




Pandemic Issues: Faculty Value Alignment and Burnout


Eu Gene Chin, PhD

Biola University, La Mirada, California, United States

 <https://orcid.org/0000-0003-2615-9223>

Brooke Hildebrand Clubbs, EdD

Southeast Missouri State University, Cape Girardeau, Missouri, United States

 <https://orcid.org/0000-0001-7133-7063>

Contact: eu.gene.chin@biola.edu

Abstract

Burnout among faculty members impacts physical, cognitive, and emotional functioning and has negative socioeconomic consequences downstream. Prior to the pandemic, faculty members were already reporting high levels of burnout, which is characterized by depersonalization, emotional exhaustion, and a lack of personal accomplishment. Previous research reported that value incongruence functions as one of the strongest predictors of depersonalization (and subsequently) turnover intention. This study provides a snapshot of the value alignment and burnout of faculty at a regional public university in the months following the pandemic-induced pivot to remote learning. Results from our survey of faculty members ($N = 58$) suggest a concerning trend for a subset of faculty members who greatly identify with the values of their workplace and are severely impacted by COVID-19 related stressors. For these people, higher alignment with values predicts higher depersonalization. These results raise the possibility of moral injury among educators, who may experience a value conflict between maintaining the rigor they previously required and demonstrating radical empathy to students living through a pandemic. These results have implications for college administrators, instructors, and educational researchers.

Keywords: *COVID-19, depersonalization, faculty, moral injury, trauma, value alignment*

Date Submitted: October 7, 2021 | **Date Published:** April 25, 2022

Recommended Citation

Chin, E. G., & Clubbs, B. H. (2022). Pandemic issues: Faculty value alignment and burnout. *Journal of Educational Research and Practice*, 12, 51–62. <https://doi.org/10.5590/JERAP.2022.12.1.04>

Introduction

Faculty's experience in higher education may now be divided into "BP" and "AP:" before and after the pandemic. As Brazeau et al. (2020) observed, "The COVID-19 pandemic has shaken the key assumptions and beliefs that serve as the foundation of higher education" (p. 688). Prior to the pandemic, faculty members were already reporting high levels of emotional exhaustion (Clubbs et al., 2020). The seriousness of burnout cannot be overstated—it manifests in physical symptoms, such as frequent headaches, back pain, insomnia,

Note: We thank Dr. Floyd Lockhart in the Office of Instructional Technology at Southeast Missouri State University for assisting with sending the recruitment e-mails to faculty who taught in the spring semester of 2020. We thank Michael Heath from the Center for Writing Excellence for his diligent proofreading of this paper.

and being more susceptible to catching colds or flu (Belcastro & Gold, 1983; Hock, 1988), as well as cognitive impairment (Golonka et al., 2017). In addition to physical consequences, burnout has serious socioeconomic impacts as well, such as reduced productivity levels and increased turnover (Schaufeli et al., 1993; Lee, 2019).

Maslach et al. (2001) postulate that the best and most idealistic workers experience burnout—“You have to have been on fire to burn out” (p. 405). This interpretation implies that dedicated people commit too much in support of their ideals, which leads to emotional exhaustion, depersonalization, and the feeling of a lack of personal achievement when their sacrifice is insufficient to achieve their goals. Studies with teachers and university faculty have shown that exhaustion and depersonalization are influenced by both organizational and individual variables (Mojsa-Kaja et al., 2015).

Research investigating burnout’s organizational contexts has identified certain qualities of work settings that aggravate or alleviate burnout. Leiter and Maslach (1999) proposed that the primary themes arising from these research studies fit readily into six areas of work life to provide a model for the organizational context of burnout: workload, control, reward, community, fairness, and values. Incongruities in any of the six areas of work life are predictive of burnout (risk factors). Value incongruence between the employer and employee, in particular, has a downstream effect of increasing depersonalization, such as work being perceived as personally irrelevant (Leiter & Maslach, 1999, Jimenez & Dunkl, 2017), which is one of the strongest predictors of increased turnover intention (Leiter & Maslach, 2009; Leiter et al., 2009).

Unfortunately, COVID-19 created a set of extraordinary circumstances for higher education faculty. First, in the spring of 2020, faculty were forced to move their instruction online on short notice, a process described as “Panic-gogy” by Kamenetz (2020). Frustrations related to rapidly changing policies and plans (e.g., hiring freezes, revisions in tenure requirements), increased workload and decreased resources (e.g., more hours spent supporting students as opposed to pedagogy), and increased uncertainty related to work and life (e.g., living at work rather than working from home) became the new normal for faculty members (Sacco & Kelly, 2021). In addition, faculty members were faced with maintaining their institutions’ standards and deadlines while their students were struggling with internet access, different living and work situations, and the effect of the pandemic on their physical, mental, and social well-being.

