BURNOUT, SELF-EFFICACY, AND COPING STRATEGIES AMONG COLLEGE

FACULTY

by

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ABSTRACT

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Due to the changing college environment, university faculty are faced with a serious burden to support their university. University faculty are expected to satisfy numerous job demands, and these demands in turn lead to burnout, a chronic response to job stressors. Burnout is an essential component of occupational research as it relates to other negative outcomes, such as turnover and decreased performance. Because of this, it behooves both faculty and universities to employ methods that decrease burnout. Research concerning other populations indicates that certain personal resources can decrease burnout. Therefore, the current study seeks to determine if coping strategies and self-efficacy are useful for decreasing burnout. Furthermore, this study distinguishes between research and non-research universities following the Carnegie Classifications. Faculty were collected from five universities from the Eastern United States. The results suggest that faculty at both types of universities experience levels of burnout similar to that of medical professionals. Approach-based coping strategies can be useful in decreasing burnout, but avoidance-based coping strategies only serve to potentially increase burnout. Despite expectations, self-efficacy was not related to burnout, and potential explanations are offered. In conclusion, burnout is an important consideration for both individual faculty members as well as higher education institutions in general, and approach-based coping strategies may be helpful for reducing burnout levels.

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CHAPTER I

INTRODUCTION

The higher education environment has rapidly changed over the past decades in various ways (Schuster & Finkelstein, 2006). For example, public funding has decreased in recent years (DeBot & Reich, 2015), forcing universities to transition from a teaching-learning model to a business model (Padilla & Thompson, 2016). At the unseen intersection of this transition lies university faculty, who are encumbered by many job demands. In addition to teaching courses, faculty are required to conduct research and secure grant funding on a regular basis. Faculty also engage in job-related tasks (e.g., serving on thesis/dissertation committees), graduate and undergraduate advising, academic service (e.g., university committees, reviewing professional manuscripts, etc.), and community involvement. From the perspective of the Job-Demand Control Model (Karasek, 1979; Johnson & Hall, 1988), this increase in job demands should also be accompanied by a physiological and psychological cost. One such psychological cost is burnout (also known as emotional exhaustion), and faculty at research universities tend to experience high levels of it (Padilla & Thompson, 2016). In fact, Padilla and Thompson found that 27% of their sample experienced high levels of burnout, most of which was attributed to tenured and tenured track faculty. This is a concern because burnout is a key contributor to employee turnover (Marchand & Vandenberghe, 2016). In conjunction with this, the position of university faculty has seen little growth in recent years: data show that the number of faculty employed in 2017 was 3.98 million, which is a negligible increase from the 3.92 million in 2011 (U.S. Department of Education, 2012, 2019). As such, the position of university faculty may not be as desirable as it once was to individuals who are entering the job market with advanced degrees. The combination of the potential of increased turnover due to burnout and a decreased

flow of new junior faculty makes faculty retention a priority. However, does this pattern hold for faculty at non-research universities?

When it comes to research about university faculty, non-research universities are often overlooked. Faculty at non-research universities are not expected to produce research at the same intensity but are expected to teach more. For faculty at non-research universities, teaching and service tend to be contributing factors to tenure promotion and salary increases (Shepherd et al., 2009). As such, faculty at non-research universities are not encumbered by the "publish or perish" mindset but may experience an "edify or die" mindset that could also lead to burnout. Therefore, faculty at non-research and research universities may both be experiencing burnout, but the source of the burnout may be different.

From a human capital perspective, burnout is an issue that is being addressed across many different occupations. In particular, burnout in university faculty is a potential retention concern because individuals who experience high levels of stress and burnout are more likely to voluntarily turnover or express intent to quit (Rush et al., 1995; Wright & Cropanzano, 1998; Wanberg & Banas, 2000; Marchand & Vandenberghe, 2016; Bakker et al., 2008). In this respect, this study examined the roles of coping strategies and self-efficacy as mitigating factors of burnout among university faculty at non-research and research universities.

Burnout

Burnout is a form of occupational stress that is a chronic response to job stressors (Maslach & Jackson, 1981; Maslach et al., 1996; Maslach et al., 2001). Burnout is related to various outcomes in the workplace, such as satisfaction and commitment, and has three dimensions: emotional exhaustion, cynicism, and reduced personal accomplishment. Despite having three dimensions, emotional exhaustion is the most relevant and pertinent to the

workplace, and university faculty are no exception. Furthermore, when people think of burnout it typically manifests as emotional exhaustion (Padilla & Thompson, 2016). Thus, the current study uses burnout and emotional exhaustion interchangeably.

Burnout is not unique to college faculty, but they are especially at risk. Lackritz (2004) estimates roughly 20% of all university faculty experience high levels of burnout, a figure similar to the 27% found by Padilla and Thompson (2016). Even outside of the US, faculty experience levels of burnout that are unusually high in comparison to workers in non-academic sectors (Azeem & Nazir, 2008; Biron et al., 2008; Johnson et al., 2018). In terms of what contributes to burnout, the largest factor in research universities is the pressure to secure grants and publish in peer-reviewed journals (Padilla & Thompson, 2016). Conducting research is a central component of the professorial role at research universities and cannot simply be excised or outsourced in order to lessen faculty burnout. As for non-research universities, having a heavy course load is presumably a major contributing factor to faculty burnout, but likewise cannot be avoided. It then follows that alternatives are needed to reduce or mitigate the burnout that faculty at either university type experience.

Recently, Bakker & Demerouti (2007) and Demerouti et al. (2001) developed the job demands and resource (JD-R) model (Figure 1). The JD-R can be applied to any field or job because rather than focusing on specific tasks or factors of an occupation, the model looks at demands and resources available to the individual (Bakker et al., 2003). According to Karasek (1979) and Bakker & Demerouti (2007), job demands are aspects of a job that require effort and are therefore associated with psychological or physiological costs. On the other hand, job resources are defined as

"aspects of the job that are functional in achieving work goals, reducing job demands and the associated physiological and psychological costs, or stimulating personal growth, learning, and development" (Bakker & Demerouti, 2007, p. 312).

From a university faculty standpoint, examples of job demands include, but are not limited to, the pressure to publish and all the associated tasks that encompass teaching (grading, meeting with students, creating exams, and so on). An example of job resources for university faculty includes autonomy of research, as faculty generally pursue research topics of interest as they see fit.

Figure 1

Job Demands and Resources Model (Bakker et al., 2008)
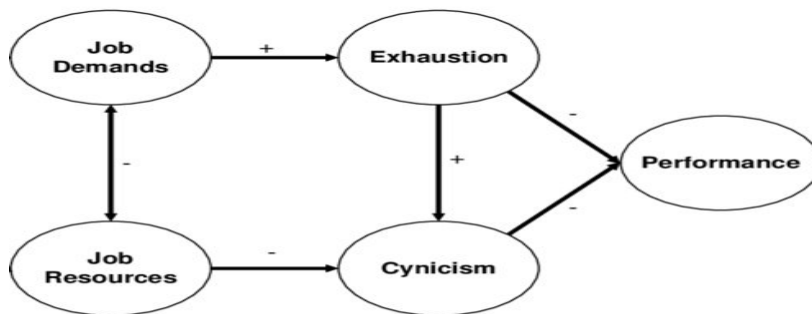
The current study focuses primarily on the path of job demands to exhaustion but incorporates individual resources beyond the scope of the JD-R that may influence exhaustion. While the JD-R focuses primarily on workplace aspects, it is important to factor in the individual resources that workers carry with them into a workplace. However, it remains to be seen what individual resources faculty have at their disposal as no research has shed light on this topic. This is an issue as job resources are negatively associated with job demands, and job demands are

positively associated with burnout (i.e., emotional exhaustion). Specifically, fewer available resources increases job demands, which in turn raises the potential for burnout (see Figure 1).

