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Research paper

# The great resignation in higher education: An occupational health approach to understanding intentions-to-quit for faculty in higher education

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ABSTRACT

The increase of resignations in education has continued to trend upwards, particularly during the COVID-19 pandemic. The present study's aim was to develop a comprehensive investigation of key predictors and motivations for leaving academia. The key factors associated with intent-to-quit were: low perceived organizational support, high exhaustion, and low compassion satisfaction. Additionally, high rates of depression and anxiety were worse for faculty intending to leave academia. To improve retention, it is recommended that higher education institutions commit to increase support to faculty and to improve overall working conditions, in order to advert the predicted impending Great Resignation within academia.



## 1. Introduction

Recent changes and unprecedented movement within the labor market, magnified by the ongoing COVID-19 pandemic, indicates employee dissatisfaction and a willingness to consider alternative employment (BLS, 2022). Consequently, a growing number of workers, including higher education faculty, are actively reevaluating career goals and contemplating quality of life for themselves and their families (Almhdawi et al., 2021). In April of 2021, the U.S. Bureau of Labor Statistics (BLS) Survey recorded more than 4 million resignations, spanning a broad range of industries, including education services. Findings from the BLS survey indicate that the total number of resignations within the education services sector – a labor category representing faculty from schools, colleges, universities, and other training centers – topped out at 54,000, a steadily increasing trend witnessed throughout 2021 (BLS, 2022). The rising number of resignations in education services has continued to trend upwards, as evidenced by the 68,000 resignations recorded in April 2022, an increase of nearly 26% from the previous year (BLS, 2022).

These kinds of labor trends, including the growing number of faculty resignations, were predicted by some economists, like Anthony Klotz, from University College London, who coined the term *The Great Resignation* (Lodewick, 2022). Previous research, conducted prior to the COVID-19 pandemic, suggests motivating factors that influence faculty intentions-to-quit, (e.g., seeking to improve work-life balance, establish job security, and attain competitive compensation and benefit packages), can result in feelings of burnout, anxiety, and depression (Chambers Mack et al., 2019; Cidlinska et al., 2022; Lashuel, 2020; Mudrak et al., 2018). Researchers exploring the precipitous rise in resignations have also considered the way COVID-19 is linked to the ongoing faculty resignation trend. For instance, the protracted hunkering-down effect resulting from stay-at-home orders, relative to differing regional and national guidelines, was compounded by the confusing messaging emanating from global health institutions

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(e.g., The World Health Organization [WHO]). This may have amplified existing work frustrations and intensified certain psychological stressors, like burnout, financial insecurity, and increased workloads (Gewin, 2022; Weyandt et al., 2020). Environmental changes associated with the corporatization of higher education, referred to as a neoliberal operating model indicating that individuals are transformed into so-called human capital, has also been cited as a source of faculty psychological distress (Berg et al., 2016; Shin & Jung, 2014). Further, there are indications that limited support offered to workers, especially during the early days of the pandemic, in addition to other pre-existing workplace frustrations, may have accelerated the intention-to-quit (Gewin, 2022; Woolston, 2020).

There are predictions within recent literature forecasting an impending trend of academics choosing to leave universities at varying stages of career development (Heffernan & Heffernan, 2019). Human resource studies have suggested that some higher education systems, like the Australian model, anticipate losing nearly 50% of the entire academic workforce within five years (Crimmins et al., 2017). The academic profession has undergone a sustained movement away from full-time and tenure-track employment to a part-time, temporary, and a contingency based corporate model (Kezar & Maxey, 2015), causing job and financial insecurity for a considerable number of faculty members. U.S. contingency appointments, including adjunct or part-time faculty positions, are estimated to constitute 70% of all faculty positions within the education sector (Kezar & Maxey, 2015). The proportion of contingency appointments illustrate the conditions of underemployment and a prevailing sentiment of stress attributed to job insecurity, which can contribute to individual intentions-to-quit (Heffernan & Heffernan, 2019). Purposeful and concentrated initiatives on the part of university administrators to retain experienced faculty may slow the rising tide of resignations and the intention-to-quit. A recent study examining the so-called "academic exodus" of instructors demonstrates the importance of providing ongoing career support and development to faculty members, citing survey findings that individuals who feel their careers are supported by their respective institutions are less likely to quit (Heffernan & Heffernan, 2019). Notwithstanding, research highlighting other causal factors, especially those pertaining to psychological distress, including burnout, anxiety, and depression, are anticipated to influence faculty intention-to-quit decision-making processes.

The Job Demands-Resources Model of Burnout links specific characteristics related to job demands (e.g., workload) and job resources (e.g., participation in decision making) with overall job outcomes, which often include attrition or intentions-to-quit (Demerouti et al., 2001). It is understood that certain pressures are inherent within higher education yet can vary depending on location and position. Some higher education faculty members are hired primarily to teach, often with heavy workloads. The traditional triadic model of academia, commonly seen in research-based institutions, emphasizes research, teaching, and service, and can take a toll on an individual's psychological resources. Further, certain demands, like the need to publish or perish (a commonly cited academic trope), in addition to time spent grant writing and securing research funding, can lead to self-doubt, burnout, and anxiety (Lashuel, 2020). These same stressors are amplified in an already hyper-competitive working environment, if an instructor chooses to pursue a highly competitive tenure-track position. Consequently, a loss of social support due to increased competition among faculty peers is implicated as a significant risk factor for mental health problems (Weyandt et al., 2020). In a 2014 study, respondents stated that academic workplaces can leave individuals feeling isolated due to individualized work practices, intense workloads and pressures, a loss of separation between work and home life, and a persistent feeling of job insecurity (Horton & Tucker, 2014). Berg et al. (2016) examined the effects of "neoliberalism" on the academy, an operating model conveyed through economic terms, and organized largely around financial incentives and metrics. The authors argued that the university environment has moved away from mutuality and exchange, to individualism, competition, and siloed work, and from relational equality to status inequality. Consequently, the prestige of individual accomplishment has supplanted collaboration, thereby transforming academics into "human capital". The commodification of academia has been linked to high levels of psychological distress and anxiety (Berg et al., 2016). However, the Job Demands-Resources Model does not account for psychological stressors, such as depression or anxiety. BLS exploring occupational *and* psychosocial factors, the current study seeks to better explain faculty members' intentions-to-quit, as well as expand the Job Demands-Resources Model.

