

Teaching and Supervision in Counseling

Volume 5 | Issue 1 Article 3

February 2023

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Crockett, Jamie E. and Ivers, Nathaniel N. (2023) "Basic Needs Adversities Among Counselors in Training: A Cluster Analysis," Teaching and Supervision in Counseling: Vol. 5: Iss. 1, Article 3.

https://doi.org/10.7290/tsc057pio

Available at: https://trace.tennessee.edu/tsc/vol5/iss1/3

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Basic Needs Adversities Among Counselors in Training: A Cluster Analysis

Received: 04/08/22 Revised: 06/13/22 Accepted: 09/19/22 DOI: 10.7290/tsc057pio

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Abstract

During the intersection of COVID-19 with ongoing identity-based injustices in the United States, Counselors-in-Training (CITs) experience unprecedented challenges including new or exacerbated basic needs insecurity. In this descriptive study, the authors examine Basic Needs Adversities (BNA) in a national sample of CITs (n = 233) during the first year of the COVID-19 pandemic. The authors use cluster analysis to investigate CITs' reported BNAs and identify four subgroups of participants based on similarities and dissimilarities in the number and type of BNAs endorsed. The authors discuss implications for training and supervision with a focus on social justice in counselor education.

Significance to the Public

Addressing counselor in training (CIT) basic needs security may be essential in advancing social justice, equity, and diversity in counseling and counselor education. In this descriptive study, the authors use cluster analysis to examine Basic Needs Adversities (BNA) in a national sample of CITs (n = 233) during the first year of the COVID-19 pandemic and identify four subgroups based on similarities and dissimilarities in the number and type of BNAs endorsed.

Keywords: basic needs adversities, identity-based injustice, social justice, counselors in training, COVID-19

COVID-19 has exacerbated identity-based discrimination, hatred, and violence (IBDHV) and related inequities (Allwood et al., 2022; Van Dorn et al., 2020). The COVID-19 pandemic and social injustice continue to affect people's well-being, such as physical, psychological, social, professional, financial, and intellectual dimensions of well-being (Shullman, 2020). During this time, many experienced novel or compounded threats to basic needs security, some of which are caused or exacerbated by identity-based injustices. New or ongoing adversities threaten security or worsen anxieties about finances, housing, nutrition, childcare, education, physical and psychological safety, access and ability to pay for medical and mental health care, and COVID-19 risk and prevention. Amidst these adversities, counselors, counselors-in-training (CITs), and supervisors balance helping their clients cope while coping with

many parallel challenges themselves (Fish & Mittal, 2021). Accordingly, mental health providers report increased stressors, work dissatisfaction, teletherapy fatigue, imposter syndrome, and burnout (Fish & Mittal, 2021). During this time, CITs face many of these challenges beyond the typical stressors of counselor training. Investigating CITs Basic Needs Adversities (BNAs) may help to illuminate issues that challenge CIT success and privilege some CITs over others.

COVID-19, Identity-Based Injustice, and Basic Needs Adversities

COVID-19 has caused a devastating loss of life throughout the world as well as "unprecedented challenges to public health, food systems, and the world of work" (World Health Organization [WHO], 2020, para. 1). COVID-19 affects everyone

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but is particularly harmful to Black, Indigenous, and People of Color (BIPOC); women; gender and/or sexual minorities (LGBTQ+); elders; people living with low-income or in poverty; people who have an undocumented status; and people with disabilities (Harrichand et al., 2021). Concomitantly, the pre-COVID-19 rise in IBDHV continues (Allwood et al., 2022; Van Dorn, 2020). For example, Asian, Asian-American, and Pacific Islander communities experienced a sharp increase in violence and hate crimes since the outbreak of COVID-19 (Litam & Oh, 2020). Amidst COVID-19, Black individuals and communities continue to experience systemic racism, police brutality, and healthcare disparities (Washington & Henfield, 2019). Many in the LGBTO+ community continue to experience violence and discrimination, including limited access to appropriate healthcare and the continued proposal of laws that restrict their rights (Katz-Wise, 2020). The Federal Bureau of Investigation (2021) reported that after race/ethnicity/ancestry (61.8%) and affectional orientation (20%), religion (13.3%) was the third leading bias motivation of reported hate crimes in 2020. COVID-19 and identity-based injustices have wide-ranging effects on basic needs security.

Basic Needs Adversities

With substantial variance in how experts define basic needs, there is a corresponding lack of empirically validated, comprehensive measures of basic needs (Goldrick-Rab et al., 2019). With a focus on psychological basic needs, some researchers used a framework of Self-Determination Theory to advance Basic Psychological Need Theory (e.g., Vansteenkiste et al., 2020). Psychological basic needs include (a) autonomy (e.g., personal responsibility and freedom, informed decision making), (b) competence (e.g., balance of ability and challenge, achievable goals), and (c) relatedness (connection, caring, social support) in the context of performance and wellness (Van der Kaap-Deeder, 2020). In contrast, when concerned with basic needs security related to the human right to health, social justice, and resource disparities, researchers typically consider basic needs security

to include secure housing, food, water, finances, education, transportation, personal hygiene, sanitation, physical and psychological safety, childcare, access to medical and mental health care, and freedom from discrimination (Cappelletti et al., 2015; Goldrick-Rab et al., 2019). Because of concerns in counselor education about racism, discrimination, and resource inequities, for the current study we focus on the latter conceptualization of basic needs security with the addition of COVID-19 prevention (e.g., ability to social distance). Thus, we define BNAs as basic needs insecurity and experiences that threaten basic needs security (Crockett & Ivers, 2023).