Purpose of the Study

To date, no study has examined whether value incongruence would still cause increased depersonalization in the context of COVID-19-related stressors. Due to the ongoing crisis precipitated by COVID-19, trauma- and stressor-related symptoms may inadvertently modulate such a relationship as individual and organizational-level coping resources are overburdened and overtaxed. The importance of examining such a relationship is underscored by increased turnover intentions (i.e., change jobs, leave higher education, or retire early) among faculty members across the country due to the negative sequelae caused by COVID-19 (The Chronicle of Higher Education, 2020). Using a simple moderation model, we aimed to examine whether trauma- and stress-symptoms caused by COVID-19-related stressors would moderate the relationship between value incongruence and depersonalization.

Methods

Procedure

The study was conducted at a regional, mid-sized university over the course of three weeks (June 30, 2020—July 20, 2020). Faculty members were recruited through email, which provided a link to the informed consent page containing details of the study, including the risks and benefits of participation, participant

confidentiality, voluntary nature of participation, contact information of the investigators, and other information pertaining to the nature of the study. The study was approved by the Institutional Review Board at the institution at which it was conducted. Faculty members who volunteered to participate indicated their faculty status (e.g., non-tenured, tenured) and previous attendance (if any) in a pedagogical workshop or event organized by the university's Center for Teaching and Learning. Participants also provided demographic information and indicated if they consented to the inclusion of their data in this study. Lastly, participants completed a battery of questionnaires that included the Areas of Worklife Survey, Maslach's Burnout Inventory, an adapted Life Events Checklist, and the PTSD Symptom Checklist for DSM-5.

Participants

Data collection ended with a total of 95 participants. However, some responses were removed for the following reasons: two participants did not consent for the researchers to use their data, seven participants never attended a pedagogy-focused professional development event organized by the university's Center for Teaching and Learning, one participant did not provide information on workshop/event attendance, 19 participants were administrative or adjunct faculty members, one participant did not indicate if they were an administrative or adjunct faculty member, and seven participants had 100% missing data on variables analyzed in this paper. After the aforementioned participants were removed, this study had a total of 58 participants.

We limited responses to those who had attended at least one of the pedagogy-focused workshops because the concept of burnout implies that they were once "on fire" or valued teaching at some point in time (Maslach et al., 2001). Limiting responses to these individuals helped to increase the likelihood that our sample was representative of the population of interest. These participants appeared to represent faculty across various types of appointments: 37.9% ($n = 22$) were associate or full professors, 27.6% ($n = 16$) were assistant professors, and 34.5% ($n = 20$) were renewable non-tenure-track faculty members. Similarly, they represented faculty members across all the age categories: 22.4% ($n = 13$) were 30–39 years of age, 32.8% ($n = 19$) were 40–49 years of age, 13.8% ($n = 8$) were 50–59 years of age, 22.4% ($n = 13$) were 60 or over 60 years of age. The majority of faculty members were white (87.9%; $n = 51$) and approximately one-third of participants (29.3%; $n = 17$) indicated that they had dependents (child or vulnerable adult) who lived at home with them.

Instrumentation

Areas of Worklife Survey (AWS)

To measure alignment with values (i.e., the degree to which personal goals are consistent with the organization's goals), participants completed the 29-item Areas of Worklife Scale (AWS; Leiter & Maslach, 2004). The instrument is composed of six subscales: workload, control, reward, community, fairness, and values. The values subscale includes positively worded items of congruence, such as, "my values and the organization's values are alike." Respondents indicated their degree of agreement on a 5-point Likert-type scale, ranging from 1 (strongly disagree) through 3 (hard to decide) to 5 (strongly agree). Respondent ratings of more than 3.00 points suggest more perceived alignment between the values of the workplace and respondent. In a large sample of participants representing various occupations (e.g., university employees, postal workers), national contexts (e.g., United States, Finland) and languages (i.e., English, Finnish), the variability in scores produced by the measure was explained well by a six-factor structure (Leiter & Maslach, 2003). Moreover, the thematic elements from qualitative comments corresponded with the quantitative scores obtained from the measure—further supporting the divergent validity of each factor score. Cronbach alpha values for all the scales were above 0.70 (Leiter & Maslach, 2003). In our study, the values subscale produced a Cronbach's alpha of .82, which is considered very good (DeVellis, 2017).