In sum, studies point to multiple stressors and occupational factors that might influence higher education faculty intentions-to-quit. However, comprehensive investigations of key predictors and motivations for leaving academia are scarce. Instead, studies typically focus on single factors, like anxiety or stress (Berg et al., 2016; Shin & Jung, 2014), precipitating exit. Although research attention has been given to factors associated with primary and secondary educator's intention-to-quit (Chambers Mack et al., 2019), few studies have examined these associations among higher education faculty. Some faculty members have turned to informal sources of support, like *The Professor Is Out*, a private Facebook group for higher-education professionals to share their experiences and thoughts, while contemplating a move away from academia (Gewin, 2022). By the middle of 2022, the Facebook group has accumulated 23,712 members, regularly coming together to discuss workplace frustrations and industry employment opportunities. The group administrator is a former university professor, and has suggested that a common theme among both tenured and non-tenured members is that people are happier once they leave academia (Gewin, 2022). Although these kinds of informal social support systems appear to substantiate the notions of an academic exodus (Heffernan & Heffernan, 2019) and the great resignation, there are gaps within existing literature regarding higher education faculty members' intentions-to-quit. Before universities consider interventions to retain employees, they must first understand the factors contributing to faculty members' desire to exit academia. The aim of the present study is to address this gap with a comprehensive occupational health analysis that expands on the Job Demands-Resources Model of Burnout (Demerouti et al., 2001) to include a psychosocial approach. The present study examines the association of demographic, psychosocial, and occupational factors with higher education faculty members' motivation and intentions-to-quit.

## 2. Methods

### 2.1. Participants and procedure

The participants in this study are higher education faculty members who were recruited through various online academic groups and provided an opportunity to enter a raffle for one of fifty $50 gift certificates. The link to the Qualtrics survey was posted one time in April 2022 with moderator permissions on multiple Facebook academic sites, including *The Professor is In* (128,719 members), *The Professor is Out* (23,900 members), and *Reviewer 2 Must BLS Stopped* (89,300 members). A total of 1195 individuals clicked on the link to the survey. The Qualtrics review indicated that 228 responses were 'potential bots' and were removed from the dataset.

Of the remaining 967 participants in the dataset, an additional 637 participants were removed due to not indicating higher education faculty as their occupation, having excessive missing data, or through manipulation checks on the open-ended items. The final dataset included 330 higher education faculty members with quality responses. For the current study, 291 of the 330 (88.2%) participants responded to the question regarding intent-to-quit within 5 years, and were included in the final analyses. A post-hoc power analysis using a fixed-effects, one-way omnibus ANOVA with an alpha = .05, small-to-moderate effect size (f = 0.2), and total N = 291 with 3 comparison groups yielded sufficient power (1-β) = 0.87.

The demographics of the participants in this sample to have a mean age of 42.7 years (*SD* = 8.7), with 74.2% Female, 23.0% Male, and 2.8% Non-Binary or Prefer to Self-Describe. The racial breakdown of this sample is 86.9% White, 2.7% Black, 4.1% Asian, 1.0% Native Hawaiian or Pacific Islander, 1.4% American Indian or Alaskan Native, 1.4% mixed races, and 2.4% Other or Not Specified. This sample included 14.5% who identified as Hispanic, Latinx, or of Spanish origin. This study was approved by the Institutional Review Board at <Redacted>.

### 2.2. Measures

Demographics – Participants were asked to provide information about their age, gender, race, ethnicity, marital status, children living at home, highest level of education, and years' experience in academia (see Table 1).

**Table 1**
Sample descriptives (N = 291).

| | Sample Descriptives<br>% (n) for categorical variables<br>Mean (SD) for continuous variables |
|---|---|
| Gender | |
| Male | 23.0% (67) |
| Female | 74.2% (216) |
| Non-binary/Prefer to Self-Describe | 2.8% (8) |
| Age | M = 42.7 (SD = 8.7); Range = 21 - 68 |
| Race | |
| White | 86.9% (253) |
| Black | 2.7% (8) |
| Asian | 4.1% (12) |
| Native Hawaiian/Pacific Islander | 1.0% (3) |
| American Indian/Alaskan Native | 1.4% (4) |
| Mixed Races | 1.4% (4) |
| Other/Not Specified | 2.4% (7) |
| Ethnicity | |
| Hispanic | 14.4% (42) |
| Non-Hispanic | 85.2% (248) |
| No Response | 0.3% (1) |
| Marital Status | |
| Single-Not in a Relationship | 11.7% (34) |
| Single-In a Relationship | 9.6% (28) |
| Married | 71.8% (209) |
| Separated | 1.0% (3) |
| Divorced | 4.5% (13) |
| Widowed | 1.0% (3) |
| No Response | 0.3% (1) |
| Children Living at Home | |
| None | 40.5% (118) |
| 1 | 22.0% (64) |
| 2 | 25.1% (73) |
| 3+ | 7.5% (22) |
| No Response | 4.8% (14) |
| Education Level | |
| PhD | 76.3% (222) |
| Masters or Equivalent | 23.7% (69) |
| Years of Experience | |
| Years in Academia | M = 13.4 (SD = 7.7); Range = 1- 43 |
| Years in Current Position | M = 8.7 (SD = 6.4); Range = 0 - 41 |

### 2.3. Occupational measures

**Job Satisfaction** was measured using the Job Descriptive Index – Coworker Satisfaction Scale (JDI) which assesses both the individual's job satisfaction and their satisfaction with coworkers (Smith et al., 1969). The JDI contains 18 work-related adjectives to which participants respond indicate if the word describes their work conditions using *No* or *Yes*. Examples of the items on the list are: *Pleasant, Inadequate,* and *Enjoyable*. Higher total scores indicate better job satisfaction. Scoring information for the JDI is available in Balzar et al. (1997). For this sample, the JDI had excellent internal consistency (Cronbach's alpha = .92; *M* = 32.6, *SD* = 15.9).