Here, interest is on how to effectively mitigate this burnout to help create a better working environment for university faculty. While the JD-R model lends itself to the current study well in that it provides an understanding of the context in which job demands might affect burnout for college faculty, it largely ignores individual resources, which are resources that are unique to the individual. One such resource that might be available to college faculty is self-efficacy.

Self-Efficacy

Self-efficacy is generally defined as a personal confidence in one's ability to accomplish a task, and can take several forms (Bandura, 1977). Broadly speaking, self-efficacy has been shown to negatively relate to stress (El-sayed et al., 2014). In an academic context, this is best described as academic self-efficacy, or

> "an estimate of confidence in one's ability to perform various tasks classified as research, service, and teaching in a university setting" (Landino & Owen, 1988, p. 2).

In Landino and Owen's (1988) study, academic self-efficacy was a result (outcome) of various factors such as age and position, and three models of self-efficacy were proposed: one for research, one for service, and one for teaching. However, more recent studies do not consider self-efficacy as an outcome, but as a predictor. For example, Schaubroeck and Merritt (1997) indicate that self-efficacy moderates the relationship between job control and stress, where job control is defined as the perceived amount of control over one's job. It was initially thought that increasing job control would lead to less stress, but this is only true when an individual has high self-efficacy (Schaubroeck & Merritt, 1997). On the other hand, for faculty with low self-

efficacy, increasing their job control would be detrimental in nature (increase stress). Therefore, it seems that it would be effective to address to the root cause of low self-efficacy in university faculty. However, faculty self-efficacy has been difficult to define and measure.

A recent endeavor to typify the self-efficacy of faculty has resulted in four domains: research, teaching, personal, and social (Shavaran et al., 2012). After developing a scale specifically for faculty self-efficacy, this study determined that there were no differences in self-efficacy amongst university faculty by gender or by rank (lecturer, assistant, associate professor, and full professor), indicating that self-efficacy (or lack thereof) is a largely stable construct that remains unchanged as faculty gain more experience. This scale will be discussed in further detail later as it was employed for the current research.

Coping Strategies

Coping strategies may also serve as a mitigating factor for burnout. In this respect, coping strategies have also been shown to be useful for reducing burnout and stress. Generally, coping strategies research has led to the development of many different forms of coping strategies such as approach vs. avoidance, problem-focused vs. emotion-focused, active vs. passive, and so on (Skinner et al., 2003). Due to the many different forms of coping, research on the topic is expansive. Broadly speaking, various coping strategies have been shown to be effective tools for reducing burnout (Shimazu & Kosugi, 2003; Anshel, 2000; Leiter, 1991; Rowe, 2000). Furthermore, coping strategies have been shown to be effective at decreasing job strain when combined with self-efficacy (Jex et al., 2001).

Research on university faculty primarily focuses on positive coping strategies and illustrates the capability of coping to effectively reduce stress and burnout (Osipow & Davis, 1988; Lease, 1999). Of the many forms of positive coping strategies, social support, recreation,

and self-care were the most effective for college faculty, and Lease (1999) suggested that universities implement plans to promote the use of these strategies among university faculty. These types of social and recreational coping strategies have also been shown to be effective for faculty regardless of age, rank, or gender (Richard & Krieshok, 1989). Workplace social support (e.g., receiving support from colleagues or superiors) also helped to decrease the negative effects (e.g., burnout and stress) of job demands for faculty (Moeller & Chung-yan, 2013), indicating that faculty pursue a variety of social support systems in order to cope with job demands.

A theoretical distinction that was followed in the current research is that of approach-based coping versus avoidance-based coping. Avoidance based coping has been shown to relate to greater psychological distress (Solomon et al., 1989; Williams et al., 1994). On the other hand, research has supported the capability of approach-based coping to reduce burnout (Guerrero, 2003). Given the nature of the study concerning how faculty members attempt to deal with their burnout, the distinction of approach- versus avoidance-based coping was deemed most appropriate because these coping strategies are defined as "Cognitive and emotional activity that is oriented either toward or away from threat" (Roth & Cohen, 1986, p. 813). Here, the threat in question is the job demands that cause burnout. The question then becomes, do faculty members engage in cognitive or emotional activity that orients them toward the stressor or away from the stressor as a way to cope? Given the previous research concerning this approach to coping strategies, it is clear that approach-based coping might be an efficacious tool for university faculty. Furthermore, research has shown a positive relationship between approach-based coping strategies and self-efficacy (Devenport & Lane, 2006; Verešová & Malá, 2012). Because of this, the interaction between coping strategies and self-efficacy should be taken into account.

The Current Study

This study acknowledges the need to better understand faculty and the stress placed on them by their work environment. While the literature concerning self-efficacy and coping strategies listed above seem to be viable options for college faculty, most of it is decades removed from the status quo. As mentioned before, between then and now, the college environment has shifted drastically. As such, do these findings still hold true? Based on the previously discussed research, the current study arrived at the following hypotheses:

H1: Job demands will be positively related to burnout (emotional exhaustion).

H2: Self-efficacy will be negatively related to burnout, such that higher self-efficacy will decrease burnout.

H3: Approach-based coping will be negatively related to burnout, such that greater use of approach-based coping will decrease burnout.

H4: Avoidance-based coping will be positively related to burnout, such that greater use of avoidance-based coping will increase burnout.

H5: The relationship between self-efficacy and burnout will be influenced by coping strategies. Overall, the relationship between self-efficacy and burnout will be negative for both avoidance- and approach-based coping. However, the relationship will be stronger for individuals who use approach-based coping.

Proposed Model

Based on the hypotheses above, the model in Figure 2 is proposed. Due to prior research on burnout (i.e., emotional exhaustion), coping strategies, and self-efficacy, it is anticipated that this model will be retained. The model will still hold despite faculty at research and non-research

universities experiencing different work stressors (e.g., secure grants & publish vs. heavy course load).