Unmet basic needs limit counseling outcomes (Clark et al., 2020) and educational outcomes (Goldrick-Rab et al., 2019). Basic needs insecurity disproportionately impacts minoritized groups and those who experience low socioeconomic status (Cappelletti et al., 2015). Basic needs are interrelated; for example, the restrictions and shutdowns enacted to reduce the spread of COVID-19 cases were central to reducing infection rates, fatalities, and the strain on the public health system. However, these restrictions resulted in financial, relational, educational, safety, and psychological challenges. Social distancing requirements and remote work also impacted work-life balance, particularly for women (Matulevicius et al., 2021; Tuğsal, 2020). With little to no preparation, many people experienced simultaneous and conflicting responsibilities with full-time work, childcare, and remote schooling. At the same time, some needed new technologies or skills to perform their essential work or academic duties. These changes often led to long hours, physical fatigue, stress, and anxiety (Tuğsal, 2020).

Further, the COVID-19–related restrictions resulted in over 40 million individuals filing for unemployment between February and May 2020 (Wilson et al., 2020). By mid-May 2020, the unemployment rate reached its highest rate (14.7%) since the Great Depression (Wilson et al., 2020). Despite government relief measures, the economic impact of COVID-19 created a great deal of basic needs insecurity. The stress associated with long-

term and open-ended job loss, as well as a sense of helplessness to remediate the situation, had profound effects on people's physical and mental health (Panchal et al., 2021; Xiong et al., 2020). Women, individuals living in poverty or lowincome households, marginalized communities, and individuals in jobs deemed nonessential disproportionately carried the weight of COVID-19's financial toll (Panchal et al., 2021). The disproportionate impacts of COVID-19 provide large-scale confirmation of ongoing systemic injustice and related IBDHV (Van Dorn et al., 2020). IBDHV can be defined as bias-driven discrimination, hatred, or violence toward an individual, group, community, or organization wherein the prejudice is based in whole or in part on perception of group membership (Allwood et al., 2022). These biases and prejudices are based on dimensions of identity such as race, ethnicity, nation of origin, gender, gender identity, religion, disability, affectional orientation, ability, or other individual characteristics and include assaults or deprivation of resources (Allwood et al., 2022). IBDHV can cause, sustain, or exacerbate resource inequality (Sen, 2008) and related BNAs and profoundly impact health and mental health.

Mental Health, Educational Impacts, and CITs

COVID-19 and social injustices also affect educational development, notwithstanding the efforts of educators, administrators, and educational institutions. Many students experienced delays in their education, especially children in low-income families. Adult students, including undergraduate and graduate students, are also negatively impacted by COVID-19. Loss or unavailability of jobs challenges students' ability to pay for college (The Hope Center for College, Community, and Justice, 2021). Some opt for (a) gap year(s) before beginning their education to avoid virtual learning or delay tuition or other education-related costs. Those who elected to start or continue their higher education during COVID-19 often struggled to balance schoolwork with many other stressors. The Hope Center (2021) reported that, due to COVID-

19, nearly 3 in 5 college students experienced exacerbated basic needs insecurity with a significant racial gap wherein BIPOC students were more likely to report greater basic needs insecurity and withdraw, delay, or forego enrollment as a result. College students reported increased anxiety and difficulty concentrating due to concerns about their basic needs, academic performance, and the health and needs of their family and friends (The Hope Center, 2021).

Within and beyond higher education, the COVID-19 pandemic has caused or heightened mental health problems and the need for related services (Panchal et al., 2021; Xiong et al., 2020), resulting in increased depression, anxiety, posttraumatic stress disorder, and other psychological distress. Those currently most at risk of mental health concerns include those who are women, under 40 years old, LGBTQ+, have an existing mental health diagnosis, unemployed, students, or report frequent exposure to news articles and social media posts about COVID-19 (Xiong et al., 2020). Among a sample of young adults in June 2020, more than 25% reported suicidality in the past 30 days (The Hope Center, 2021). These increases in mental health problems may impact CITs personally, educationally, or both.

Although some disruptions related to COVID-19 and the current sociopolitical conditions are shared experiences by students in counseling programs, there remains a great deal that we do not know about CITs experiences in this context, including how basic needs security may privilege some CITs over others in their training programs. One risk to CITs is that when counselors focus on satisfying their clients'/students' needs while their own needs remain unmet, counselors may experience burnout (Ko & Lee, 2021). Counseling for the Accreditation of Counseling and Related Educational Programs (CACREP; 2018) reported that, in 2017, 82.2% of CITs identified as women, a group identified as more susceptible to the impacts of the COVID-19 pandemic. Further, before COVID-19, BIPOC CITs already experienced "exponentially higher rates of burnout" due to "microaggressions, hostile campus environments, negative stereotypes, and racially

biased course content and ... instructors" (Mitchell & Binkley, 2021, p. 40). Previous research on stress, fatigue, and burnout among counselors and CITs often focused on personal issues (e.g., relationship problems), self-care, caseload or other work environment issues, client lack of progress and complaints, and perfectionism (Moore et al., 2020), with a lack of empirical investigation related to CITs' basic needs. Anti-racist efforts in the counseling field include the goal of removing systemic barriers faced by some CITs (Ieva et al., 2021), and investigating CITs basic needs may be an essential step toward that end.

Purpose of the Study

Researchers call for social scientists to investigate the impact of discrimination and systemic injustice, including power and resource inequities (Sugarman et al., 2018). There are calls to examine basic needs among students in higher education (Goldrick-Rab et al., 2019) and for counseling researchers to examine anti-racist approaches to training, self-care (Mitchell & Binkley, 2021), resource inequities (Crockett & Ivers, 2022), and wellness among CITs and marginalized communities during COVID-19 (Harrichand et al., 2021) and beyond. Although to date no studies have empirically examined CITs' BNAs, investigating CIT's BNAs during COVID-19 is a critical step toward meeting these research calls and advancing social justice in counselor education and supervision. Thus, the purpose of this quantitative descriptive study is to investigate resource inequities and related impacts of injustice among CITs, specifically through an examination of CITs' BNAs. We aim to increase understanding of issues that challenge CIT success and privilege some CITs over others. We used the following research questions to guide our empirical investigation:

- 1. Which and what number of BNAs do CITs report experiencing in their households since the onset of COVID-19 in 2020?
- 2. Do the number and category of BNAs endorsed by CITs display patterns of

- similarities and dissimilarities (a multiplecluster structure)?
- 3. If a multiple-cluster structure is found, what are the demographic characteristics of each cluster?