**Employee Engagement** was measured using the Intellectual, Social and Affective Engagement Scale (ISA) (Soane et al., 2012). The ISA scale includes 9 items measured on a 7-point agreement Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*, with higher total scores indicating greater engagement in the workplace. An example of this scale is: "I pay a lot of attention to my work." For this study's sample, the ISA scale had good internal consistency (Cronbach's alpha = .86; *M* = 150.1, *SD* = 10.4).

**Perceived Organizational** Support was assessed using the Survey of Perceived Organizational Support— Shortened Version (SPOS), which measures the degree that an organization shows concern for participants' well-being (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). The SPOS includes 8 items on a 5-point agreement Likert scale, with response options ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Higher total scores on the SPOS indicate greater perceived organizational support. An example item from this measure is: "My organization really cares about my well-being." For this study's sample, the Perceived Organizational Support measure had good internal consistency (Cronbach's alpha = .90; *M* = 19.4, *SD* = 7.7).

**Work-Life Conflict and Life-Work Conflict** were assessed using the Work-Family Conflict Scale (WFC), which assesses the degree that work interferes with individuals' lives, and the Family-Work Conflict Scale (FWC), which assesses the degree that life interferes with individuals' work (Netemeyer et al., 1996). The WFC scale includes 3 items and the FWC scale includes 5 items, each measured on a 7-point agreement Likert scale with responses ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Higher scores on both scales indicate greater conflict. An example statement from the WFC scale is: "The demands of my work interfere with my personal life," and an example statement from the FWC scale is: "The demands of my family or friends interfere with work-related activities." Both scales showed good internal consistency: Work-Life Conflict (WFC; Cronbach's alpha = .90; *M* = 11.6, *SD* = 3.1) and Life-Work Conflict (FWC; Cronbach's alpha = .90; M = 13.6, SD = 5.1).

**Organizational Identification** was assessed using a shortened version of the Organizational Identification Questionnaire (OIQ), which measures the degree respondents' identity and interests align with those of their organization (Cheney, 1982). Items were measured on a 5-point agreement Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*, with higher scores indicating greater organizational identification. An example statement from this scale is, "I find that my values and the values of my organization are very similar." For this study, the OIQ measure had good internal consistency (Cronbach's alpha = .81; *M* = 11.0, *SD* = 3.7).

**Workplace Bullying** was assessed using the Workplace Aggression Questionnaire (Baron & Neuman, 1998). The measure used for this study included 43 statements to which the participant responded with the frequency of occurrence ranging from 1 = *Not at All* to 5 = *Many Times a Week*. Higher total scores on this scale indicates more bullying. Examples of statements include, "Accused

you of wrongdoing" and "Undervalued your efforts." For this sample, the Workplace Bullying measure had excellent internal consistency (Cronbach's alpha = .98; $M = 86.5$, $SD = 36.4$).

**Occupational Burnout** was assessed using the Maslach Burnout Scale (MBS), which includes three subscales: Exhaustion, Depersonalization, and Personal Accomplishment (Maslach & Jackson, 1981). The MBS scale includes 22 statements to which the participants respond to how frequently the event has happened to them. The response options are on a 7-point Likert scale that ranges from 0 = *Never* to 6 = *Every Day*. The Exhaustion subscale includes 9 statements, the Depersonalization scale includes 5 statements, and the Personal Accomplishment subscale includes 8 statements. Higher total scores on each of the subscales indicates greater frequency of those events, and thereby, more Exhaustion, Depersonalization, or Personal Accomplishment.

The Exhaustion subscale had good internal consistency (Cronbach's alpha = .92; $M = 42.9$, $SD = 13.3$). The Depersonalization subscale had good internal consistency (Cronbach's alpha = .74; $M = 15.8$, $SD = 6.5$). The Personal Accomplishment subscale had good internal consistency (Cronbach's alpha = .79; $M = 31.7$, $SD = 8.7$).

### 2.4. Psychosocial measures

**The Perceived Stress Scale** (PSS) is a 10-item self-report measure that assesses general stress over the past four weeks using a Likert scale from 0 = *never* to 4 = *very often*. The total summed score ranges from 0 to 40, with higher scores indicating a greater degree of perceived stress. Participants are asked to respond to items such as, "In the past month, how often have you been nervous or stressed?" and "In the last month, how often have you found that you could not cope with all the things you had to do?" The PSS is routinely used in research settings and is considered a valid and reliable scale (Cohen et al., 1983). The present study's Cronbach's alpha was = .82 ($M = 21.5$, $SD = 6.5$).

**The Secondary Trauma Stress Scale (STSS)** consists of 17 items measuring intrusion, avoidance, and arousal symptoms associated with indirect exposure to traumatic events via one's professional relationship ((Bride et al., 2004). Using a 5-point Likert scale, responses range from 1 = *never* to 5 = *very often*, with higher scores indicating more trauma. An example item from the instrument is: "I felt emotionally numb." For the current study, the STSS had excellent internal consistency (Cronbach's alpha = .94; $M = 45.8$, $SD = 14.9$).