Figure 2

Proposed model to address hypotheses
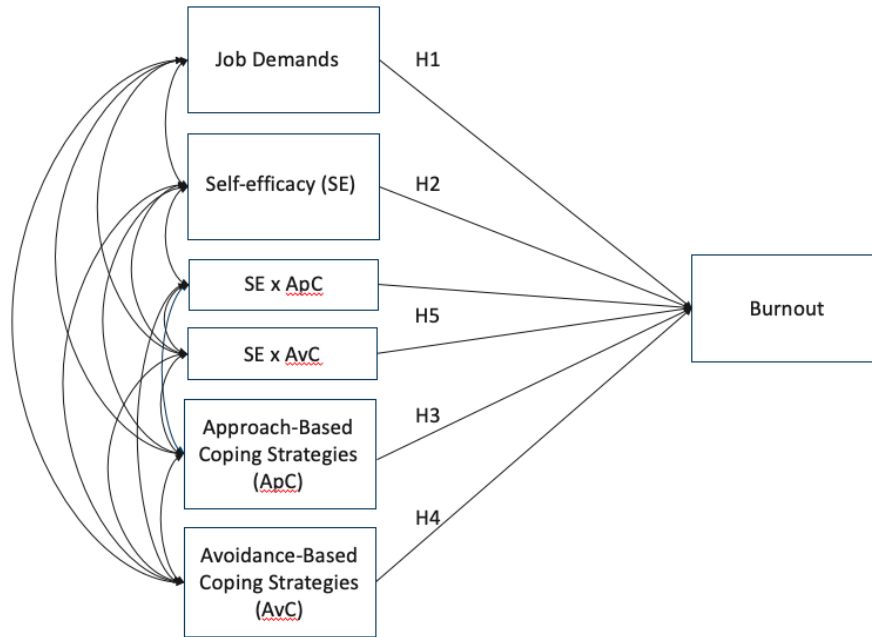
Research Questions

It is important to note that much of the research concerning university faculty is conducted at large, research intensive universities. However, faculty at smaller non-research universities represent a sizeable population of higher education. For example, data from Carnegie Classifications (2018) recent update indicates that there are 575 baccalaureate (i.e., non-research) universities, which is slightly more than the 418 Doctoral (i.e., research) universities. Despite being more in quantity, non-research universities do not employ more faculty than their research

counterparts. Data collected in 2012 by the U.S. Department of Education indicate that while Doctoral universities employ roughly 1.2 million faculty, baccalaureate universities employ 192,767 faculty. Despite being the minority, 200,000 represents a number of faculty that should no longer be ignored and will thus be a focus of the current research.

To differentiate between a "research university" and a "non-research university," the 2018 Carnegie Classifications system was followed. Of the seven classifications, the two that were used for this study were "doctoral universities with very high research activities" and "baccalaureate colleges." These categories were chosen because high research activity universities have the most pressure to produce research (i.e., "research university"), and baccalaureate colleges mimic non-research universities more closely. This will allow for equal representation of both types of universities. Non-research universities tend to be smaller, and consequently have less faculty. Therefore, more non-research universities than research universities were used so as to collect a relatively similar sample size.

For non-research universities, faculty are not traditionally expected to conduct research at the same level as research universities. This is not to say that faculty at non-research universities do not conduct research; it is just not expected to the same degree as research universities. While it may seem that faculty at these universities would experience less burnout than their research counterparts, the lack of focus on research only means that faculty at non-research universities are required to teach more. While a faculty member at a research university might teach two courses a semester, a faculty member at a non-research university might be expected to teach at least four courses a semester. The increased teaching demands are presumed to contribute to burnout.

Furthermore, faculty at non-research universities are often encumbered by undergraduate advising. At research universities, this obligation is instead given to non-tenure track faculty rather than tenure track faculty or advising offices. Despite having differences in job demands, it is expected that university faculty at these institutions will also experience high levels of burnout. Little to no research has been conducted on faculty at non-research universities. As such, these research questions will contribute to the literature by highlighting the necessity of incorporating these faculty members into the overall dialogue. Regarding non-research universities, the current study arrived at the following research questions:

RQ1: Faculty at non-research universities will not experience different levels of burnout to those at research universities.

RQ2: Time spent teaching at non-research universities will be the largest contributing factor of faculty burnout.

RQ3: Faculty at non-research universities will spend significantly more time advising than faculty at research universities.

RQ4: Time spent advising will be positively related to burnout among non-research university faculty.

CHAPTER II

METHOD

Participants

A power analysis was conducted on the hypothesized multiple linear regression model to determine the number of participants needed using G*Power (Faul et al., 2009). A minimum of 103 participants was required to detect a small effect ($R^2 = .12$) using an alpha of .05, a power of .8, and 6 predictors (IVs). Approximately 200 faculty provided usable responses. The final sample was comprised of one research university and four non-research universities along the Eastern United States.

Procedure

After receiving human subject approval from the researchers' home university Institutional Review Board (IRB), participants were recruited via faculty email. The battery included the measures for each construct (burnout, coping strategies, self-efficacy, and job demands), as well as demographic information. Individual demographics were also collected (age, ethnicity, etc.), as well as faculty specific demographics, such as job status (i.e., associate professor, professor, and so on), and position description (tenure track vs. non-tenure track).

Time of semester has been shown to influence the stress and coping patterns for college professors (Brown et al., 1986a, 1986b). In other words, a faculty member at the beginning of the semester (i.e., has relatively few demands at the time) will be experiencing drastically different demands from a faculty member during the middle of a semester (i.e., around midterms). During different times of stress and demands, faculty members will resort to using different coping patterns. This presents an issue for the current study, as coping behaviors are a main focus. Time of semester is, therefore, a confounding variable that needs to be controlled for. In light of this,

all faculty were contacted at the same time, and responses were collected during a three-week timeframe of a semester; for the current study, faculty were contacted two weeks before the beginning of the fall semester and were contacted with a reminder email to participate two weeks later. This ensured that all the faculty who participated were experiencing similar levels of job demands. After assuring anonymity and their right to leave the survey at any given time, participants had the option to complete an online survey. Participants were entered into a raffle for a gift card for their participation. Furthermore, they were informed that they will have the opportunity to contact the researcher after the data has been analyzed should they want to be informed of the findings. To further ensure anonymity, no specific information regarding the college/university of the participant was collected.

Measures

Job Demands. Following the research conducted by Padilla & Thompson (2016), job demands was assessed by five items to determine how much time faculty spend on each of the following job demands: teaching, service, grant writing, research, and advising. For each job demand, participants were asked how many hours (on average) they spend each week doing that activity. Service hours includes any service specifically for the department, university, or college. Distinctions will be made between teaching and advising, as well as research and grant writing. Teaching includes actual class time in preparation for class, and meeting with students about class related issues (in hours per week), whereas advising refers to meeting with students to discuss their professional development and progression through their required course plan (also in hours per week). While it is commonly thought to be one and the same, research and grant writing are distinguished here following the example by Padilla & Thompson (2016). Grant

writing refers specifically to looking for, writing, and applying for grants. Research, on the other hand, refers to all aspects of research that exclude the aforementioned grant-related activities.

College Faculty Efficacy Scale. Developed by Shavaran et al. (2012), this efficacy scale was designed specifically for college faculty. With an overall alpha of .83, the scale includes four factors related to college faculty efficacy: research (α = .83), teaching (α = .79), social (α = .78), and personal self-efficacy (α =.81). As is evident from the scale (see Appendix A), the items were not translated into English adequately. As such, the items were adjusted for readability. Two alternative items were created for each of the original 18 items from Shavaran et al. (2012) for a total of 54 items. One item was corrected for grammar by the researcher, and another item was corrected using a grammatical editing software. A pilot study was then conducted using M-Turk. Participants were asked which of the three versions is the most understandable, and consensus determined readability. The item that received the most support was used in this version of the study. Because this was merely an attempt to determine readability, it was not necessary for participants to meet any demographic requirements (least of all being a faculty member). An exploratory factor analysis (EFA) was conducted on the final data from college faculty to assure that the original factor structure remained unchanged with the grammatical adjustments to the items.

