

Prevalence and Predictors of Burnout Among Occupational Therapy Practitioners in the United States

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Importance: Identifying the extent and predictors of burnout among occupational therapy practitioners is important so strategies can be developed to reduce burnout and mitigate associated consequences within the profession.

Objective: To investigate the prevalence and determinants of burnout reported by U.S. occupational therapy practitioners.

Design: Cross-sectional survey.

Participants: Occupational therapy practitioners working in a wide range of clinical settings who spent at least 50% of their time in direct patient care and who had been employed continuously for more than 6 mo.

Outcomes and Measures: The outcome of interest was burnout, which was measured using the Emotional Exhaustion, Depersonalization, and Personal Accomplishment subscales of the Maslach Burnout Inventory–Human Services Survey (MBI–HSS). Predictor variables included sociodemographic and workplace characteristics. The relationship between MBI–HSS subscale scores and predictor variables was jointly estimated using a multivariate multivariable linear regression analysis.

Results: One hundred seventy-eight occupational therapy practitioners completed the survey. Higher perceived level of supervisor support, satisfaction with income, and educational attainment were associated with lower MBI–HSS subscale scores ($ps = .001, .002, \text{ and } .005$, respectively).

Conclusions and Relevance: Burnout among occupational therapy practitioners can be conceptualized as an issue of workplace health and safety. Various stakeholder groups can consider potential systematic interventions involving measures to promote positive supervisor support in the workplace and salary negotiation skills for early-stage clinicians. Future research should explore broad interventions to reduce burnout among clinicians.

What This Article Adds: We estimated the extent and predictors of burnout among U.S. occupational therapy practitioners. Future research, advocacy, and policy should address structural-level interventions to promote workplace cultures and conditions that can protect the occupational therapy workforce from burnout.

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Burnout is a concept that describes the psychological relationship people have with their job along three dimensions: exhaustion–energy, cynicism–involvement, and inefficacy–efficacy (Maslach & Leiter, 2008). A large body of literature indicates that feelings of burnout are common among health care professionals, including occupational therapy practitioners (Balogun et al., 2002; Painter et al., 2003; Poulsen et al., 2014). A range of high-quality studies in the disciplines of medicine, nursing, and other health professions has shown that feelings of burnout may reduce patient safety

(Garcia et al., 2019; Salyers et al., 2017; Tawfik et al., 2019) and contribute to attrition in professional disciplines (Scanlan & Still, 2013; Willard-Grace et al., 2019). In addition, health care providers who experience a high level of burnout tend to exhibit lower empathy and responsiveness to client needs (Aiken et al., 2012; Wilkinson et al., 2017) and to have lower creativity (Derakhshanrad et al., 2019).

Previous studies have shown that occupational therapy practitioners in the United States and around the world experience a high level of burnout (Balogun

et al., 2002; Edwards & Dorette, 2010; Gupta et al., 2012; Katsiana et al., 2021; Lloyd & King, 2001; Painter et al., 2003). This body of literature documents that among occupational therapy practitioners, burnout is associated with workplace issues, such as high workload and time demands (Gupta et al., 2012; Lloyd et al., 2005; Poulsen et al., 2014; Wressle & Samuelson, 2014), lack of resources at work (Lloyd et al., 2005), type of shift (Escudero-Escudero et al., 2020), lack of autonomy (Gupta et al., 2012), and low satisfaction with income (Balogun et al., 2002; Poulsen et al., 2014). Previous studies have also shown that burnout is associated with strains specific to the field of occupational therapy, such as pressure to adopt a generalist approach (Devery et al., 2018), underrecognized value of the profession (Devery et al., 2018; Lloyd & King, 2001), lack of respect from colleagues (Gupta et al., 2012), and pressure to use nonoccupational practices (Devery et al., 2018). Intrinsically located stressors that are specific to occupational therapy and associated with burnout include professional self-doubt (Lloyd et al., 2005), lack of professional identity (Edwards & Dorette, 2010), and role conflict (Edwards & Dorette, 2010).