**The UCLA Loneliness Scale** (UCLA-3) is an abbreviated 3-item scale designed to measure an individual's subjective feelings of loneliness and social isolation (Russell et al., 1978). Using a four-point rating scale ranging from 1 = *I often feel this way* to 4 = *I never feel this way*, participants answer questions such as, "How often do you feel left out?" and "How often do you feel part of a group of friends?" Higher total scores indicate more loneliness. The UCLA-3 has been shown to be reliable and valid (Russell et al 1978). For the current study, the overall scale ($M = 6.0$, $SD = 1.9$) showed good internal consistency (Cronbach's alpha = .82).

**Professional Quality of Life (ProQOL)** includes three subscales: compassion fatigue, compassion satisfaction, and burnout, and asks participants to respond to 30 items using a 5-point Likert scale from 1 = *never* to 5 = *very often*, indicating how often each event has occurred over the past 30 days (Stamm, 2010). An example statement from the ProQOL is: "Because of my [occupation], I have felt on edge about various things." The ProQOL-Compassion Satisfaction subscale had good internal consistency (Cronbach's alpha = .92; $M = 34.0$, $SD = 7.8$). The ProQOL-Burnout subscale had good internal consistency (Cronbach's alpha = .73; $M = 29.9$, $SD = 5.8$). The ProQOL-Secondary Traumatic Stress subscale had good internal consistency (Cronbach's alpha = .88; $M = 25.5$, $SD = 8.5$).

**Major Depressive Disorder** (MDD) was assessed using the subscale of the Patient Health Questionnaire for Major Depressive Disorder (PHQ-9). The PHQ-9 assesses whether the participants meet the criteria for a provisional diagnosis of Major Depressive Disorder (Spitzer et al., 1999). The PHQ is a validated measure comparable to the PRIME-MD (Kroenke et al., 2010). The MDD subscale of the PHQ includes 9 items measured on a 4-point Likert scale from 0 = *not at all* to 3 = *nearly every day* and evaluates experiences in past two weeks, such as "Little interest or pleasure in doing things." The summed scores range from 0 to 27, and the validated cut-off for MDD is a score of 10 or greater. The PHQ-9 had good internal consistency (Cronbach's alpha = .89; $M = 10.8$, $SD = 6.6$).

**Generalized Anxiety Disorder** (GAD) was assessed using the subscale of the Patient Health Questionnaire for Generalized Anxiety (GAD-7). The GAD-7 subscale includes 7 items on a 3-point Likert scale ranging from 0 = *not at all* to 3 = *nearly every day* and evaluates the extent to which the participant has been bothered by specific issues during the past four weeks. A cut-off score of 8 is used to provide a provisional diagnosis of GAD (Spitzer et al., 2006). An example of an item from the GAD subscale is, "Feeling restless so that it is hard to sit still." The GAD-7 had good internal consistency (Cronbach's alpha = .83; $M = 8.8$, $SD = 3.6$).

**Somatization Disorder** (PHQ-15) was assessed using the Patient Health Questionnaire − Somatization subscale (Lowe et al., 2008) which evaluates the presence of physical ailments related to stress. Participants are presented with 15 items to which they respond if they have been bothered in the past 4 weeks by ailments such as stomach pain, back pain, headaches, dizziness, gastrointestinal issues, and depressive symptoms. Response options include 0 = *not bothered at all*, 1 = *bothered a little*, and 2 = *bothered a lot.* The scores are summed for a composite score, and cut-offs include: Minimal (0−5), Mild (6−10), Moderate (11−15), and Severe (16−30). The PHQ-15 had good internal consistency (Cronbach's alpha = .82; $M = 10.0$, $SD = 5.5$).

### 2.5. Statistical analysis

Of the 330 participants in this study, 291 responded to the question regarding intention-to-quit academia in 5 years and those participants were placed into one of three groups based on how they responded to the question: "How likely are you to leave academia in the next 5 years (not due to natural retirement)?" which used an 11-point sliding scale from 0 (not likely) to 10 (100% likely). The first group, *Staying in Academia*, includes 33.7% (n = 98) of the participants who responded with 0, 1 or 2 on the sliding scale. The second group, *On the Fence*, includes 36.1% (n = 105) of the participants whose responses included 3 through 7 on the sliding scale. The last group, *Leaving Academia*, includes 30.2% (n = 88) of the participants who responded to the prompt with an 8, 9 or 10 on the sliding scale.

First, univariate comparisons were conducted between the three comparison groups for demographic, occupational, and psychosocial variables. One-way ANOVAs were used for variables measured on a continuous scale, and Chi-Square tests of Independence were used for categorical variables. A Holm-Bonferroni Step-Down procedure was used to reduce potential Type I error due to multiple comparisons. Pairwise deletion was used for any missing responses.

Next, a step-wise binary logistic regression analysis was conducted to determine the key factors associated with Leaving Academia in 5 years. For this analysis, the participants in the Staying in Academia and On the Fence groups were combined into

one group. A step-wise regression was chosen due to the multicollinearity between the psychosocial variables and between the occupational factors (Glen, 2015). Only variables significant at the univariate level were included in the logistic regression. An alpha level of $p = .05$ was used to determine significant differences for all comparisons. All analyses were conducted using SPSS (IBM, Inc., Chicago IL).

## 3. Results

The description of the demographics for this sample is presented in Table 1. Univariate comparisons for demographics (Table 2), occupational factors (Table 3), and psychosocial factors (Table 4) were conducted to assess differences between the Staying in Academia (SA) group, On-the-Fence (OTF) group, and Leaving Academia (LA) group (see Table 5).