Maslach's Burnout Inventory-Educators Survey (MBI-ES)

To measure depersonalization (i.e., having an impersonal response toward recipients of one's instruction), participants completed the 22-item MBI-Educators Survey (MBI-ES) published by Maslach et al. (1986). The MBI-ES is composed of three scales: (1) depersonalization, (2) emotional exhaustion (being emotionally overextended and exhausted by one's work), and (3) personal accomplishment (feelings of competence and successful achievement in one's work). Participants responded to items on a 6-point Likert-type scale ranging from 0 (Never) through 3 (A few times a month) to 5 (Every day) to indicate how frequently each statement applied to them. Higher scores on the depersonalization subscale indicate a higher tendency to treat one's students as impersonal objects (I/It relationship) rather than as individuals with the fullness of humanity (I/Thou relationship). The MBI instrument is commonly used by researchers interested in measuring burnout-related indices, and good psychometric properties have been reported in reliability (Wheeler et al., 2011). In a group of employees receiving therapy for work-related problems, global fit indices provided evidence for a three-factor structure underlying the dispersion of scores (Schaufeli et al., 2001). Among these individuals, three aforementioned factors evidenced discriminant validity between burnout constructs and a broad range of mental symptoms (e.g., anxiety, depression) and personality traits (e.g., hostility, interpersonal sensitivity). Cronbach alpha values ranged from respectable ($\alpha = .75$; personal accomplishment) to very good ($\alpha = .89$; emotional exhaustion), except for the depersonalization subscale ($\alpha = .67$). Similarly, the depersonalization subscale used in this study produced a Cronbach's alpha value of .68, which is considered minimally acceptable (DeVellis, 2017).

Adapted Life Events Checklist for DSM-5 (LEC-5)

To help respondents identify an index stressor caused by COVID-19, we administered a revised Life Events Checklist for DSM-5 (LEC-5; Weathers et al., 2013a). Participants were shown a list of potentially traumatic and/or stressful events and asked to indicate if any of the listed events happened to them, happened to someone they personally knew, if they were not sure, or if the event simply did not apply to them, a process similar to the original measure. The list of events described to participants was adapted to reflect commonly reported stressors caused by COVID-19 as reported in literature, media, and anecdotal experience from the authors of this paper (e.g., lack of social support/connections, serious illness). Participants were also encouraged to describe a COVID-19-related stressor if it was not already listed in the measure. After reviewing the listed events and providing their responses, participants were asked to identify one event that bothers them the most and to briefly describe it prior to moving on to the next section of the battery. Gray et al. (2004) reported that items on the LEC for the DSM-IV demonstrated adequate test-retest reliability (7-week interval), showed convergent relationships with an established measure of potentially traumatic events (Traumatic Life Events Questionnaire; Kubany et al., 2000), and correlated strongly with trauma-specific measures of distress, such as the Clinician-Administered PTSD Scale (Blake et al., 1995). The LEC-5 differs from LEC only in one aspect: the LEC-5 contains an additional response option, "part of my job," which is consistent with changes made in the DSM-5. Network analysis with the LEC-5 identified three types of potentially traumatic event clusters (i.e., accidental traumas, victimization traumas, predominant death threats) with differential relations to mental health correlates such as posttraumatic stress disorder severity (Contractor et al., 2020).

PTSD Symptom Checklist for DSM-5 (PCL-5)

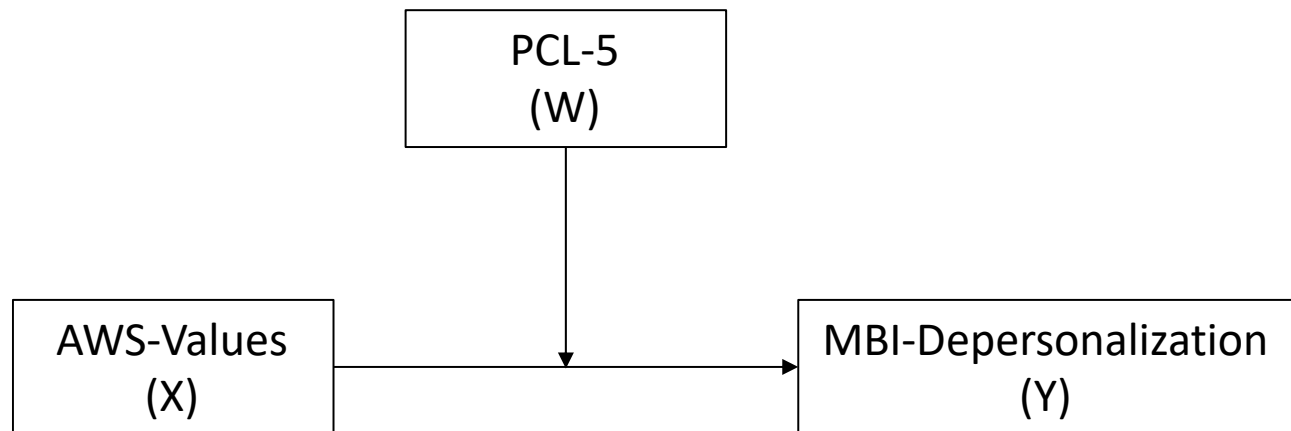
After participants completed the adapted Life Events Checklist (LEC), they completed the PTSD Symptom Checklist for DSM-5 (PCL-5; Weathers et al., 2013b). The PCL-5 is a 20-item self-report instrument frequently used by clinicians and researchers to screen and track symptoms caused by traumatic events. Participants were asked to keep in mind the COVID-19-related stressor that bothered them the most (identified in the adapted LEC) and indicate the degree to which they have experienced possible trauma- and/or stressor-related symptoms in the past month. Participants responded to items on a 4-point Likert-type scale, ranging from 0 (not at all), through 2 (moderately), to 4 (extremely). A sum of scores was obtained, with higher scores suggesting higher trauma- and/or stressor-related symptoms connected to the COVID-19

