Williams & Reetz, 2020). Prior to the COVID-19 pandemic, according to the 2018 – 2019 Association for University and College Counseling Center Directors (AUCCCD, 2019) national survey, nearly 90% of UCCs reported an increased demand for services, compared to the previous academic year. In the first year of the pandemic, some UCCs experienced a decline in the number of students seeking services, which was likely due to virtual/remote learning. Despite the pandemic, however, 31.6% of UCCs did experience an increase in demands in the 2020 – 2021 academic year (AUCCCD, 2021). As most universities have returned to in-person learning, it is likely that the trajectory of increased demands will continue. Ongoing waitlists have been one

result of the increased demand for services, which for some students creates such a burden for treatment that they end up discouraged from seeking mental health services offered on campus. For those who persist and take their places on waiting lists, delays in receiving treatment may lead to the adoption of unhealthy coping mechanisms, which can further exacerbate mental health issues prior to clinician and treatment availability. As students' mental health services are delayed, their academic performance stands the risk of further declining, leading to greater overall distress, dissatisfaction with life, and potentially adverse academic consequences such as being dropped from courses, placed on academic probation, or losing financial aid security (Bolinksi et al., 2020). Students across the nation are speaking out against treatment delays and limited resources when seeking mental health services at their UCCs with disappointing outcomes (Brown, 2020; National Alliance on Mental Illness, 2012; Van Brunt, 2012).

Meeting the pure volume of students is, in itself, a challenge faced by UCCs today, with increased mental health severity and intricacy of cases being another challenge that UCC clinicians must account for (Abrams, 2020; Brown, 2020; Reilly, 2018; Williams & Reetz, 2020). Multiple studies have provided evidence for increased complexity of the cases seen at UCCs, which consists of greater severity of psychopathology, increased comorbidity of disorders, as well as a higher prevalence of self-harm behaviors, suicidal ideation, suicide attempts, and psychiatric hospitalizations (Abrams, 2020; Benton et al., 2003; Center for Collegiate Mental Health, 2020; Gallagher, 2012; Grasgreen, 2012; Kettmann et al., 2007; Reilly, 2018; Xiao et al., 2017).

In the Center for Collegiate Mental Health Annual Report (CCMH, 2020), data collected during the 2019 calendar year revealed that as UCC clinicians' caseloads

increased, clients' appointments were spaced further apart, and for clients with more significant mental health needs, less symptom relief was obtained. Similarly, the 2018 – 2019 AUCCCD (2019) national survey revealed that in attempt to accommodate increased demands, over a third of UCCs reported spacing appointments out at least three weeks between sessions in attempt to see more students. The result of the increased demand in services and increased complexity of cases has not only left students with long waitlists and increased time between sessions but has left UCC clinicians overwhelmed and at risk for developing burnout and other mental health concerns. These experiences, in turn, can impede their ability to provide adequate mental health services for students (Brown 2020; Gallagher, 2012; Hodges, 2001; Reilly, 2018).

Further contributing to longer wait times is that the rate of hiring new clinicians has failed to keep pace with the increased volume of students seeking out mental health services. The International Accreditation of Counseling Services recommends a ratio of one licensed mental health provider per 1500 undergraduate students, however, very few UCCs actually meet this metric (Gallagher, 2012). In fact, in the 2015 AUCCCD national survey, there was an average report of one clinician for approximately every 3500 students amongst larger campuses. Due to concerning trends such as this, the CCMH developed the Clinical Load Index (CLI) in 2018 – 2019. The CLI serves as a supply and demand metric whereby UCCs are better able to assess current staffing resources in the context of service utilization by their students (CCMH, 2022). Since the development of this metric, there have been gradual improvements in meeting the ratio of licensed staff to students. In the most recent report published by the AUCCCD for the 2020 – 2021 academic year, there was an average report of one clinician for approximately 2050

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students amongst larger campuses. While this is certainly a move in the right direction, it is still noteworthy that there remain some larger universities who still have a mere one licensed clinician for every 4000 students (AUCCD, 2021).

In addition to being understaffed while trying to meet the needs of the students, UCCs must uphold the best interests of the university, maintaining the perspective that the university at large is an additional client with its own complex case in need of management. From this perspective, UCC staff must aim to meet the expectations and needs of university higher administration. This includes fulfilling requests for outreach events and programming, triage/on-call services, serving on campus threat assessment or behavioral risk management teams and various committees (e.g., wellness committees), providing faculty consultations, assisting with new student orientations, spearheading sexual misconduct and violence prevention education efforts, and for many, providing supervision and training to graduate students in the social work, counseling, and psychology departments (AUCCCD, 2019; Perloe & Pollard, 2016; Xiao et al., 2017). Additionally, UCC staff are expected to engage in suicide prevention efforts throughout the academic year, and when a student death does occur, oftentimes the UCC is viewed as being accountable for the loss, despite mental health professionals' limited ability to predict suicidal behaviors (Polychronis, 2018).

Coronavirus Disease-2019: An unprecedented challenge for UCCs today

With the Coronavirus Disease-2019 (COVID-19) pandemic, UCCs have faced continued challenges as students have encountered numerous distressing conditions related to academics, housing, employment, and many other important health-related needs (e.g., early on in the pandemic decreased access to food services on campus,

limited access to medical and psychological treatment services while universities transitioned to telehealth, and other supportive resources provided by their universities; Abrams, 2020). Many students have encountered the stress and worry that accompanies being diagnosed with COVID-19 or having a loved one fall victim to the virus (e.g., either directly through contraction of the virus, or indirectly via job loss).

Early studies during the pandemic demonstrated an increase in requests for service by college students with nearly half of those requests being directly related to the coronavirus (Abrams, 2020). To gain a clearer understanding of how the pandemic has negatively impacted students' mental health, the CCMH started including "COVID-19 Impact Items" on the Standardized Data Set (SDS; standardized data collection forms utilized by UCCs across the nation, often administered to students at intake; CCMH, 2022). The SDS COVID-19 Impact Items inquired of students whether their lives were being impacted by the coronavirus, even if that was not their primary reason for presenting to treatment (CCMH, 2022). Of their sample (N = 98,218), 94% of students reported that at least one area of their life was being affected by the pandemic, and 90% of students endorsed numerous areas of life being negatively impacted (CCMH, 2022). The top five areas of life being negatively impacted were as follows: mental health, motivation or focus, loneliness or isolation, academics, and missed experiences or opportunities (CCMH, 2022).

As the pandemic continued, during the 2021 – 2022 academic year, more universities returned to offering in-person services, along with virtual options. While the 2021 – 2022 school year was characterized by presenting concerns which were less directly related to the coronavirus, this period brought with it several presenting concerns

which seemed to be outcomes of the pandemic, or consequences of the virtual college experience associated with the pandemic (Bamforth, 2022). For instance, academic distress has been on the rise as students have returned to campus, potentially related to students having to transition their college experience to online at the start of the pandemic, and now adjust to in-person class requirements (Bamforth, 2022; CCMH, 2022). It has also been proposed that while students had to transition from in-person to online educational formats, they likely experienced significant impacts to their degree of academic motivation, attention and concentration related to coursework, and faced more challenging learning environments during a time when they had less access to campus resources such as writing centers, tutors, and student accommodation offices (Bamforth, 2022).

In addition to increased academic concerns, since returning to in-person services, students have reported greater frequency of concerns related to family distress (CCMH, 2022). This could be related to students living with family during the early stages of the pandemic, as opposed to living in campus housing. Moreover, there has been an increase in concerns related to eating habits (CCMH, 2022). Not only did the pandemic limit access to food, but there were also food shortages in many areas across the United States (CCMH, 2022). As students attended their classes and extracurricular meetings online, they encountered changes in their daily routines, possibly engaging in a more sedentary lifestyle than what was typical during a period of in-person classes and meetings, bringing disordered eating concerns more to the surface (CCMH, 2022). Moreover, the pandemic financially impacted universities nationwide resulting in hiring freezes and budget restrictions, further limiting resources available to clinicians and students

(Abrams, 2020). What has resulted from the pandemic for college mental health is what some have referred to as the "perfect storm" in that student demands for service have risen during a time when universities have faced great financial crises (Abrams, 2020; Williams & Reetz, 2020). While national funding has been made available to universities through coronavirus relief funds, UCCs have had to advocate for financial resources to be allotted to them (Bamforth, 2022).

Early on during the pandemic, UCC clinicians aimed to meet the needs of their students during a time characterized by sweeping pandemonium and ambivalence. UCCs nationwide were forced to quickly adopt telehealth protocols, switching their means of service delivery in an exceptionally short period of time (Abrams, 2020; Williams & Reetz, 2020). This was an additional demand placed on the shoulders of UCC directors and clinicians, in which they not only had to undertake telehealth training but had to ensure they were abiding by licensing board regulations while providing ethical and secure remote treatment to established clients along with the surge of new students requesting services (Abrams, 2020). This was a transition that undoubtedly many UCCs had not anticipated, but accepted the challenge and began providing telehealth services such as individual telehealth sessions, virtual drop-in support groups, and topically-based workshops on coping skills (Abrams, 2020; Williams & Reetz, 2020).

In sum, UCCs today are often under-staffed, under-funded, and under-resourced and yet are expected to do more and be more to their campuses (Brown, 2020; Uffelman & Hardin, 2002). Moreover, the COVID-19 pandemic further exacerbated these issues as UCCs were pressed to meet an additional increase in students' mental health needs as well as forced to expand their service delivery of telemental health to be able to offer

services during the pandemic. An unintended consequence of this suite of circumstances may be increased burnout, decreased job satisfaction, and decreased organizational commitment among clinicians. In fact, in the 2020 – 2021 AUCCCD national survey, the UCCs which had experienced turnover in the previous year found that the top three reasons for turnover included: leaving for a "better job," "work conditions," and "low salary" (AUCCCD, 2021). Increased demands, coupled with decreased resources and insufficient support can have detrimental impacts on one's work-related quality of life, leading to leaving one's profession, which further impacts the students and university community.

Burnout

As demands faced by UCC clinicians have surged across the nation, UCCs have been faced with the challenge of navigating how to healthily respond in a way that does not result in exhausted, discouraged, and ultimately burned-out clinicians. Unfortunately, with limited resources to meet these demands, UCCs have encountered a quagmire in which their clinicians are likely more susceptible to burnout (O'Brien, 2019). For example, AUCCCD (2020) reported that 17% of UCC clinicians have resorted to providing services to students over their lunchbreak in attempt to account for increased demands. Additionally, nearly a quarter of clinicians reported coming in early or leaving the office late to manage increased demands. Scheduling early, over lunchbreaks, and staying late places increased pressure on UCC clinicians and limits their ability to designate time for self-care and healthy work-life boundaries, leaving them more vulnerable to negative professional outcomes, such as burnout.

Burnout, in the mental health field, has long been studied and UCC clinicians are not exempt from the risk of developing this multifaceted condition. One of the earliest conceptualizations of burnout came from work by Christina Maslach in the 1970's (Kristensen et al., 2005). According to Maslach's Multidimensional Theory (1998), burnout is comprised of three key components: emotional exhaustion, depersonalization, and reduced sense of personal accomplishment. Through the framework developed by Maslach, burnout can be conceptualized as an experience in the interpersonal relationship between a clinician and the client when the clinician believes he or she is lacking in resources to meet the demands of the client. As such, the clinician begins to feel overly stressed (emotional exhaustion component) and experiences a sense of interpersonal distancing (depersonalization component), leading to a self-evaluation characterized by displeasure, lack of fulfillment, and decreased self-satisfaction (reduced sense of personal accomplishment component).

According to a multitude of studies, those in helping professions are at a greater susceptibility to experiencing burnout; and mental health professionals are included in this risk (Farber, 1983; Maslach & Jackson, 1981). Clinicians are prone to becoming emotionally invested in the services they offer to their clients, which to some extent can provide a sense of accomplishment, however, when the investment is too deep, it can lead to emotional depletion (Lee et al., 2011). Not only do UCC clinicians run this risk, but they also encounter numerous day-to-day stressful job-related tasks that can lead to amplified exhaustion (Ross et al., 1989). The stress-inducing activities encountered by UCC clinicians can be categorized accordingly: therapy-related (e.g., treatment planning and provision), interpersonal-related (e.g., interacting with coworkers and supervisors),

and administrative (e.g., completing paperwork and other work-related duties like outreach; Ross et al., 1989). According to Ross and colleagues (1989), the number of stress-inducing events a clinician encounters each day in the aforementioned categories can be predictive of the degree of job-burnout experienced. Additionally, when these stressful events are not met with increased support, particularly supervisory or higher administration support, UCC clinicians are even more vulnerable to the emotional exhaustion experienced, resulting in the onset of burnout (Ross et al., 1989). Day-to-day stressors cannot be totally avoided or eliminated, which is why increasing positive features (e.g., support and autonomy) of UCC clinicians' work is so vital for their physical, mental, and occupational wellbeing.

Once clinicians begin to experience burnout, their capacity to engage in creative treatment planning and individualize interventions to meet clients' needs becomes impaired. This naturally leads to poor treatment outcomes and potentially dissatisfied students. Not only does the exhaustion component of burnout impede clinicians' abilities to provide effective treatment, it also impairs their capacity to make sound decisions, which can lead to poor clinical judgment, and even ethical dilemmas (Vredenburgh et al., 1999). Clinicians who are struggling to effectively treatment plan and problem-solve end up experiencing a lack of fulfillment from their work, and thus detach from a job that once brought a sense of accomplishment, and perhaps even identity (Maslach & Jackson, 1981). When this occurs, not only is the experienced burnout negatively impacting the clinician's work-related duties, but also may affect interactions with clients and the treatment provided to those clients, thus limiting the sense of effectiveness and fulfillment gained from the work that is being completed (Kristensen et al., 2005).

As demands continue to weigh heavy on the shoulders of UCC clinicians, feeling a lack of control over their work could be an outcome. While clinicians are seeing as many students as possible each day, it can be challenging to carve out time to decompress and receive support from colleagues and administrative staff. The combination of high demands, low control, and low support is one which could inevitably result in heightened burnout, lessened job satisfaction, and decreased organizational commitment.

Demand – Control – Support Model. Karasek's Demand – Control Model (Karasek, 1979), which was later extended into the Demand – Control – Support Model by Johnson and Hall (1988), highlights not only the importance of having adequate resources/support to manage work demands, but also stresses the degree to which one has control over his or her work environment. Thus, both control over one's work and support from others are theorized as helping thwart increased demands from leading to the development of job burnout.

Control. The Demand – Control – Support model proposes that workers, who have a greater sense of control over the demands of his or her job, are likely to experience a lower degree of job-burnout (Devereux et al., 2009). In a 2004 study by Innstrand et al., when the degree of work-related control was manipulated at varying levels for participants, those individuals who had a greater degree of control experienced lower degrees of burnout following the study. Thus, control over one's work can serve as a buffer between increased demands and burnout.

While higher administration may not be able to offer many solutions with regards to decreasing job demands placed on UCC clinicians, they can strive to involve UCC leadership and staff in decision-making processes when germane to the work performed

by UCCs. Should this occur, it is plausible that UCCs would experience a bolstered perception of control over their work. In the end, this benefits the higher administration of a university, in that their UCC is characterized by healthier clinicians. Heightened burnout leads to lower job satisfaction and higher rates of turnover, both of which can be costly for a university, so higher administration valuing the health of their UCC clinicians would be an investment that pays off (Lim et al., 2010, Maslach et al., 1996; Steel et al., 2015; Wilkerson & Bellini, 2006).

     Support. While increased job demands can eventually lead to burnout when resources are slim, the Demand – Control – Support Model proposes that even when other work-related resources are minimal, if a worker has support from co-workers or supervisors, also known as *instrumental support*, then this type of resource can serve as a buffer, keeping work-related burnout at bay (Karasek et al., 1998). This has been supported in numerous studies that have demonstrated supervisory support contributes positively to staff morale and decreases the risk of burnout by reinforcing employees' competence and bolstering their self-efficacy (Constable & Russell, 1986; Ross et al., 1989; Russell et al., 1987). Ito et al. (1999) also confirmed this finding that among workers faced with work or personal difficulties, those who believed they had support from their supervisors reported lower degrees of burnout than those who did not believe their supervisors would offer support. In two additional studies by Dyer and Quine (1998) and Ford and Honnor (2000), it was found that when workers experienced times of frustration while on the job, but received support from co-workers, the workers experienced immediate relief from their job-related distress. In both studies, the workers

who reported higher degrees of collegial support, also reported greater job satisfaction and lower degrees of job-related burnout.