Coping Strategies. As previously stated, coping strategies and the research thereof are widespread. However, Nelson and Sutton (1990) concluded that coping strategy measures created for life stressors (e.g., the Ways of Coping Checklist) may not be useful for occupational stress research. Given the occupational focus of the current research (i.e., how job demands directly relate to burnout), it was imperative to identify a measure created specifically for occupation-based coping. The 27-item modified version of the job coping strategy scale (JCSC)

was used (Dewe, 1990; Brown et al., 2002). The JCSC is comprised of three factors: task focused coping (α = 0.78; i.e., approach-based coping, 12 items), avoidance coping (α = 0.77, 11 items), and emotion focused coping (α = 0.65, 4 items). Participants respond to how often they use each technique in the workplace on Likert scale items ranging from 1 ("Never") to 5 ("Always"). Example items include "Get advice and suggestions from someone else at work" and "Throw yourself into work and work harder and longer." For the current study, only the Avoidance-Coping and Task-Focused coping subscales were used.

Burnout. Burnout was assessed using the Maslach Burnout Inventory (MBI) Emotional Exhaustion subscale (Maslach & Jackson, 1981). Example items include "I feel emotionally drained from my work" and "I feel used up at the end of the day." Items are arranged on a Likert scale ranging from 1 ("Very Strongly Disagree") to 7 ("Very Strongly Agree"). Internal consistency of the MBI Emotional Exhaustion subscale is good (α = .90, Maslach et al., 1996).

CHAPTER III

RESULTS

Data Cleaning and Creation of New Variables

Data were cleaned in order to eliminate participants who did not provide sufficient information to conduct analyses. Participants who did not respond to at least 50% of the necessary items to conduct analyses were removed from the dataset. Furthermore, one participant was removed after indicating that he/she was not a faculty member, but instead an administrator. Administrative members were not part of this study, and so these data were removed. This yielded a final usable dataset of 194 participants. Most participants were Non-Tenure Track faculty (40.2%), followed by Tenured (25.8%), Tenure Track (24.2%), and Other (9.8%). Further demographic information can be found in tables 1 and 2.

Table 1

Demographics by gender and race/ethnicity

	Race/Ethnicity						
	Other	African American/Black	Asian/Pacific Islander	Caucasian/ White	Latino/ Hispanic	Mixed	Total
Male	2	1	2	48	3	1	57
Female	2	6	4	77	0	2	91
Other/ nonbinary	1	0	0	0	0	0	1
Total	5	7	6	125	3	3	149

Table 2

Demographics by discipline and job position

	Job Position										
	O	DP	EP	FP	AcP	AtP	AdP	VP	L	I	Total
Other	1	0	0	2	3	1	2	0	0	0	9
Arts and Letters	0	1	0	5	3	2	10	1	5	1	28
Business	0	0	0	2	2	7	5	0	1	1	18
Education	2	0	0	6	9	4	13	0	4	2	40
Engineering	0	0	0	1	2	0	1	0	2	0	6
Humanities	0	0	0	2	0	0	1	0	1	0	4
Health Sciences	1	0	0	2	4	3	1	0	0	2	13
Social Sciences	0	0	0	1	3	3	2	0	1	0	10
Life Sciences	0	0	0	0	1	0	0	0	0	0	1
Sciences	0	1	1	2	4	3	0	1	5	0	17
Total	4	2	1	23	31	23	35	2	19	6	146

Note. O = Other, DP = Distinguished Professor, EP = Eminent Professor, FP = Full Professor, AcP = Associate Professor, AtP = Assistant Professor, AdP = Adjunct Professor, VP = Visiting Professor, L = Lecturer, I = Instructor.

In order to create the variables used for analyses, items in each scale were summed to create composite scores. Scores for relevant subscales were also summed and included in the analyses where relevant. For creation of interaction effect terms, the scores were first centered at the mean before being multiplied together. Only the variables that were used in the interaction

terms were centered; thus, job demands was left uncentered, while the self-efficacy subscales and coping strategy subscales were centered. This method controls for collinearity without changing the regression coefficients. A total of six interaction terms were created between the two coping strategies subscales (Approach and Avoidance) and the three self-efficacy subscales (Research, Teaching, and Student Interaction). Three subscales for self-efficacy were used rather than the original four factor structure from Shavaran et al. (2012) due to the results from the exploratory factor analysis, which is discussed in detail in a following section.

Assumption Checks

Both univariate and multivariate assumption checks were conducted for the subsequent regression analyses. Univariate normality, skewness, and kurtosis were all in acceptable ranges for predictor variables as well as the outcome variable (burnout). Across all variables, three cases were winsorized to be one value larger than the second largest value. Winsorizing is a common approach to reduce the detrimental effects of severe outliers (Ghosh & Vogt, 2012). Grant hours had a bimodal distribution: 83% (N = 161) spent 0 hours and the other 17% (N = 33) spent from 1 to 50 hours on grantsmanship activities per week. Therefore, the variable was dichotomized, as it appears the responses are indicative of two different populations (i.e., those who do conduct research and those who do not). However, job demands as a whole (i.e., composite score of hours spent conducting the various tasks) was normally distributed with no extreme outliers.

Multivariate assumption checks were conducted on the multiple regression model predicting burnout. Normality of residuals was assessed using a Q-Q plot, which indicated that residuals were normally distributed. Serial dependency was assessed using the Durbin-Watson test. Acceptable values range from 1.5 to 2.5; for the initial regression model, a Durbin-Watson value of 2.07 was obtained, suggesting that the assumption concerning serial dependency was

not violated. Collinearity of variables was assessed using variance inflation factor (VIF), where values closer to 1 are preferred. A common rule of thumb for VIF cutoff criterion is greater than 10 (Midi, 2010). All variables yielded acceptable values ranging between 1.19 and 1.96. Multivariate outliers were detected using DFFIT. Values larger than 2 are deemed extreme outliers, and 11 responses were removed using this criterion.

Cronbach's Alpha was used as a measure of internal consistency for the pre-established scales. For the Emotional Exhaustion subscale of burnout, Cronbach's Alpha was .93. For the Approach- and Avoidance-based Coping strategies, Cronbach's Alphas were .73 and .71, respectively.