Several studies have examined burnout among U.S. occupational therapists. An article by Stoykov et al. (2017) reported that feelings of burnout among occupational therapy practitioners in a small mentorship program at one institution were associated with a desire to quit research. Other studies of burnout among U.S. occupational therapists have tended to focus on one geographic area or practice setting and are somewhat dated (Balogun et al., 2002; Edwards & Dorette, 2010; Rogers & Dodson, 1988); therefore, the extent to which the findings apply to present-day circumstances in light of changes to clinical practice environments over the previous decades is unclear. Thus, the purpose of this study was to assess the extent and predictors of burnout in a national sample of U.S. occupational therapy practitioners in varied practice settings.

Method

This study was a cross-sectional anonymous online survey fielded between October 2018 and January 2019. The Creighton University institutional review board approved of the study protocol.

Participants

The participants were occupational therapy practitioners who met the following inclusion criteria: They (1) spent at least 50% of their scheduled work time providing direct care, (2) reported that they had worked ≥ 6 mo continuously in their position, and (3) practiced in the United States. Practitioners who did not meet these criteria were excluded from the study.

Recruitment occurred through professional social media platforms, including selected groups on

Facebook, state-level occupational therapy organizations, and CommunOT. Participants were encouraged to invite their colleagues who met the inclusion criteria to also participate in the study.

Measures

Burnout was measured using the Maslach Burnout Inventory–Human Services Survey (MBI–HSS), which contains 22 statements that describe feelings of burnout across three subscales: Emotional Exhaustion (EE), Depersonalization (DE), and Personal Accomplishment (PA). For each statement, participants rate how frequently they experience feelings of burnout on a 7-point Likert scale ranging from 0 (*never*) to 6 (*every day*; Maslach et al., 2016). The MBI–HSS has been widely used in burnout research, and strong or acceptable psychometric properties have consistently been reported for various demographic populations (Maslach et al., 2016). Maslach et al. (2016) and Leiter and Maslach (2016) provided a thorough review of the instrument’s standardization, psychometric properties, and most recent trends in burnout research using the MBI–HSS. As opposed to other burnout measures, the MBI–HSS addresses the three key dimensions of burnout, allowing a holistic evaluation of trends, causes, and consequences (Maslach et al., 2016). The instrument is specifically tailored to measure burnout among health care professionals, such as occupational therapy practitioners, who interact frequently and intensely with clients (Leiter & Maslach, 2016; Maslach et al., 2016).

Sociodemographic and education-related variables included age, gender, marital status, satisfaction with income, educational attainment, and years of clinical experience in occupational therapy practice. Potential workplace predictors included practice setting, number of clients seen per day, and number of hours per day spent in direct patient care; in addition, respondents indicated the extent to which they felt supported by colleagues and supervisors by answering the following two questions: “What level of support do you feel you receive from your colleagues?” and “What level of support do you feel you receive from your supervisor?” The response options for both questions were *high*, *medium*, or *low*.

Statistical Analyses

Univariate analyses involved summarizing the characteristics of participants who provided responses for all relevant variables, including the three MBI–HSS subscales. The means, standard deviations, medians, interquartile ranges, and ranges for EE, DE, and PA scores were calculated. In this article, we report the univariate results in two ways (Maslach et al., 2016). First, we report the summed score for each MBI–HSS subscale; this approach enables multivariate analysis and comparisons with prior research (Maslach et al., 2016). Second, we report the average score for each

MBI–HSS subscale; this approach improves the ease of interpretation because the results provide an average rating on a scale ranging from 0 (*never*) to 6 (*every day*).

Data analyses also included a multivariate approach. We used multivariable multivariate linear regression to model the relationships among the three dependent variables—EE, DE, and PA subscale scores—simultaneously in relation to the potential predictor variables. We selected this statistical approach rather than using three separate linear regression analyses because the dependent variables are conceptually and empirically related concepts (Maslach et al., 2016). Thus, we used multivariable multivariate linear regression to simultaneously model EE, DE, and PA as dependent variables in the same regression model. The effect of each independent variable was tested using global tests of association across the three models. A Bonferroni adjustment accounted for multiple comparisons (α of .05/7 = .007). Assumptions for all models were examined. All analyses were conducted in Stata Version 15.1.