When considering protective factors for burnout, as maintained by the Demand – Control – Support Model, social support can be beneficial in keeping symptoms of burnout at manageable levels (Etzion, 1984; Greenglass et al., 1996). Not only do fellow clinicians play an essential role pertaining to the provision of social support for one another, but so too do the individuals who make up the higher administrative department overseeing the UCC (e.g., the president and/or vice president of the division of student affairs/student life). Although social support provides a protective factor against burnout, with the "do more with less" message coming from many college administrators today, it is doubtful that UCC clinicians often receive the degree of recognition and acknowledgment desirable in order to account for the high number of workplace demands.

In the case of the Demand – Control – Support model, when a job is such that a worker faces high demands, low control, and low support, Karasek and Theorell (1990) propose that this type of job will be putting the worker at the greatest risk for work-related stress which can lead to burnout. Unfortunately, many UCCs today have a climate that is seemingly characterized by the high-risk features described by Karasek and Theorell: high demands, low control, and low support. Without changing the operating procedures to address the multifaceted challenges faced by UCCs today, mental health providers in these agencies will be at an increased risk for job burnout. Clinicians can only operate with a "do more with less" mentality for so long, before it begins to take a

toll leading to emotional exhaustion, diminished clinical effectiveness, a lack of self-fulfillment, potential unethical decision-making, and burnout.

Organizational Commitment and Job Satisfaction

While the Demand – Control – Support Model suggests that UCC clinicians' risk of developing burnout can be minimized if adequate control over resources and sufficient support from the university is present, other beneficial outcomes may result from increased control and support, such as increased organizational commitment and improved job satisfaction. Research investigating commitment to one's work has revealed that the variable of commitment can have a plethora of positive outcomes, including increased organizational effectiveness, improved organizational morale, satisfactory job performance, and in the context of academia, improved academic outcomes for students (Bergmann et al., 2011; Bogler & Nir, 2015; Kushman, 1992; Steers, 1977). When commitment to an organization is high, employees are also often characterized by a higher degree of job satisfaction (Biswas & Bhatnagar, 2013), which has been found to correlate with lower job burnout (Abushaikha & Saca-Hazboun, 2009; Chenevey et al., 2008). Additionally, King and Sethi (1997) found organizational commitment to serve as a buffer between job stress and job burnout.

When individuals are not committed to their work, however, they are more likely to perceive themselves as being inadequately supported to perform their job duties, thus have lower job-related satisfaction, and are more susceptible to experiencing work-related burnout, tension, and stress (Biswas & Bhatnagar, 2013). The reverse has been found to be true as well, in that those employees who experience a heightened degree of job burnout report feeling less committed to the work duties and responsibilities they are

expected to fulfill (Schaufeli & Bakker, 2004). Therefore, when clinicians begin to experience burnout, they risk experiencing a domino effect in which burnout leads to depleted commitment, causing a lack of fulfillment and job satisfaction, resulting in poor outcomes for the clinician, students, and the university as a whole (Bogler & Nir, 2015).

Stepped Care: A modern service delivery model to abate the challenges

Currently, there are procedural trends across UCCs that have been designed to alleviate the present challenges brought on by increased demands and reduced resources for UCC services. Primarily, there is a push to make services at UCCs more accessible while depleting waitlists for students. One way this can be accomplished is through adopting a model such as Stepped Care, which encompasses a process of distributing resources on college campuses in a way that utilizes various supportive networks, decreasing the weight of demand on UCCs alone to provide students with support (Cornish et al., 2017; Haaga, 2000). Stepped Care practices strive to meet students' needs through the least intensive and least restrictive means possible, freeing up more intensive resources and services for those students whose difficulties warrant such treatment intensities (Richards et al., 2012; Sobell & Sobell, 2000).

As described by Haaga (2000), a Stepped Care model for service delivery within a UCC is built upon the notion that not all students require the same level of care. While it is possible that some students may need ongoing individual psychotherapy, others may benefit from resources like self-help books, relaxation apps for their electronic device, group therapy, booster sessions, or through attending a brief workshop or seminar on a particular topic (Haaga, 2000). From this perspective, resources are disseminated judiciously based off the students' current level of functioning (e.g., degree of need and

degree of autonomy) thereby better meeting the needs of the students through individualization of services and resources (Borsari et al., 2007). See Appendix A – Illustrations 1 – 5 for several Stepped Care models which were submitted by participants in this study.

When operating from a Stepped Care protocol, UCC clinicians can decide the appropriate resource for their clients, which may mean pointing some students to other campus offices accordingly, rather than taking on every student as a client for individual psychotherapy services. This process not only increases the number of resources available (while working with limited funding), but also produces more opportunities for social integration, in that UCC clinicians interact more with offices across campus, and thus experience a greater sense of support campus wide. This is ideal, as identified in Ross, Altmaier, and Russell's (1989) investigation on UCCs, for those who reported lower degrees of emotional exhaustion and depersonalization (two variables of burnout) were the centers who had a broader network to collaborate. Overall, while the Stepped Care approach to service delivery is still relatively new in its application within UCCs, it has demonstrated the potential to improve outcomes, enhance client satisfaction, eliminate waitlists, improve resource allocation, and streamline service delivery (Cornish et al., 2017; Haaga, 2000).

While reducing job demands and increasing resources via added funding alone may not be feasible in today's college mental health climate, the Stepped Care approach aims to account for this by increasing options across the university campus for UCC clinicians to utilize. As a result, UCC clinicians may perceive themselves as having increased control over the work they do and over how they utilize the resources that are

available to them. This approach is consistent with the recommendations of Lee and colleagues (2011), as they determined that if job control is enhanced for clinicians, they are less likely to experience depersonalization and lack of accomplishment, two facets of burnout. Additionally, these researchers indicated that if clinicians' resource pools broadened and they were given more latitude in the decision-making process of their work (i.e., increased control over their work), then burnout could potentially be prevented (Lee et al., 2011). Van der Doef and Maes (1999) and Bakker and colleagues (2007) also discovered the buffering effect of increased job resources in the relationship between job demands and burnout. This is the crux of Stepped Care: broaden the resource pool and equip clinicians with the opportunity to utilize the protocol in conjunction with their clinical judgment to individualize interventions to each students' needs, thus increasing control over one's work in the face of increased demands.

Despite the empirical studies that have investigated the outcomes of a Stepped Care protocol on client-related factors, to date, no research has addressed the impacts of Stepped Care on clinicians and the variables related to one's work-related wellness (Bower & Gilbody, 2005; Boyd et al., 2019; Richards et al., 2012). Furthermore, the 2020 – 2021 AUCCCD national survey (2021) revealed that 47% of UCCs were utilizing a Stepped Care model, even though nearly 90% of UCC directors reported increased demand for services since the prior academic year. One could hypothesize that when procedures for deciding treatment intensity in a Stepped Care model are followed, an increased ability to meet work demands and, in some cases, a reduction in job-burnout amongst UCC staff would be revealed; however, this has not yet been empirically investigated. Additionally, no investigations have been conducted to examine the overall

impact of these procedural alterations specifically within the context of the Demand – Control – Support Model. Given the complexity of demands, and the inability of most universities to increase financial resources for their UCCs, particularly in light of the COVID-19 pandemic, the current research examined if employing a Stepped Care service delivery model decreases burnout and increases job satisfaction and commitment.

The Current Study

Increased demands faced by UCC clinicians are likely to lead to increased rates of burnout. As demands are unlikely to decrease in the near future, researchers must assist UCCs in identifying what service delivery alterations may better serve students while also helping to improve the work atmosphere for clinicians. This study sought to identify relationships between the factors of the Demand – Control – Support model and job burnout, organizational commitment, and job satisfaction. The first aim was to confirm existing studies that have found that increased job demands relate to increased burnout experienced, while increased perceived support and increased control relate to lower burnout among UCC clinicians, and to examine if perceived control and perceived support independently moderate the relationship between increased demands and experienced burnout. In addition, because commitment and satisfaction are two additional variables that can be foretelling of burnout (Biswas & Bhatnagar, 2013; Bogler & Nir, 2015; Schaufeli & Bakker, 2004), these variables were deemed important to include as additional dependent variables due to the relationships they have with job burnout and potential positive outcomes.

To meet increased demand in services, and to better serve students with varying needs, UCCs are striving for alternative methods of service delivery, such as Stepped

Care (Cornish et al., 2017). Through the lens of the Demand – Control – Support model, this study investigated whether UCCs utilizing a Stepped Care model consist of clinicians who experience a lower degree of job burnout during a time of increased demand. Stepped Care protocols also encourage collaboration with offices campus wide, and so, this study sought to unveil if adopting a Stepped Care approach allows for a greater perception of control over job-related decisions and resources, as well as an increased perception of support from the universities participants are employed. Finally, this study strived to confirm if those UCCs operating from a Stepped Care service delivery protocol were characterized by more committed and satisfied clinicians, as it was predicted that as clinicians experience an enhanced perception of control over their resources and increased collegial support (as a result of a Stepped Care service delivery protocol), clinicians' morale, and thus UCCs' morale would be benefited.

In light of the COVID-19 pandemic, the variable of "control" was also assessed as it related to the degree in which UCC clinicians were consulted with or involved in the pivoting response to the pandemic and the resulting service delivery changes. While changes in treatment delivery were undergone quickly by most universities, switching from in-person services to complete telehealth services (Abrams, 2020; Williams & Reetz, 2020), according to the Demand – Control – Support model, higher administration would have been prudent to collaborate with UCC staff as the transition was made (Constable & Russell, 1986; Ross et al., 1989; Russell et al., 1987).

Collectively, the hypothesized relationships are outlined below.

Hypotheses

Hypothesis 1: The perceived degree of job demands will be positively related to UCC clinicians' perceived degree of burnout, and negatively related to organizational commitment and job satisfaction.

Hypothesis 2: The perceived degree of control over work duties and resources will be negatively related to UCC clinicians' perceived degree of burnout, and positively related to organizational commitment and job satisfaction

Hypothesis 3: The perceived degree of job-related support received by higher administration will be negatively related to UCC clinicians' perceived degree of burnout and positively related to organizational commitment and job satisfaction.

Hypothesis 4: The perceived control over work duties/resources received by higher administration will moderate the relationship between job demands and:

    a. UCC clinicians' perceived degree of job burnout,

    b. organizational commitment,

    c. job satisfaction.

Hypothesis 5: The perceived support received by higher administration will moderate the relationship between job demands and:

    a. UCC clinicians' perceived degree of job burnout,

    b. organizational commitment,

    c. job satisfaction.

Hypothesis 6: It is predicted that the relationships between the independent variables of demands, control, and support and the dependent variables of job burnout, organizational

commitment, and job satisfaction will differ between clinicians using Stepped Care versus non-Stepped Care.

      a. UCCs utilizing a Stepped Care model will be characterized by a stronger sense of perceived support from their universities as opposed to centers not using Stepped Care.

      b. UCC clinicians, whose centers are utilizing a Stepped Care model, will display lower levels of job-related burnout compared to centers not using Stepped Care.

      c. UCC clinicians, whose centers are utilizing a Stepped Care model, will be characterized by stronger degrees of organizational commitment compared to centers not using Stepped Care.

      d. UCC clinicians, whose centers are utilizing a Stepped Care model, will report greater job satisfaction compared to centers not using Stepped Care.

CHAPTER II – METHODS

Participants

Participants were recruited by means of a snowball sampling method. Because the

sample for this study needed to meet specific eligibility criteria (e.g., at least 18 years old,

employed by a UCC, and providing direct clinical services to university students) an

email was sent to the AUCCCD list serve. The email contained information about the

study and requested the directors receiving the email to not only participate in the study,

but also to recruit their licensed (or license-eligible) staff to participate. An undergraduate

research assistant also assisted the primary investigator in generating a list of email

addresses for UCC staff. This list was utilized by the primary investigator to send out

emails directly to UCC staff for additional recruitment efforts. Within the email

requesting participation in the research study, there was a link directing the participants to

Qualtrics Online Surveys. Data collection took place between May of 2021 until March

of 2022.

The final sample consisted of 339 adult participants (211 males, 118 females, 6

transgender, 3 non-binary/third gender, 1 queer gender) with a mean age of 39.82 years,

(SD = 10.45, range = 23 – 71 years). All participants were employed by a UCC and were

providing direct mental health services to students. The mean length of employment for

participants in their UCC was 5.34 years, with a median of 3.25 years, a range of 33.42

years, and a standard deviation of 6.07 years.

In this study, 79.94% self-reported as White or Caucasian (non-Hispanic), 7.96%

as Black or African American, 7.37% as Hispanic/Latino, 2.65% as

Multicultural/Multiracial, 1.47% as Asian American, 0.29% as Middle Eastern, and

0.29% as American Indian. The majority of participants (66.37%) indicated they were engaged, married, or partnered (see Appendix D, Table 1 for additional demographic information). With regards to education, most participants held either a master's degree (49.56%) or doctoral degree (46.61%). The remaining 3.83% participants held bachelor's degrees, two of which indicated they were currently pursuing a graduate degree. Professional licenses were held by the majority of participants (88.20%), and of those who did not yet have a license (n = 40), 85% reported they were in the process of obtaining licensure. Regarding the job title of the participants, nearly one half were master's level clinicians, over a quarter served in a director or assistant director capacity, and just under one quarter of participants were doctoral level staff psychologists.

Central to the aim of the study, utilization of a Stepped Care model was assessed. In this sample, 46.90% of participants indicated the UCC they are employed at does not use Stepped Care, 27.43% of participants indicated their UCC does utilize Stepped Care, 25.37% of participants reported being unsure if their UCC utilizes a Stepped Care delivery model, and one participant (.29%) did not respond to the question. Of the individuals who indicated that their UCC does not use a Stepped Care model, or who stated that they were not sure if Stepped Care was being implemented at their UCC, 58.89% reported that they are familiar with Stepped Care, and 29.44% of the participants reported having no familiarity with Stepped Care. The remaining 11.67% participants did not respond.

Because this study took place amidst the COVID-19 pandemic, data were collected regarding service delivery changes and work expectation changes in light of the pandemic. While only 10.32% of centers represented in this study offered telehealth pre-

pandemic, in response to the pandemic, 99.41% of participants indicated that their UCC was now offering telehealth to their students. Due to the pandemic, nearly a third of participants also indicated they now had the option to work remotely in their positions. Regarding these service delivery changes, 61.36% of participants were consulted by their UCC directors during the transition to telehealth and/or remote work; while just 33.04% reported being consulted by their higher administration regarding the changes being enacted. The majority of participants reported changes in their work expectations during the pandemic, with the majority (72.27%) reporting an increase in expectations (see Appendix D, Table 3 for more information regarding service delivery and work expectation changes).

Measures

The overall survey for this study consisted of eight questionnaires (Appendix E). All measures were administered through the online Qualtrics platform. Descriptive data and internal consistency reliability data for each measure for the current study is presented in Table 4.

Demographic Questionnaire. Following completion of informed consent, participants were presented first with a demographic questionnaire. The demographic questionnaire gathered information pertaining to gender identity, sexual orientation, age, race, relationship status, educational background (e.g., highest degree obtained), position title, household income, license type, license state, years in practice as a licensed clinician, total years employed in university counseling, and years employed at their present UCC.

Additionally, the demographic questionnaire asked participants to indicate whether their UCC utilized Stepped Care, and if so, to what degree they believed their center adhered to the Stepped Care model. The latter question was presented using a sliding scale response format whereby participants provided a rating on a 0 – 100 scale, where "0" represented "we rarely adhere to the Stepped Care model" and "100" indicated, "all, or nearly all, of our services are decided upon within the context of the Stepped Care model". Moreover, participants were asked to describe their center's Stepped Care approach and to upload any supporting documents which further explain the Stepped Care model adopted by their UCC (e.g., Appendix A, Illustrations 1 – 5).

Furthermore, participants were asked if they currently serve, or have served in the past, in a higher administrative role overseeing the university counseling center in which they are employed. This question was included with the purpose of identifying any participant whose responses regarding the "support" component of the Demand – Control – Support model may be favorably biased toward higher administration's role in the policies or procedures of university counseling.

Finally, with regards to the initial pivot due to the COVID-19 pandemic, clinicians were asked to speak to the degree in which they were involved in the decision-making process for service-delivery changes during the spring 2020 semester (i.e., the shift to telehealth services). Clinicians were also asked to speak to their degree of involvement in the decision-making process for the fall 2020 semester as it pertained to service-delivery for students amidst the continued pandemic (i.e., hybrid of telehealth and in-person services).