Method

Procedure and Sampling

We collected a large, multistudy data set with an Internet-based anonymous survey approved by the university institutional review board. We designed the survey, including the items used for the current study, in May 2020 to address several discrete sets of a priori research questions about CITs' and postmaster's practicing counselors' experiences, including the current study's research questions. Thus, for the present study, we used a subset of data from this larger data set. We used online convenience snowball sampling to recruit participants for two samples (CITs and postmaster's practicing counselors). With this type of online snowball sampling it is not possible to calculate a response rate. We emailed state counseling organizations and CACREP-accredited counseling programs to request they disseminate our recruitment message. We posted the recruitment message to Facebook, LinkedIn, and counselingrelated listservs. We used the CIT sample for the current study. To be eligible, participants had to be over 18 years old and enrolled as master's- or doctoral-level counseling students. We collected all data between June and December 2020. Participants consisted of a national sample of 233 counseling students. All participants reported current enrollment as a master's (n = 206, 88.4%) or doctoral student (n = 27, 11.6%). Most master's students reported that they were enrolled in the Clinical Mental Health Counseling (CMHC) track (n = 123), followed by School (n = 39), multiple tracks (n = 22), and Couple and Family (n = 14). Of the master's students, 134 reported they had not begun clinical courses (i.e., practicum, internship). Participants' ages ranged from 20 to 66 (M = 32.6years, SD = 10.6). Many participants identified

their race/ethnicity as White (n = 174, 75%), followed by Hispanic/Latinx (n = 23, 9.9%), Black or African American (n = 18, 7.3%), multi-racial (n= 8, 3.2), Asian (n = 6, 2.5%), Middle Eastern or North African (n = 1, .4%), Native Hawaiian or other Pacific Islander (n = 1, .4%), and not listed (wrote in Portuguese American; n = 1, .4%). Of those who reported gender (n = 231), the majority identified as cisgender female (n = 204, 88.3%), followed by cisgender male (n = 20, 8.7%), genderexpansive (n = 5, 2.2%), not listed (wrote in androgenous; n = 1, .4%), not listed (wrote in gender queer; n = 1, .4%), and chose not to respond (n = 2, .9%). Most participants identified their affectional orientation as heterosexual (n = 186, 81.2%), followed by bisexual (n = 24, 10.5%), lesbian/gay (n = 7, 3.1%), pansexual (n = 5, 2.1%), not listed (n = 6, 2.6%), chose not to respond (n = 4,1.7%), and asexual (n = 1, .4%). Of those who wrote in their spiritual, religious, and/or existential worldview, many identified as Christian (n = 111, 47.8%), followed by agnostic (n = 24, 10.3%), spiritual/non-religious spiritual (n = 24, 10.3%), chose not to report (n = 19, 7.8%), none (n = 12,5.2%), atheist (n = 8, 3.4%), other (n = 6, 2.6%), undefined higher power (n = 5, 2.2%), undecided (n= 5, 2.2%), Church of Latter-day Saints (n = 5, 2.2%), secular humanist (n = 4, 1.7%), spiritual atheist (n = 3, 1.3%), Muslim (n = 3, 1.3%), Jewish (n = 2, .9%), and Buddhist (n = 2, .9%). The mean number of people in participants' households was 2.85 (SD = 1.48) with a range of 1 to 7. Nearly half of participants (n = 116, 49.7%) reported a pre-COVID household income of less than \$45,000 with 20.6% (n = 48) reporting household income less than \$20,000.

Measures

Demographics and Training Information

The study variables included items addressing factors such as race/ethnicity, gender identity, affectional orientation, religious/spiritual/existential worldview, household income, and age. We also

included items about participants' student status and clinical experience.

Basic Needs Adversities

When we designed the survey in 2020, the literature lacked basic needs measures that included health, physical and psychological safety, and COVID-19 specific basic needs. Thus, we developed and examined the validity of an index of BNAs (Crockett & Ivers, 2023). The measure includes three areas of BNAs identified in the literature as well as several items related to COVID-19. The index we developed includes essentials (e.g., finances, nutrition, housing), with 13 items such as "job loss, reduction in work hours, or other reduction in pay/income"; safety (physical and psychological), with nine items including "physical or psychological violence or discrimination based on race or ethnicity"; access to care (medical and mental health), with three items including "inadequate access to mental health care if needed"; and COVID-19 (risk and prevention), with three items such as "inability to consistently maintain social distancing." Table 1 includes a complete list of all BNA items. We also included "other" with the option to write in BNAs not listed. We asked participants to reflect on their experiences and indicate all the BNAs experienced within the participant's household since the onset of COVID-19 in 2020. In our data analysis, we used the individual items, summed the number of items selected within each category, and also used the total number of BNAs indicated. Thus, higher scores reflect a higher number of BNAs reported. We found support for convergent validity (Crockett & Ivers, 2023) with significant correlations between the total BNAs endorsed and both perceived stress and minoritized group membership, as well as a significant negative correlation with household income. Index items do not need to correlate, and thus internal consistency is not recommended for assessing the reliability of an index (DeVellis & Thorpe, 2022). Still, index reliability methods are not always available and researchers do sometimes assess the coefficient alpha despite that alphas are likely to be low when there are items that do not

share a common underlying cause (DeVellis & Thorpe, 2022). Despite the limitations, we used Cronbach's alpha coefficients to gain insights about internal consistency for the current sample. We found support for good reliability for the total BNAs endorsed (α = .82), acceptable reliability for essentials (α = .72), safety (α = .64), and access (α = .74). We did not find support for reliability for the COVID-19 category (α = .36) in the current sample.

Results

We analyzed all data using SPSS version 27. Counseling researchers recommend using cluster analysis to discover patterns of similarities and dissimilarities that illuminate individual variances and counseling professional variables in multicontextual frameworks, including social and relational dimensions (Bardhoshi et al., 2021). As such, we used an SPSS two-step cluster analysis (Bacher et al., 2004; Chiu et al., 2001) to address research question 2. We used frequencies and descriptives to describe the sample and address research questions 1 and 3.