pandemic. Bovin et al. (2016) reported that the PCL-5 evidenced excellent internal consistency ($\alpha = .96$) and good test–retest reliability ($r = .84$; 30-day interval). In support of convergent and discriminant validity, the PCL-5 produced strong positive correlations with scores of depression, anxiety, somatization, disability, and functional impairment and weaker correlations with scores on measures of psychopathy and alcohol abuse (Bovin et al., 2016). In this study, the total score produced a Cronbach’s alpha of .95, which is considered very good (DeVellis, 2017).

Data Analysis

We examined a simple moderation model (Model 1; Hayes, 2017) to determine if the effects of work values alignment (AWS-Values; X) on the degree of depersonalization (MBI-Depersonalization; Y) would be moderated by stressor symptoms caused by COVID-19-related events (PCL-5; W). Figure 1 shows the conceptual relationships tested in this regression model. Both predictor variables were mean-centered prior to the construction of interaction. We used SAS software and PROCESS macro (Version 3.3; Hayes, 2017) to conduct the simple moderation analysis.

Figure 1. Conceptual Diagram for the Simple Moderation Model



Note: AWS-Values = Areas of Worklife Survey–Values Subscale; PCL-5 = PTSD Checklist for DSM-5; MBI-Emotional Exhaustion = Maslach Burnout Inventory-Depersonalization Subscale

Missing Data Patterns

Two of the three variables, the AWS-values subscale (5.2%) and PCL-5 (12.1%), had small percentages of missing data. The MBI-depersonalization scale had no missing data. This missing data pattern appeared to be not missing at random (NMAR) because Little’s missing completely at random test was statistically significant ($\chi^2 = 37.02$, $df = 20$, $p = .01$). To address this underlying data mechanism and maximize power, we imputed data using multiple imputation procedures (Enders, 2010). Blimp Version 1.0 (Enders et al., 2018; Keller & Enders, 2017) was used to conduct the multiple imputation. This software uses a Markov Chain Monte Carlo (MCMC) algorithm to estimate the regression model parameters and iteratively update imputations based on these estimates. In other words, based on the pattern of scores observed in the dataset, the software creates and iteratively estimates a regression model (and corresponding regression parameters) that best accounts for the observed patterns of scores. This iterative process is repeated until regression parameters achieve stable distributions. For this study, we instructed the software to utilize a burn-in and thinning interval of 400

MCMC cycles.¹ In simpler terms, the software was permitted to engage in the aforementioned recursive process 400 times before producing an imputed dataset. Because PROCESS does not support analysis and pooling routines (Hayes, 2020), one imputed dataset was randomly selected for the simple moderation analysis.

Data Screening and Regression Diagnostics

In preparation for the analysis, responses were screened for Cook's distance, studentized residuals, and leverage values. Leverage values indicate the deviance of a particular observation's predictors from the center of predictor space (i.e., multivariate outlier). Studentized residuals indicate the distance between the actual score and predicted Y value based on the regression line. Cook's distance provides an estimate of how much model parameters change when the observation is removed from the analysis (i.e., an index of influence). None of the responses were flagged for any of the three indices. Residual and normal probability plots did not suggest violations of normality, linearity, or homogeneity of variance assumptions. Condition indices and variance inflation factor values suggested that the predictors were not collinear with each other in the simple moderation model.

Results

The overall regression model involving AWS-values (X) and PCL-5 (W) to predict MBI-Depersonalization (Y) was statistically significant ($R^2 = .20$, $F(3, 54) = 4.49$, $p < .01$). More specifically, the effect of AWS-value (X) on MBI-Depersonalization (Y) was moderated by PCL-5 (W) scores ($b_3 = .005$, $t(54) = 2.90$; Table 1). This simple moderation model explained 12.50% of the variance in depersonalization scores (R^2 change = .13, $F(1, 54) = 8.40$, $p < .01$). Because this test for interaction was statistically significant, we probed the interaction to determine where in the distribution of PCL-5 (W) scores AWS-values (X) scores exert an effect on Depersonalization (Y) and where they do not demonstrate a significant effect.

