



Job Satisfaction and Burnout Among Nonclinical Workers in a Medical Education Center

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BACKGROUND AND OBJECTIVES: Research into the rates of burnout among nonclinical workers is nonexistent at medical education centers (MECs). The first goal of this study was to explore the prevalence of burnout among nonclinical faculty and staff working at a local MEC. The second goal was to identify predictors of burnout using job satisfaction dimensions—supervision, coworkers, contingency rewards, and nature of work.

METHODS: The study included a convenience sample of 95 nonclinical faculty and staff working at a local MEC. Data from these workers were collected between December 2016 and January 2017. The Abbreviated Maslach Burnout Inventory (AMBI) was used to measure burnout while a modified Spector's Job Satisfaction Survey (JSS) was used to measure participants' job satisfaction. The authors correlated the dimensions of the AMBI and JSS. They also conducted multiple regression analysis using the four dimensions of JSS to determine predictors of participant burnout.

RESULTS: The data showed that 1% of the 95 respondents reported high burnout and 35% reported medium burnout on the scale. Correlation coefficient showed that job satisfaction and burnout strongly and negatively correlated ($r[93]=-0.66$; $P<.001$). Multiple regression analysis showed that nature of work ($\beta=-.49$) and coworkers ($\beta=-.30$) were significant predictors of burnout ($R=0.74$; $F[4, 90]=26.81$; $P<.001$).

CONCLUSIONS: Nonclinical workers at a local MEC were generally satisfied with their job and showed a moderate degree of burnout. Compared to the general population, our sample reported less burnout.

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workers are unsatisfied with their work and are burned out, they may not be in a position to help learners. Long-term exposure to work-related stress^{1,2} and low job satisfaction^{3,4} are both associated with burnout. To our knowledge, no study has aimed at identifying burnout rates among nonclinical workers in MECs.

Given the lack of research surrounding nonclinical faculty and staff in MECs and the importance of their role in medical education, the current study sought to fill a gap in the medical education literature. The purpose of this study was threefold: (1) to explore the prevalence of both burnout and job satisfaction among nonclinical workers at the University of Kansas School of Medicine-Wichita (KUSM-W), (2) to assess relationships between job satisfaction and burnout among nonclinical workers at KUSM-W (a community-based, outpatient and inpatient medical school), and (3) to determine which job satisfaction factors related to burnout. We hypothesized that nonclinical workers with greater job satisfaction experience less emotional exhaustion, less depersonalization, and greater personal accomplishment and therefore, decreased burnout.

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Nonclinical workers in medical education centers (MECs) play an integral role in the day-to-day operations of the medical education process. The nonclinical workers are faculty (PhD degree holders who do not spend time in clinics), research instructors, and office staff including departmental directors, department

administrators, clerkship coordinators, and other medical education coordinators. These workers are frequently the first contact for learners (medical students, residents, and fellows) and spend a significant amount of time with learners. They have multiple roles, carry many responsibilities, and often work in a stressful environment. If nonclinical

Methods

The project was a nonexperimental, prospective wellness study involving nonclinical workers at a local MEC. The KUSM-W Institutional Review Board granted exemption for the study. Modified Spector's Job Satisfaction Survey (JSS)⁵ and the Abbreviated Maslach Burnout Inventory (AMBI)^{6,7} were used to measure participants' job satisfaction and burnout, respectively. Data were gathered via anonymous survey of a convenience sample of all 158 nonclinical workers at a local MEC between December 2016 and January 2017. Given the goal of the study, only nonclinical workers were asked to participate in the study.

Results

Of the 158 individuals surveyed, data were obtained from 95, representing a 60% response rate. Of the 95 respondents, 80% were staff and 20% were nonclinical faculty. Of those who provided information about their gender, 11% were males while 89% were females. Participants' years of service to the institution ranged from 3 months to 29 years (7.9±6.9). As shown in Table 1, 1% of nonclinical workers reported high, 35% medium, and 64% low burnout. Sixty-two percent of faculty and 65% of staff reported low burnout respectively. In calculating the prevalence of job satisfaction among the participants, 76% of all respondents, 79% of faculty, and 75% of staff reported high satisfaction rates (Table 2).

As shown in Table 3, there was a statistically significant relationship between job satisfaction and burnout ($r[93]=-0.66$; $P<.001$). Multiple regression analysis showed that nature of work (job tasks; $\beta=-.49$) and coworkers ($\beta=-.30$) were significant predictors of burnout ($R=0.74$; $F[4, 90]=26.81$; $P<.001$; Table 4).