Results

A total of 248 people responded. We included 178 participants and their responses in the analysis; 70 participants (28%) were excluded because they had missing values for one of the relevant variables. Most participants included in the analysis were female ($n = 167$; 94%) and ranged in age from 22 to 69 yr ($M = 39$ yr, $SD = 11$). The respondents also ranged in their highest educational attainment: One-fifth had a baccalaureate degree ($n = 36$; 20%), and 80% had either a master's degree ($n = 71$; 40%) or a doctoral degree ($n = 71$; 40%). The most common primary practice settings reported were skilled nursing facilities ($n = 21$), inpatient and outpatient pediatrics ($n = 26$), and school-based settings ($n = 20$). The participants perceived a range of support from their supervisors and colleagues, with almost half indicating a high degree of support from colleagues ($n = 81$; 46%), but only about one-quarter indicating a high degree of support from their supervisors ($n = 47$; 26%). Almost 60% reported satisfaction with their current income ($n = 104$; 58%). The sample's full demographic characteristics are provided in Table 1.

The univariate distributions of the MBI–HSS subscales using the summated rating scale method (Maslach et al., 2016) were as follows: for EE, the mean score was 26 ($SD = 12$, range = 1–51); for DE, it was 7 ($SD = 6$, range = 0–27); and for PA, it was 39 ($SD = 6$, range = 21–48; Table 2).

The distributions of these three variables using the average for each subscale were as follows: For EE, the mean value was 2.9, which means that, on average, participants reported feeling emotionally exhausted a few times per month. For DE, it was 1.4, which means that, on average, participants felt a sense of depersonalization between a few times per year or less and

Table 1. Sample Characteristics

Characteristic	<i>n</i> (%)
Gender, <i>M</i> (<i>SD</i>)	
Female	167 (93.8)
Male	11 (6.2)
Age, yr, <i>M</i> (<i>SD</i>)	38.8 (11.3)
Marital status	
Single	51 (28.7)
Married	112 (62.9)
Divorced or widowed	15 (8.4)
Educational attainment	
Bachelor's degree	36 (20.2)
Master's degree	71 (39.9)
Doctoral degree	71 (39.9)
Perceived support from supervisor	
High	47 (26.4)
Medium	77 (43.3)
Low	54 (30.3)
Perceived support from colleagues	
High	81 (45.5)
Medium	69 (38.8)
Low	28 (15.7)
Satisfaction with current income	
Yes	104 (58.4)
No	74 (51.6)
Practice setting ^a	
Skilled nursing facility	21 (15.4)
Pediatrics (outpatient or inpatient)	26 (19.1)
School	20 (14.7)
Hospital (inpatient acute)	23 (16.9)
Home health	9 (6.6)
Hospital (inpatient rehabilitation)	13 (9.6)
Hospital (outpatient)	9 (6.6)
Mixed	15 (11.0)
Reported hours per day spent in direct patient care	
Low (1–4)	14 (8.0)
Medium (5–8)	86 (48.9)
High (≥ 9)	54 (30.7)
Other	22 (12.6)
Reported number of clients seen per day	
Low (1–3)	11 (6.2)
Medium (4–6)	49 (27.7)
High (≥ 7)	109 (61.6)
Other	8 (4.5)
Years of experience as an OT	12.1 (10.8)

Note. $N = 178$. OT = occupational therapist.

^aThe eight most frequently reported practice settings are reported here; thus, the *n*s do not sum to 178.

Table 2. Outcome Variables Used in the Multivariate Multiple Regression Analysis

MBI-HSS Subscale	<i>M</i> (<i>SD</i>)	<i>Mdn</i>	IQR	Range
Emotional Exhaustion	26.3 (12.1)	25.5	16.0–37.0	1–51
Depersonalization	7.0 (5.9)	5.0	3.0–11.0	0–27
Personal Accomplishment	38.8 (6.3)	40.0	35.0–44.0	21–48

Note. *N* = 178. IQR = interquartile range; MBI-HSS = Maslach Burnout Inventory–Human Services Survey.

monthly. For PA, it was 4.9, which means that, on average, participants felt a sense of personal accomplishment almost a few times per week (Figure 1).