When comparing demographic factors between the three comparison groups, there were no significant differences in gender, age, race, marital status, children living at home, education level, or years of experience (all $ps > .05$). There was a significant difference in ethnicity between the three groups, such that a higher proportion of those identifying as Hispanic/Latinx were in the SA group (16.3%) and OTF group (21.9%), compared to the LA group (3.4%; $p < .001$). A subset analysis to assess how Hispanic/Latinx faculty members differed from non-Hispanic faculty members showed that 50% of the faculty members who identified as Hispanic/Latinx were male ($n = 21$; $p > .05$), and the mean age was significantly ($p = .004$) lower for Hispanic/Latinx faculty members (39.1 years vs 43.2 years for non-Hispanics). Both general perceived stress (18.1 vs 21.7 on the PSS; $p < .001$) and loneliness (5.3 vs 6.1 on the UCLA loneliness scale; $p = .003$) were significantly lower for Hispanic/Latinx faculty members compared to non-Hispanic faculty members.

Comparisons of occupational factors between the three comparison groups indicated that the LA group had significantly lower job satisfaction ($p < .001$), lower employer engagement ($p < .001$) and lower perceived organizational support ($p < .001$) compared to faculty members in the SA and OTFOTF groups. When evaluating work-life conflict and life-work conflict, there was a significant difference between the groups for work-life conflict, such that the faculty members in the LA reported greater work-life conflict than those in the SA and OTF groups ($p < .001$). However, no significant differences were found between the three comparison groups for life-work conflict ($p = .552$). Organizational identification was significantly different between the three comparison groups with those in the SA group indicating the highest level of organizational identification, and those in the LA group indicating the lowest levels ($p < .001$). Bullying in the workplace was also significantly different between the SA and LA groups, with the LA group indicating the greatest amount of bullying ($p = .008$). When comparing the different domains of burnout between the three groups, the LA group had significantly higher levels of exhaustion ($p < .001$) and depersonalization ($p < .001$), while the SA group was significantly higher in personal accomplishment ($p = .008$).

Comparison of psychosocial factors between the three groups showed that the LA group reported the highest level of perceived stress ($p < .001$), secondary traumatic stress ($p < .001$), and loneliness ($p = .010$). The analysis of professional quality of life (ProQOL) showed that those in the OFT and LA groups reported lower levels of compassion satisfaction compared to those in the SA group ($p < .001$). Differences in the burnout subscale of the ProQOL were found between all three groups, with those in the LA indicating the highest level of burnout ($p < .001$). And the comparisons of the secondary traumatic stress (i.e., compassion fatigue) subscale showed the OTF and LA groups to have significantly higher levels compared to those in the SA group ($p = .005$). When comparing rates of psychopathology, the proportions of faculty in the LA group with MDD (66.7%) and GAD (86.4%) far exceeded the already high rates for the SA and OTF groups (both $p < .001$). The proportion of faculty with either moderate or severe levels of Somatization (52.8%) significantly exceeded the proportion of faculty in the SA group (42.6%) and the OTF group (35.2%; $p = .024$). However, when comparing the total scores for the PHQ-15 somatization scale, the differences between the three comparison groups was marginally significant ($p = .098$) with a higher mean score for those in the LA group compared to those in the SA and OTF groups.

**Table 2**
Demographic comparisons.

| | Staying in Academia | On-the-Fence | Leaving Academia | Statistical Significance |
|---|---|---|---|---|
| | n = 98 | n = 105 | n = 88 | |
| Gender % (n) | | | | |
| Male | 31.6% (31) | 20.0% (21) | 17.0% (15) | p = .147 |
| Female | 67.3% (66) | 77.1% (81) | 78.4% (69) | |
| Non-binary/Prefer to Self-Describe | 1.0% (1) | 2.9% (3) | 4.5% (4) | |
| Age | | | | |
| | 42.0 (9.1) | 42.9 (8.2) | 43.2 (8.8) | p = .610 |
| Race % (n) | | | | |
| White | 83.7% (82) | 87.6% (92) | 89.8% (79) | p = .453 |
| Ethnicity % (n) | | | | |
| Hispanic | 16.3% (16)^ | 21.9% (23)^ | 3.4% (3)^^ | p < .001 |
| Marital Status % (n) | | | | |
| Married | 71.4% (70) | 77.9% (81) | 65.9% (58) | p = .180 |
| Children at Home % (n) | | | | |
| Yes – Have Children | 62.8% (59) | 61.0% (61) | 47.0% (39) | p = .070 |
| Education Level % (n) | | | | |
| PhD | 72.4% (71) | 77.1% (81) | 79.5% (70) | p = .507 |
| Years of Experience | | | | |
| Years in Academia | 13.4 (7.8) | 13.3 (7.4) | 13.7 (8.0) | p = .946 |
| Years in Current Position | 8.9 (6.5) | 9.0 (6.4) | 8.0 (6.1) | p = .504 |

Note.
- The post-hoc group differences for significant Chi-Square tests, are indicated using the ^ symbol.
- Means (St.Dev) provided unless otherwise specified.