Table 1. Regression Coefficients for the Simple Moderation Model

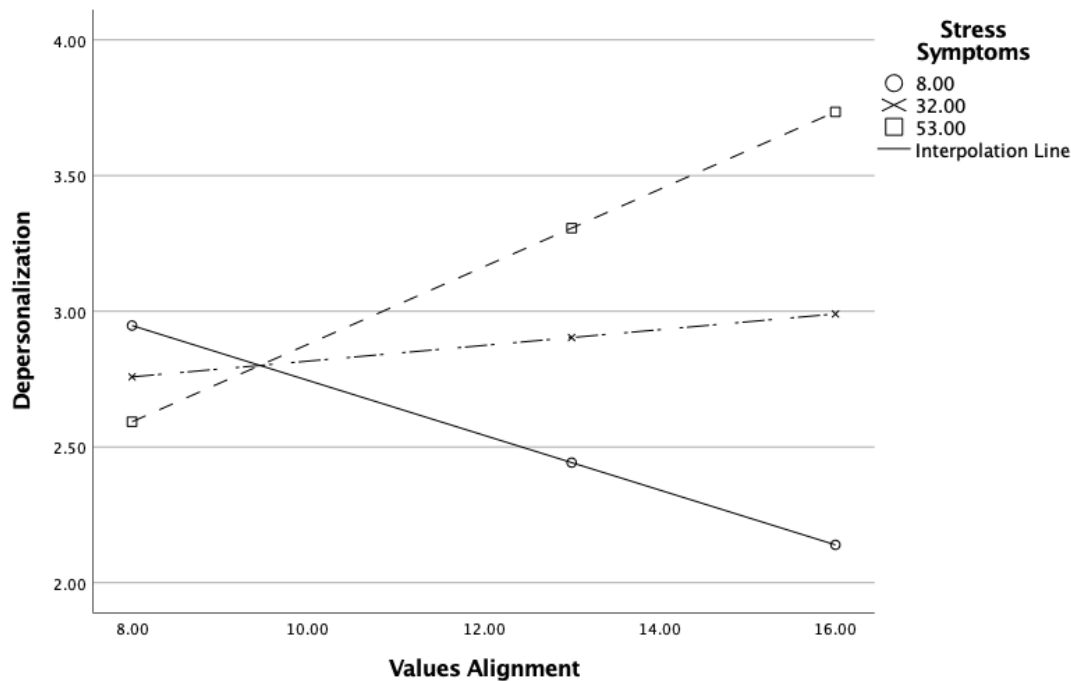
Predictors	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
AWS-Values (X)	-0.04	0.04	-0.85	.40	[-0.12, 0.05]
PCL-5 (W)	0.02	0.008	2.06	.04	[0.005, 0.03]
AWS-Values * PCL-5 (X*W)	0.005	0.002	2.90	.005	[0.001, 0.009]

Note: AWS-Values = Areas of Worklife Survey—Values Subscale; PCL-5 = PTSD Checklist for DSM-5; CI = confidence interval.

The Johnson-Neyman technique (Hayes, 2017) was used to ascertain the point(s) in which the conditional effect AWS-Values (X) may transition from non-statistical significance to statistical significance. When PCL-5 (W) scores were less than 9 points, the conditional effect of AWS-Values (X) on Depersonalization (Y) was statistically significantly different from zero. As AWS-Values (X) goes up, Depersonalization (Y) scores go down. Similarly, the conditional effect of AWS-Values (X) on Depersonalization (Y) was statistically significantly different from zero when PCL-5 (W) scores were more than 53 points. However, the pattern of relationship reverses—as AWS-Values (X) goes up, Depersonalization (Y) scores go up as well. Figure 2 displays the conditional effect of AWS-Values (X) on Depersonalization (Y) scores as a function of stress symptoms due to COVID-19-related stressors.

¹ Potential Scale Reduction (PSR), which is a measure of similarity in imputations generated from two separate MCMC runs, was used to guide this determination. As recommended by Enders (2010), PSR $1 < 1.05$ was used as the reference point to estimate the number of MCMC cycles needed to achieve stable imputations and regression parameters. Readers interested in learning more about multiple imputation are encouraged to read Enders (2010).

Figure 2. *The Conditional Effect of AWS-Values on MBI-Depersonalization as Moderated by Stress Symptoms Due to COVID-19-Related Events*



Note: When PTSD symptoms are below 9 points, greater alignment with values predicts less depersonalization. When PTSD symptoms are above 52 points, however, greater alignment with values predicts more depersonalization. MBI-Depersonalization = Maslach Burnout Inventory-Depersonalization Subscale; AWS-Values = Areas of Worklife Survey—Values Subscale; PCL-5 = PTSD Checklist for DSM-5.