Preliminary Analysis

We used visual inspection to determine there were limited missing values on demographic items and no pattern of the missing values relating to any of the other study variables. We examined box plots to identify potential outliers and extreme values. We identified high potential outliers (i.e., more than 1.5 interquartile range above quartile 3) and high extreme values (i.e., more than 3 interquartile range above quartile 3) for the variables selected for cluster analysis. We visually assessed the participants' full response set for each outlier to ensure there were no input errors or other potential errors in the data set; all outliers appeared valid. Cluster analysis is appropriate for detecting and assessing outliers (Lara et al., 2020). As such, we included outliers in the analyses of research questions. To standardize variables for the cluster analysis, we selected the automatic standardization of continuous variables in the SPSS two-step cluster analysis procedure. We assessed normality by reviewing the skewness and kurtosis statistics and found violations of normality for each of the four BNA variables selected for the cluster analysis. We proceeded with the analysis since SPSS two-step cluster analysis is typically robust to deviations from normality.

Research Question 1

In Table 1 we provide a complete description of the BNAs that CITs report experiencing within their household. Of the 233 participants, 87.1% reported one or more BNAs (range 0 = 17; m = 3.62, SD=3.14), while only 12.9% reported none, 42.1% reported 4 or more, and 12% reported 8 or more. Among the BNA essentials, 48.5% (n = 113) of participants indicated job loss, reduction in work hours, or other reduction in pay/income; decreased or inadequate money for food 11.6% (n = 27), housing 11.2% (n = 26), or other necessities 12.9% (n = 30), and 28.8% (n = 67) sought government assistance. Almost a quarter of participants, 23.2% (n = 54), reported inadequate or decreased amount of money for their graduate program (e.g., tuition, books). Regarding safety, 17.6% (n = 41) of participants reported fearing crime or violence where they live or work. Some participants reported experiencing physical or psychological violence based on race or ethnicity (n = 27, 11.6%); gender (n = 13, 5.6%); or religious/spiritual/existential worldview (n = 12, 5.2%). Regarding access to care, 19.3% (n = 45) reported inadequate ability to pay for mental health care if needed. Regarding COVID-19–specific needs, 33% (n = 77) indicated that they or someone in their household is classified as medically vulnerable for COVID-19 related complications or death. Nearly 20% reported inadequate materials to protect against COVID-19 (e.g., masks, disinfectant, soap; n = 46, 19.7%) or inability to consistently maintain social distancing (n = 44, 18.9%).

Research Questions 2 and 3

Bardhoshi et al. (2021) outlined four steps for applying cluster analysis in counseling research.

Table 1Basic Needs Adversities (N = 233)

Ite	em	n	%	
Esse	entials			
1.	Job loss, reduction in work hours, or other reduction in pay/income?	113	48.5	
2.	Not have enough, or have a reduction in the amount of, money for food?	27	11.6	
3.	Not have enough, or have a reduction in the amount of, money for housing?	26	11.2	
4.	Inadequate resources for safe transportation?	7	3	
5.	Not have enough, or have a reduction in the amount of, money for other necessities?	30	12.9	
6.	Inadequate childcare or care for other dependents?	17	7.3	
7.	Inadequate preschool or K-12 education resources?	10	4.3	
8.	Inadequate household space considering the number of people and pets living in your household?	16	6.9	
9.	Inadequate heating and/or cooling in your housing?	6	2.6	
10.	Inadequate access to outdoor spaces and nature?	20	8.6	
11.	Sought government assistance (e.g., food stamps, unemployment, utility, housing, transportation)?	67	28.8	
12.	Not enough, or reduction in the amount of, money for undergraduate program (tuition, books, etc.)?	11	4.7	
13.	Not enough, or reduction in the amount of, money for graduate program (tuition, books, etc.)?	54	23.2	
Safe	ety			
14.	Increased risk of abuse or neglect for minors/dependents in your household?	0	0	
15.	Discrimination in health and/or mental health care settings?	15	6.4	
16.	Fear crime or violence in the area where you live or work?	41	17.6	
17.	Physical or psychological violence or discrimination based on race or ethnicity?	27	11.6	
18.	Physical or psychological violence or discrimination based on gender?	13	5.6	
19.	Physical or psychological violence or discrimination based on sexuality?	9	3.9	
20.	Physical or psychological violence or discrimination based on religion/spirituality?	12	5.2	
21.	Physical or psychological violence or discrimination based on language?	6	2.6	
22.	Physical or psychological violence or discrimination based on place of origin?	10	4.3	
Acc	ess to Care			
23.	Inadequate access to and/or ability to pay for medical treatment if needed?	36	15.5	
24.	Inadequate access to mental health care if needed?	29	12.4	
25.	Inadequate ability to pay for mental health care if needed?	45	19.3	
CO	VID-19 Risks			
26.	Inadequate materials to protect against COVID-19 infection (e.g., masks, disinfectant, soap)	46	19.7	
27.	Inability to consistently maintain social distancing	44	18.9	
28.	Classified as "vulnerable" for COVID-19 related complications or death?	77	33.0	

Accordingly, in the first step, we selected the variables for clustering subgroups, the BNAs subtotal for each of the four categories of essentials, safety, access to care, and COVID-19 risks. We also identified the demographic variables of race/ethnicity (R/E), religious/spiritual/existential worldview (R/S/EW), gender identity, affectional orientation, age, number of people in the household, and household income for post hoc analysis of the clusters. Second, we performed preliminary data analysis described in the Methods section earlier.