**Table 3**
Occupational factor comparisons.

| | Staying in Academia | On-the-Fence | Leaving Academia | Statistical Significance |
|---|---|---|---|---|
| | n = 98 | n = 105 | n = 88 | |
| Job Satisfaction | | | | |
| Total Score | 37.3^ (10.6) | 29.0^^ (12.6) | 19.7^^^ (12.7) | p < .001 |
| % (n) Satisfied | 80.6% (75)^ | 43.0% (43)^^ | 22.4% (19)^^^ | p < .001 |
| % (n) Ambivalent | 9.7% (9)^ | 28.0% (28)^^ | 24.7% (21)^^ | |
| % (n) Dissatisfied | 9.7% (9)^ | 29.0% (29)^^ | 52.9% (45)^^^ | |
| Employee Engagement | | | | |
| Total Score | 45.9^ (9.7) | 42.8^ (10.3) | 37.5^^ (9.2) | p < .001 |
| Perceived Organizational Support | | | | |
| Total Score | 23.2^ (7.0) | 20.1^^ (7.3) | 14.2^^^ (5.8) | p < .001 |
| Work-Life and Life-Work Conflict | | | | |
| Work-Life Conflict Total Score | 10.5^ (3.3) | 11.4^ (3.1) | 13.2^^ (2.1) | p < .001 |
| Life-Work Conflict Total Score | 13.8 (5.0) | 13.8 (4.7) | 13.1 (5.6) | p = .552 |
| Organizational Identification | | | | |
| Total Score | 12.5^ (3.3) | 11.3^^ (3.6) | 8.9^^^ (3.2) | p < .001 |
| Workplace Bullying | | | | |
| Total Score | 77.5^ (35.0) | 87.5 (36.1) | 94.6^^ (36.6) | p = .008 |
| Maslach Burnout Scale | | | | |
| Exhaustion Subscale | 36.5^ (12.3) | 41.6^^ (13.4) | 51.4^^^ (9.1) | p < .001 |
| Depersonalization Subscale | 14.0^ (6.1) | 15.9 (6.4) | 17.7^^ (6.6) | p < .001 |
| Personal Accomplishment Subscale | 33.3^ (9.1) | 32.0 (8.4) | 29.3^^ (8.2) | p = .008 |

Note.
- The post-hoc group differences for significant Chi-Square tests or ANOVAs (using Tukey HSD or Dunnett T3 tests) are indicated using the ^ symbol.
- Means (St.Dev) provided unless otherwise specified.

**Table 4**
Psychosocial comparisons.

| | Staying in Academia n = 98 | On-the-Fence n = 105 | Leaving Academia n = 88 | Statistical Significance |
|---|---|---|---|---|
| Perceived Stress (PSS) | | | | |
| Total Score | 19.0^ (6.4) | 20.6^ (6.2) | 24.2^^ (6.2) | p < .001 |
| Secondary Trauma Stress (STSS) | | | | |
| Total Score | 39.4^ (14.8) | 46.0^^ (14.1) | 51.2^^^ (14.1) | p < .001 |
| Loneliness Scale (UCLA) | | | | |
| Total Score | 5.5^ (1.9) | 6.0 (1.8) | 6.4^^ (1.9) | p = .010 |
| Professional Quality of Life (ProQOL) | | | | |
| Compassion Satisfaction Score | 36.8^ (7.4) | 33.2^^ (7.3) | 30.6^^ (8.6) | p < .001 |
| Burnout Score | 26.5^ (5.1) | 30.4^^ (5.5) | 33.1^^^ (5.0) | p < .001 |
| Secondary Traumatic Stress Score | 23.0^ (8.2) | 26.2^^ (8.6) | 26.9^^ (8.0) | p = .005 |
| Major Depression (PHQ) | | | | |
| Total Score | 9.1^ (5.9) | 10.3 (6.5) | 13.0^^ (6.5) | p < .001 |
| Provisional Diagnosis for MDD | 47.9% (45)^ | 48.6% (51)^ | 66.7% (58)^^ | p = .016 |
| Generalized Anxiety (PHQ) | | | | |
| Total Score | 7.9^ (3.6) | 7.8^ (3.6) | 10.7^^ (2.9) | p < .001 |
| Provisional Diagnosis for GAD | 53.2% (50)^ | 50.0% (52)^ | 86.4% (76)^^ | p < .001 |
| Somatization (PHQ) | | | | |
| Total Score | 9.5 (5.8) | 9.6 (5.8) | 11.1 (4.6) | p = .098 |
| % (n) Moderate or Severe | 42.6% (40) | 35.2% (37)^ | 52.8% (46)^^ | p = .024 |

Note.
- The post-hoc group differences for significant Chi-Square tests or ANOVAs (using Tukey HSD or Dunnett T3 tests) are indicated using the ^ symbol.
- Means (St.Dev) provided unless otherwise specified.

**Table 5**
Binary Logistic Step-Wise Regression Predicting Intentions to Leave Academia in 5 Years – Including all factors significant at the univariate level.

| | B | SE | Wald | Sig | Odds Ratio | Lower 95% CI | Upper 95% CI |
|---|---|---|---|---|---|---|---|
| Perceived Organizational Support | −.089 | .031 | 8.209 | .004 | .914 | .860 | .972 |
| Maslach Burnout -Exhaustion Subscale | .055 | .020 | 7.712 | .005 | 1.056 | 1.016 | 1.098 |
| ProQOL-Compassion Satisfaction Subscale | −.047 | .024 | 3.854 | .050 | .955 | .911 | 1.000 |
| Constant | −.217 | 1.586 | .019 | .891 | .805 | | |

A multivariate binary logistic regression analysis was used to identify which of the significant occupational and psychosocial variables were significantly associated with Leaving Academia in 5 years. The step-down procedure provided a significant omnibus model, $X^2$ (3) = 63.113, $p < .001$, with a -2 L L = 215.926 and Nagelkerke $R^2$ = 0.345. The significant factors showed that

Perceived Organizational Support was negatively related to LA ( $BLS = -0.089$, $p = .004$), the Exhaustion subscale of the Maslach Burnout Measure was positively associated with LA ($B = 0.055$, $p = .005$), and the Compassion Satisfaction subscale of the ProQOL was negatively associated with LA ($B = -0.047$, $p = .050$). The overall classification model was 72.2%, with a sensitivity of 67.8% and specificity of 81.7%.