Exploratory Factor Analysis

An exploratory factor analysis (EFA) was conducted on the Shavaran et al. (2012) scale for faculty self-efficacy. This was conducted primarily for two reasons. First, the items from the original study were not well translated into English from the source language. In order to remedy this, some of the questions were modified to enhance readability and understanding. Secondly, the Shavaran et al. (2012) study used an orthogonal rotation on their extracted factor structure, which forces the factor structure to be uncorrelated. However, their initial results showed that the four factors were strongly correlated, with a range from .34 to .59. Furthermore, the factors they elucidate (self-efficacy for teaching, research, social, and personal competencies) all seem to be highly related to one another at face validity. To compensate for this, the data from the current study were used to conduct a more appropriate factor analysis using principal axis factoring with an oblique promax rotation that allows factors to correlate. An initial analysis of the scree plot of eigenvalues determined that a four-factor structure would be best. Items were removed or kept based on the following guidelines:

- Items required a factor loading of at least .40 in order to be kept

- Items that had high cross-loading (i.e., loaded on to more than one factor at .40 or greater) were removed

- Items with higher communalities were preferred

Using the aforementioned guidelines, eight items were removed, leaving a total of ten items. Due to the removal of multiple items, the factor structure was also reduced after a factor had less than three items that loaded on to it. Items had acceptable factor loadings ranging from .54 to .84, and the finalized structure accounted for 55.4% of the variance. By inspecting the three-factor structure, it was clear that the Research and Teaching self-efficacy subscales remained. The third construct had items that pertained to a faculty member's ability to interact well with students and was thus named the "Student Interaction" subscale. Four items comprised the Research subscale, while the Teaching and Student Interaction subscales both contained three items. Overall Cronbach's Alpha was .79, while the alphas for the Research, Teaching, and Student Interaction subscales were .88, .73, and .66, respectively. The final items that remained in the revised version of the Shavaran scale used here can be found in Appendix B.

Hypothesis and Research Question Testing

Before testing the hypotheses of interest, it was essential to determine if there were differences in job demands across colleges (i.e., Business, Education, Engineering, etc.) that needed to be accounted for. An ANOVA was conducted for each faculty job demand (teaching, service, grantsmanship, research, and advising) across the colleges. Only time spent conducting research showed significant differences by college, $F(9,136) = 2.07$, $p = .036$. However, job demands as a whole composite score of the various tasks did not differ across colleges, $F(9, 136) = 1.50$, $p = .157$. Furthermore, job demands as a composite score did not significantly differ

between the research (M = 42.97, SD = 14.56) and non-research university (46.70, SD = 13.37)

samples, $t(158) = 1.51$, $p = .133$. Because of this, the composite score of job demands was

included in the models for hypothesis testing rather than by distinct job demands.

Correlations and descriptive statistics for the study variables are listed in Tables 3 and 4.

All hypotheses for the study variables were tested using multiple linear regression models.

Table 3

Correlations for study variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Burnout												
2. Job demands	.31**											
3. ApC	-.25**	-.1										
4. AvC	.47**	.23*	-.16									
5. RE	.06	.2*	.12	-.15*								
6. TE	-.02	.1	.34**	-.16*	.38**							
7. SIE	-.18*	-.13	.46**	-.28**	.14*	.43**						
8. RE x ApC	.11	-.08	.02	.01	.16*	-.03	.03					
9. RE x AvC	-.01*	-.07	.03	-.16*	.07	.01*	.18	-.04				
10. TE x AvC	.17*	.04	.03	.22*	-.01	.15*	.03	-.03	.28**			
11. TE x ApC	-.01	-.13	.22*	-.03	-.03	.07	.04	.33**	.01	-.05		
12. SIE x ApC	-.13	-.09	.12*	-.12	.02	.01	.06	.23*	-.03	-.13	.63**	
13. SIE x AvC	.12	.02	-.04	.05	.17*	.05	.16*	-.06	.32**	.37**	-.08	.03

Note. ApC = Approach-Based Coping, AvC = Avoidance-Based Coping, RE = Research
Efficacy, TE = Teaching Efficacy, SIE = Student Interaction Efficacy.
* = $p < .05$, ** = $p < .001$.

Table 4

Descriptive Statistics for study variables

Variable	*M*	*SD*
Burnout	23.78	11.88
Job Demands	43.20	14.19
ApC	0.70	5.43
AvC	0.67	5.98
RE	0.20	5.41
TE	0.26	1.88
SIE	0.20	2.17
RE x ApC	3.63	29.0
RE x AvC	-4.58	32.6
TE x ApC	-1.56	10.1
TE x AvC	3.66	9.9
SIE x ApC	5.46	12.0
SIE x AvC	-3.47	13.1

Note. ApC = Approach-Based Coping, AvC = Avoidance-Based Coping, RE = Research
Efficacy, TE = Teaching Efficacy, SIE = Student Interaction Efficacy.

Hypotheses 1-4 were assessed using a main effects multiple linear regression model.

Overall, the model was significant and accounted for 31% of the variance in burnout, $F(6, 141) =$

10.45, $p < .001$. The full results of the main effects regression analysis can be found in Table 5.

Table 5

Multiple linear regression results for main effects model predicting burnout

Variable	Statistic					95% CI for B	
	β	sr^2	B	SE	p value	Lower bound	Upper bound
Job demands	0.17	.03	0.14	0.06	.025	0.02	0.27
Approach coping (ApC)	-0.20	.03	-.44	0.18	.013	-0.79	-0.96
Avoidance coping (AvC)	0.43	.16	0.85	0.15	<.001	0.55	1.15
Research Efficacy (RE)	0.09	.01	0.19	0.17	.265	-0.15	0.53
Teaching Efficacy (TE)	0.06	<.01	0.37	0.54	.494	-0.69	1.43
Student Interaction Efficacy (SIE)	0.02	<.01	0.09	0.47	.846	-0.84	1.02

Note. sr^2 = squared semipartial correlation; B = unstandardized regression coefficient; SE = standard error; CI = confidence interval.
Main Effects Model: $F_1(6, 141) = 10.45$, $p < .001$, $R^2 = .31$, adjusted $R^2 = .28$.

Hypothesis 1 stated that job demands would be positively related to burnout. This

hypothesis was supported, B = 0.14, $t(146) = 2.26$, $p = .025$, 95% CI [0.018, 0.268], indicating

that as job demands increase, so too does burnout. Hypothesis 2 stated that self-efficacy would

be negatively related to burnout. This hypothesis was not supported for any of the subscales of

self-efficacy. Contrary to previous research, self-efficacy for research and teaching were not

significantly related to burnout, B = 0.19, $t(146) = 1.12$, $p = .265$, 95% CI [-.147, 0.53], and B =

0.37, $t(146) = 0.69$, $p = .494$, 95% CI [-0.69, 1.43], respectively. Student interaction self-efficacy

was also not significantly related to burnout, B = 0.09, $t(146) = 0.20$, $p = .846$, 95% CI [-0.84,

1.02]. Taken as a whole, the results indicate that there is no relationship between self-efficacy of any form and burnout.

Hypothesis 3 stated that approach-based coping would be negatively related to burnout. This hypothesis was supported, B = -0.44, $t(146)$ = -2.52, p = .013, 95% CI $[-.79, -.10]$, indicating that greater use of approach-based coping can reduce burnout. Hypothesis 4 stated that avoidance-based coping would be positively related to burnout. This hypothesis was supported, B = 0.85, $t(146)$ = 5.66, $p < .001$, 95% CI $[0.55, 1.15]$. As faculty members engage in more avoidance-based coping, their burnout can potentially increase. Of notice is that avoidance-based coping strategies accounted for the largest proportion of variance in burnout. This suggests that the detrimental effect of using avoidance-based coping strategies is substantially larger than the positive effect of using approach-based coping strategies.