Third, we determined and applied the appropriate clustering method. Given the limitations of k-means clustering and agglomerative hierarchical techniques, some researchers (e.g., Bacher et al., 2004) recommend using SPSS two-step clustering (Chiu et al., 2001) in social sciences research. More specifically, we used the SPSS two-step clustering approach because it is especially robust to assumption violations, handles outliers, identifies the variables that most influence clustering, and determines the best number of clusters when there is not a theory-driven rationale to establish the number of clusters a priori (Bacher et al., 2004; Bardhoshi et al., 2021; Chiu et al., 2001). The SPSS two-step clustering process includes the first step of preclustering of cases using a nonhierarchical analysis with a modified cluster feature tree, followed by the second step, an agglomerative hierarchical technique for the clustering of cases. We used the log-likelihood-based distance measure, and for the clustering criterion, we used Schwarz's Bayesian criterion (BIC). Fourth, we assessed the validity of the resulting four-cluster solution. With a silhouette coefficient of .5, there was an acceptable measure of cohesion and separation. The ratio of sizes for largest to smallest cluster was 3.0. We further assessed validity with a visual analysis of the BIC coefficient line chart, observation of the group centroids, and meaningful interpretability of the clusters. Based on these criteria, we determined that the four-cluster solution was appropriate for the sample. Dalmaijer et al. (2022) recommend a minimum of 20 participants per cluster subgroup to achieve adequate statistical power for cluster analysis; with the four-cluster solution identified in

our analysis, our sample size (N = 233) is more than adequate.

In the following descriptions of the characteristics of each cluster, we use language such as "lower," "moderate," or "higher,"; these descriptors are intended to describe each cluster relative to the other clusters and do not reflect any broader classification or established cut-offs.

Cluster 1: Fewest BNA Concerns

The first and largest cluster (n = 91) was characterized by the lowest reports of BNAs on all four dimensions, with relatively low BNAs related to access to care, COVID-19 risk, and safety, and with comparatively low to moderate adversities related to essentials.

Cluster 2: Highest Essentials and Access Concerns

The second cluster (n = 36) was characterized by the highest number of BNAs essentials and access to care with lower BNAs related to safety and COVID-19.

Cluster 3: Some Essentials and COVID-19 Concerns

The third cluster (n = 76) was characterized by a lower number of both BNA safety concerns and access to care, with a moderate to higher number of BNAs related to both essentials and COVID-19.

Cluster 4: Highest Safety Concerns, Some Essentials and COVID-19 Concerns

The fourth, and smallest cluster (n = 30), was characterized by relatively low BNAs related to access to care, moderate to high reports of BNAs essentials and COVID-19 related risk, and the highest number of BNA safety concerns relative to other clusters.

For a complete depiction of each cluster see Table 2. Table 2 lists cluster variables with means and standard deviations of each BNA scale, as well as BNA total and demographic variables (e.g., age, race/ethnicity, affectional orientation, combined household income) by cluster.

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Discussion

In this investigation, we examined CITs' BNAs after the onset of the COVID-19 pandemic. For research question 1, we asked about the type and number of BNAs that CITs experienced in their household after the onset of COVID-19 in 2020. Most CITs (87.1%) reported at least one BNA within their household. For example, consistent with broader economic trends across the United States (Wilson et al., 2020), just under half (48.5%) of participants reported job loss, reduction in work hours, or other reduction in pay/income. Safety is another critical BNA concern; CITs reported physical and psychological safety concerns, ranging from fear of crime or violence where they live or work to concerns about IBDHV. Some of these reported safety concerns may reflect the rise in IBDHV that began prior to COVID-19 (Allwood et al., 2022; Van Dorn, 2020). The National Alliance on Mental Illness (NAMI; 2021) identifies cost as the second most prevalent reason for not receiving mental health services. Results of our study support that cost is a significant barrier as evidenced by almost one in five CITs (19.3%) reporting difficulties paying for needed mental health care. Other BNAs reported included those related to COVID-19 concerns. For example, one-third of participants reported that they or someone in their household was medically vulnerable to COVID-19related complications and death. We defined medically vulnerable as those that the Center for Disease Control and Prevention (2022) identified as more likely to experience severe sickness from COVID-19 including older adults, those who are pregnant, and people with certain medical risks or conditions (e.g., cancer, chronic lung disease, smoking). Almost 20% of participants shared that they did not have adequate resources (e.g., disinfectant, masks) to protect themselves against COVID-19 infections. For some, BNAs may reflect

systemic barriers that disproportionately impact individuals with minoritized group membership. To dismantle these barriers and meet the social justice goals of the counseling field, including increasing diversity and inclusion among CITs and thereby the counseling profession (Meyers, 2017), it may be necessary to collaborate proactively with universities and CITs to address basic needs and related resource inequities that not only impact their wellness and educational success but also privilege some CITs over others. Addressing BNA-related systemic barriers in counselor education may also be critical to support those who may wish to become a counselor but to date have been unable to pursue higher education due to the impact of resource inequities.

For research question 2, we used cluster analysis to explore similarities and dissimilarities in the number and type of BNAs endorsed. The fourcluster solution on the number of BNA essentials. safety, access to care, and COVID-19 endorsed is noteworthy in several ways. The largest subgroup, cluster 1, reported the fewest mean total BNAs (M = 1.37) and endorsed with no BNAs related to COVID-19 risk. This group was over three-quarters white and heterosexual, with just over half identifying as Christian. Likewise, cluster 3 was also more than three-quarters white, heterosexual, with more than half identifying as Christian. Although this subgroup indicated the highest number of BNAs related to COVID-19 (M = 1.45), the total BNA mean was just over 3. Of the four clusters, the two most diverse clusters reported the highest total mean number of BNAs endorsed. Cluster 2 was also predominantly white and cisgender; however, more than a quarter identified as LGBTQ+, and half as a R/S/EW minority. Cluster 2 had the highest BNA mean total (M =8.30). This cluster reported the greatest number of BNA concerns related to essentials and access to care. In contrast, the smallest subgroup, cluster 4, reported an average of more than 5 BNAs endorsed with the highest number of BNAs related to safety. Cluster 4 was the only subgroup where all participants indicated two or more safety-related BNAs. In all other subgroups, many cluster members reported zero safety-related BNAs (cluster