Discussion

Burnout is a universal problem that affects individuals who work with others in some capacity, and has been found to be getting worse

Table 1: Distribution Statistics: Components of Burnout

Variables	Overall		Staff		Faculty	
	n	%	n	%	n	%
Emotional Exhaustion						
Low	42	44.2	34	44.7	8	42.1
Medium	35	36.8	28	36.8	7	36.8
High	18	18.9	14	18.4	4	21.1
Total	95	100.0	76	100.0	19	100.0
Depersonalization						
Low	80	84.2	63	82.9	17	89.5
Medium	13	13.7	11	14.5	2	10.5
High	2	2.1	2	2.6	0	0.0
Total	95	100.0	76	100	19	100.0
Personal Accomplishment						
Low	0	0.0	0	0.0	0	0.0
Medium	21	22.1	17	22.4	4	21.1
High	74	77.9	59	77.6	15	78.9
Total	95	100.0	76	100.0	19	100.0
Burnout						
Low	61	64.2	49	64.5	12	63.2
Medium	33	34.7	26	34.2	7	36.8
High	1	1.1	1	1.3	—	—
Total	95	100	76	100		100

among medical workers.⁸ More than one-third of our sample reported symptoms of burnout. Despite these concerning statistics, the burnout rates of our sample is better than that of the general population of US workers (excluding physicians), where 53% reported symptoms of burnout.⁸

Regarding job satisfaction, our findings suggest that the nonclinical workers at a local MEC are satisfied, a finding that is consistent with the Society for Human Resources Management's 2016 report that showed that 88% of US employees were satisfied with their job.⁹ Findings emphasized the importance of coworkers, supervision, contingent rewards, and nature of work to job satisfaction.

When it comes to job satisfaction and degrees of burnout, our findings showed that nonclinical workers who are satisfied with their job reported a low degree of burnout. In particular, job satisfaction negatively correlated

with all three dimensions of burnout. Although we are not aware of any data that provide a direct comparison to nonclinical workers at MECs, our findings are consistent with studies that examined job satisfaction and burnout among mental health workers¹⁰ and other educators.¹¹

Even though there were negative correlations between burnout and all four subscales of job satisfaction, nature of work and coworkers were found to be the best predictors of burnout with negative beta coefficients. These findings suggest that negative feelings about one's job, poor relationships with colleagues, lack of support, and lack of teamwork from coworkers are all responsible for burnout among nonclinical workers at a local MEC.

This study is limited by having been conducted in a single medical education center, and having a small sample size. The inherent bias and nonprobability-based nature of the

Table 2: Distribution Statistics: Components of Job Satisfaction

Variables	Overall				Staff				Faculty			
	n	%	M	SD	n	%	M	SD	n	%	M	SD
Supervision												
Low	3	3	4.5	0.7	3	3.9	4.5	0.7	—	—	—	—
Medium	13	14	17.1	3.8	12	15.8	16.5	3.7	1	5.3	20.0	3.4
High	79	83	23.0	1.7	61	80.3	22.9	1.8	18	94.7	23.5	1.0
Total	95	100	21.3	4.2	76	100	21.0	4.5	19	100	22.7	2.2
Contingent Rewards												
Low	14	15	4.0	0.0	12	15.8	4.0	0.0	2	10.5	—	—
Medium	32	34	11.2	4.4	28	36.8	11.1	4.7	4	21.1	12.0	2.9
High	49	52	19.3	3.5	36	47.4	19.0	3.7	13	68.4	20.4	2.8
Total	95	100	17.2	5.3	76	100	16.8	5.5	19	100	18.6	4.4
Coworkers												
Low	2	2	7.5	0.7	2	2.6	7.5	0.7	—	—	—	—
Medium	26	27	15.7	2.8	20	26.3	15.6	3.1	6	31.6	15.8	1.3
High	67	71	21.6	2.3	54	71.1	21.7	2.3	13	68.4	21.4	2.5
Total	95	100	20.0	3.9	76	100	20.0	4.1	19	100	20.2	3.3
Nature of Work												
Low	2	2	12.5	6.4	2	2.6	12.5	6.4	—	—	—	—
Medium	13	14	18.3	4.0	10	13.2	19.1	3.7	3	15.8	15.0	3.8
High	80	84	22.1	2.1	64	84.2	22.0	2.2	16	84.2	22.6	1.8
Total	95	100	21.1	3.3	76	100	21.1	3.2	19	100	21.0	3.9
Job Satisfaction												
Low	2	2	2.9	0.3	2	2.6	2.9	0.3	—	—	—	—
Medium	21	22	2.8	0.4	17	22.4	2.8	0.4	4	21.1	2.7	0.5
High	72	76	2.2	0.6	57	75	2.1	0.7	15	78.9	2.5	0.6
Total	95	100	79.6	14.0	76	100	78.8	14.5	19	100	82.6	11.9