Hypothesis 5 stated that the relationship between self-efficacy and burnout would be influenced by coping strategies. In order to determine if the interaction effects significantly contributed to the model, a second model with main effects and all six interaction (i.e., a total of 12 predictors) was specified, $F(12, 135) = 5.99$, $p < .001$, $R^2 = 0.35$, adjusted $R^2 = 0.29$. The two models were compared, and the interaction effects showed no significant increase in R^2, $F_{\Delta}(6, 135) = 1.36$, $p = .234$. This indicates that the inclusion of interaction effects had no significant effect above the model which only included the main effects. Because of this, hypothesis 5 was not supported for any of the interactions between self-efficacy types or coping strategy types, suggesting that there is no interaction of self-efficacy and coping strategies on burnout.

Research questions were assessed using a combination of regression analyses, t-tests, and correlations. Research question 1 stated that faculty at non-research universities would not experience different levels of burnout to those at research universities. This was supported, as

faculty at non-research universities (M = 26.45, SD = 11.76) did not experience significantly different levels of burnout as faculty at research universities (M = 24.71, SD = 13.64), $t(184) =$ .83, $p = .408$, 95% CI [-2.40, 5.87], $d = 0.133$.

Research question 2 stated that time spent teaching at non-research universities would be the largest contributing factor of faculty burnout. In order to analyze this, a multiple linear regression analysis using only faculty at non-research universities was conducted. Furthermore, while job demands was kept as a composite score for the hypotheses, to answer this research question the job demand hours were broken down by each source (teaching, research, service, advising, and grantsmanship). The variables for advising, teaching, and service were approximately normal and had no outliers. However, the researcher variables were bimodal as mentioned before, so they were dichotomized. Furthermore, the service variable showed extreme outliers, so it was natural log transformed in order to make the distribution more normal. Regression analyses indicated that service was the only significant job demand that contributed to burnout for faculty at non-research universities, B = 7.48, $t(41) = 2.19$, $p = .034$, 95% CI [0.55, 14.40], meaning that the research question was not supported. Controlling for the other job demands, time spent conducting service activities explained 33% of the variance in burnout for faculty at non-research universities. The full results of this regression model can be found in table 6.

Research question 3 stated that faculty at non-research universities would spend significantly more time advising than faculty at research universities. This was not supported, as faculty at non-research universities (M = 5.01, SD = 3.97) spent only slightly more time advising than faculty at research universities (M = 3.97, SD = 4.70), $t(158) = 1.29$, $p = .198$. However, faculty at non-research universities did spend significantly more time teaching, $t(158) = 2.75$, $p =$

.007, M$_{diff}$ = 5.45. Research question 4 stated that time spent advising would be positively related to burnout among non-research university faculty. This research question was not supported, but there was a small effect, $r(42) = .19$, $p = .12$.

Table 6

Multiple linear regression results for job demands predicting burnout for non-research faculty

Variable	Statistic					95% CI for B	
	β	sr^2	B	SE	*p* value	Lower bound	Upper bound
Service hours*	.34	.11	7.48	3.41	.035	0.55	14.40
Research hours	.19	.03	0.29	0.29	.311	-0.29	0.87
Teaching hours	.15	.02	0.18	0.20	.389	-0.24	0.59
Advising hours	.27	.07	0.73	0.45	.114	-0.18	1.65
Grantsmanship hours	-.14	.02	-4.83	6.27	.446	-17.53	7.88

Note. Sr^2 = squared semipartial correlation; B = unstandardized regression coefficient; SE = standard error; CI = confidence interval.
* Service hours was natural log transformed.
F(5, 36) = 1.68, $p = .165$, R^2 = .19, adjusted R^2 = .07.

CHAPTER IV

DISCUSSION

It is important to understand the factors that contribute to faculty burnout, as a poor work environment has been shown to cause university faculty to leave higher education in large droves (Brown, 2016). The Job-Demands and Resources model theorizes that job demands serve to increase an incumbent's burnout, while individual and workplace resources can decrease burnout. Consistent with this literature, the present sample of university faculty shows the effects of increased job demands and the use of coping strategies on burnout. Given the high expectations that are placed on faculty members to produce cutting edge research and teach an ever-increasing number of students, all while conducting service activities for the university, it is important to understand what impacts burnout.

The results from the present study suggest that job demands and the use of avoidance-based coping strategies can significantly increase burnout among college faculty, while the use of approach-based coping strategies can significantly decrease burnout. Contrary to expectations, self-efficacy for faculty members did not affect burnout. The average burnout score of faculty members was roughly 24 (out of a total of 63 points). While the most recent edition of the MBI (Maslach et al., 2017) has done away with cutoff values of the subscales (see Mind Garden Inc., 2018 for a brief review), this level of burnout is comparable to a national sample of U.S. physicians, who reported a mean Emotional Exhaustion subscale score of 27 (Brady et al., 2020). This level of burnout is alarming and warrants a further understanding in research so that faculty members and universities can address this issue together.

Consistent with other literature, approach-based coping strategies are shown to decrease burnout, while avoidance-based coping strategies are shown to increase burnout (Shimazu et al., 2003). The practical takeaway for faculty members is to engage in approach-based coping strategies in order to decrease their consistently high levels of burnout. Approach-based coping strategies seek to tackle the problem directly rather than attempting to escape from it (Roth & Cohen, 1986). For faculty members, approach-based coping may manifest in different ways. For example, one way to use approach-based coping would be to draw on social support from a supervisor or work colleagues. Furthermore, implementing a plan to tackle a difficult problem would be an effective way to decrease burnout.

Across other literature, avoidance-based coping strategies are considered maladaptive efforts to remove oneself from unwanted experiences (Hayes et al., 2006; Hayes et al., 2009; Vilardaga et al., 2011). Particularly, avoidance-based coping strategies only delay the inevitable, thus causing more strain when individuals are caught between a looming task and an approaching deadline. As it relates to faculty members, some examples of how this may manifest could be waiting to turn in a grant application until the deadline, or possibly putting off grading student assignments until a later time. True to form, this resulted in increased negative outcomes (i.e., greater burnout) for the present sample.

Contrary to expectations, self-efficacy did not predict burnout for the present sample of university faculty. This could be due to self-efficacy making individuals persist more at a given task (Busch et al., 1998). Self-efficacy is also shown to increase productivity (Pasupathy & Siwatu, 2014). These findings hold true for the present sample as well. Research self-efficacy was positively correlated with job demands, suggesting that more research self-efficacy only increased job demands. If self-efficacy is only causing a faculty member to be more productive

at a job demand that is causing them burnout, then it logically follows that self-efficacy would also slightly contribute to burnout. Given the nonsignificant findings here, self-efficacy might be better suited to predicting other outcomes for faculty members, or simply treated as an outcome of interest.