Copenhagen Burnout Inventory. The Copenhagen Burnout Inventory (CBI;

Kristensen et al., 2005) was utilized to assess burnout in this study. The CBI has strong

psychometric properties. In fact, Winwood and Winefield (2004) described the CBI as

having "excellent psychometric properties" (p. 282) when studying burnout experienced

by dentists, and concluded that the measure would be an appropriate option when

investigating burnout amongst a variety of healthcare providers. With regards to

reliability, the measure has been found to have high internal reliability, with Cronbach's

alphas ranging from .85 to .87 (Kristensen et al., 2005). Additionally, there is favorable

evidence of face validity and criterion validity, as well as concurrent and predictive

validity (Kristensen et al., 2005).

The CBI assesses burnout in three distinct categories: personal burnout (scale 1),

work-related burnout (scale 2), and client-related burnout (scale 3), while assessing for

the key characteristics of burnout with regards to the physical, emotional/psychological,

and cognitive effects, largely consistent with Maslach's multidimensional theory of

burnout (Maslach, 1998). The measure has 19 total items; the personal burnout scale of

the measure is comprised of six items (e.g., "How often do you feel weak and susceptible

to illness?"), the work-related burnout scale consists of seven items (e.g., "Does your

work frustrate you?"), and the client-related burnout scale is made up of six items (e.g.,

"Does it drain your energy to work with clients?"). All items maintain a 5-point Likert

scale response format (e.g., "0" = "never/almost never", "100" = "always"). The measure

is scored by averaging the 19 items. Scores can range from 0 to 100, where higher scores

on this measure are indicative of greater burnout. Each scale was scored individually to

obtain scale scores in addition to the overall score for the measure; the overall score was utilized in this study to assess for the overall experience of burnout for the participants.

The Swedish Demand – Control – Support Questionnaire. The Swedish Demand – Control – Support Questionnaire (DCSQ) was developed by Theorell et al. (1988). The DCSQ assesses the psychological demands placed on employees in their work, the decision-making autonomy (i.e., control) entrusted to employees in their work, and the social support experienced by employees while at work (Sanne et al., 2005; Theorell et al., 1988). The survey is comprised of three subscales with a total of seventeen 4-point Likert scale items ("1" = "strongly disagree" to "4" = "strongly agree"; sample item: "My co-workers [colleagues] are there for me [support me]"). However, due to a translation issue (from the original version written in Swedish), one of the items on the control subscale has been excluded (translated question: "Does your work require skills?"), thus sixteen total items were utilized: five items on the psychological demands subscale, five items on the decision latitude subscale, and six items on the social support subscale. While the full DCSQ was administered to participants, the demands subscale was used to operationalize "demands" in this study and the decision latitude subscale was used to operationalize control. The social support subscale was not used.

To score the DCSQ, the item scores are summed for each of the three subscales, resulting in scores ranging from 5 to 20 on the psychological demands and decision latitude subscales and from 6 to 24 on the support subscale; higher scores on each of the subscales indicate heightened job demands, sufficient control over one's work, and adequate support received by one's colleagues.

The DCSQ has been found to be a psychometrically sound measure in various

translations, including but not limited to, the Swedish version, English version, and

Japanese version (Mase et al., 2012; Sanne et al., 2005). Previous studies have also

utilized the sixteen-item DCSQ with satisfactory psychometric outcomes (Sanne,

Mykeltun, et al., 2005; Sanne, Torp, et al., 2005). The three subscales making up the

DCSQ have been supported via factor analyses demonstrating support for the three

domains of the Demand – Control – Support model (Chungkham et al., 2013; Sanne et

al., 2005). Regarding the reliability of the DCSQ, Cronbach's alpha coefficients vary

from scale to scale in which reliability coefficients have been found to range from $\alpha = .78$

to $\alpha = .85$ (Mauss et al., 2018; Sanne at al., 2005). The measure has demonstrated

satisfactory internal consistency and content validity across genders, educational

backgrounds, levels of skill, and for those in a clinical sample who have been identified

as having a mental health condition (e.g., depression) compared to those in the general

population (Landbergis et al., 2000; Sanne et al., 2005).

Survey of Perceived Organizational Support. The 8-item Survey of Perceived

Organizational Support (SPOS) originally developed by Eisenberger and colleagues

(1986) was chosen to assess how supported, recognized, and valued the participants feel

by the university they work for. Therefore, in data analyses used for testing hypotheses,

support data was derived from the SPOS, not the DCSQ support scale. While the original

measure offers 36-items, the 16- and 8-item versions have since accumulated evidence of

validity in numerous studies (Hellman et al., 2006; Worley et al., 2009). The items are

presented in a 7-point Likert scale response format where responses range from "strongly

disagree" to "strongly agree" (Eisenberger et al., 1986). The measure is scored by

summing the items, with specific items being reverse scored where indicated. The mean reliability coefficient for this measure across more than 55 studies is $\alpha = .88$ (Hutchison, 1997; Shore & Tetrick, 1991). Additionally, the measure has evidence of adequate face validity, factorial validity, and construct validity (Hutchison, 1997; Shore & Tetrick, 1991).

The Affective, Continuance, and Normative Commitment Scales (1990). The measure that was employed to evaluate organizational commitment was the Three-Component Model of Commitment questionnaire. This measure was developed by Allen and Smith (1990) based off previous research which measured commitment to one's work. While the measure offers three 8-item scales measuring affective, continuance, and normative components of commitment, for the purposes of this study only the Affective Commitment Scale (ACS) was utilized. The ACS uses a seven-point Likert Scale (1 = *strongly disagree* to 7 = *strongly agree*) and assesses the degree to which one personally identifies with the values and goals of their organization, thus determining the extent of their emotional attachment and belongingness to their job. The following is a sample item from the ACS, "I really feel as if this organization's problems are my own". The reliability of this scale is strong with a coefficient alpha of .87 (Allen & Smith, 1990). The ACS is also characterized by a strong test-retest reliability coefficient of .94 in a study by Blau and colleagues (1993) with a 7-week span between the first administration and the second. The scale is scored by first reverse scoring items four, five, six, and eight and then obtaining a total score by summing the items together. A higher score on the ACS is suggestive of a greater sense of affective commitment to one's organization.

Overall Job Satisfaction. The Overall Job Satisfaction (OJS) questionnaire is a 5-item measure which was created by Judge and colleagues (1998) on the bases of Brayfield and Rothe's 1951 version to assess one's contentment with his or her work (Duffy et al., 2012). The items are structured with a five-point Likert response format where "Strongly Disagree" is equal to one-point and "Strongly Agree" results in a score of five. It is scored by first reverse scoring items three and five and then totaling the items to obtain an overall sum. Higher scores on the OJS are suggestive of a greater sense of satisfaction in one's job.

The internal consistency of the OJS has been determined to be a strength, with a reliability coefficient of .88 (Duffy et al., 2012). Another strength of the OJS is its concurrent validity with other psychometrically sound measures of workplace satisfaction (Duffy et al., 2012). Furthermore, the internal consistency of the OJS scales have been established with a reliability coefficient of .88 (Duffy et al., 2012).

COVID Stress Scales and the Perceived Stress Scale. To gauge the degree of impact the coronavirus had on UCC clinicians' mindset, the COVID Stress Scales (CSS) was applied (Taylor et al., 2020). The CSS was quickly developed in response to the global COVID-19 pandemic, utilizing a sample of nearly 7,000 individuals from Canada (N = 3,479) and the United States (N = 3,375; Taylor et al., 2020). The CSS consists of five scales which measure stress related to the pandemic by assessing an individual's degree of worry related to the virus; fear of contracting the virus from foreigners (xenophobia), items, or surfaces; degree of engagement in checking behaviors (such as checking for news updates, reassurance checking, and excessive handwashing/worries of contamination); and signs of traumatic stress specific to the virus (e.g., nightmares about

the virus). The CSS has an additional scale that claims to measure "personal social and economic consequences of COVID-19" (Taylor et al., 2020). However, it is important to note the items on this scale are limited to concerns that grocery stores will run out of items, close down, or become a looting location, rather than worries pertaining to job loss, losing one's housing in relation to income loss, or the overall economic impact of the virus on one's city, state, or country. For the purposes of this study, the only CSS scale that was utilized was Scale 1, which assesses one's worry in relation to the virus.

Though it is a new measure, the CSS has demonstrated strong psychometric properties. The Cronbach alpha coefficients for each of the five scales range from 0.83 to 0.95 (Taylor et al., 2020). The measure has also been found to have satisfactory convergent validity and discriminant validity (Taylor et al., 2020). The responses on the CSS are in a five-point Likert scale format, where "not at all" = 0 and "extremely" = 4. It is scored by adding up each of items' responses, whereby a higher score is indicative of a greater sense of COVID-19 related stress (Taylor et al., 2020).

In addition to utilizing the COVID Danger and Contamination Fears scale of the CSS (scale 1), the Perceived Stress Scale (PSS; Cohen et al., 1983) was employed to gauge the participants' more general sense of stress in light of the pandemic and in relation to their present responsibilities. The PSS is one of the most frequently used measures to gauge stress in relation to situations which one cannot predict or control (such as a global pandemic) and thereby may have detrimental impacts on one's life. While the measure can be used to assess general stress, participants were instructed to respond in the context of their experiences pertaining to the COVID-19 pandemic. Using the PSS in conjunction with the CSS created a richer picture of not only worries

pertaining to the dangerousness of the coronavirus (i.e., the items on the CSS, such as, "I am worried about catching the virus"; Taylor et al., 2020), but also the degree to which one felt out of control and emotionally distraught due to the pandemic (e.g., "In the last month, how often have you felt that you were unable to control the important things in your life" and "In the last month, how often have you found that you could not cope with all the things that you had to do?"; Cohen et al., 1983). The two measures together allowed for a more thorough understanding of how UCC clinicians were impacted personally by the COVID-19 pandemic.

The PSS has 10 items which are on a five-point Likert scale (0 = "Never" and 4 = "Very Often"). It is scored by obtaining a sum of all items (whereby items 4, 5, 7, and 8 are reverse scored) in which higher scores are indicative of greater stress and vulnerability to physical and mental health consequences of stress (e.g., becoming ill with a cold or experiencing symptoms consistent with depression; Cohen et al., 1983). The PSS has been found to be a reliable and valid tool for measuring stress in a variety of populations (Cohen et al., 1983; Luft et al., 2007; Ng, 2013). With regards to reliability of the measure, coefficient alphas ranging from .84 to .86 have been obtained (Cohen et al., 1983). The PSS has been found to discriminate from other measures which assess factors related to social anxiety and health anxiety, demonstrating discriminant validity while correlating with measures that focus on various life-events, demonstrating satisfactory concurrent validity (Cohen et al., 1983). Furthermore, the PSS has also proven useful with regards to predicting various occurrences such as one's success with smoking cessation, one's vulnerability to becoming ill, and one's likelihood to display depressive symptoms, demonstrating predictive validity (Cohen et al., 1983).

Procedure

Before beginning data collection, human research subject approval from the

Institutional Review Board (IRB) was obtained (Appendix B). Following IRB approval,

recruitment commenced via an email dispersed to the AUCCCD listserv, soon followed

by additional recruitment emails to UCC staff sent by the lead investigator.

Interested individuals were directed to an electronic informed consent document

which was housed within the Qualtrics online survey platform. The informed consent

process included information about the goal of the study, informed participants of the

voluntary nature of the study, and provided a list of foreseeable risks and benefits of

participating in the study. Once an electronic signature was provided, signifying consent

to participating in the study, the survey began. Following completion of the demographic

questionnaire, the rest of the questionnaire items were administered in a varied order with

the intention of minimizing disruptive question ordering effects, such as stereotyped

response patterns. At the end of the survey, participants were given the opportunity to

provide their email address (which were not tied to their completed survey responses) and

enter a drawing for a chance to win one of four $25.00 Amazon gift cards. Of the

participants, 273 chose to enter the drawing. Four winners were randomly selected and

were each emailed their $25.00 Amazon gift card.

CHAPTER III – RESULTS

Data Cleaning

Data cleaning was performed to ensure that the data was valid and complete.
Cleaning the data consisted of ensuring survey completion and establishing that all
participation criteria had been met (e.g., participants were at least 18 years of age,
employed by a UCC, and providing direct clinical services to university students).
Additionally, the dataset's directed response items were screened to assess the
respondents' attention across the measures (e.g., items that instructed the respondents to
select "strongly agree" for their response; Meade & Craig, 2012). The initial sample for
this study consisted of 448 participants. Data cleaning resulted in data for 107 individuals
being deleted due to missing greater than 25% of item responses, and data for two
additional participants were deleted due to failing all three validity checks. Descriptive
statistics (e.g., frequencies, means, skewness, and kurtosis) were obtained for each
measure of the survey to check for endorsement errors using the statistical software,
Statistical Package for the Social Sciences (SPSS).

Preliminary Analyses

Descriptive statistics, Cronbach's alphas, and bivariate correlations were obtained
using IBM SPSS statistics (Appendix D, Table 4). Potential covariates were examined for
inclusion in the final model. Covariates included stress and fear related to the COVID-19
pandemic. These variables were included as covariates, as it was predicted that the
COVID-19 pandemic, and the work-related changes at UCCs as a result of the pandemic,
may affect participants' experience of job burnout, job satisfaction, and organizational
commitment. Furthermore, it was predicted that participants' experience of work

demands, control over their work-related duties, and support received from higher administration and coworkers could be influenced by one's experience of stress and fear related to the pandemic. These predictions have been supported by previous studies that have shown that COVID stress negatively impacts work well-being (Abramson, 2022; Gavidia, 2020; Saleem et al., 2021). As predicted, COVID stress was found to significantly correlate with overall burnout ($r = .479$, $p < .001$), job satisfaction ($r = -.296$, $p < .001$), and organizational commitment ($r = -.127$, $p = .019$). COVID fears also significantly correlated with the three dependent variables: burnout ($r = .337$, $p < .001$), job satisfaction ($r = -.183$, $p < .001$), and organizational commitment ($r = -.108$, $p = .046$). Because these COVID-related variables correlated with the dependent variables, these variables were accounted for in the model (as predictors of the dependent variables), allowing for the balancing of their effects across groups in the models under investigation.

Initially, the plan was to have two groups in this study: one group comprised of UCC clinicians whose UCCs utilized a Stepped Care model, and a second group for those clinicians whose UCC did not provide services in accordance with a Stepped Care model. However, data resulted in three comparison groups: 1) UCC clinicians whose centers use Stepped Care (N = 93), 2) UCC clinicians whose centers do not use Stepped Care (N = 159), and 3) UCC clinicians who were unsure if their center employed a Stepped Care service delivery protocol (N = 86).

<center>Primary Analyses</center>

Figure 1 (Appendix C) was the model used to examine hypotheses 1, 2, 3, and 6. Figure 2 (Appendix C) tested hypothesis 4 and Figure 3 (Appendix C) tested hypothesis

5. All three path models were analyzed using the AMOS statistical software. Although not shown, paths modeling correlations amongst independent variables (e.g., demands – control) and correlations between the error terms for burnout, job satisfaction, and commitment were modeled.

Hypotheses 1, 2, 3, and 6 were tested using Model 1, which was a just-identified model as observed variables were used. The first hypothesis predicted that job demands would be positively related to burnout and negatively related to organizational commitment and job satisfaction. The results of this analysis partially supported these predictions. Job demands were positively related to burnout ($\beta = .247$, $p < .001$) and were negatively related to job satisfaction ($\beta = -.224$, $p < .001$). While there was a negative relationship between job demands and organizational commitment, this relationship was not statistically significant ($\beta = -.022$, $p = 0.658$).

Hypothesis 2 predicted that control over work duties would be negatively related to burnout and positively related to organizational commitment and job satisfaction. The results of this analysis supported these predictions. Control over one's work was negatively related to burnout ($\beta = -.198$, $p < .001$), positively related to job satisfaction ($\beta = .292$, $p < .001$), and positively related to organizational commitment ($\beta = .273$, $p < .001$).

Hypothesis 3 predicted that support would be negatively related to burnout and positively related to organizational commitment and job satisfaction. The results of the analysis partially supported these predictions. Organizational support was positively related to job satisfaction ($\beta = .292$, $p < 0.001$) and positively related to organizational

commitment ($\beta = .378$, $p < 0.001$). However, while organizational support was negatively related to burnout, this was not statistically significant ($\beta = -.063$, $p = 0.196$).

Prior to testing for the moderations (hypotheses 4 and 5), the independent variables and moderator variables were centered. Hypothesis 4 predicted that perceived control over one's work would moderate the relationships between job demands and burnout, job demands and organizational commitment, and job demands and job satisfaction. Model 2 was a just-identified model. Results from this analysis indicated that control over one's work did not buffer the relationship between job demands and job satisfaction ($\beta = -.030$, $p = .466$), job demands and burnout ($\beta = -.002$, $p = 0.971$), or job demands and organizational commitment ($\beta = .020$, $p = 0.664$).