Table 2 ${\it CIT~BNA~and~Demographic~Variables~by~Cluster~(N=233)}$

	Cluster 1 $(n = 91)$			Cluster $2 (n = 36)$			Cluster $3 (n = 76)$			Cluster 4 $(n = 30)$		
	M	SD	Freq (%)	М	SD	Freq (%)	M	SD	Freq (%)	M	SD	Freq (%)
Cluster Variables												
BNA Essentials (13)	1.01	1.21		4.67	2.44		1.37	1.50		1.33	1.12	
BNA Safety (9)	0.15	0.36		0.61	1.15		0.22	0.42		2.87	0.97	
BNA Access to Care (3)	0.21	0.44		2.50	1.23		0.24	0.46		0.23	0.63	
BNA COVID-19 Risks (3)	0.00	0.00		0.56	1.23		1.45	0.66		1.23	0.90	
Total BNAs endorsed (28)	1.37	1.32		8.30	3.10		3.28	1.76		5.67	2.29	
Support Adequacy	2.78	1.41		2.32	0.72		3.07	1.46		4.08	1.68	
Demographic Variables												
Race/Ethnicity												
BIPOC			21 (23.1%)			5 (13.9%)			18 (24%)			14 (47%)
White			69 (75.8%)			31 (86.1%)			58 (76%)			16 (53%)
Affectional Orientation												
LGBQ+			10 (10.1%)			11 (30.5%)			10 (13%)			12 (40%)
Heterosexual			79 (86.8%)			25 (69.5%)			64 (84%)			18 (60%)
Gender Identity												
EAQ+			2 (2.2%)			2 (5.5%)			2 (3.4%)			1 (3.3%)
Cisgender Female			81 (89.0%)			28 (77.8%)			69 (91%)			26 (86.7%)
Cisgender Male			7 (7.7%)			5 (13.9%)			5 (6.6%)			3 (10%)
R/S/EW												
R/S/EW Minority			41 (45.1%)			18 (50.0%)			33 (43.4%)			21 (70%)

1, 84.6%; cluster 2, 72.2%; cluster 3, 77.6%). This subgroup also indicated the lowest combined household incomes (including income from all sources such as wages, social security, disability and/or veteran's benefits, unemployment benefits, help from relatives, alimony, etc.) prior to the onset of COVID-19 with 70% reporting household income below \$45,000 and 36.7% of the cluster reporting a household income below \$20,000, with a mean of 2.9 people per household in this cluster. Cluster 4 was the most diverse, with nearly half of the students identifying as BIPOC, over a third identifying as LGBTQ+, and more than two-thirds reporting an identity categorized as a R/S/EW minority.

These findings support the historical evidence and growing body of current literature (Harris et al., 2021) indicating that BIPOC, LGBTQ+, and others with minoritized identities continue to experience systemic oppression as evidenced by resource inequities such as lower-income and greater threats to physical and psychological safety as seen in the current study and previous research (e.g., Allwood, 2022; Sugarman et al., 2018). Relatedly, anti-racist and social justice researchers assert there is an urgent need for evidence-based approaches that focus on those responsible for IBDHV and the targets of these behaviors (e.g., Sugarman et al., 2018).

The results of the current study offer more insights about the problems of BNAs, injustice, and resource inequities than it does specific solutions. Nonetheless, we suggest that counselor educators integrate basic needs and resource equity into how they approach key issues in counselor education including but not limited to admissions, cultural competence, cultural humility, assessment and treatment planning, ethics, CIT stress, and burnout. For example, concerning CIT stress, researchers often focus on "occupational stressors and occupational stress responses" (Moore et al., 2020, p. 123) without attending to systemic oppression and resource inequities. These injustices likely account for some of the disproportionate stress seen among counselors who identify within minoritized groups. For example, recommendations for

addressing counselor stress and burnout often center around self-care strategies (e.g., relaxation, exercise; Ko & Lee, 2021), an integration of wellness throughout the CACREP curriculum (Harrichand et al., 2021), although more recently researchers have begun to address self-care in the context of promoting anti-racist approaches in counselor education (e.g., Mitchell & Binkley, 2021). Although these are valuable recommendations, beyond self-care, there is also a need to address structural and systemic supports and barriers that contribute to CIT stress, burnout, and wellness. While some researchers asserted frameworks for self-care in the context of identity, social justice, and advocacy (e.g., Mitchell & Binkley, 2021), in the past, the emphasis on selfcare in counseling and counselor education has not effectively addressed these dimensions. To address self-care it may be critical first to address BNAs that may be barriers to effective self-care for some CITs. It may be helpful for counselor educators and supervisors to integrate assessment and conceptualization of BNAs as well as dimensions of identity, micro sociopolitical contexts, and macro sociopolitical contexts throughout counseling curriculum. For example, counselor educators could facilitate discussion around BNAs and the related context of systemic oppression and resource inequalities, offer CITs tools for self-assessment, and discuss campus-based or other resources available for students. In parallel, counselor educators can teach CITs how to assess and address BNAs with clients. Each of these suggestions point to the need for further research to inform related best practices in counselor education, supervision, and practice.

We recommend that researchers and counselor educators continue to investigate CITs' BNAs and experiences with sociopolitical and public health crises with a focus on representative and targeted samples, including BIPOC, LGBTQ+, and R/S/EW minority CITs, supervisors, and counselors. When investigating constructs like stress, compassion fatigue, and burnout among CITs, it would be helpful to investigate the potential role that BNAs and related resource inequities may play in the disproportionately higher rates of burnout seen

among minoritized CITs. Additionally, further research is needed to inform how counselor educators can counter systemic oppression, and relatedly, what strategies may be most useful for counselor educators to address BNAs and ameliorate resource inequities among current and prospective students.