Another key focus of this study was to include non-research university faculty. Faculty at research and non-research universities showed similar levels of burnout and patterns of reducing burnout. However, burnout for each resulted from different reasons. Time spent conducting service was the greatest contributor to burnout for non-research faculty, but for research faculty the greatest contributor has been shown to be grantsmanship (Padilla & Thompson, 2016). However, what activities constitutes service hours remains unclear for faculty at non-research universities. Typically, faculty at research universities report that time spent being on dissertation and theses committees is a large portion of their service hours. For faculty at non-research universities, serving on these committees is not as common. On average, the research university faculty members took part in 2.6 thesis/dissertation committees per year in various roles (i.e., chair or member). On the other hand, faculty at non-research universities indicated that they, on average, were involved in only 0.6 committees of this type per year. Clearly, faculty at non-research universities take other factors into consideration as service to their organization, but what those factors are remains to be seen as there is simply not enough research to suggest potential answers.

Faculty at non-research universities spent, on average, 5.4 more hours per week teaching than faculty at research universities. In essence, this most likely translates to teaching one more class per semester; classes are usually three hours per week, and the additional time beyond that is most likely subsumed under preparation for the course. However, it is interesting to note that

this time spent teaching did not significantly predict burnout. This does support the traditional notion that faculty at non-research universities spend more of their time teaching due to the lower expectation to produce research or secure funding. True to this, 100% of respondents at non-research universities ($N = 45$) indicated that securing funding was not a promotion requirement.

Limitations

Perhaps the largest limitation to the current study is the time in which it was conducted. Due to the global pandemic (COVID-19), many job sectors and workers have experienced drastic changes in the structure of not only their work tasks, but also their work environment. Faculty members and higher education in general are no exception. For example, many faculty members have been instructed to halt or reduce their research endeavors. Other faculty members who are able to transition their research to an online format have been encouraged to do so, but for some faculty this requires a learning process in order to appropriately use the necessary software (e.g., Qualtrics). To compensate for the decrease in time spent conducting research, faculty members have taken on an increased teaching load, which may have resulted in preparing material for a new course. In other words, while faculty members may have experienced a slight decline in the hours relegated to one specific job demand, their workload increased in other places resulting in the same, or maybe even slightly higher, overall hours worked. The current results may have been somewhat different in terms of what specific job demand had the greatest impact on burnout, but the end result of using overall job demands to predict burnout should be the same regardless of changes brought about by the pandemic. However, it must also be acknowledged that the coefficient estimates this study arrived at might be higher than normal given the current global pandemic (COVID-19).

Another limitation is the direct impact COVID-19 has on the variable of interest: burnout. Research has already been published concerning the impact of COVID-19 on levels of burnout (Arslan et al., 2020; Yildirim & Solmaz, 2020). While questions in the survey were modified to instruct participants to answer questions irrespective of the current pandemic, there is really no way to disentangle their current emotional state from the situation at hand. For future iterations of studies similar in nature to this one the end result should still be the same in that faculty members are susceptible to burnout from their job demands. Faculty are burnt out regardless of the global situation, as Padilla & Thompson (2016) indicated that roughly 25% of their sample (N = 1146) indicated high levels of burnout. In years to come, faculty will continue to experience high levels of burnout even after a global pandemic. Consequently, while the results of this study do need to be understood in the context of a global pandemic, the veracity of the results need not be called into question. However, similar to the findings concerning job demands, the coefficient estimations that the current study arrived at may be higher than normal.

Limitations arise when considering both the sample and the sample size. This small sample of university faculty may not be representative of the national population. One consideration is that the universities that were contacted to participate in the study constitute only one geographical region of the United States. Universities in this locale may not be representative of universities in other geographical regions. While Padilla & Thompson (2016) demonstrated that burnout of university faculty at high research universities was not dependent on geographical location, the same cannot be said for the inclusion of baccalaureate colleges in the present study. A further issue arises due to the relatively small sample size. While the current sample adequately reached the requirements of the initial power analysis, the sample size was not sufficient to break down the effect of job demands into the separate sources. Thus, the

finding that job demands increase burnout cannot be broken down by the separate sources and instead remains a global prediction rather than a specific one.

Limitations due to measurement arise when taking the Shavaran et al. (2012) scale into consideration. While pre-established scales exist for graduate students (Forester et al., 2004) and for teachers at the high school education level (Verešová & Malá, 2012), finding a measure of self-efficacy specifically for university faculty was not an easy task. Although the factor structure allowed factors to correlate and accounted for just over half of the variance in self-efficacy, the revised scale lost one factor and, on average, had smaller coefficient alphas than the original scale. This is most likely due to a combination of lack of sufficient items as well as using a measure that was originally validated using a sample of Iranian faculty members, who are most likely not similar to the current sample of U.S. faculty members.

Limitations also arise in regard to the inferences that can be made about non-research university faculty. For instance, the results of job demands for non-research faculty indicated that service hours was the greatest contributor to burnout. However, it is unclear what exactly constitutes service hours for these faculty members. While faculty at research universities primarily serve their department through involvement in thesis/dissertation committees, faculty at non-research universities are not encumbered by these committees. Unfortunately, the current study did not ask the appropriate questions of non-research faculty in order to arrive at an answer for what constitutes service hours for these faculty.

Directions for Future Research

Even though self-efficacy has been shown on numerous populations and occasions to reduce burnout, it did not yield fruitful results here. An issue with measures of self-efficacy is that there appears to be no standard, even for studies concerning university faculty in which

significant findings are reported. For example, while some use an adaptation of Bandura's general self-efficacy scale (Busch et al., 1998), others have attempted to produce self-efficacy measures more tailored to university faculty, such as the MSEATS (see Landino & Owen, 1998 for original article; Kelly, 2007). Nevertheless, a common thread emerges in that poor psychometric shortcuts are taken that inevitably produce misleading factor loadings. For example, it is clear that the factors in which self-efficacy manifested are correlated, indicating that methods that incorporate a correlated factor structure should be used as was done here. Even though this is a step in the right direction, further psychometric development is necessary. The self-efficacy measure used here could still be improved upon by conducting a confirmatory factor analysis with a new sample of faculty.

One way to improve the measurement of self-efficacy would be to capture another dimension that remained unexplored in this study. Given that faculty members spend much of their time on a computer, including some sense of "technological self-efficacy" might be useful. On this note, several studies have explored faculty member's self-efficacy for using technology but have treated technology self-efficacy as an outcome rather than a predictor (Kagima & Hausafus, 2000; Saleh, 2008). Given the current transition in higher education to a more online delivery system, coupled with the constantly changing landscape of technology (i.e., new computer software or applications, keeping up with slight changes in current products used, etc.), including technological self-efficacy for university faculty might significantly improve the structure of a self-efficacy measure.

Future studies might also include more person level variables. While typically the focus of research on undergraduate students, a recent study found that procrastination in faculty members significantly predicted higher levels of burnout (Hall & Rahimi, 2019). Procrastination

is similar to avoidance-based coping in that both strategies only serve to delay or postpone the inevitable until a later time when there is more pressure to meet a deadline. However, future studies may want to consider distinguishing between active and passive procrastination styles. While active procrastinators prefer to work under the pressure that a deadline imposes, passive procrastinators are crippled by their inability to accomplish a task (Hsin, Chu, & Choi, 2005). Hope and optimism have also been suggested as potential factors to reduce burnout from the positive psychology literature (Seligman & Csikszentmihalyi, 2000). These constructs represent psychological capital that an individual has at their disposal to lessen the burden of negative influences such as burnout. These constructs are similar to the idea of resilience in that they give an individual the ability to recuperate effectively from difficult scenarios.