The fifth hypothesis predicted that perceived support would moderate the relationships between job demands and burnout, job demands and organizational commitment, and job demands and job satisfaction. The fifth hypothesis was tested using Model 3, which as with the others, was a just identified model. Results from this analysis indicated that while demands and support both individually relate to burnout, support does not moderate the relationship between job demands and burnout ($\beta = -.080$, $p = 0.067$). Furthermore, though support relates to commitment, and both demands and support relate to job satisfaction, support does not serve to buffer the relationships between job demands and organizational commitment ($\beta = -.073$, $p = 0.109$) or job demands and job satisfaction ($\beta = -.014$, $p = 0.744$).

Hypothesis 6 predicted that there would be differences between the clinicians using Stepped Care versus those who are not. Specifically, it was proposed that UCCs utilizing Stepped Care would be characterized by perceptions of greater support, lower

degrees of burnout, stronger degrees of organizational commitment, and greater job satisfaction. Data collection resulted in having three groups for comparison: Stepped Care (N = 93), no Stepped Care (N = 159), and a third group of clinicians who were unsure if their UCC was utilizing Stepped Care (N = 86). In comparing these three groups, a chi-square difference test revealed that the three groups were not statistically different when comparing the whole model (chi-square = 15.522, p = .986). Table 5 (Appendix D) lists the means for all variables across the three Stepped Care groups. Because the three groups were not found to be statistically different, individual paths were analyzed on an exploratory basis only and differences are discussed in the discussion.

CHAPTER IV – DISCUSSION

College mental health services are imperative to student success and satisfaction, which directly effects a university's overall success (i.e., higher retention and graduation rates; Eisenberg et al., 2016; Kalkbrenner et al., 2021). An efficiently operating UCC, which meets students' various needs in a timely and robust manner is essential in today's mental health climate (Williams & Reetz, 2020). As such, research that investigates the various service delivery protocols that UCCs can adopt to better serve their clientele is critical. While previous research has shown that Stepped Care as a service delivery option is positively received by students (Cornish et al., 2017), no prior studies have considered how Stepped Care affects UCC clinicians. This study sought to identify whether UCCs utilizing Stepped Care were characterized by clinicians with lesser burnout, greater job satisfaction, and heightened organizational commitment. Through the lens of the Demand – Control – Support Model it was hypothesized that Stepped Care would allow clinicians to better meet students' demands through the increased decision latitude afforded to clinicians within this service delivery protocol. Furthermore, the Demand – Control – Support Model suggests that clinicians would likely feel a bolstered sense of support in their work when operating from a Stepped Care model in that they would be given the freedom to collaborate with other campus offices to best serve the needs of their students. Having a greater resource pool, as one has within Stepped Care, could result in clinicians feeling more supported by their organization (i.e., the university), and thus, more satisfied in and committed to their work.

Results indicated that increased demands are indeed related to greater burnout and lower job satisfaction. These findings are consistent with previous research in that job

demands have been shown to contribute to one's experience of burnout and affect one's job satisfaction (Fikri Zaidan & Juariyah, 2020; Richardsen et al., 1992). However, increased demands did not statistically correspond with decreased organizational commitment, which is not consistent with previous research that found a statistically significant inverse relationship between job demands and commitment (Jong & Ford, 2016). Control over one's work was related to the degree of burnout, job satisfaction, and organizational commitment experienced, which is consistent with findings from previous studies (Williams et al., 2002; Wolowska, 2014). Furthermore, organizational support was also found to relate to the degree of one's job satisfaction and organizational commitment, but not with burnout. These findings are consistent with previous research which has found positive relationships between organizational support and job satisfaction (Miao, 2011) and organizational support and commitment (Settoon et al., 1996); however, is inconsistent with research which has demonstrated an inverse relationship between organizational support and burnout (Zeng et al., 2020).

Aligned with the Demand – Control – Support model, increasing one's control over their work, or the degree of support received by those within their organization have both been found to buffer the effects between increased job demands and burnout, job satisfaction, or organizational commitment (Del Pozo-Antúnez, J. et al., 2018; Dyer & Quine, 1998; Ford & Honnor, 2000; Innstrand et al., 2004; Karasek et al., 1998). However, these moderations were not supported in this study. The items used to assess control over one's work relate to decision latitude which could be applied to a variety of occupations; therefore, effects may not have been detected as these items were not specific to the clinical work duties which are unique to UCC clinicians. For example,

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asking questions about whether the clinicians can determine types of treatment or resource recommendations to offer to the students they see or if they have control over when they schedule their clinical appointments may have provided more specificity on the degree of control the clinicians have in their particular jobs. Similarly, support was measured broadly in this study, gauging the degree of support received from the organization (i.e., university) overseeing the UCC clinicians. Analyzing support as it pertains to relationships *within* the UCCs (i.e., support received from colleagues, primary supervisors, UCC admin teams etc.) perhaps could have had different results, as it is possible that measuring support more broadly minimized the effects.

While a Stepped Care model could increase a clinician's resource pool, theoretically leading to greater decision latitude (i.e., control) in their work, and increased support by having others to turn to across campus, in this study, there were no differences obtained when comparing the Stepped Care versus non-Stepped Care groups. As such, based on the participants in this study, there was no evidence to suggest that implementing Stepped Care as a service delivery protocol is superior to not using Stepped Care concerning rates of burnout, job satisfaction, or organizational commitment among UCC clinicians. Currently, Stepped Care protocols vary vastly across UCCs – there is no standardized model centers are employing. This degree of variation could make it difficult to make comparisons between centers using Stepped Care and those who are not, as an underlying assumption of a "Stepped Care group" would be that the centers making up that group are all using a similar model; this is not the case. As such, it could be that Stepped Care is too variable across UCCs to demonstrate a global effect.

While no overall group differences were observed in the Ombnibus test between groups using or not using Stepped Care, the individual paths of the models were analyzed on an exploratory basis. Interestingly, there were three differences found when comparing the No Stepped Care group to the group of clinicians who were "unsure" if their center was utilizing a Stepped Care model and one difference found when comparing the Stepped Care group to the Unsure Stepped Care group. When comparing the groups, control over one's work was found to have a significant, negative relationship with burnout for the No Stepped Care group, but a non-significant relationship for the Unsure Stepped Care group. One explanation for this difference could be that those who are unsure whether their center uses Stepped Care may be newer employees as it was found that those in the No Stepped Care group had significantly longer average employment length of 5.98 years, compared to 3.88 years [t (243) = 2.606, p = .01] for those in the Unsure Stepped Care group. As such, for those in the Unsure Stepped Care group, greater control over their work could feel overwhelming during a time when increased oversight and structure is often appreciated as one is gaining an understanding of their job duties and employer expectations. In fact, previous research has demonstrated that new hires desire clear and regular instructions from those managing them, as this allows them to better understand their job requirements (Scott et al., 2022). Another explanation for this, however, could be that for those in the Unsure Stepped Care group, the variable of control does not affect their burnout (i.e., burnout is driven by another/other variable/s). Additionally, it is possible that for those in the Unsure Stepped Care group, working in an environment where the organization's plan for disseminating care is unclear results in differences in perception about the job itself.

Control over one's work was also found to have a stronger and more positive relationship to organizational commitment for the Stepped Care and No Stepped Care groups, while control was not related to commitment in the Unsure Stepped Care group. Again, this could, in part, be explained by the Unsure Stepped Care group being comprised of newer employees who are likely to be more ambivalent about committing to their organization due to the newness of it. Furthermore, new employees are likely to desire less ambiguity in their jobs at first, thus, having someone else spearhead their day (i.e., having less control themselves), may lead to them feeling well-cared for by their administrators, whereas having too much control over their work early on could be overwhelming during the onboarding period (Scott et al., 2022). Those who have been with the organization longer (as seen in the Stepped Care [$M = 5.62$ years] and No Stepped Care [$M = 5.98$ years] groups) are likely to appreciate greater autonomy, and having increased decision-latitude communicates to them that their administrators trust them, thereby strengthening their commitment to their organization.

Finally, the variable of support was found to have a stronger relationship with job satisfaction for those in the Unsure Stepped Care group than the No Stepped Care group. This group difference can also be conceptualized based off the newer-employee observation. Those who are newer to the organization, comprising the Unsure Stepped Care group are likely to feel greater satisfaction in their new roles if it is clear early on that they are feeling well-supported (Scott et al., 2022). Research has shown that new hires tend to seek out social support and help from others, therefore, receiving what they seek after is likely to increase their degree of job satisfaction (Feldman & Brett, 2017). Those employees who have been in their roles longer have more data to consider in

deciding if they are satisfied with their jobs, whereas new employees are likely to make that determination based off the judgment that they are being supported as new employees. Another possible explanation for this finding relates to the type of support that was analyzed in this study. This study looked at organizational support, as opposed to support offered by UCC colleagues, supervisors, UCC higher administrative staff, etc. Therefore, it could be that those who are unsure if their center is using Stepped Care may be more influenced by organizational support rather than close support from peers.

Further comparison of differences observed between the three groups revealed that the Unsure Stepped Care group was comprised of the fewest UCC leadership staff (i.e., directors and assistant directors), whereby only 8.1% of the participants in this group held a director's position. This greatly contrasts with the Stepped Care and No Stepped Care groups, whereby the groups were comprised of 35.5% and 49.4% of directors, respectively. Not only did the Unsure Stepped Care group differ in terms of leadership positions, but also differed with respect to licensure, whereby 51.2% of the Unsure Stepped Care group were licensed mental health counselors. However, within both the Stepped Care and No Stepped Care groups, licensed psychologists were the predominant licensure held, whereby 46.2% of participants in the Stepped Care group and 46.5% of participants in the No Stepped Care group were licensed psychologists.

Limitations and Future Directions

Limitations of this study are important to consider when evaluating the findings and speaking to future directions. The goal of this study was to compare UCCs employing Stepped Care to those who are not to identify relevant differences amongst the clinicians. Unexpectedly, a third group emerged from data collection: a group of

clinicians who were unsure whether their center employed Stepped Care. As such,

participants were divided into three groups: Stepped Care (N = 93), No Stepped Care (N

= 159), Unsure Stepped Care (N = 86). Smaller group sizes resulted from this, and while

Hypotheses 1, 2, 3, 4, and 5 used all participants, when performing the multi-group

analysis (Hypothesis 6), the smaller group sizes obtained are a potential limitation. While

few differences were observed, it is possible that larger groups may allow for detection of

more group differences. For instance, according to Kline (2011) when performing a

multi-group analysis, researchers should plan for 10 to 20 participants per parameter,

thus, both the Unsure Stepped Care and Stepped Care groups in this study would be

considered small sample sizes when utilizing this guideline. Future studies should seek to

obtain data from more participants in the various groups, increasing the likelihood of

group differences being detected.

A second limitation pertains to the self-report nature of this study. Self-report

measures are susceptible to bias and a tendency to present oneself in a more socially

favorable light. Future research could employ a measure to gauge participants' social

desirability motivation and could also incorporate peer-report measures. Further related

to the measures used in this study, it is possible that the measures assessing job demands

and control over one's work were too broad; thus, future studies may consider using

measures which consist of items specific to the demands of clinical work and the degree

of control over clinical duties.

Thirdly, while this study sought to look at differences between clinicians whose

centers use Stepped Care and those who do not, it is important to note that not all centers

adhere to the Stepped Care model put in place at their center. For those participants who

indicated their UCC used Stepped Care, they were also asked to rate (0 to 100%) to what degree their center adheres to their Stepped Care model. Of the 93 participants whose centers used Stepped Care, 90 individuals provided an answer to this question, with a mean adherence rating of 67.79%, ranging from 5% to 100% (Appendix D, Table 2). As such, adherence to the Stepped Care model in place was quite varied amongst this group of participants. Future research would benefit from establishing an inclusion criterion which looks at those centers who have a particular rate of adherence to their Stepped Care model (e.g., 80% and above).

Also related to the Stepped Care group, several participants chose to upload documents which provided information on the various steps in the Stepped Care model employed by their UCC (see examples provided in Appendix A). From these documents, it was clear that the Stepped Care models themselves varied greatly. Some models provided showed as few as three distinct steps, while others had as many as 15. Standardizing a Stepped Care model across UCCs is likely not possible since universities vary in size, campus resources, financial resources, and staff. However, studies looking to investigate further the impact of Stepped Care on UCC clinicians need to be cognizant of how varied Stepped Care models are across universities. As such, it may behoove future researchers to identify several universities who do have similar Stepped Care protocols, and specifically recruit these individuals for investigation. Alternatively, prospective studies investigating possible changes in clinicians' burnout, commitment, and job satisfaction before and after implementing a Stepped Care model may clarify the impact of using this protocol on clinicians' work lives.

An additional limitation relates to the timing in which the data for this study was collected, both in respect to the timing of the semester in which a participant completed the survey, as well as the timing within the COVID-19 pandemic. Data collection began in May of 2021, at the end of the spring semester. Responses from clinicians completing the survey at the end of a semester likely differ from those who completed the survey during the summer of 2021 or beginning of the fall 2021 semesters, for example. UCCs tend to be the busiest around midterm and final exams (Thielking, 2017), therefore, those who completed the survey in May of 2021, at the end of the semester, may have been experiencing greater fatigue coming out of a busier time, clinically speaking. As data collection continued throughout the fall 2021 semester, similar limitations apply, in that there are various peaks throughout the fall semester in which clinicians are likely to feel the weight of the clinical demands more than other points in the semester; for instance, UCCs tend to experience their busiest month in October (University of Pittsburgh, 2019).

With respect to the timing within the pandemic, many UCCs were still offering virtual services around May of 2021, along with the option for remote work both of these combined could mean that even if a UCC was utilizing a Stepped Care model, many of the services typically offered as part of their Stepped Care may not have been as accessible during a time of virtual/remote work (Hawk, 2021; Mongkol, 2021). Thus, the Stepped Care model may not have been viewed as feasible during this time. As data collection continued throughout the fall 2021 semester and into the spring of 2022 semester, more UCCs began returning to in-person services, which perhaps allowed for campus resources within their Stepped Care model to be more accessible (Carrasco, 2021). Additionally, with regard to the pandemic, as data collection continued over the

course of ten months, it is possible that stress in general varied for participants. For some, stress may have decreased in response to less uncertainty about the pandemic, whereas for others, stress may have increased as service delivery changes were once again implemented (i.e., remote work was decreased and clinicians were transitioning more and more to in-person services).

Finally, a limitation in this study relates to the participants' length of time employed by their UCC. Participants in this study had been in their current position for as little as one month to as much as 33 and a half years, with a mean of 5.34 years. It is noteworthy that of the 339 participants, 222 (65%) had been employed for five years or less, (with 184 having been employed for three years or less, 128 for two years or less, and 69 for one year or less). The data obtained from those who would be considered "new employees" likely varies from the data obtained from those who have been with the organization for a greater length of time. Future research should consider looking at the differences in length of employment and if a Stepped Care model has varying impacts on those who are new to the field or organization, versus those who are late career UCC clinicians and/or with longer tenure at the same UCC.

While the participants in this study predominantly consisted of those who identify as White, non-Hispanic; this is not inconsistent with the national staff demographic data of UCC's. According to the AUCCCD's 2019 – 2020 Annual Survey, 60.5% of UCC staff identified as White, 13.2% as Black/African American, 6.0% as Asian American, and 5.6% as Latino/Latina, making up a total of 85.3% of UCC staff (AUCCCD, 2020). In this study, 90.84% of participants identified as being in one of the four aforementioned ethnic/racial groups. When looking at the national data on UCC directors, 80.2%

identified as White, 9.9% as Black/African American, 3.5% as Asian American, and 1.6% as Latino/Latina (AUCCCD, 2021). It is important to note these demographic statistics, since nearly one third of this study's participants were UCC directors/assistant directors.

<div align="center">Implications</div>

Despite the above limitations, the current research has several implications. Burnout in the mental health field has long been a concern investigated by many researchers. Mental health professionals are expected to fulfill a variety of services to their clients and the organization at large for which they are employed. Meeting job-related demands can become increasingly challenging as the experience of burnout intensifies. Individuals who are not satisfied with their jobs are more likely to become burned out as they strive to meet job performance expectations (Ozyurt et al., 2006). The experience of burnout, coupled with low job satisfaction, may very well leave employees feeling a lack of commitment to their organization. As UCC clinicians experience greater job demands than ever, they are at risk to experience increased job burnout and decreased job satisfaction and organizational commitment. It is imperative that researchers investigate ways in which this risk can be mitigated.