Limitations

The limitations of this study include that we are unable to determine a response rate, we cannot assess how participants differ from those who chose not to participate, and we cannot verify the accuracy of this self-reported data. The ability to calculate and achieve a high response rate in survey-based research is used to support nonresponse bias validity; despite this, researchers report that even results from low response rate surveys may still accurately represent the population and should not be dismissed (Meterko et al., 2015). Although the lack of a response rate is a significant limitation in this study, the results remain worthy of consideration. Another significant limitation is that we did not establish evidence for reliability for the current sample of the COVID-19 category on the BNA index. For an index, the low alpha found for the COVID-19 items does not indicate poor reliability but rather that the reliability of these index items cannot be established by assessing internal consistency (DeVellis & Thorpe, 2022). Given our study aims, the descriptive nature of the study, and that in our analysis we report these items as individual items, the total number (per category and total index) endorsed, we chose to include these COVID-19 items in our analysis. Further, given that much of the current sample identified as white, heterosexual, and cisgender, the generalizability of our findings across CITs is limited. The diversity represented in the smallest cluster may suggest that the proportion of CITs per cluster may differ in a more diverse sample or even shift the cluster solution entirely.

Conclusion

The purpose of this study was to investigate CITs' BNAs amidst COVID-19 and sociopolitical crises. CITs experience a range of BNAs, and cluster analysis revealed differences in BNA types and totals with differences in CITs' demographics across some clusters. Identifying CITs' BNAs and helping to address them may be an essential step for supervisors and educators, helping to reduce CIT stress and burnout while improving educational and clinical outcomes. Counselor educators and supervisors must acknowledge the potential for CITs of minoritized identities and backgrounds to experience greater numbers of BNAs compared to their cultural/identity majority counterparts. It is possible that addressing CIT basic needs security could help to advance social justice in counselor education, promote diversity in the counseling field, reduce CIT burnout, support CIT learning outcomes, and ensure greater benefit to those in CITs' current and future caseloads.

References

Allwood, M., Ghafoori, B., Salgado, C., Slobodin, O., Kreither, J., Waelde, L. C., Larrondo, P., & Ramos, N. (2022). Identity-based hate and violence as trauma: Current research, clinical implications, and advocacy in a globally connected world. *Journal of Traumatic Stress*, 35(2), 1–13. https://doi.org./10.1002/jts.22748

Bacher, J., Wenzig, K., & Volger, M. (2004). SPSS two-step cluster—A first evaluation (pp. 1–31). Universität Erlangen-Nürnberg, Wirtschafts- und Sozialwissenschaftliche Fakultät, Sozialwissenschaftliches Institut Lehrstuhl für Soziologie. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-327153

Bardhoshi, G., Um, B., & Erford, B. T. (2021). Conducting a cluster analysis in counseling research: Four easy steps. *Counseling Outcome Research and Evaluation*, *12*(1), 54–62. https://doi.org/10.1080/21501378.2020.1768522

Cappelletti, E. R., Kreuter, M. W., Boyum, S., & Thompson, T. (2015). Basic needs, stress and the effects of tailored health communication in vulnerable populations. *Health Education Research*, *30*(4), 591–598. https://doi.org/10.1093/her/cyv033

Center for Disease Control and Prevention. (2022). COVID-19: Your health. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/your-health/index.html

Chiu, T., Fang, D., Chen, J., Wang, Y., & Jeris, C. (2001). A robust and scalable clustering algorithm for mixed type attributes in large database environment. In *Proceedings of the seventh ACM SIGKDD international conference on knowledge discovery and data mining* (pp. 263–268).

- Clark, M., Ausloos, C., Delaney, C., Waters, L., Salpietro, L., & Tippett, H. (2020). Best practices for counseling clients experiencing poverty: A grounded theory. *Journal of Counseling* & *Development*, 98(3), 283–294. https://doi.org/10.1002/jcad.12323
- Council for Accreditation of Counseling and Related Educational Programs. (2018). *CACREP vital statistics 2017: Results from a national survey of accredited programs*. Author.
- Crockett, J. E., & Ivers, N. N. (2022). Counselors in training educational impacts and perceived adequacy of supports amidst COVID-19. *Journal of Technology in Counselor Education and Supervision*, 2(2), Article 5. https://doi.org/10.22371/tces/0021
- Crockett, J. E., & Ivers, N. N. (2023). *Conceptualizing and assessing basic needs adversities*. [Manuscript in preparation].
- Dalmaijer, E. S., Nord, C. L., & Astle, D. E. (2022). Statistical power for cluster analysis. *BMC Bioinformatics*, 23(1), 1–28. https://doi.org/10.1186/s12859-022-04675-1
- DeVellis, R. F., & Thorpe, C. T. (2022). Scale development: Theory and applications (5th ed.). SAGE.
- Federal Bureau of Investigation. (2021). *Hate crime statistics*, 2020. *USA*. https://crime-data-explorer.fr.cloud.gov/pages/explorer/crime/hate-crime
- Fish, J. N., & Mittal, M. (2021). Mental health providers during COVID-19: Essential to the U.S. public health workforce and in need of support. *Public Health Reports*, *136*(1), 14–17. https://doi.org/10.1177/0033354920965266
- Goldrick-Rab, S., Baker-Smith, C., & Looker, E. (2019). *Guide to assessing basic needs insecurity in higher education*. The Hope Center for College, Community, and Justice. Philadelphia, PA. https://tacc.org/sites/default/files/documents/2019-11/realcollege-guide_assessing_basic_needs_insecurity.pdf
- Harrichand, J.J.S., Litam, S.D.A., & Ausloos, C. D. (2021). Infusing self-care and wellness into CACREP curricula: Pedagogical recommendations for counselor educators and counselors during COVID-19. *International Journal for the Advancement of Counselling*, 1–14. https://doi.org/10.1007/s10447-021-09423-3
- Harris, P., Hines, E., & Mayes, R. (2021). Introduction to the Special Issue: Anti-racist counselor education. *Teaching and Supervision in Counseling*, 3(2). https://doi.org/10.7290/tsc030201
- Ieva, K., Hannon, M. D., & Vereen, L. G. (2021). The intentionality of confronting racism, systemic oppression, and cyclical trauma in counselor education: A self-study. *Teaching and Supervision* in Counseling, 3(2), 109–124. https://doi.org/10.7290/tsc030211
- Katz-Wise, S. L. (2020). *COVID-19* and the LGBTQ+ community: Rising to unique challenges. Harvard Health. https://www.health.harvard.edu/blog/covid-19-and-the-lgbtq-community-rising-to-unique-challenges-2020043019721
- Ko, H., & Lee, S. M. (2021). Effects of imbalance of self- and other-care on counselors' burnout. *Journal of Counseling & Development*, 99(3), 252–262. https://doi.org/10.1002/jcad.12372
- Lara, J. A., Lizcano, D., Rampérez, V., & Soriano, J. (2020). A method for outlier detection based on cluster analysis and visual expert criteria. *Expert Systems*, 37(5), e12473. https://doi.org/10.1111/exsy.12473
- Litam, S.D.A., & Oh, S. (2020). Ethnic identity and coping strategies as moderators of Covid-19 racial discrimination experiences among Chinese Americans. *Counseling Outcome Research and Evaluation*, 13(2), 101–115. https://doi.org/10.1080/21501378.2020.1814138