## 4. Discussion

The aim of the present study was to extend the Job Demand-Resources Model (Demerouti et al., 2001) by incorporating a psychosocial approach in order to conduct a comprehensive, targeted analysis of demographic, occupational, and psychosocial factors associated with intentions-to-quit among higher education faculty members. The measures included for this study were deliberately selected based on the occupational health literature to capture aspects of psychological factors associated with occupational distress, including stress, loneliness, and mood disorders, along with specific occupational measures that capture multiple dimensions of the work experience. Prior research typically investigates single factors related to faculty intentions-to-quit, like burnout and well-being, or larger occupational concepts such as attrition and retention. This comprehensive occupational health study can guide institutions to develop targeted interventions focused on attenuating specific faculty frustrations and thereby reducing intentions-to-quit.

Key findings from the group of individuals already committed to leaving academia (LA) are consistent with literature that indicates certain occupational factors, like perceived organizational support, or a lack of support (Heffernan & Heffernan, 2019), can lead to faculty resignations. The present study found that perceived organizational support was negatively related with intentions-to-quit within the LA group, which aligns with results from a meta-analysis demonstrating that employees who feel their organization does not care about their well-being are more likely to quit (Rhoades & Eisenberger, 2002). Findings from the current study indicated that a range of occupational and environmental factors play a role in determining faculty intentions-to-quit, such as low job satisfaction and low employer engagement. In addition, work-life conflict was elevated in the LA group compared to the SA and OTF groups. The perceived imbalance of work demands, infringing on the desire to provide equal attention to one's family and home, has been cited in existing literature as a source of faculty frustration ((Chambers Mack et al., 2019); Cidlinska et al., 2022; Lashuel, 2020; Mudrak et al., 2018), a conclusion supported by this study. The prevalence of these findings within higher education, which echoes research conducted with K-12 educators (Chambers Mack et al., 2019)This underscores the need for further research into occupational factors that are experienced throughout all levels of the education system, to improve institutions' ability to retain faculty members.

Aside from ethnicity, there were no indications of demographic factors influencing intentions-to-quit in the present study (see Tables 1 and 2), although previous studies have found disparities between groups. For instance, one study indicated female faculty members have experienced higher levels of anxiety when contrasted against their male counterparts (Souza et al., 2020). The comparisons for ethnicity showed that Hispanic/Latinx faculty members were more likely to stay in academia or were on the fence about leaving. Recent research on Latinas leaving the work force showed that between March 2020 and March 2021, Latinas had the largest drop in employment compared to all other demographics, with speculation that Latinas involuntarily left the work force due to increased household responsibilities amid COVID-19 transitions such as a switch to remote schooling for children (Hernandez, Garcia, Nazario, Rios, & Dominguez-Villegas, 2021). The current study identified that Hispanic/Latinx faculty members were less likely to plan to leave academia. Given that the present study's full sample was comprised of only 23% (n = 61) males, yet half of the Hispanic/Latinx faculty members in this study were male (50%; n = 21), this could offer some explanation for the Hispanic/Latinx faculty members' intent-to-stay or being on the fence about leaving. However, because the sample size is small for the Hispanic/Latinx group, more research would be warranted.

There are strong indicators within existing literature linking negative psychological affectations to faculty dissatisfaction with their employers – an assertion this study supports. Although the LA, SA, and OTF groups all reported elevated levels of perceived stress, the LA group reported the highest levels of perceived stress when compared to the other groups. High levels of stress have been consistently linked to negative health outcomes, including exhaustion, repetitive strain injuries, and cardiovascular disease (Lashuel, 2020; Mudrak et al., 2018). If faculty members link these stress-related negative health outcomes to their academic jobs, they may opt for less stressful working conditions away from academia. Similarly, the LA group also reported higher levels of burnout, which has been cited as a persistent dimension of the faculty experience within higher education (Lashuel, 2020); (Mudrak et al., 2018). There was further evidence that the LA group was experiencing less compassion satisfaction, indicating greater compassion fatigue, than the other groups. Greater compassion fatigue suggests that faculty members are dissatisfied with important element of their job (e.g., teaching), and identifying compassion fatigue can be helpful as higher-education institutions contemplate and design effective interventions to attenuate existing frustrations and support the needs of current and future faculty members (Cordaro, 2020). Higher-education administrators should also consider how psychological conditions like stress and burnout can manifest physically in faculty members, as 52.6% of the respondents from the LA group reported moderate-to-severe levels of somatization (i.e., psychological concerns manifesting as physical complaints). Notably, the other two groups also reported moderate-to-severe levels of somatization (42.6% of SA group, and 35.2% of OTF group).

Two especially insightful findings were identified when comparing rates of psychopathology between the three groups. Faculty members from the LA group with Major Depressive Disorder (MDD) reported a 2-week provisional prevalence rate of 66.7% and individuals meeting the criteria for Generalized Anxiety Disorder (GAD) indicated an alarming 2-week provisional prevalence rate of 86.4%; outpacing already elevated rates found within the SA and OTF groups. Most disturbing, these rates exceed the already high MDD and GAD prevalence documented in the literature for frontline healthcare worker populations (Adibi et al., 2021; Olaya et al., 2021). MDD is characterized by persistent feelings of sadness, hopelessness, emptiness and anhedonia (i.e., loss of interest), and can be accompanied by other psychosocial changes (e.g., loss of appetite, disrupted sleep, a lack of sexual desire, uncertainty when decision-making), and suicidal ideation (Belmaker & Agam, 2008; Uwadiale et al., 2022). While some MDD symptoms overlap with compassion fatigue, it's important to note that compassion fatigue is a psychological condition, whereas MDD is a mental illness. GAD clinical symptomology includes chronic and excessive anxiety and uncontrollable worry encompassing a broad range of life circumstances, events and activities, demonstrating

high comorbidity with other mental health disorders, including suicide (Cordaro et al., 2021; Hernandez, Garcia, Nazario, Rios, & Dominguez-Villegas, 2021). Existing research indicates depression is reported at greater rates within the teaching profession when contrasted against other occupations (Chambers Mack et al., 2019), and in the K-12 literature, MDD (Besse et al., 2015) and GAD (Jones-Rincon & Howard, 2018) both influence faculty intentions-to-quit.