Looking at the phenomenon of burnout amongst mental health professionals, research has shown that both early- and late-career psychologists are at risk. While the reasons for development can vary, so too can the reactions amongst clinicians. When studying career counseling center psychologists from a developmental approach, Sim and colleagues (2016) found that when faced with symptoms of burnout early-career psychologists are more likely to engage in help-seeking behaviors, such as seeking out

their own personal therapy, than are later-career psychologists. Unfortunately, as time becomes more of a limited resource for UCC clinicians during their quest to meet the requirements of the "do more, with less" expectation, help-seeking behavior may become a less feasible option, even for the once willing-to-seek-help psychologists, thus making the threat of burnout even greater.

This research, in particular, examined the role of a service delivery protocol, known as Stepped Care. This service delivery approach allows UCC clinicians access to a greater resource pool, while giving them the decision latitude to disperse resources judiciously based off clients' unique levels of need. Through the increased resource pool allotted by Stepped Care, clinicians are then afforded the opportunity to engage in greater collaboration both within and outside of the UCC. Previous research has demonstrated that students respond favorably to Stepped Care (Cornish et al., 2017), however, no prior research has investigated whether Stepped Care relates to work-related variables for clinicians, such as burnout, job satisfaction, or organizational commitment.

Based on the sample for this research, there was limited evidence to suggest that the relationships between demands, control, and support on burnout, job satisfaction and organizational commitment were different among UCCs which employed a Stepped Care model versus those who did not. However, while the findings of this study suggest limited differences between UCCs who use Stepped Care versus those who do not, the majority of differences observed were with those UCC clinicians who were unsure if their center was employing a Stepped Care model for service delivery. Specifically, while control did not affect burnout or commitment for the Unsure Stepped Care group, support was found to be more related to job satisfaction. Therefore, being unsure about the

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clinical operating procedures may have some implications for needing increased support

and potentially other variables (but not control), contributing to job burnout and

organizational commitment. Furthermore, when looking at the differences in staff

positions and licensure between the three groups, it was found that the Stepped Care and

No Stepped Care groups had the greatest amount of leadership staff, as well as licensed

psychologists (as opposed to master's level counselors or social workers). Seemingly,

those who had greater clarity about the operating procedures of the UCC (i.e., whether or

not Stepped Care was being utilized) were those who held leadership positions within

their UCC and/or were licensed psychologists. This suggests that those within UCC

leadership positions would bode well to increase their communication about the method

of service delivery to those who are not in leadership positions, or are not licensed

psychologists.

Though there were no statistically significant differences overall between the

groups in this study, there were some significant findings for several of the study's

hypotheses. The results supported the Demand – Control – Support model and found that

this can be an effective way to conceptualize the current state of UCCs today. In this

study, job demands were found to be related to burnout and job satisfaction, whereby the

greater the demands, the greater the burnout and the lower the job satisfaction. Control

over one's work was also significantly related to burnout, job satisfaction, and

organizational commitment, in which the greater one's control, the lower their burnout

and the greater their job satisfaction and commitment. Regarding support received from

higher administrators, this variable also explained job satisfaction and organizational

commitment in that the more support received, the greater the degree of job satisfaction and commitment.

These results have significant implications for UCC leadership staff. Leadership can strive to adopt practices that better help meet the varied clinical and work demands faced by clinicians while increasing their control over their work and the support received from colleagues and supervisors as these factors directly contributed to job satisfaction. Including clinicians on important decisions for the UCC will give them a voice, allowing them to contribute to the operations of the center. Regularly checking in on the clinicians via supportive staff meetings and annual staff retreats may be other ways to build morale. Furthermore, making efforts to connect UCC clinicians with offices outside of the UCC could also be beneficial in that this increases the clinicians' resource pool (giving them greater decision-latitude when working with students), and also allows them to network and foster supportive relationships with others across campus.

As discussed in the limitations section, it is recommended that future research provide a more nuanced examination of these variables to further understand the role of Stepped Care in these relationships. For example, efforts to further elucidate the impact of Stepped Care on clinicians, should account for the degree to which the UCC adheres to the Stepped Care model since there is not a standardized Stepped Care model at this time. Additionally, accounting for the length of time in which the employees have been working for their UCC may also provide greater clarity on factors which may influence clinicians' perceived control over their work and support received in their work.

APPENDIX A – Stepped Care Examples

Illustration 1. Stepped Care Service Delivery Protocol from The University of Southern Mississippi's Student Counseling Services

Illustration 2. Stepped Care Service Delivery Protocol from an Anonymous UCC
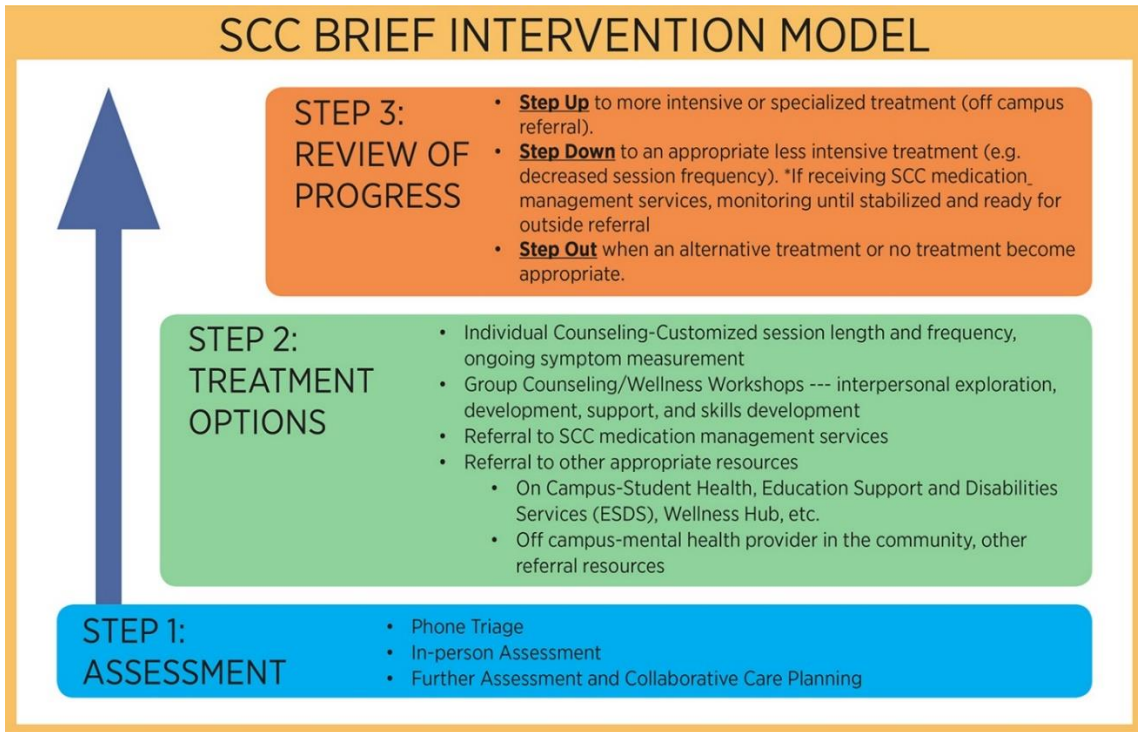
Illustration 3. Stepped Care Service Delivery Protocol from the University of Central Oklahoma Center for Counseling and Well-Being

Illustration 4. Stepped Care Service Delivery Protocol from the Counseling Center at Colorado School of Mines

Illustration 5. Stepped Care Service Delivery Protocol from an Anonymous UCC

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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: 22-074
PROJECT TITLE: Burnout in University Clinicians: Stepped Care as a possible solution
SCHOOL/PROGRAM Psychology
RESEARCHERS: PI: Madison Estrada
Investigators: Estrada, Madison~Leuty, Melanie~
IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 28-Jan-2022 to 27-Jan-2023

Donald Sacco Jr.

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

Model Diagrams

Figure 1. Model for Hypotheses 1, 2, 3, and 6 with Standardized Regression Weights
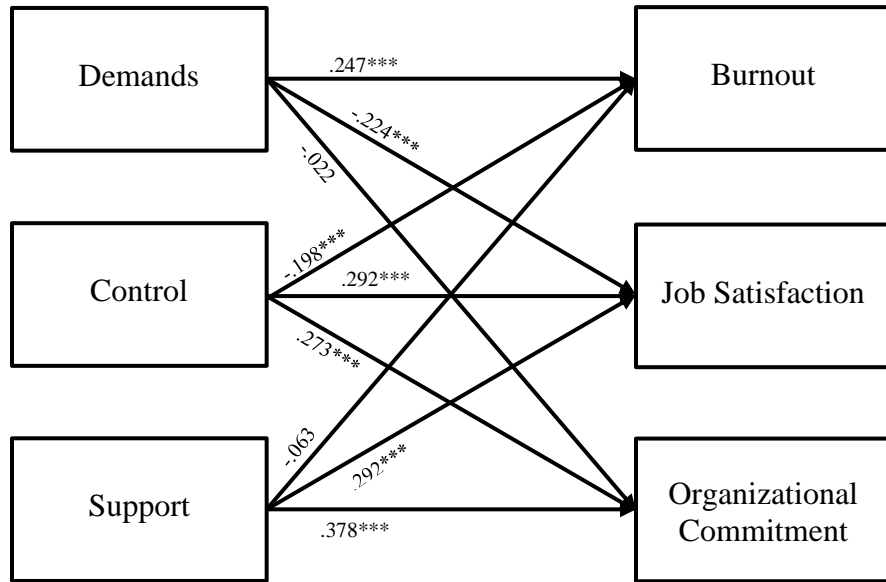
Note: * = $p < .05$, ** $p < .01$, *** $p < .001$

Figure 2. Model for Hypothesis 4 with Standardized Regression Weights
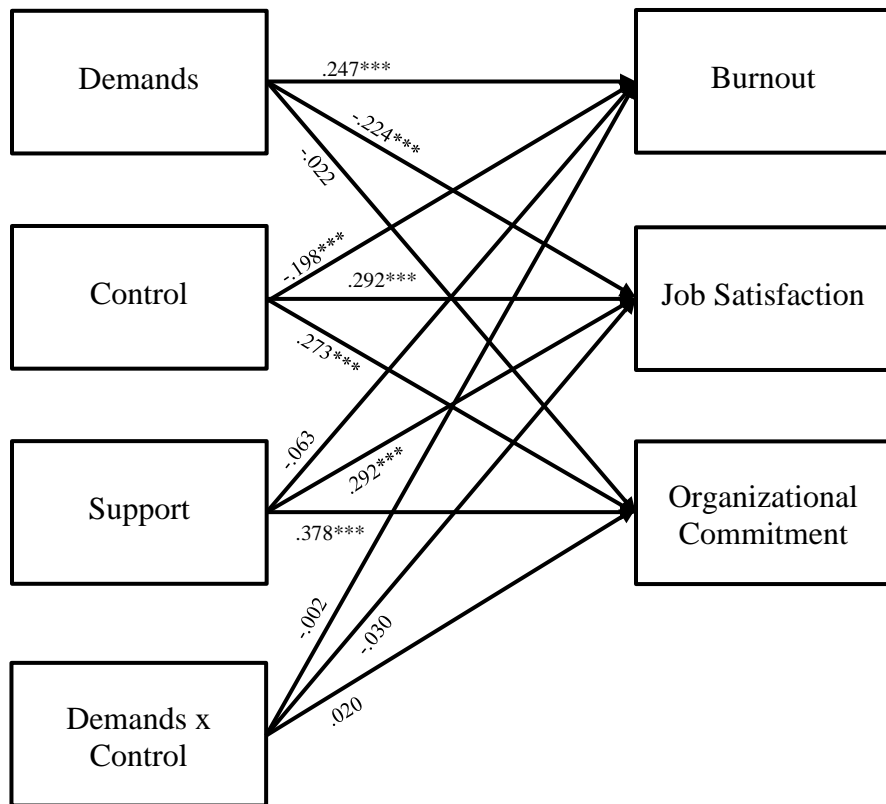
Note: * = *p* < .05, ** *p* < .01, *** *p* < .001

Figure 3. Model for Hypothesis 5 with Standardized Regression Weights
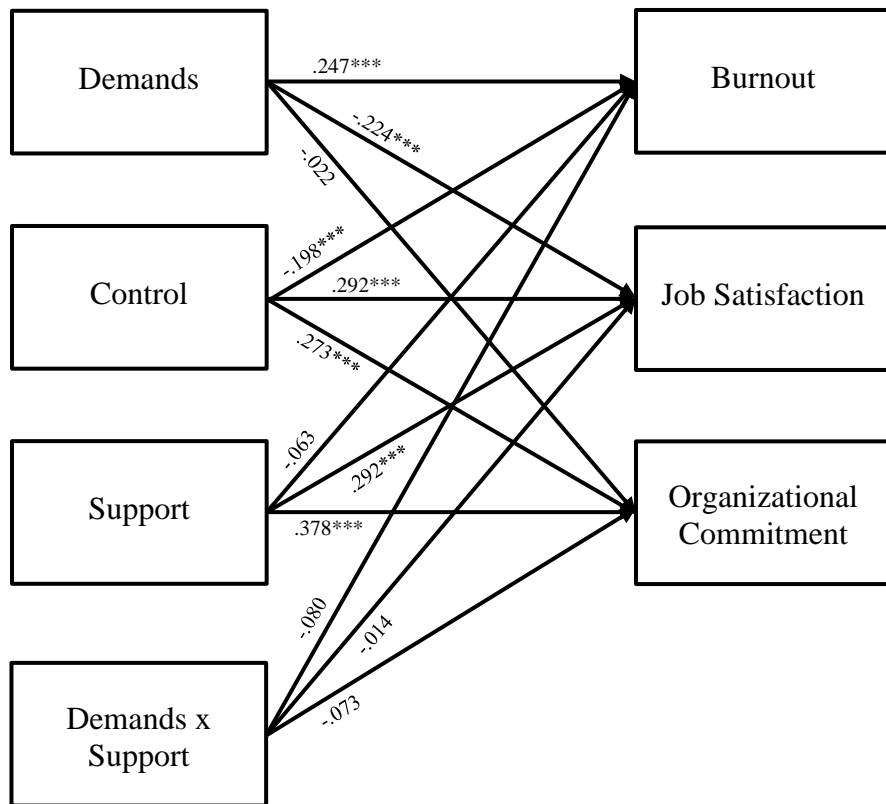
Note: * = *p* < .05, ** *p* < .01, *** *p* < .001

APPENDIX D – Tables

TABLE 1. Demographic Characteristics

Demographic Characteristic	*n*	%
Gender		
Male	211	62.24
Female	118	34.81
Transgender	6	1.77
Non-binary/third gender	3	0.88
Queer gender	1	0.29
Race/Ethnicity		
White/Caucasian (non-Hispanic)	271	79.94
Black or African American	27	7.96
Hispanic/Latino	25	7.37
Multicultural/Multiracial	9	2.65
Asian American	5	1.47
Middle Eastern	1	0.29
American Indian	1	0.29
Relationship Status		
Engaged, Married, or Partnered	225	66.37
Single/Never Married	48	14.16
In a Committed/Cohabiting Relationship	28	8.26
Divorced	20	5.90
In a Committed/Non-Cohabiting Relationship	17	5.01
Relationship Status Not Provided	1	0.29
Education		
Master's Degree	168	49.56
Doctoral Degree	158	46.61
Bachelor's Degree	7	2.06
Professional Degree	6	1.77
Licensure Status		
Licensed Mental Health Professional	299	88.20
Not Yet Licensed	40	11.79
Of those not licensed, those pursuing licensure	34	85
Job Title		
Master's Level Mental Health Counselor	141	41.59
Doctoral Level Staff Psychologist	78	23.01
UCC Director	65	19.17
UCC Assistant Director	31	9.14
Doctoral Intern/Fellow	19	5.60
Staff Psychiatrist	5	1.47

TABLE 2. Stepped Care Utilization

Stepped Care Utilization		*n*	%
Stepped Care Employed at UCC			
	No	159	46.90
	Yes	93	27.43
	Unsure	86	25.37
	Did Not Answer	1	0.29
Familiarity with Stepped Care (if UCC is NOT utilizing)			
	Yes	105	58.89
	No	53	29.44
	Did Not Answer	21	11.67
Stepped Care Adherence		%	
Degree to which Stepped Care is Adhered to (participant rated percentage 0 – 100%)	Mean	67.79	
	Minimum	5.00	
	Maximum	100.00	

TABLE 3. COVID-19: Changes Regarding Service Delivery and Work Expectations

Telehealth Services		n	%
Pre-Pandemic			
	Not Offered	304	89.67
	Offered	35	10.32
During Pandemic	Not Offered	2	0.58
	Offered	337	99.41
UCC Clinicians Consulted Regarding Service Delivery Changes			
Consulted by UCC Director			
	Yes	208	61.36
	No	61	17.99
	Did Not Answer	70	20.65*
Consulted by Higher Administration	Yes	112	33.04
	No	225	66.37
	Did Not Answer	2	0.59
Remote Work Due to COVID-19			
	No	227	66.96
	Yes	106	31.27
	Did Not Answer	6	1.77
Work Expectations During the Pandemic			
	Much More	62	18.29
	Moderately More	105	30.97
	Slightly More	78	23.01
	About the Same	82	24.19
	Slightly Less	8	2.36
	Moderately Less	1	0.29
	Did Not Answer	1	0.29

Note: * Of the total participants, 19.17% of the sample are UCC Directors, which could largely account for the 20.65% of participants who did not answer the question regarding whether they were consulted by the UCC Director regarding pandemic-related service delivery changes.