Table 3: Correlations Coefficients of Job Satisfaction and Burnout of Respondents (N=95)

Variables			1	2	3	4	5	6	7	8	9
1	Low personal accomplishment	Pearson Correlation	—								
		Sig. (2-tailed)									
2	Depersonalization	Pearson Correlation	.354**	—							
		Sig. (2-tailed)	0.000								
3	Emotional exhaustion	Pearson Correlation	.459**	.608**	—						
		Sig. (2-tailed)	0.000	0.000							
4	Coworkers	Pearson Correlation	-.414**	-.501**	-.561**	—					
		Sig. (2-tailed)	0.000	0.000	0.000						

(continued on next page)

Table 3, continued

Variables			1	2	3	4	5	6	7	8	9
5	Supervisor	Pearson Correlation	-.335**	-.367**	-.445**	.735**	—				
		Sig. (2-tailed)	0.001	0.000	0.000	0.000					
6	Contingent rewards	Pearson Correlation	-.355**	-.362**	-.446**	.648**	.640**	—			
		Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000				
7	Nature of work	Pearson Correlation	-.513**	-.481**	-.622**	.587**	.541**	.392**	—		
		Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000			
8	Job satisfaction	Pearson Correlation	-.473**	-.501**	-.608**	.885**	.876**	.846**	.713**	—	
		Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
9	Burnout	Pearson Correlation	.701**	.805**	.899**	-.615**	-.479**	-.485**	-.673**	-.660**	—
		Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

** Correlation is significant at the 0.0006 (0.01/18) level (2-tailed).

Table 4: Summary Statistics: Results From Regression Analysis

Variables	Dimensions of Burnout Syndrome									
	Burnout Syndrome				Emotional Exhaustion ^a		Depersonalization ^a		Personal Accomplishment ^a	
	<i>M</i>	<i>SD</i>	<i>b</i>	β	<i>b</i>	β	<i>b</i>	β	<i>b</i>	β
(Constant)			17.14		25.59		12.82		13.02	
Coworkers	20.01	3.89	-0.22	-0.30**	-0.29	-0.26*	-0.28	-0.34*	-0.09	-0.13
Supervision	21.33	4.17	0.08	0.12	0.10	0.10	0.08	0.11	0.06	0.09
Contingent rewards	17.18	5.35	-0.09	-0.17	-0.13	-0.16	-0.05	-0.09	-0.09	-0.17
Nature of work	21.06	3.34	-0.42	-0.49***	-0.61	-0.46***	-0.28	-0.30**	-0.35***	-0.42
<i>F</i>		26.81***			19.14***		10.13***		9.53***	
<i>R</i>		0.74			0.68		0.56		0.54	
<i>R</i> ²		0.54			0.46		0.31		0.30	

^aMeans (*M*) and standard deviations (*SD*) of the variables are the same as those of burnout syndrome.

P*<.05, *P*<.01, ****P*<.001.

convenience sampling limit generalizability of the findings.

The data collected has the potential for many future projects. One consideration would be to expand this study to include multiple institutions with a larger sample. Most literature on burnout and job satisfaction focuses on negative predictive factors and less on what is being done to promote wellbeing and resilience. Given the overall positive outcomes of this data with high rates of job satisfaction and low rates of

burnout among the nonclinical workers, more attention should be focused on what is being done to foster optimal functioning at this institution.

In conclusion, the findings of this exploratory study highlight the importance of job satisfaction factors such as nature of work, support from coworkers, supervision, and contingent rewards among nonclinical workers at an MEC. Both job satisfaction and burnout constructs are well studied among clinicians, and are now documented among

nonclinical workers at an MEC. This study has contributed new and meaningful knowledge to the field of well-being and resilience among workers at MECs.

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