Future research might also benefit from the inclusion of industrial-organizational (I-O) psychology approaches. I-O psychology seeks to understand an individual's place in a work environment, and how the two mutually affect one another. While I-O psychology has much to offer, a few directions for potentially relevant factors to university faculty are discussed here. At the organizational level, task variety has been shown to decrease burnout (Humphrey et al., 2007), so perhaps research can explore if faculty members with more task variety have reduced levels of burnout. Task variety helps reduce burnout by offering workers a wide range of tasks to accomplish (Morgeson & Humphrey, 2006). However, it should be noted that more recent studies have indicated differential effects of task variety based on age, such that while task variety reduces burnout for younger workers, the same cannot be said for older workers (Zaniboni et al., 2013). Furthermore, the effects of feedback on a worker's level of burnout have shown interesting results. While Padilla & Thompson (2016) illuminated the effect of perceived support from colleagues on reducing burnout of faculty members, this is only one part of a much

larger support puzzle. Effective feedback from supervisors is also something that should be taken into consideration. Through the JD-R model, feedback on an individual's performance from a supervisor has been shown to be negatively related to burnout (Schaufeli et al., 2009), suggesting that incorporating feedback might be beneficial to the field of university faculty research.

Conclusion

Given the findings from the current study, it would behoove faculty members to engage in approach-based coping strategies in an attempt to reduce their burnout. While job demands are a significant contributing factor to burnout, it seems unlikely that faculty members can simply decrease their work hours. Rather, faculty members should take action instead of falling into avoidance-based coping strategies, which will only further increase their burnout. As an organization, higher education institutions might look to include burnout related interventions to reduce burnout, as this has found success with a similar sample of teachers (Żołnierczyk-Zreda, 2005). This study opens the door for inclusion of faculty at non-research universities in future studies; however, care should be taken when considering the subtle nuanced differences between research and non-research faculty. For example, while the outcome of burnout has been shown to be similar across the two types of faculty, the work environment is slightly different. Nevertheless, the current study contributes to the growing body of literature concerning the mental health of college faculty by providing an approach that demonstrates person level constructs such as coping strategies can be used to reduce the strain of higher education career.

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APPENDIX A

COLLEGE FACULTY EFFICACY SCALE

1. I have theoretical knowledge enough about the subject matters that I teach.

2. My educational experiences lead to more needed teaching skill in me.

3. I apply disciplinary procedures in class well.

4. I have mastery in providing and producing the teaching material and resources.

5. I believe that high level goals lead to teaching progress.

6. I have mastery in evaluation methods considering teaching methods.

7. My research abilities make research work enjoyable to me.

8. One of my good skills is providing and formulating books and articles.

9. My capabilities in formulating research projects lead to my scientific achievement.

10. I do a good judgement if they assign me a research work for evaluation.

11. I create a warm climate whenever I have social relation with students.

12. I have a fair social relationship with my peers.

13. The students are feeling comfort whenever the discuss their problems with me.

14. One of my abilities is directing and leading of discussions in meetings.

15. When I really try, I can get through most difficult students.

16. My achievement in my job performance is due to my efforts.

17. If the chairperson assigns me different courses, I will teach them successfully.

18. My presentation skills in scientific meetings will encourage the audiences to listen

    carefully.

APPENDIX B

COLLEGE FACULTY EFFICACY SCALE – REVISED

1. My capabilities in formulating research projects lead to my scientific achievement.

2. One of my skills is writing and publishing books and articles.

3. My research abilities make research work enjoyable to me.

4. I have good judgment in evaluating research work I am assigned.

5. I have enough theoretical knowledge about the subject matters that I teach.

6. I have mastery in providing and producing teaching materials and resources.

7. My achievement in my job performance is due to my efforts.

8. Students feel comfortable whenever they discuss their problems with me.

9. I create a warm environment whenever I interact with students.

10. When I really try, I can get through to the most difficult students.

APPENDIX C

COPING WITH STRESS AT WORK – GENERAL SCALE

Please consider each statement in the list below and indicate how frequently you use such actions to cope with the pressures at work.

1. Try to find out more about the situation - seek out additional information
2. Take some immediate action on the basis of your present understanding of the situation
3. Consider a range of plans for handling the situation: set priorities
4. Draw on support from your boss, discuss the problem with him
5. Whenever possible, give your opinion about how things are done and the way things are going to work
6. Do not let the problem go until you have solved it or reconciled it satisfactorily
7. Make sure people are aware you are doing your best
8. Get advice and suggestions from someone else at work
9. Let people know exactly where you stand
10. Tackle routine work so that you can cool down and get composure back
11. Try and introduce some variety into your job
12. Cover up problems rather than deal with them
13. Take your feelings out on your colleagues or whoever happens to be around
14. Get mad at yourself and tell yourself that you could have avoided the situation
15. Get rid of the tension by expressing some irritability and frustration to yourself – swearing, slamming things down, crumpling up pieces of paper
16. Lose your temper for a moment
17. Try to prevent others from finding out about the pressures you are under
18. Simply drop what you are doing and take up something totally unrelated
19. Throw yourself into work and work harder and longer
20. Spend more time daydreaming
21. Drink more tea or coffee
22. Ignore for a time the apparent problem until you feel you are ready to handle it
23. Don't think objectively about the situation and don't keep your feelings under control

24. Decide to go out with the family or friends and enjoy yourself, forgetting about work problems for a time

25. Think of the good things in the future

26. Make a concerted effort to distract yourself with some fun or pleasurable activity

27. Try to reassure yourself that everything is going to work out all right

APPENDIX D

MASLACH BURNOUT INVENTORY

1. I feel emotionally drained from my work.

2. I feel fatigued when I have to get up in the morning to face another day on the job.

3. Working with people all day is really a strain for me.

4. I feel (burned out) from my work.

5. I feel frustrated by my job.

6. I feel I'm working too hard on my job.

7. Working directly with people puts too much stress on me.

8. I feel like I'm at the end of my rope.

9. I feel used up at the end of the day.

VITA

Jordan Ball, B.S. currently conducts research in Dr. Miguel Padilla's OMEGA lab, located at 232 Mills Godwin Building, 1320 44th St, Norfolk, VA 23508. Jordan Ball obtained his undergraduate degree from Erskine College, where he majored in Psychology with a minor in Biology. There, he graduated Summa Cum Laude and with departmental honors in 2017. During his undergraduate career, he published two articles in peer-reviewed journals concerning tattooed individuals. Jordan took a gap year to focus and spend time with family. Upon being accepted to the PhD program in Health Psychology at Old Dominion University, he transitioned his research into focusing on university faculty. In particular, his research is at the intersection of mental health and workplace factors such as organizational commitment, job demands, and workplace behavior. He has since attended multiple conferences where he showcases his work. One such poster, titled "College faculty perceptions of incoming students," received the best poster award at the World Future Forum. Jordan hopes to continue conducting research in a higher education environment, and eventually acquire a senior managerial role in institutional research where he can continue to make a positive impact on faculty members and students alike.