The multivariate multivariable linear regression model estimated the relationship between possible predictor variables and each of the outcome variables (EE, DE, and PA; Table 3). Important predictor variables in all three of the model's equations were educational attainment ($p = .005$), perceived support from supervisor ($p < .001$), and satisfaction with income ($p = .002$).

Overall, greater support from one's supervisor was significantly associated with the MBI-HSS subscale scores ($p < .001$). In particular, the participants with a high degree of support from their supervisor reported lower emotional exhaustion ($\beta = -6.85$, 95% confidence interval [CI] $[-10.63, -2.53]$) and higher personal accomplishment ($\beta = 2.95$, 95% CI $[0.73, 5.18]$), whereas those who perceived a low degree of supervisor support had higher depersonalization ($\beta = 2.10$, 95% CI $[0.02, 4.19]$) than people with a medium degree of supervisor support.

Satisfaction with income was associated with less burnout for all three subscales ($p = .002$). The participants who were satisfied with their income reported lower emotional exhaustion ($\beta = -6.36$, 95% CI $[-9.66, -3.05]$), lower depersonalization ($\beta = -2.01$, 95% CI $[-3.72, -0.30]$), and higher personal accomplishment ($\beta = 1.86$, 95% CI $[0.05, 3.68]$).

The association between educational attainment was significant across all three equations ($p = .005$),

such that having a doctoral degree compared with a baccalaureate degree was associated with lower emotional exhaustion ($\beta = -6.33$, 95% CI $[-11.02, -1.64]$), lower depersonalization ($\beta = -3.60$, 95% CI $[6.02, -1.17]$), and higher personal accomplishment ($\beta = 4.41$, 95% CI $[1.8, 6.98]$). This trend was similar for those with a master's degree, although the point estimates for those having a doctoral degree were greater, particularly with respect to personal accomplishment.

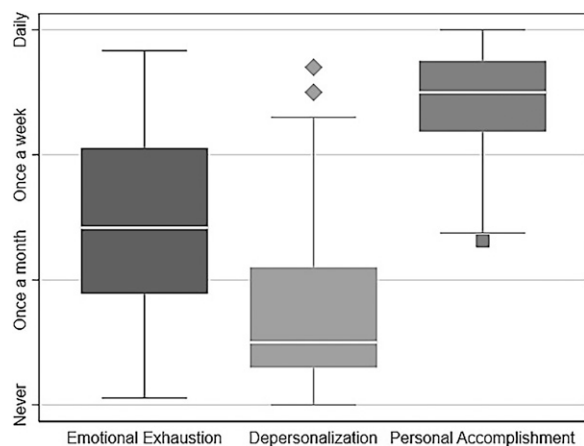
Discussion

In this article, we have described the distribution of burnout among occupational therapy practitioners across the United States in various practice settings. Factors that were protective against burnout across all three MBI-HSS subscales included support from one's supervisor, satisfaction with income, and higher educational attainment. Individual-level characteristics other than educational attainment were not associated with feelings of burnout.

Most of our findings harmonize with those of other studies. The finding that greater support from one's supervisor predicted lower burnout scores is consistent with Scanlan and Still's (2013) burnout study, which was completed with occupational therapists in mental health settings in Australia. In addition, we found that feelings of burnout were associated with dissatisfaction with income, which is consistent with findings about occupational therapy practitioners from Queensland, Australia (Poulsen et al., 2014), and from New York City (Balogun et al., 2002). Other important structural factors associated with burnout noted in previous literature include high demands on practitioners' time, feeling overloaded at work, and other negative aspects of working conditions (Abaoglu et al., 2020; Gupta et al., 2012; Poulsen et al., 2014; Wressle & Samuelson, 2014).

In this study, we found that most individual-level characteristics did not predict burnout, although previous research is inconsistent regarding this association. Balogun et al. (2002), Edwards and Durette (2010), and Katsiana et al. (2021) found no association between burnout and demographic characteristics, although other scholars have noted an association between burnout and gender (Scanlan & Still, 2013), age (Escudero-Escudero et al., 2020; Reis et al., 2018), marital status (Escudero-Escudero et al., 2020), and caregiving responsibilities (Escudero-Escudero et al., 2020). The findings of this study suggest that higher educational attainment predicts lower burnout scores;

Figure 1. Distribution of self-reported feelings of burnout by MBI-HSS subscale.