TABLE 4. Means, Standard Deviations, Cronbach's Alphas, and Intercorrelations

Variable	Descriptives			Correlation							
	M	*SD*	α	1	2	3	4	5	6	7	8
1. Overall Burnout (CBI)	48.07	14.70	.906	--							
2. Organizational Commitment (ACS)	32.43	9.85	.864	-.301**	--						
3. Job Satisfaction (OJS)	17.71	3.90	.834	-.670**	.545**	--					
4. Demands	14.89	2.77	.770	.429**	-.226**	-.441**	--				
5. Control	14.19	2.20	.644	-.377**	.452**	.515**	-.299*	--			
6. Support (SPOS)	19.06	3.23	.945	-.266**	.505**	.504**	-.308**	.434**	--		
7. COVID Fears	9.21	5.54	.904	.337**	-.108*	-.183**	.137*	-.179**	-.029	--	
8. COVID Stress	18.83	5.81	.864	.479**	-.127*	-.296**	.290**	-.193**	-.122*	.540**	--

*p < .05, **p < .01

Note: The possible minimum and maximum scores for each variable are as follows: Overall Burnout (0 to 100); Organizational Commitment (8 to 56); Job Satisfaction (5 to 25); Demands (5 to 20); Control (5 to 20); Support (0 to 48); COVID Fears (0 to 24); COVID Stress (0 to 40)

TABLE 5. Means for Variables across Stepped Care Utilization

Variables	Stepped Care (n = 93) Mean (SD)	No Stepped Care (n = 159) Mean (SD)	Unsure Stepped Care (n = 86) Mean (SD)	F
Overall Burnout	48.671 (13.537)	47.196 (15.380)	49.096 (14.743)	.440
Organizational Commitment	31.677 (10.519)	32.044 (9.836)	33.954 (9.098)	.949
Job Satisfaction	17.484 (3.592)	17.673 (4.006)	17.942 (4.007)	1.377
Demands	15.194 (2.748)	14.987 (2.831)	14.384 (2.666)	1.554
Control	14.118 (1.966)	14.113 (2.261)	14.359 (2.285)	1.876
Support	18.527 (3.457)	19.200 (3.163)	19.341 (3.050)	1.661

TABLE 6. Chi-Square Difference Tests per Path for Group Comparisons

Variables (Groups)	Chi Square	P-value
Demands → Burnout (SC – NO)	1.341	.247
Demands → Burnout (SC – UN)	.834	.361
Demands → Burnout (NO – UN)	.001	.969
Demands → Job Sat. (SC – NO)	.041	.840
Demands → Job Sat. (SC – UN)	.069	.793
Demands → Job Sat. (NO – UN)	.207	.649
Demands → Commit. (SC – NO)	.000	.987
Demands → Commit. (SC – UN)	1.190	.275
Demands → Commit. (NO – UN)	1.815	.178
Control → Burnout (SC – NO)	.498	.480
Control → Burnout (SC – UN)	1.468	.226
Control → Burnout (NO – UN)	**4.170**	**.041**
Control → Job Sat. (SC – NO)	1.014	.314
Control → Job Sat. (SC – UN)	.019	.891
Control → Job Sat. (NO – UN)	1.365	.243
Control → Commit. (SC – NO)	.042	.838
Control → Commit. (SC – UN)	**8.280**	**.004**
Control → Commit. (NO – UN)	**16.587**	**.000**
Support → Burnout (SC – NO)	.326	.568
Support → Burnout (SC – UN)	1.070	.301
Support → Burnout (NO – UN)	.344	.558
Support → Job Sat. (SC – NO)	1.427	.232
Support → Job Sat. (SC – UN)	2.091	.148
Support → Job. Sat. (NO – UN)	**6.244**	**.012**
Support → Commit. (SC – NO)	.001	.977
Support → Commit. (SC – UN)	1.771	.183
Support → Commit. (NO – UN)	2.383	.123

Note: SC = Stepped Care group; NO = No Stepped Care group; UN = Unsure Stepped Care group. Significant paths are in bold.

APPENDIX E – Survey

Demographic Questionnaire
Please provide your age: _____ years

Please provide your date of birth: _____ (Month, day, year)

What is your gender identity (select all that apply):
- Woman
- Man
- Non-binary/Third gender
- Transgender
- Cisgender
- Agender
- Genderqueer
- A gender not listed
- Prefer to self-describe
- Prefer not to say

What is your sexual orientation (select all that apply):
- Straight/Heterosexual
- Gay
- Lesbian
- Bisexual
- Pansexual
- Queer
- Asexual
- Prefer to self-describe
- Prefer not to say

Please select your race/ethnicity:
- Alaskan Native
- Black or African American
- Native Hawaiian
- American Indian
- Hispanic/Latino
- Pacific Islander
- Asian American
- Middle Eastern
- White or Caucasian (non-Hispanic)
- Multicultural/Multiracial

Please select your current relationship status:
- Single/Never Married
- In a committed relationship

- In a committed relationship AND living together
- Engaged/Married/Partnered
- Divorced/Separated
- Widowed

In what state do you live? _____

What is your total household gross annual income? $ _____

What is the highest level of education you have completed?
- Some High School
- High School Diploma
- Some College
- Associate Degree
- Vocational Technology Certificate
- Bachelor's Degree
- Master's Degree
- Doctoral Degree
- Professional Degree
- Other, please describe _____

Are you a *licensed* mental health professional?
- Yes
- If yes, what is your license type? _____
- If yes, what state/s are you licensed in? _____
- No
- If no, are you in the process of obtaining licensure? _____
- If in the process of obtaining licensure, what type of license are you pursuing?_____
- If in the process of obtaining licensure, what state are you pursuing licensure in?_____

Please provide the following information for your current job in a university counseling center.

- What is your current job title?
  _____

- Briefly describe your current job:
  _____
  _____

- How long have you been employed in this job? _____years, _____months

- How many hours per week do you work at this job? _____hours

- Does the university counseling center you're employed at adhere to a Stepped Care model for service delivery?
  - o Yes
  - o No
  - o I'm not sure

- If "yes", please describe the Stepped Care model at your center:
  _____
  _____

- If "yes", please attach a sample of your Stepped Care model here or any other supporting documents which further explain the Stepped Care approach adopted by your center (e.g., PDF graphic of your Stepped Care model):
  _____
  _____

- If "yes", using the sliding scale below, please rate the degree to which your university counseling center adheres to the Stepped Care model (where "0" represents "we rarely adhere to the Stepped Care model" and "100" indicates, "all, or nearly all, of our services are decided upon within the context of the Stepped Care model"):

0   10   20   30   40   50   60   70   80   90   100

- If "no", are you familiar with the Stepped Care approach to service delivery?
  - Yes
  - No

- If "no", have you ever worked at a center that utilized a Stepped Care model?
  - Yes
  - No

Please select yes.
  - Yes
  - No

Please respond to the following questions regarding your experience at your university counseling center in response to the COVID-19 pandemic.

- Prior to the pandemic, did your university counseling center offer telehealth services?
  - Yes
  - No

- In response to the pandemic, did your university counseling center begin offering telehealth services to students?
  - Yes
  - No

- In response to the pandemic, were you consulted by your counseling center director regarding the service delivery changes? (If you are a director please select N/A).
  - Yes
  - No
  - N/A

- In response to the pandemic, were you consulted by higher administrators (e.g., president or vice president of the department that oversees university counseling such as student affairs) regarding the service delivery changes?
  - Yes
  - No

Please provide the following information regarding your work history.

- How long have you been working in this career field (e.g. amount of time in similar jobs or field)? _____ years, _____ months

- How many years have you been working (had a paid job) in your life? _____ years

Please provide the following information regarding how the COVID-19 pandemic has impacted you personally and vocationally (questions derived from the Psychological Stress Associated with the COVID-19 Crisis study; Adamson, M., 2020).
Have any of your friends or family tested positive for COVID-19?
- Yes
- No

Are you providing homeschooling due to COVID-19?
- Yes
- No
- N/A

Are you providing homecare (caretaking of elderly, persons with disabilities, etc.) due to COVID-19?
- Yes
- No
- N/A

Please select no.

- Yes
- No

Are you working remotely as of recent due to COVID-19?
- Yes
- No
- N/A

If so, how many hours a day?
- < 1 hour
- 1 hour to 5 hours
- 5 hours to 8 hours
- > 8 hours
- N/A

How have the expectations of your work changed since COVID-19?
- Much more
- Moderately more
- Slightly more
- About the same
- Slightly less
- Moderately less
- Much less

Copenhagen Burnout Inventory
(Kristensen, Borritz, Villadsen, & Christensen, 2005)

Directions: Please rate your response to the following statements on 1 to 5-point scale. A score of 1 indicates that you never/almost never experience the described statement, and a score of 5 indicates that you always experience the described statement.

Part one: Personal burnout
Definition: Personal burnout is a state of prolonged physical and psychological exhaustion.

Questions:
1. How often do you feel tired?
2. How often are you physically exhausted?
3. How often are you emotionally exhausted?
4. How often do you think: "I can't take it anymore"?
5. How often do you feel worn out?
6. How often do you feel weak and susceptible to illness?

Response categories: Always, Often, Sometimes, Seldom, Never/almost never.
Scoring: Always: 100. Often: 75. Sometimes: 50. Seldom: 25. Never/almost never: 0.

Total score on the scale is the average of the scores on the items.
If less than three questions have been answered, the respondent is classified as non-responder.

Part two: Work-related burnout
Definition: Work-related burnout is a state of prolonged physical and psychological exhaustion, which is perceived as related to the person's work.

Questions:
1. Is your work emotionally exhausting?
2. Do you feel burnt out because of your work?
3. Does your work frustrate you?
4. Do you feel worn out at the end of the working day?
5. Are you exhausted in the morning at the thought of another day at work?
6. Do you feel that every working hour is tiring for you?
7. Do you have enough energy for family and friends during leisure time?
8. Please select "often".

Response categories and scoring:
Three first questions: To a very high degree: 100, To a high degree: 75, Somewhat: 50, To a low degree: 25, To a very low degree: 0.
Last four questions: Always: 100, Often: 75, Sometimes: 50, Seldom: 25, Never/almost never: 0. Reversed score for last question.

Scoring as for the first scale. If less than four questions have been answered, the respondent is
classified as non-responder.

Part three: Client-related burnout

Definition: Client-related burnout is a state of prolonged physical and psychological exhaustion, which is perceived as related to the person's work with clients*.
*Clients, patients, social service recipients, elderly citizens, or inmates.

Questions:
1. Do you find it hard to work with clients?
2. Do you find it frustrating to work with clients?
3. Does it drain your energy to work with clients?
4. Do you feel that you give more than you get back when you work with clients?
5. Are you tired of working with clients?
6. Do you sometimes wonder how long you will be able to continue working with clients?

Response categories and scoring:
The four first questions: To a very high degree: 100, To a high degree: 75, Somewhat: 50, To a low degree: 25, To a very low degree: 0.
The two last questions: Always: 100, Often: 75, Sometimes: 50, Seldom: 25, Never/almost never: 0.
Scoring as for the first two scales. If less than three questions have been answered, the respondent is classified as non-responder.

The Swedish Demand-Control-Support Questionnaire

The Swedish Demand – Control – Support Questionnaire
(Sanne et al., 2005)

1. Does your job require you to work very fast?
Strongly Disagree   Disagree   Agree   Strongly Agree

2. Does your job require you to work very hard?
Strongly Disagree   Disagree   Agree   Strongly Agree

3. Does your job require too great a work effort?
Strongly Disagree   Disagree   Agree   Strongly Agree

4. Do you have sufficient time for all your work tasks?
Strongly Disagree   Disagree   Agree   Strongly Agree

5. Do conflicting demands often occur in your work?
Strongly Disagree   Disagree   Agree   Strongly Agree

6. Do you have the opportunity to learn new things in your work?
Strongly Disagree   Disagree   Agree   Strongly Agree

7. Does your job require creativity?
Strongly Disagree   Disagree   Agree   Strongly Agree

8. Does your job require doing the same tasks over and over again?
Strongly Disagree   Disagree   Agree   Strongly Agree

9. Do you have the possibility to decide for yourself how to carry out your work?
Strongly Disagree   Disagree   Agree   Strongly Agree

10. Do you have the possibility to decide for yourself what should be done in your work?
Strongly Disagree   Disagree   Agree   Strongly Agree

11. There is a quiet and pleasant atmosphere at my place of work.
Strongly Disagree   Disagree   Agree   Strongly Agree

12. There is good collegiality at work.
Strongly Disagree   Disagree   Agree   Strongly Agree

13. My co-workers (colleagues) are there for me (support me).
Strongly Disagree   Disagree   Agree   Strongly Agree

14. People at work understand that I may have a ''bad'' day.
Strongly Disagree   Disagree   Agree   Strongly Agree

15. Please select "strongly disagree".
Strongly Disagree   Disagree   Agree   Strongly Agree

16. I get along well with my supervisors.
Strongly Disagree   Disagree   Agree   Strongly Agree

17. I get along well with my co-workers.
Strongly Disagree   Disagree   Agree   Strongly Agree

Survey of Perceived Organizational Support
(Eisenberger et al., 1986)

Listed below and on the next several pages are statements that represent possible opinions that YOU may have about working at your university. Please indicate the degree of your agreement or disagreement with each statement by selecting the answer that best represents your point of view about your university. Please choose from the following answers:

0	1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderately Agree	Strongly Agree

1. My university values my contribution to its well-being.

2. My university fails to appreciate any extra effort from me. (R)

3. My university would ignore any complaint from me. (R)

4. My university really cares about my well-being.

5. Even if I did the best job possible, my university would fail to notice. (R)

6. My university cares about my general satisfaction at work.

7. My university shows very little concern for me. (R)

8. My university takes pride in my accomplishments at work.

(R) indicates the item is reverse scored.

Organizational Commitment

Affective Commitment Scale

(Allen & Meyer, 1990)

Instructions: Listed below is a series of statements that represent feelings that individuals might have about the company or organization for which they work. With respect to your own
feelings about the particular organization for which you are now working, please indicate the degree of your agreement or disagreement with each statement by selecting a number from 1 to 7 using the scale below.

      1 = strongly disagree
      2 = disagree
      3 = slightly disagree
      4 = undecided
      5 = slightly agree
      6 = agree
      7 = strongly agree

1) I would be very happy to spend the rest of my career with this organization.

2) I enjoy discussing my organization with people outside it.

3) I really feel as if this organization's problems are my own.

4) I think that I could easily become as attached to another organization as I am to this

one. (R)

5) I do not feel like 'part of the family' at my organization. (R)

6) I do not feel 'emotionally attached' to this organization. (R)

7) Please select "undecided".

8) This organization has a great deal of personal meaning for me.

9) I do not feel a strong sense of belonging to my organization. (R)

Overall Job Satisfaction

Overall Job Satisfaction
Brayfield and Rothe, 1951

Please respond to the following statements in response to your current job using the following scale.

1 = Strongly Disagree
2 = Disagree
3 = Undecided
4 = Agree
5 = Strongly Agree

1. I feel fairly well satisfied with my present job.   _____

2. Most days I am enthusiastic about my work.   _____

3. Each day of work seems like it will never end. (R)   _____

4. I find real enjoyment in my work.   _____

5. I consider my job rather unpleasant. (R)   _____

COVID Stress Scales

<div align="center">

Scale 1: COVID Danger and Contamination Fears

(Taylor et al., 2020)

</div>

Please respond to the following statements in response to COVID-19 using the following scale.