Discussion

The results of this study offer some interesting insights into the lived experience of faculty members. First, the disparate effects of COVID-19 related stressors appear to be evident in our sample. Approximately 10% of faculty members indicated that they were not at all affected by COVID-19-related stressors and 40% of faculty members reported COVID-19-related stress levels suggestive of meeting full criteria for PTSD (> 30 points; National Center for PTSD, 2021). The heterogeneity of PCL-5 scores echoes the findings reported by other research groups. In a recent survey conducted in October 2020 with 1,122 faculty members at four-year and two-year institutions around the country, researchers noted the disparate effects of COVID-19 on faculty members, with additional stresses experienced by female professors and other minority member faculty members (The Chronicle of Higher Education, 2020).

Second, the trauma- and stressor-related symptoms caused by COVID-19-related events appear to moderate the linkage between workplace values alignment and depersonalization (or cynical attitudes toward work). Consistent with previous research conducted prior to the pandemic (Leiter & Maslach, 1999; Jimenez & Dunkl, 2017), higher alignment with values predicted less depersonalization for faculty members not severely affected by COVID-19 related stressors. On the other hand, the relationship between values and depersonalization appears to reverse when faculty members start to experience intense trauma- and/or stressor-related symptoms related to COVID-19 events. A person's heart and sincere connection with their job arguably reside in the space of congruence between workplace and personal ideals (Leiter & Maslach, 2003). Unfortunately, faculty members who greatly identify with the ideals, values, and mission of their workplace,

but are severely impacted by COVID-19 related stressors, may be experiencing some type of dissonance, causing them to emotionally distance themselves from their students and workplace environment. As we contemplated the moderation effects of trauma- and stressor-related symptoms caused by the pandemic, we wondered if moral injury could be contributing to increased levels of depersonalization (Elliott, 2020).

Previously the concept of moral injury was only discussed in the context of combat trauma and medical staff involved in end-of-life care; however, workplace climate research suggests it takes place to a lesser degree in other employment situations due to job overload, stress, and ethical violations (Thompson, 2018). While burnout can feel like a personal failing, moral injury is different because someone can acknowledge that they are trying to do the right thing, but are faced with other things, such as policies and lack of workplace resources, that they believe they can do little about (Elliot, 2020). The distinction between moral injury and burnout could mean a world of a difference for someone who blames themselves for feeling like they are mentally exhausted, discouraged, and emotionally distant from their workplace environment. The concept of moral injury makes it clear that debilitating burnout symptoms can still be felt even though faculty may be completely competent and able to still see value in their overall role in higher education.

Because the etiology of moral injury can be traced back to a lack of workplace resources and supports (such as the stretching and/or removal of resources due to the pandemic), reducing it requires systemic change. Frequently, individual solutions (self-care) or temporary distractions (free “welcome back” snacks) are offered to mitigate burnout instead of systems-level changes. In the instance of higher education, this change could look like administration encouraging empathy and providing faculty with the means to practice it. Just as some institutions are adjusting research and scholarship expectations on annual reviews for faculty (Brazeau et al., 2020), administrators could adjust policies to make it easier for faculty to issue pass/fail grades and for academic requirements for scholarships and financial aid to be temporarily relaxed. Knowing that students have a safety net could eliminate the moral conflict faculty experience when they know they cannot in good conscience give a student an A or pass a student who has not achieved the required learning outcomes, but also don't want the students to lose their scholarships or financial aid. The psychological and economic ramifications of the pandemic for students are ongoing, so these policies may need to be adjusted for some time.

Limitations

The findings of our study are limited by our small sample size. Although data collection ended with a total of 95 participants, approximately 39% ($n = 37$) of participant data were removed for practical (e.g., withdrew consent) and theoretical reasons. For example, approximately 27% ($n = 26$) of responses were removed in order to increase the likelihood that our sample was representative of the population of interest (i.e., full-time instructors who were once “on fire”). Thus, although we lost participants in numeric terms, the removal of these participants helped us to obtain a representative sample of our population of interest. Moreover, multiple imputation procedures, often considered the gold standard in dealing with missing data patterns, were used to mitigate further missing data issues and maximize power in our moderation analysis. As a sensitivity analysis, the moderation analysis was re-run without imputed data and obtained virtually identical results. Overall, steps were taken to increase the rigor of our study in light of limitations associated with the sample size. Future research should nonetheless determine if similar results can be obtained by independent replication efforts.

In addition, the results of this study may be limited in terms of temporal validity. While the “panic-gogy” began in March 2020, faculty were not contacted until 6 weeks after the spring semester. This timing was not ideal, as it required faculty to reflect on experiences rather than responding to what they were currently experiencing; however, logistically, it was the earliest the researchers were able to provide the survey. In relevant sections of the survey, we instructed participants to respond to the items with the direction, “when you think about your job, especially from March 2020 to now,” in order to mitigate the lack of temporal

validity. Providing specificity to respondents in regard to the time window relevant to the construct(s) of interest is consistent with best practices delineated by DeVellis (2017).