Note. Subscales are scored on a 7-point Likert scale ranging from 0 (never) to 6 (daily).

Table 3. Multivariable Multivariate Regression of Burnout in Occupational Therapists

Predictor Variable	Outcome Variables						<i>p</i> ^a
	Emotional Exhaustion		Depersonalization		Personal Accomplishment		
	β	95% CI	β	95% CI	β	95% CI	
Gender, male (ref. = female)	-1.74	[-8.48, 5.00]	0.55	[-2.94, 4.04]	-0.20	[-3.90, 3.49]	
Age	-0.09	[-0.26, 0.08]	-0.08	[-0.17, 0.01]	0.07	[-0.02, 0.17]	.236
Marital status (ref. = single)							.201
Married	-2.04	[-5.85, 1.77]	-2.45*	[-4.42, -0.48]	1.21	[-0.88, 3.30]	
Divorced or widowed	-5.99	[-13.15, 1.17]	-3.14	[-6.84, 0.57]	3.04	[-0.89, 6.97]	
Educational attainment (ref. = bachelor's degree)							.005*
Master's degree	-4.02	[-8.63, 0.60]	-2.59*	[-4.98, -0.20]	1.51	[-1.02, 4.04]	
Doctoral degree	-6.33**	[-11.02, -1.64]	-3.60**	[-6.02, -1.17]	4.41**	[1.84, 6.98]	
Perceived support from supervisor (ref. = medium)							.001**
High	-6.58*	[-10.63, -2.53]	-2.03	[-4.13, 0.06]	2.95*	[0.73, 5.18]	
Low	4.00	[-0.03, 8.02]	2.10*	[0.02, 4.19]	-0.72	[-2.93, 1.49]	
Perceived support from colleagues (ref. = medium)							.572
High	-2.31	[-5.87, 1.26]	-0.02	[-1.87, 1.82]	0.96	[-0.99, 2.92]	
Medium	—	—	—	—	—	—	
Low	0.67	[-4.28, 5.62]	-0.67	[-3.24, 1.89]	-0.30	[-3.02, 2.42]	
Satisfaction with current income, yes (ref. = no)	-6.36**	[-9.66, -3.05]	-2.01*	[-3.72, -0.30]	1.86*	[0.05, 3.68]	
<i>R</i> ²	.29**		.19**		.21**		

Note. *N* = 178. Boldface indicates that the variable was statistically significant in both the multivariable multivariate linear regression and the global test of association with the Bonferroni adjustment. CI = confidence interval; ref. = reference category.

^aGlobal *p* value from multivariable multivariate linear regression using the Bonferroni correction for multiple comparisons (α of .05/7 = .007).

p* < .007. *p* < .001.

however, the mechanism underlying this association is unclear.

Brown et al. (2015) and Griffiths and Padilla (2006) discussed how graduates of doctoral-level occupational therapy programs are expected to be more autonomous, skillful at conducting interprofessional and evidence-based practice, and prepared to assume higher level leadership positions. It is plausible that occupational therapy practitioners with higher educational degrees may be exposed to a wider range of work opportunities, positions, and relationships; it is also possible that doctoral education may confer protection against burnout vis-à-vis coursework and mentorship opportunities. However, occupational therapy practitioners who do not have a doctoral degree may have more feelings of burnout related to having less autonomy in the workplace or feeling less valued as a member of the care team. Future research should explore this association with the goal of promoting an engaged workforce among

occupational therapy practitioners of all educational backgrounds.

The findings from this study suggest that the experience of burnout among occupational therapy practitioners is a psychosocial process (Martikainen et al., 2002) involving factors at the macro and meso levels (i.e., adequacy of supervisor support provided at workplace, satisfaction with income expected within the profession). The macro-level issues cannot be fully addressed by an individual practitioner, but they could be addressed more broadly through advocacy and intervention by health care organizations, professional associations, and educational institutions (Brown & Pashniak, 2018; Durocher et al., 2016; Reis et al., 2018).