0 = Not at all
1 = Slightly
2 = Moderately
3 = Very
4 = Extremely

1. I am worried about catching the virus.
   - Not at all
   - Slightly
   - Moderately
   - Very
   - Extremely
2. I am worried that I can't keep my family safe from the virus.
   - Not at all
   - Slightly
   - Moderately
   - Very
   - Extremely
3. I am worried that our healthcare system won't be able to protect my loved ones.
   - Not at all
   - Slightly
   - Moderately
   - Very
   - Extremely
4. I am worried that our healthcare system is unable to keep me safe from the virus.
   - Not at all
   - Slightly
   - Moderately
   - Very
   - Extremely
5. I am worried that basic hygiene (e.g., handwashing) is not enough to keep me safe from the virus.
   - Not at all
   - Slightly
   - Moderately
   - Very
   - Extremely

6. I am worried that social distancing is not enough to keep me safe from the virus.
   - Not at all
   - Slightly
   - Moderately
   - Very
   - Extremely

Perceived Stress Scale (due to COVID-19)

Perceived Stress Scale (PSS)
Cohen, 1983

Instructions: Please answer the following questions in the context of the COVID-19 pandemic.

0 = Never
1 = Almost Never
2 = Sometimes
3 = Fairly Often
4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly in relation to the COVID-19 pandemic?
    - Never (0)
    - Almost Never (1)
    - Sometimes (2)
    - Fairly Often (3)
    - Very Often (4)
2. In the last month, how often have you felt that you were unable to control the important things in your life in relation to the COVID-19 pandemic?
    - Never (0)
    - Almost Never (1)
    - Sometimes (2)
    - Fairly Often (3)
    - Very Often (4)
3. Please select "very often".
    - Never (0)
    - Almost Never (1)
    - Sometimes (2)
    - Fairly Often (3)
    - Very Often (4)
4. In the last month, how often have you felt nervous and stressed in relation to the COVID-19 pandemic?
    - Never (0)
    - Almost Never (1)
    - Sometimes (2)
    - Fairly Often (3)

- Very Often (4)

5. In the last month, how often have you felt confident about your ability to handle your personal problems during the COVID-19 pandemic?
   - Never (4)
   - Almost Never (3)
   - Sometimes (2)
   - Fairly Often (1)
   - Very Often (0)

6. In the last month, how often have you felt that things were going your way in relation to the COVID-19 pandemic?
   - Never (4)
   - Almost Never (3)
   - Sometimes (2)
   - Fairly Often (1)
   - Very Often (0)

7. In the last month, how often have you found that you could not cope with all the things that you had to do in the context of the COVID-19 pandemic?
   - Never (0)
   - Almost Never (1)
   - Sometimes (2)
   - Fairly Often (3)
   - Very Often (4)

8. In the last month, how often have you been able to control irritations in your life in relation to the COVID-19 pandemic?
   - Never (0)
   - Almost Never (1)
   - Sometimes (2)
   - Fairly Often (3)
   - Very Often (4)

9. In the last month, how often have you felt that you were on top of things in the context of the COVID-19 pandemic?
   - Never (4)
   - Almost Never (3)
   - Sometimes (2)
   - Fairly Often (1)
   - Very Often (0)

10. In the last month, how often have you been angered because of things that happened that were outside of your control in relation to the COVID-19 pandemic?
    - Never (0)

- Almost Never (1)
- Sometimes (2)
- Fairly Often (3)
- Very Often (4)

11. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them in relation to the COVID-19 pandemic?
    - Never (0)
    - Almost Never (1)
    - Sometimes (2)
    - Fairly Often (3)
    - Very Often (4)

REFERENCES

Abdin, E., Nordin, R., Naing, L., & Mazalisah, M. (2006). Reliability and construct
    validity of the Malay version of the Job Content Questionnaire (JCQ). *The*
    Southeast Asian Journal of Tropical Medicine and Public Health, 37(2). 412—
    416.

Abrams, Z. (2020). A crunch at college counseling centers. *Monitor on Psychology,*
    51(6). http://www.apa.org/monitor/2020/09/crunch-college-counseling

Abramson, A. (2022). Burnout and stress are everywhere. *Monitor on Psychology, 53*(1).
    https://www.apa.org/monitor/2022/01/special-burnout-stress

Abushaikha, L., & Saca-Hazboun, H. (2009). Job satisfaction and burnout among
    Palestinian nurses. *Eastern Mediterranean Health Journal, 15*(1), 190-197.
    https://doi.org/:10.26719/2009.15.1.190

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective,
    continuance and normative commitment to the organization. *Journal of*
    Occupational Psychology, 63(1), 1-18. https://doi.org/:10.1111/j.2044-
    8325.1990.tb00506.x

Association for University and College Counseling Center Directors (AUCCCD). (2015).
    The Association for University and College Counseling Center Directors annual
    survey. Indianapolis, IN.

Association for University and College Counseling Center Directors (AUCCCD). (2019).
    The Association for University and College Counseling Center Directors annual
    survey Indianapolis, IN.

Association for University and College Counseling Center Directors (AUCCCD). (2020).

The Association for University and College Counseling Center Directors annual survey. Indianapolis, IN.

Association for University and College Counseling Center Directors (AUCCCD). (2021). *The Association for University and College Counseling Center Directors annual survey survey*. Indianapolis, IN.

Astrid M. R., Ronald J. B., & Michael P. L. (1992). Occupational demands, psychological burnout and anxiety among hospital personnel in Norway. *Anxiety, Stress & Coping, 5*(1), 55-68, https://doi.org/10.1080/10615809208250487

Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., & Schreurs, P. J. G. (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology, 22*(8), 766-786.

Bamforth, E. (2022). After two years of COVID-19, data guides university mental health support. Edscoop. Retrieved from https://edscoop.com/college-data-mental-health-counseling-2022/.

Benton, S. A., Robertson, J. M., Tseng, W. C., Newton, F. B., & Benton, S. L. (2003). Changes in counseling center client problems across 13 years. *Professional Psychology: Research and Practice, 34*, 66-72. https://doi.org/10.1037/0735-7028.34.1.66

Bergmann, T. J., Lester, S. W., De Meuse, K. P., & Grahn, J. L. (2011). Integrating the three domains of employee commitment: An exploratory study. *Journal of Applied Business Research, 16*(4) https://doi.org/10.19030/jabr.v16i4.2050

Biswas, S., & Bhatnagar, J. (2013). Mediator analysis of employee engagement: Role of

perceived organizational support, P-O fit, organizational commitment and job

satisfaction. *Vikalpa: The Journal for Decision Makers, 38*(1), 27-40.

https://doi.org/10.1177/0256090920130103

Blau, G., Paul, A., & St. John, N. (1993). On developing a general index of work

commitment. *Journal of Vocational Behavior, 42*, 298–314.

Bogler, R., & Nir, A. E. (2015). The contribution of perceived fit between job demands

and abilities to teachers' commitment and job satisfaction. *Educational*

Management Administration & Leadership, 43(4), 541-560.

https://doi.org/10.1177/1741143214535736

Bolinski, F., Boumparis, N., Kleiboer, A., Cuijpers, P., Ebert, D. D., & Riper, H. (2020).

The effect of e-mental health interventions on academic performance in university

and college students: A meta-analysis of randomized controlled trials. *Internet*

Interventions, 20, 100321. https://doi.org/10.1016/j.invent.2020.100321

Borsari, B., Hustad, J. T. P., Mastroleo, N. R., Tevyaw, T. O., Barnett, N. P., Kahler, C.

W., . . . Monti, P. M. (2012). Addressing alcohol use and problems in mandated

college students: A randomized clinical trial using stepped care. *Journal of*

Consulting and Clinical Psychology, 80(6), 1062-1074.

https://doi.org/10.1037/a0029902

Borsari, B., Tevyaw, T. O., Barnett, N. P., Kahler, C. W., & Monti, P. M. (2007).

Stepped care for mandated college students: A pilot study. *American Journal on*

Addictions, 16(2), 131-137. https://doi.org/10.1080/10550490601184498

Bower, P., & Gilbody, S. (2005). Stepped care in psychological therapies: Access,

effectiveness and efficiency. Narrative literature review. *British Journal of*

Psychiatry, 186, 11.

Boyd, L., Baker, E., & Reilly, J. (2019). Impact of a progressive stepped care approach in
an improving access to psychological therapies service: An observational
study. *PloS One, 14*(4), e0214715. https://doi.org/10.1371/journal.pone.0214715

Brown, S. (2020). Students are showing up at counseling centers in droves. But they
don't always get the treatment they need. The Chronicle of Higher Education.
66(18).

Brumeister, E. & Aitken, L. M. (2012). Sample size: How many is enough? *Australian
Critical Care. 23*(4). 271-274. https://doi.org/10.1016/j.aucc.2012.07.002

Cable, D. M. & DeRue, D. S. (2002). The convergent and discriminant validity of
subjective fit perceptions. *Journal of Applied Psychology, 87*(5), 875—884.
https://doi.org/10.1037//0021-9010.87.5.875

Carrasco, M. (2021). Colleges seek virtual mental health services. *Inside Higher Ed.*
Retrieved from: https://www.insidehighered.com/news/2021/09/20/colleges-
expand-mental-health-services-students

Center for Collegiate Mental Health. (2020). *2019 Annual Report.* Penn State University.
University Park, PA.

Center for Collegiate Mental Health. (2022). *2021 Annual Report*. Penn State University.
University Park, PA.

Chenevey, J., Ewing, J., & Whittington, S. (2008). Teacher burnout and job satisfaction
among agricultural education teachers. *Journal of Agricultural Education, 49*(3),
12-22. https://doi.org/10.5032/jae.2008.03012

Choi, B., Clays, E., Bacquer, D. D., Karasek, R. (2008) Socioeconomic status, job strain

and common mental disorders—an ecological (occupational) approach.

Scandinavian Journal of Work, Environment, & Health, 6, 22-32.

Chungkham, H. S., Ingre, M., Karasek, R., Westerlund, H., & Theorell, T. (2013). Factor

structure and longitudinal measurement invariance of the demand control support

model: An evidence from the Swedish longitudinal occupational survey of health

(SLOSH). *PloS One, 8*(8), e70541. https://doi.org/10.1371/journal.pone.0070541

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress.

Journal of Health and Social Behavior, 24(4), 385-396.

https://doi.org/10.2307/2136404

Constable, J. F., & Russell, D. W. (1986). The effect of social support and the work

environment upon burnout among nurses. *Journal of Human Stress, 12*(1), 20.

Cornish, P. A., Berry, G., Benton, S., Barros-Gomes, P., Johnson, D., Ginsburg, R.,

Whelan, B., Fawcett, E., & Romano, V. (2017). Meeting the mental health needs

of today's college student: Reinventing services through stepped care 2.0.

Psychological Services, 14(4), 428—442.

De Cuyper, N., Raeder, S., Van der Heijden, B. I. J. M., & Wittekind, A. (2012). The

association between workers' employability and burnout in a reorganization

context: Longitudinal evidence building upon the conservation of resources

theory. *Journal of Occupational Health Psychology, 17*(2), 162-174.

https://doi.org/10.1037/a0027348

Del Pozo-Antúnez, J. J., Ariza-Montes, A., Fernández-Navarro, F., & Molina-Sánchez,

H. (2018). Effect of a job demand-control-social support model on accounting

professionals' health perception. *International journal of environmental research*

and public health, 15(11), 2437.

Devereux, J., Hastings, R., & Noone, S. (2009). Staff stress and burnout in intellectual

disability services: Work stress theory and its application. *Journal of*

Applied Research in Intellectual Disabilities, 22, 561-573.

https://doi.org/10.1111/j.1468-3148.2009.00509.x

Dyer, S. & Quine, L. (1998). Predictors of job satisfaction and burnout among the direct-

care staff of a community learning disability service. *Journal of Applied Research*

in Intellectual Disabilities, 11, 320-332.

Eisenberg, D., Lipson, S., & Posselt, J. (2016). Promoting resilience, retention, and

mental health. *New Directions for Student Services, 156*, 87–95.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived

organizational support. *Journal of Applied Psychology, 71*(3), 500-

507. https://doi.org/10.1037/0021-9010.71.3.500

Etzion, D. (1984). Moderating effect of social support on the stress–burnout relationship.

Journal of Applied Psychology, 69(4), 615-622.

Farber, B. A. (1983). Dysfunctional aspects of the psychotherapeutic role. In B. Farber

(Ed.), *Stress and burnout in the human service professions* (pp. 97—118). New

York: Pergamon Press.

Feldman, D. C. & Brett, J. M. (2017). Coping with new jobs: A comparative study of

new hires and job changers. *Academy of Management Journal, 26*(2), 258-272.

https://doi.org/10.5465/255974

Fikri Zaidan, A., & Juariyah, L. (2020). The influence of workloads on the job

satisfaction of the lecturers of state university of Malang through job stress as

intervening variable. *KnE Social Sciences, 4*(9), 156–176.

https://doi.org/10.18502/kss.v4i9.7323

Ford, J. & Honnor, J. (2000). Job satisfaction of community residential staff serving

individuals with severe intellectual disabilities. *Journal of Intellectual and*

Developmental Disability, 25, 343-362.

Friesen, P. & Sarros, J. C. (1989). Sources of burnout among educators. *Journal of*

Organizational Behavior, 10, 179-188.

Gallagher, R. P. (2012). *National survey of counseling center directors*. Alexandria, VA:

International Association of Counseling Services.

Gavidia, M. (2020). How has COVID-19 affected mental health, severity of stress among

employees? Retrieved from https://www.ajmc.com/view/how-has-covid19-

affected-mental-health-severity-of-stress-among-employees

Grasgreen, A. (2012). The complications of counseling. Inside Higher Ed. Retrieved from

https://www.insidehighered.com/news/2012/03/14/aucccd-survey-shows-some-

progress-same-struggles-college-counseling-centers

Greenglass, E., Fiksenbaum, L., & Burke, R. J. (1996). Components of social support,

buffering effects and burnout: Implications for psychological functioning.

Anxiety, Stress, and Coping, 9(3), 185-197.

Grilo, C. M., White, M. A., Masheb, R. M., Ivezaj, V., Morgan, P. T., & Gueorguieva, R.

(2020). Randomized controlled trial testing the effectiveness of adaptive

"SMART" stepped-care treatment for adults with binge-eating disorder comorbid

with obesity. *The American Psychologist, 75*(2), 204-218.

https://doi.org/10.1037/amp0000534

Gruttadaro, D., & Crudo, D. (2012). College students speak: A survey report on mental

    health. National Alliance on Mental Illness. https://www.nami.org/Support-

    Education/Publications-Reports/Survey-Reports/College-Students-Speak_A-

    Survey-Report-on-Mental-H

Haaga, D. A. F. (2000). Introduction to the special section on stepped care models in

    psychotherapy. *Journal of Consulting and Clinical Psychology, 68*(4), 547-548.

    https://doi.org/10.1037/0022-006X.68.4.547

Haas, A. P., Hendin, H., & Mann, J. J. (2003). Suicide in college students. *American*

    Behavioral Scientist, 46(9), 1224-1240. Doi:10.1177/0002764202250666

Halbesleben, J. R. B., Neveu, J., Paustian-Underdahl, S. C., & Westman, M. (2014).

    Getting to the "COR": Understanding the role of resources in conservation of

    resources theory. *Journal of Management, 40*(5), 1334-1364.

    https://doi.org/10.1177/0149206314527130

Hawk, J. (2021). What to expect of the university experience in the 2021-2022 academic

    year. Retrieved from: https://www.linkedin.com/pulse/what-expect-university-

    experience-2021-2022-academic-year-hawk-m-a-/

Hellman, C., Fuqua, D., & Worley, J. (2006). A reliability generalization study on the

    survey of perceived organizational support: The effects of mean age and number

    of items on score reliability. *Educational and Psychological Measurement, 66*(4),

    631—642.

Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing

    stress. *The American Psychologist, 44*(3), 513-524. https://doi.org/10.1037//0003-

    066X.44.3.513

Hodges, S. (2001). University counseling centers at the twenty first century: Looking

    forward, looking back. *Journal of College Counseling, 4*, 161-173. https://doi.org/

    10.1002/j.2161-1882.2001.tb00196.x

Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines

    for determining model fit. *Journal of Business Research Methods, 6*(1), 53-60.

Hu, L. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure

    analysis: Conventional criteria versus new alternatives. *Structural Equation*

    Modeling, 6(1), 1–55. https://doi.org/10.1080/10705519909540118

Hutchison, S. (1997). Perceived organizational support: Further evidence of construct

    validity. *Educational and Psychological Measurement 57*(6), 1-5.