Conclusion

This study provides a snapshot of the value alignment and burnout of faculty at a regional public university in the months following the pandemic-induced pivot to remote learning. Prior to the pandemic, research studies reported that value incongruence functions as one of the strongest predictors of depersonalization (and subsequently) turnover intention. The results of our study suggest that trauma and/or stress symptoms due to COVID-19 may moderate such a linkage, prompting us to consider other factors that may contribute to depersonalization. We suspect that there may be a value conflict between maintaining pre-pandemic norms and adapting to the needs of students during a pandemic. Moral injury is discussed as a possible construct to examine in future research in light of the unique circumstance caused by COVID-19. The limitations of such a snapshot in time include the small sample size of our study, which limits the generalizability of our results. However, because faculty burnout is becoming a greater concern in higher education (The Chronicle of Higher Education, 2021), distinguishing it from moral injury, as well as identifying ways to mitigate both, is worthy of consideration.

References

- Brazeau, G. A., Frenzel, J. E., & Prescott, W. A., Jr. (2020). Facilitating wellbeing in a turbulent time. *American Journal of Pharmaceutical Education, 84*(6), 688–691. <https://doi.org/10.5688/ajpe8154>
- Belcastro, P. A., & Gold, R. S. (1983). Teacher stress and burnout: Implications for school health personnel, *53*(7), 404–407. <https://doi.org/10.1111/j.1746-1561.1983.tb03148.x>
- Blake, D. D., Weathers, F. W., Nagy, L. M., Kaloupek, D. G., Gusman, F. D., Charney, D. S., & Keane, T. M. (1995). The development of a Clinician-Administered PTSD Scale. *Journal of Traumatic Stress, 8*, 75–90. <https://doi.org/10.1002/jts.2490080106>
- Bovin, M. J., Marx, B. P., Gallagher, M. W., Schnurr, P. P., Weathers, F. W., Rodriguez, P., & Keane, T. M. (2016). Psychometric properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders—Fifth Edition (PCL-5) in veterans. *Psychological Assessment, 28*(11), 1379–1391. <https://doi.org/10.1037/pas0000254>
- Clubbs, B., Odegard-Koester, M., & Chin, E. (2020, November 19–22). *I get by with a little help from my ... colleagues: The crossroads of faculty burnout, social support, and institutional support* [Paper presentation]. 106th Annual Convention for the National Communication Association, Indianapolis, IN, United States.
- Contractor, A. A., Weiss, N. H., Natesan Batley, P., & Elhai, J. D. (2020). Clusters of trauma types as measured by the Life Events Checklist for DSM–5. *International Journal of Stress Management, 27*(4), 380–393. <https://doi.org/10.1037/stro000179>
- DeVellis, R. (2017). *Scale development* (4th ed.). SAGE Publications.
- Elliott, T. (2020). Understanding and avoiding burnout. *APTA Magazine, 12*(10), 20–31.
- Enders, C. K. (2010). *Applied missing data analysis*. Guilford Press.
- Enders, C. K., Keller, B. T., & Levy, R. (2018). A fully conditional specification approach to multilevel imputation of categorical and continuous variables. *Psychological Methods, 23*(2), 298–317. <https://doi.org/10.1037/met0000148>
- Golonka, K., Mojsa-Kaja, J., Gawlowska, M., & Popiel, K. (2017). Cognitive impairments in occupational burnout—Error processing and its indices of reactive and proactive control. *Frontiers in Psychology, 8*, 1–13. <https://doi.org/10.3389/fpsyg.2017.00676>
- Gray, M. J., Litz, B. T., Hsu, J. L., & Lombardo, T. W. (2004). Psychometric properties of the Life Events Checklist. *Assessment, 11*(4), 330–341. <https://doi.org/10.1177/1073191104269954>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.
- Hayes, A. F. (2020). The PROCESS macro for SPSS, SAS, and R. ProcessMacro.org. <http://processmacro.org/faq.html>.
- Hock, R. R. (1988). Professional burnout among public school teachers. *17*(2), 167–189. <https://doi.org/10.1177/009102608801700207>
- Jimenez, P., & Dunkl, A. (2017). The buffering effect of workplace resources on the relationship between the areas of work-life and burnout. *Frontiers in Psychology, 8*(12). <https://doi.org/10.3389/fpsyg.2017.00012>
- Kamenetz, A. (2020, March 19). “Panic-gogy” Teaching online classes during the coronavirus pandemic. National Public Radio. <https://www.npr.org/2020/03/19/817885991/panicgogy-teaching-online-classes-during-the-coronavirus-pandemic>.