### 4.1. Limitations

This study has identified central factors attributed to faculty intentions-to-quit, however, some noteworthy study limitations necessitate discussion. The study questionnaire was distributed exclusively through social media channels and directed at professional academics. Although this is a frequently used means of survey distribution, the participant pool only consists of responses from faculty members engaged with social media. Oftentimes specific social media groups are a place for work social support (Oksa et al., 2021), and thus, while the recruitment for this study was placed on multiple social media sites, the survey topic may have attracted more individuals who were experiencing more occupational stress than those not on social media.

Additionally, the demographic makeup of the respondents in this study does not directly align with the actual representation in academia, such that a far greater number of women completed this survey compared to men. Staniscuaski et al. (2021) identified how gender, race, and parenthood negatively affected academic productivity during the COVID-19 pandemic, which exemplifies the importance of understanding intentions-to-quit within these marginalized groups. Additionally, while the post-hoc power analysis indicates sufficient power for this study, further research would benefit from obtaining a larger, more representative sample, focusing specifically on gender and other demographic differences. Further, the study used 14 different measures, which can give the impression to potential respondents that participation would be time consuming, creating the perception of additional burdens on faculty members already struggling to meet existing administrative demands.

Key factors associated to faculty intentions-to-quit have been identified, but this study has not established causation. Existing literature has identified stress and mental health factors associated with faculty intentions-to-quit, many of which are supported by the findings from this study, yet the progression of events leading to resignations is unclear. For instance, although MDD and GAD are associated with the intentions-to-quit of all three groups, especially the LA group, it is uncertain if the desire to resign is a consequence of mental health problems, a concomitant factor associated with the decision-making process to leave, or if mental health complications follow once a faculty member has made the decision to resign from their post. Future research should also consider faculty decision-making processes and the communication surrounding organizational exit, in addition to the factors informing decisions. For example, it may be beneficial to ask faculty members what is most important when contemplating these kinds of decisions: timing, research, collective decision-making with family members, geographical concerns about work location, or financial considerations. All of these commonly inform decision-making processes and how employees announce their intent-to-quit (Klatzke, 2016). If a faculty member is struggling financially or living in a geographic region believed to be undesirable, these factors may also contribute to mental health complications and influence decision-making process associated with intentions-to-quit.

Another limitation to this study is the lack of understanding about the OTF group. It is worth considering that questions about intentions-to-quit over the next five years may elicit different responses from newer academics contrasting those who are more grounded and advanced in their careers. Therefore, future research should incorporate specific questions directed towards the OTF group, capable of distinguishing factors that will move individuals off the fence.

It is also necessary to consider the timing of this study when contextualizing findings. Recruitment began in April of 2022, more than two years past the initial onset of the COVID-19 pandemic. COVID-19 fatigue and other pandemic related stressors may have influenced would-be participants' willingness to respond to the survey and also the nature of the responses.

### 4.2. Implications for impact

Occupational health promotes physical, social, and mental well-being of workers, and maintenance of occupational health is important not only to the individual, but also the institution and stakeholders. Higher education faculty members face differentiating pressures dependent on their type of institution and position. Therefore, prevention and intervention strategies adopted to safeguard the occupational health of higher education faculty must be developed to align with the specific needs of each faculty member. Based on the aggregated results from this study, higher education faculty members' intentions-to-quit are strongly linked to poor perceived organizational support, burnout related to exhaustion, and lack of compassion satisfaction. Occupational health prevention and intervention strategies often fail because they are focused on changing the employee rather than elements within the institution. In order to improve perceived organizational support and reduce burnout, institutions should initiate changes that foster support and reduce burdens. For educators, compassion satisfaction is strongly associated with helping others. In order to help educators improve their capacity for compassion, appropriate professional development training and resource allocation should be implemented. Suggestions to improve compassion satisfaction include general self-care (i.e., healthy eating and sufficient sleep) along with strategies that focus on maintaining a healthy work-life balance (Faillace, 2020). Training programs during graduate school and professional development for teachers and academics can highlight symptoms of burnout and reduced compassion satisfaction, in order for educators to have not only an awareness of these symptoms but also resources to mitigate negative outcomes.

## 5. Conclusion

The goal of this study was to use a comprehensive occupational health model to better understand key factors associated with higher education faculty intentions-to-quit. Some of the chief findings implicate environmental factors, like work-life conflict, organizational support, stress, and burnout. These findings can inform targeted interventions so that faculty frustrations can be thoughtfully attenuated, and thus, reduce turnover. Moreover, changing unfavorable working conditions and challenging certain pervasive institutional norms, like siloed and hyper-competitive work models (Berg et al., 2016) and publish or perish norms, can mitigate the effects of unnecessary stress while improving individual and collective quality of life. The high rates of psychopathology identified among faculty who intended to leave academia should also serve as a cautionary warning to administrators. A commitment to improving working conditions and supporting faculty interests, can lessen the likelihood of negative health

outcomes, enhance retention and recruitment initiatives, and avert what has been predicted as an impending great resignation within academia.

Statements and Disclosures.

## 6. Compliance with ethical standards

— The authors declare no potential conflicts of interest.
— This study was approved by the Institutional Review Board at <Redacted> for research involving human subjects.
— All participants provided informed consent prior to completing the survey.

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## Author contributions

All authors have approved the final article should be true and included in the disclosure.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Data availability

The data that has been used is confidential.

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