- Matulevicius, S. A., Kho, K. A., Reisch, J., & Yin, H. (2021). Academic medicine faculty perceptions of work–life balance before and since the COVID-19 pandemic. *JAMA Network Open*, *4*(6), e2113539–e2113539.
- https://doi.org/10.1001/jamanetworkopen.2021.13539
 Meterko, M., Restuccia, J. D., Stolzmann, K., Mohr, D., Brennan, C., Glasgow, J., & Kaboli, P. (2015). Response rates, nonresponse bias, and data quality. *Public Opinion Quarterly*, 79(1), 130–144. https://doi.org/10.1093/poq/nfu052
- Meyers, L. (2017). Making the counseling profession more diverse. *Counseling Today*. https://ct.counseling.org/2017/10/making-counseling-profession-diverse/
- Mitchell, M., & Binkley, E. (2021). Self-care: An ethical imperative for anti-racist counselor training. *Teaching and Supervision in Counseling*, 3(2), 39–52. https://doi.org/10.7290/tsc030205
- Moore, C. M., Andrews, S. E., & Parikh-Foxx, S. (2020). "Meeting someone at the edge": Counselors' experiences of interpersonal stress. *Journal of Counseling & Development*, 98(2), 123–135. https://doi.org/10.1002/jcad.12307
- National Alliance on Mental Health. (2021). *Mood disorder survey*. https://nami.org/Support-Education/Publications-Reports/Survey-Reports/2021-Mood-Disorder-Survey
- Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2021). The implications of COVID-19 for mental health and substance use. *KFF*. https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/
- Sen, A. (2008). Violence, identity and poverty. *Journal of Peace Research*, 45(1), 5–15. https://doi.org/10.1177/0022343307084920
- Shullman, S. L. (2020). APA press release: High-profile racial incidents taking heavy psychological toll. https://www.apa.org/news/press/releases/2020/05/racism-pandemic
- Sugarman, D. B., Nation, M., Yuan, N. P., Kuperminc, G. P., Hassoun Ayoub, L., & Hamby, S. (2018). Hate and violence: Addressing discrimination based on race, ethnicity, religion, sexual orientation, and gender identity. *Psychology of Violence*, 8(6), 649–656. https://doi.org/10.1037/vio0000222
- The Hope Center for College, Community, and Justice. (2021). #Realcollege 2021: Basic needs insecurity during the ongoing pandemic. Philadelphia, PA. http://dx.doi.org/10.34944/dspace/6934
- Tuğsal, T. (2020). The mediator role of social support amid work—life balance and burnout of employees in the context of coronavirus pandemic precautions and social isolation.. *Beykent Üniversitesi Sosyal Bilimler Dergisi*, *13*(1), 6–18. https://doi.org/10.18221/bujss.718383
- Van der Kaap-Deeder, J., Soenens, B., Ryan, R. M., & Vansteenkiste, M. (2020). Manual of the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS). Ghent University, Belgium.
- Van Dorn, A., Cooney, R. E., & Sabin, M. L. (2020). COVID-19 exacerbating inequalities in the US. *The Lancet*, 395, 1243– 1244. https://doi.org/10.1016/S0140-6736(20)30893-X
- Vansteenkiste, M., Ryan, R. M., & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion*, 44, 1–31. https://doi.org/10.1007/s11031-019-09818-1
- Washington, A. R., & Henfield, M. S. (2019). What do the AMCD multicultural and social justice counseling competencies mean in the context of black lives matter? *Journal of Multicultural Counseling and Development*, 47(3), 148–160. https://doi.org/10.1002/jmcd.12138

Wilson, J. M., Lee, J., Fitzgerald, H. N., Oosterhoff, B., Sevi, B., & Shook, N. J. (2020). Job insecurity and financial concern during the COVID-19 pandemic are associated with worse mental health. *Journal of Occupational and Environmental Medicine*, 62(9), 686–691. https://doi.org/10.1097/JOM.00000000000001962

World Health Organization. (2020). *Impact of COVID-19 on people's livelihoods, their health and our food systems*. https://www.who.int/news/item/13-10-2020-impact-of-covid-19-on-people%27s-livelihoods-their-health-and-our-food-systems

Xiong, J., Lipsitz, O., Nasri, F., Lui, L.M.W., Gill, H., Phan, L.,
Chen-Li, D., Iacobucci, M., Ho, R., Majeed, A., & McIntyre, R.
S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, 277, 55–64. https://doi.org/10.1016/j.jad.2020.08.001

Author Information

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

The author(s) reported no financial support for the research, authorship, and/or publication of this article.

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How to Cite this Article:

Crockett, J. E., & Ivers, N. N. (2023). Basic needs adversities among counselors in training: A cluster analysis. *Teaching and Supervision in Counseling*, *5*(1), 26–39. https://doi.org/10.7290/tsc057pio