- Keller, B. T., & Enders, C. K. (2017). *Blimp User's Manual (Version 1.0)*. Los Angeles, CA
- Kubany, E. S., Leisen, M. B., Kaplan, A. S., Watson, S. B., Haynes, S. N., Owens, J. A., & Burns, K. (2000). Development and preliminary validation of a brief broad-spectrum measure of trauma exposure: The Traumatic Life Events Questionnaire. *Psychological Assessment, 12*, 210–224.
<https://doi.org/10.1037/1040-3590.12.2.210>
- Lee, Y. H. (2019). Emotional labor, teacher burnout, and turnover intention in high-school physical education teaching. *European Physical Education Review, 15*(1), 236–253.
<https://doi.org/10.1177/1356336X17719559>
- Leiter, M. P., Frank, E., & Matheson, T. J. (2009). Demands, values, and burnout: Relevance for physicians. *Canadian Family Physician, 55*, 1224–1225
- Leiter, M. P., & Maslach, C. (1999). Six areas of worklife: A model of the organizational context of burnout. *Journal of Health and Human Services Administration, 21*(4), 472–489.
- Leiter, M. P., & Maslach, C. (2003). Areas of worklife: A structured approach to organizational predictors of job burnout. *Research in Occupational Stress and Well-Being, 3*, 91–134.
[https://doi.org/10.1016/S1479-3555\(03\)03003-8](https://doi.org/10.1016/S1479-3555(03)03003-8)
- Leiter, M. P., & Maslach, C. (2004). Areas of worklife: A structured approach to organizational predictors of job burnout. In P. Perrewé & D. C. Ganster (Eds.) *Research in occupational stress and well-being* (3rd ed., pp. 91–134). JAI Press; Elsevier.
- Leiter, M. P., & Maslach, C. (2009). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management, 17*, 331–339. <https://doi.org/10.1111/j.1365-2834.2009.01004.x>
- Maslach, C., Jackson, S. E., & Schwab, R. L. (1986). *MBI—Educators Survey*. www.mindgarden.com
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology, 93*(3), 498–512.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397–422.
- Mojša-Kaja, J., Golonka, K., & Marek, T. (2015). Job burnout and engagement among teachers—Worklife areas and personality traits as predictors of relationships with work. *International Journal of Occupational Medicine and Environmental Health, 28*(1), 102–119.
<https://doi.org/10.13075/ijomeh.1896.00238>
- National Center for PTSD. (2021). *PTSD Checklist for DSM-5 (PCL5)*.
<https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp>
- Sacco, T. L., & Kelly, M. M. (2021). Nursing faculty experiences during the COVID-19 pandemic response. *Nursing Education Perspectives, 42*(5), 285–290.
<https://doi.org/10.1097/01.nep.0000000000000843>
- Schaufeli, W. B., Maslach, C., & Marek, C. (1993). *Professional burnout: Recent developments in theory and research*. Routledge.
- Schaufeli, W. B., Bakker, A. B., Hoogduin, K., Schaap, C., & Kladler, A. (2001). On the clinical validity of the Maslach Burnout Inventory and the burnout measure. *Psychology and Health, 16*, 565–582.
<https://doi.org/10.1080/08870440108405527>
- The Chronicle of Higher Education. (Ed.). (2021). *Burned out and overburdened: How to support the faculty*.
<https://store.chronicle.com/products/burned-out-and-overburdened>

- The Chronicle of Higher Education. (2020). *On the verge of burnout: COVID-19's impact on faculty well-being and career plans*. https://connect.chronicle.com/rs/931-EKA-218/images/Covid%26FacultyCareerPaths_Fidelity_ResearchBrief_v3%20%281%29.pdf
- Thompson, L. J. (2018). Moral injury. In R. W. Kolb (Ed.), *The Sage encyclopedia of business ethics and society* (2nd ed.). Sage Publications.
- Wheeler, D. L., Vassar, M., Worley, J. A., & Barnes, L. L. B. (2011). A reliability generalization meta-analysis of coefficient alpha for the Maslach Burnout Inventory. *Educational and Psychological Measurement*, 71(1), 231–244. <https://doi.org/10.1177/0013164410391579>
- Weathers, F. W., Blake, D. D., Schnurr, P. P., Kaloupek, D. G., Marx, B. P., & Keane, T. M. (2013a). *The Life Events Checklist for DSM-5 (LEC-5)*. Instrument available from the National Center for PTSD at ptsd.va.gov
- Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013b). *The PTSD Checklist for DSM-5 (PCL-5)*. Scale available from the National Center for PTSD at ptsd.va.gov.



The *Journal of Educational Research and Practice* is a peer-reviewed journal that provides a forum for studies and dialogue about developments and change in the field of education and learning. The journal includes research and related content that examine current relevant educational issues and processes. The aim is to provide readers with knowledge and with strategies to use that knowledge in educational or learning environments. *JERAP* focuses on education at all levels and in any setting, and includes peer-reviewed research reports, commentaries, book reviews, interviews of prominent individuals, and reports about educational practice. The journal is sponsored by The Richard W. Riley College of Education and Leadership at Walden University, and publication in *JERAP* is always free to authors and readers.