Innstrand, S. T., Espnes, G. A., & Mykletun, R. (2004). Job stress, burnout, and job

    satisfaction: An intervention study for staff working with people with intellectual

    disabilities. *Journal of Applied Research in Intellectual Disabilities, 17*, 119-126.

Ito, H., Kurita, H., & Shiiya, J. (1999). Burnout among direct-care staff members of

    facilities for persons with mental retardation in Japan. *Mental Retardation, 37*,

    477-481.

Jong, J. & Ford, M. (2016). The lagged effects of job demands and resources on

    organizational commitment in federal government agencies: A multi-level

    analysis. *Journal of Public Administration Research and Theory, 26*(3), 475-

    492. https://doi.org/10.1093/jopart/muv040

Johnson, J. V. (2008). Globalization, workers' power and the psychosocial work

    environment-is the demand-control-support model still useful in a neoliberal

    era? *Scandinavian Journal of Work, Environment & Health, 6,* 15-21.

Johnson, J. V. & Hall, E. M. (1988). Job strain, work place social support, and

   cardiovascular disease: A cross-sectional study of a random sample of the

   Swedish working population. *American Journal of Public Health, 78*(10), 1336-

   1342.

Kalkbrenner, M. T., Jolley, A. L., & Hays, D. G. (2021). Faculty views on college

   student mental health: Implications for retention and student success. *Journal of

   College Student Retention: Research, Theory & Practice, 23*(3), 636-658.

Karasek, R. (1979). Job demands, job decision latitude, and mental strain: implications

   for job redesign. *Administrative Science Quarterly, 24*(2), 285-308.

Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998).

   The Job Content Questionnaire (JCQ): An instrument for internationally

   comparative assessments of psychosocial job characteristics. *Journal of

   Occupational Health Psychology, 3*(4), 322—355.

Karasek, R. & Theorell, T. (1990). *Healthy work: Stress, productivity, and the

   reconstruction of working life*. Basic Books.

Kettmann, J. D. J., Schoen, E. G., Moel, J. E., Cochran, S. V., Greenberg, S. T., &

   Corkery, J. M. (2007). Increasing severity of psychopathology at counseling

   centers: A new look. *Professional Psychology: Research and Practice, 38*(5),

   523-529. https://doi.org/10.1037/0735-7028.38.5.523

King, R. C., & Sethi, V. (1997). The moderating effect of organizational commitment on

   burnout in information systems professionals: *European Journal of Information

   Systems, 6*(2), 86-96. https://doi.org/10.1057/palgrave.ejis.3000259

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.).

The Guilford Press.

Kovach Clark, H., Murdock, N. L., & Koetting, K. (2009). Predicting burnout and career

choice satisfaction in counseling psychology graduate students. *The Counseling*

Psychologist, 37(4), 580-606. https://doi.org/10.1177/0011000008319985

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The

Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work*

& Stress, 19(3), 192-207.

Kushman, J. W. (1992). The organizational dynamics of teacher workplace commitment:

A study of urban elementary and middle schools. *Educational Administration*

Quarterly, 28(1), 5-42. https://doi.org/10.1177/0013161X92028001002

Landsbergis, P., Theorell, T., Greiner, B., & Krause, N. (2000). Measurement of

psychosocial workplace exposure variables. *Occupational Medicine, 15*(1), 163-

188.

Lee, J., Lim, N., Yang, E., & Lee, S. M. (2011). Antecedents and consequences of three

dimensions of burnout in psychotherapists: A meta-analysis. Professional

Psychology: *Research and Practice, 42*(3), 252-258.

https://doi.org/10.1037/a0023319

Let's talk: A CAPS outreach program. (2019). *Targeted News Service.* University of

Arkansas.

Lim, N., Kim, E. K., Kim, H., Yang, E., & Lee, S. M. (2010). Individual and work-

related factors influencing burnout of mental health professionals: A meta-

analysis. *Journal of Employment Counseling, 47*(2), 86-96.

https://doi.org/10.1002/j.2161-1920.2010.tb00093.x

Luft, C. D. B., Sanches, S. d. O., Mazo, G. Z., & Andrade, A. (2007). Brazilian version of
the perceived stress scale: Translation and validation for the elderly. *Revista De
Saúde Pública, 41*(4), 606-615.

Mase, J., Ota, A., Inoue, K., Iida, T., Tsutsumi, A., Yatsuya, H., & Ono, Y. (2012).
Reliability and validity of the Japanese translated version of the Swedish demand-
control-support questionnaire. *Industrial Health, 50*(6), 467-475. https://doi.org/
10.2486/indhealth.ms1282

Maslach, C. (1998). A Multidimensional Theory of Burnout. In C. L. Cooper (Ed.),
Theories of Organizational Stress (pp. 68-78). Oxford University Press.

Maslach, C. & Jackson, S. E. (1981). Burnout among mental health workers: A review
and a research agenda. *International Journal of Social Psychiatry, 42*, 90-101.

Maslach, C. & Jackson, S. E. (1981). *Maslach Burnout Inventory manual.*
Consulting Psychologists Press.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal
of Organizational Behavior, 2*(2), 99-113.
https://doi.org/10.1002/job.4030020205

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual.*
Consulting Psychologists Press.

Mauss, D., Herr, R. M., Theorell, T., Angerer, P., & Li, J. (2018). Validating the demand
control support questionnaire among white-collar employees in Switzerland and
the United States. *Journal of Occupational Medicine and Toxicology, 13*, 1-7.
https://doi.org/10.1186/s12995-018-0188-7

Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey

data. *Psychological Methods, 17*(3), 437-455. https://doi.org/10.1037/a0028085

Miao, R. T. (2011). Perceived organizational support, job satisfaction, task performance and organizational citizenship behavior in China. *Journal of Behavioral and Applied Management, 12*(2), 105-127.

Mongkol, C. (2021). Counseling continue services despite primarily operating virtually. The Quinnipiac Chronicle. Retrieved from: https://quchronicle.com/72896/news/counseling-continue-services-despite-primarily-operating-virtually/

Ng, S. (2013). Validation of the 10-item Chinese perceived stress scale in elderly service workers: One-factor versus two-factor structure. *BMC Psychology, 1*(1), 1-9. https://doi.org/10.1186/2050-7283-1-9

Novotney, A. (2014). Students under pressure college and university counseling centers are examining how best to serve the growing number of students seeking their services. *Monitor on Psychology, 45*, 36.

O'Brien, A. (2019). Moderating effect of trait mindfulness on the relationship between job demands and burnout using the job demands-resources model. *ProQuest Dissertations Publishing, 2019.*

Odor, H. O. (2020). Work related stress and employee commitment at delta state polytechnic, ogwashi uku. *International Journal of Information, Business and Management, 12*(3), 150-162.

Ozyurt, A., Hayran, O., & Sur, H. (2006). Predictors of burnout and job satisfaction among Turkish physicians. *QJM: An International Journal of Medicine, 99*(3), 161-169.

Perloe, A., & Pollard, J. W. (2016). University counseling centers' role in campus threat

    assessment and management. *Journal of Threat Assessment and Management,*

    3(1), 1-20. https://doi.org/10.1037/tam0000051

Peterson, C., Pisetsky, E. M., & Haut, C. E. (2018). *Self-help and stepped care treatments*

    for eating disorders. (2ⁿᵈ ed.) Oxford University Press.

    https://doi.org/10.1093/oxfordhb/9780190620998.013.19

Polychronis, P. D. (2018). Unrealistic expectations for suicide prevention: Implications

    for counseling centers. *Journal of College Student Psychotherapy, 32*(4), 282-

    290. https://doi.org/10.1080/87568225.2017.1403873

Reilly, K. (2018). Record numbers of college students are seeking treatment for

    depression and anxiety but schools can't keep up. *Time.* Retrieved from:

    https://time.com/5190291/anxiety-depression-college-university-students/

Richards, D. (2009). Features and benefits of online counselling: Trinity college online

    mental health community. *British Journal of Guidance & Counselling, 37*(3),

    231-242. https://doi.org/10.1080/03069880902956975

Richards, D. A., Bower, P., Pagel, C., Weaver, A., Utley, M., Cape, J., . . . Vasilakis, C.

    (2012). Delivering stepped care: An analysis of implementation in routine

    practice. *Implementation Science: IS, 7*(1), 3-3. https://doi.org/10.1186/1748-

    5908-7-3

Ross, R. R., Altmaier, E. M., & Russell, D. W. (1989). Job stress, social support, and

    burnout among counseling center staff. *Journal of Counseling Psychology, 36*(4),

    464-470. https://doi.org/10.1037/0022-0167.36.4.464

Russell, D. W., Altmaier, E., & Van Velzen, D. (1987). Job-related stress, social support,

and burnout among classroom teachers. *Journal of Applied Psychology, 72*(2),
269-274. https://doi.org/10.1037/0021-9010.72.2.269

Saleem, F., Malik, M. I., & Qureshi, S. S. (2021). Work Stress Hampering Employee
Performance During COVID-19: Is Safety Culture Needed? *Frontiers in
Psychology, 12*, 655839. https://doi.org/10.3389/fpsyg.2021.655839

Sanne, B., Mykletun, A., Dahl, A., Moen, B., & Tell, G. (2005). Testing the job demand
– control – support model with anxiety and depression as outcomes: The
Hordaland health study. *Occupational Medicine,* 55, 463-473.

Sanne, B., Torp, S., Mykletun, A., & Dahl, A. (2005). The Swedish demand – control –
support questionnaire (DCSQ): Factor structure, item analysis, and internal
consistency in a large population. *Scandinavian Journal of Public Health,* 33,
166-174.

Sasaki, N., Imamura, K., Thuy, T., Watanabe, K., Huong, N., Kuribayashi, K., Sakuraya,
A., Thu, B., Quynh, N., Kien, N., Nga, N., Giang, N., Tien, T., Minas, H., Zhang,
M., Tsutsumi, A., & Kawakami, N. (2019). Validation of the job content
questionnaire among hospital nurses in Vietnam. *Journal of Occupational Health,
62*(1), 1—10.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their
relationship with burnout and engagement: A multi-sample study. *Journal of
Organizational Behavior, 25*(3), 293-315. https://doi.org/10.1002/job.248

Scott, C., Dieguez, T. A., Deepak, P., Gu, S., & Wildman, J. L. (2022). Onboarding
during COVID-19: Create structure, connect people, and continue adapting.

Organizational Dynamics, 51(2), 100828.

https://doi.org/10.1016/j.orgdyn.2021.100828

Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations:

Perceived organizational support, leader–member exchange, and employee

reciprocity. *Journal of Applied Psychology, 81*(3), 219-227.

https://doi.org/10.1037/0021-9010.81.3.219

Shirom, A. (2005). Reflections on the study of burnout. *Work & Stress: The*

Conceptualisation and Measurement of Burnout, 19(3), 263-270.

https://doi.org/10.1080/02678370500376649

Shore, L. M. & Tetrick, L. E. (1991). A construct validity study of the survey of

perceived organizational support. *Journal of Applied Psychology, 75*(5), 637-

643.

Sim, W., Zanardelli, G., Loughran, M. J., Mannarino, M. B., & Hill, C. E. (2016).

Thriving, burnout, and coping strategies of early and later career counseling

center psychologists in the United States. *Counselling Psychology Quarterly,*

29(4), 382-404. https://doi.org/10.1080/09515070.2015.1121135

Smith, T. B., Dean, B., Floyd, S., Silva, C., Yamashita, M., Durtschi, J., & Heaps, R. A.

(2007). Pressing issues in college counseling: A survey of American college

counseling association members. *Journal of College Counseling, 10*(1), 64-78.

https://doi.org/10.1002/j.2161-1882.2007.tb00007.x

Sobell, M. B., & Sobell, L. C. (2000). Stepped care as a heuristic approach to the

treatment of alcohol problems. *Journal of Consulting and Clinical*

Psychology, 68(4), 573-579. https://doi.org/10.1037/0022-006X.68.4.573

Steel, C., Macdonald, J., Schröder, T., & Mellor-Clark, J. (2015). Exhausted but not

cynical: Burnout in therapists working within improving access to psychological

therapy services. *Journal of Mental Health, 24*(1), 33-37.

https://doi.org/10.3109/09638237.2014.971145

Steers, R. M. (1977). Antecedents and outcomes of organizational commitment.

Administrative Science Quarterly, 22(1), 46-56. https://doi.org/10.2307/2391745

Taylor, S., Landry, C. A., Paluszek, M. M., Fergus, T. A., McKay, D., & Asmundson, G.

J. G. (2020). Development and initial validation of the COVID stress scales.

Journal of Anxiety Disorders, 72, 102232.

Theorell, T., Perski, A., Akerstedt, T., Sigala, F., Ahlberg-Hulten, G., Svensson, J., &

Eneroth, P. (1988). Changes in job strain in relation to changes in physiological

state: A longitudinal study. *Scandinavian Journal of Work, Environment, &*

Health, 14(3), 189-196.

Thielking, M. (2017). Surging demand for mental health care jams college services.

Scientific American. Retrieved from:

https://www.scientificamerican.com/article/surging-demand-for-mental-health-

care-jams-college-services/

Uffelman, R. A., & Hardin, S. I. (2002). Session limits at university counseling centers:

Effects on help-seeking attitudes. *Journal of Counseling Psychology, 49*(1), 127-

132. https://doi.org/10.1037/0022-0167.49.1.127

University of Pittsburgh. (2019). Counseling center director responds to students, sees

growth potential in first year. Pittwire. Retrieved from:

https://www.pitt.edu/pittwire/features-

articles/counseling-center-director-responds-to-students-sees-growth-potential-first-year

Van Brunt, B. (2012). Giving troubled students the brushoff. *The Chronicle of Higher Education, 58*(26). Retrieved from: https://www.chronicle.com/article/giving-troubled-students-the-brushoff/

Van der Doef, M. P., & Maes, S. (1999). The job demands-control (-support) model and psychological well-being: A review of 20 years of empirical research. *Work and Stress, 13*(2), 87-114.

Vredenburgh, L. D., Carlozzi, A. F., & Stein, L. B. (1999). Burnout in counseling psychologists: type of practice setting and pertinent demographics. *Counseling Psychology Quarterly, 12*(3), 293-302. https://doi.org/0951-5070/99/030293-10

Weiss, D. J., Dawis, R. V., England, G.W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. University of Minnesota, Industrial Relations Center.

Wilkerson, K., & Bellini, J. (2006). Intrapersonal and organizational factors associated with burnout among school counselors. *Journal of Counseling & Development, 84*(4), 440-450. https://doi.org/10.1002/j.1556-6678.2006.tb00428.x

Wilkinson, C. B., Infantolino, Z. P., & Wacha-Montes, A. (2017). Evidence-based practice as a potential solution to burnout in university counseling center clinicians. *Psychological Services, 14*(4), 543-548. https://doi.org/10.1037/ser0000156

Williams E. S., Konrad T. R., & Linzer, M. (2002). Physician, practice, and patient characteristics related to primary care physician physical and mental health:

results from the Physician Worklife Study. *Health Services Research, 37,* 119–41.

Williams, L. B. & Reetz, D. R. (2020). How to prepare for the coming flood of student

mental-health needs. *The Chronicle of Higher Education*. Retrieved from:

https://www.chronicle.com/article/how-to-prepare-for-the-coming-flood-of-

student-mental-health-needs

Wilson, G. T., Vitousek, K. M., & Loeb, K. L. (2000). Stepped care treatment for eating

disorders. *Journal of Consulting and Clinical Psychology, 68*(4), 564-572.

https://doi.org/10.1037/0022-006X.68.4.564

Winwood, P., & Winefield, A. H. (2004). Comparing two measures of burnout among

dentists in Australia. *International Journal of Stress Management, 11*, 282—289.

Worley, J., Fuqua, D., & Hellman, C. (2009). The survey of perceived organizational

support: Which measure should we use? *South African Journal of Industrial*

Psychology, 35(1), 112—116.

Xiao, H., Carney, D. M., Youn, S. J., Janis, R. A., Castonguay, L. G., Hayes, J. A., &

Locke, B. D. (2017). Are we in crisis? National mental health and treatment

trends in college counseling centers. *Psychological Services, 14*(4), 407-415.

https://doi.org/10.1037/ser0000130

Zeng, X., Zhang, X., Chen, M., Liu, J., & Wu, C. (2020). The influence of perceived

organizational support on police job burnout: a moderated mediation

model. *Frontiers in Psychology, 11*, 948.

https://doi.org/10.3389/fpsyg.2020.00948