Brown and Pashniak (2018) framed the psychological hazards for occupational therapy practitioners as an issue of workplace health and safety with the potential for a public health approach to risk reduction; specifically, they argued that employers have legal responsibilities to protect the health, including the

psychological health, of employees, and they articulated the role that diverse stakeholder groups can play to protect the health of occupational therapy practitioners. In the wake of the survey conducted by [Brown and Pashniak \(2018\)](#), the Society of Alberta Occupational Therapists (SAOT) developed a public domain website ([SAOT, n.d.](#)) that provides resources for supporting the psychological health of occupational therapy practitioners, including evidence-based recommendations and guidance about implementation for stakeholders in government, education and research, accreditation and regulatory bodies, employers and managers, and professional unions ([SAOT, 2016](#)). This framework could be adapted to future burnout prevention work and psychological health and safety efforts in the United States.

Beyond reconceptualizing the individual experience of burnout as a macro-level pattern and initiating macro-level interventions to reduce it, there are also strategies that individual occupational therapy practitioners can use to reduce their individual experience of burnout. There is strong support for practices such as mindfulness programs, relaxation techniques, and coping strategies ([Burton et al., 2017](#); [Lomas et al., 2019](#); [Luken & Sammons, 2016](#); [Maslach et al., 2016](#)). Such strategies could be protective for individual occupational therapy practitioners.

[Richards and Vallée \(2020\)](#) discussed the need for occupational therapy salaries to reflect the rising cost of education, especially with the increasing higher educational requirements to become an entry-level occupational therapy practitioner. The mismatch between the cost of education and the income potential of various health care professions, which can lead to dissatisfaction with salary accepted as a norm within the profession, has been described in several recent studies (e.g., [Chisholm-Burns et al., 2019](#); [Pabian et al., 2018](#)). In addition to occupational therapy students and practitioners being trained on job search and negotiation skills to secure employment opportunities that reflect competitive wages, educational programs and professional organizations can assume systematic perspectives to approach and mitigate the observed imbalance. [Pabian et al. \(2018\)](#) highlighted that when students accrue excessive educational debt to offset the rising cost of health care education, they are more likely to face financial challenges and develop greater expectations of salary, which may not be matched by health care funding and reimbursement schedules that are not growing at the same rate. [Chisholm-Burns et al. \(2019\)](#) urged that doctoral-granting health care programs consider endorsing debt-minimizing strategies to reduce financial stress and subsequent negative consequences for practitioners.

Limitations

The current study has several limitations. One limitation is that the small sample size of 178 participants; therefore, the extent to which the sample generalizes

to occupational therapists in the United States is unclear. Another limitation is the potential for response bias and response fatigue. We did not address regional variability in the prevalence and predictors of burnout. Finally, a limitation of the MBI-HSS is that the thresholds for what constitute low, moderate, and high levels of burnout are not clearly defined and used consistently in the previous literature; however, recent scholarship about patterns of the MBI-HSS subscale scores have added important nuance and framing to this discourse, as discussed by [Leiter and Maslach \(2016\)](#).

Implications for Occupational Therapy Practice

The results of this study have the following implications for occupational therapy practice:

- Burnout among occupational therapy practitioners can be conceptualized as an issue of workplace health and safety with the potential for broad interventions involving varied stakeholder groups to address it.
- Supervisors have a role in reducing burnout by promoting a workplace culture and policies that are supportive of occupational therapy practitioners of all educational backgrounds.
- Income satisfaction was protective against feelings of burnout. Professional associations, mentors, and educators may help occupational therapy practitioners advocate for salaries as a way of preventing or reducing burnout.

Conclusion

Individual-level characteristics were not associated with burnout, although education and workplace characteristics were; specifically, supervisor support, satisfaction with income, and higher educational attainment were protective against burnout. Burnout can significantly affect both the quality and the effectiveness of the care provided by occupational therapy practitioners, and it can have serious implications for practitioners, clients, and health care organizations ([Aiken et al., 2012](#), [Garcia et al., 2019](#); [Maslach et al., 2016](#); [Salyers et al., 2017](#)). Broad intervention approaches addressing structural factors could reduce burnout among occupational therapy practitioners in the United States. Future research, advocacy, and policy should address structural and organizational factors related to burnout to mitigate the associated consequences and promote a productive and thriving occupational therapy workforce. 🏠

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