

## Sick-Leave Due to Burnout Among University Teachers in Pakistan and Finland and Its Psychosocial Concomitants

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### Abstract

The study examines sick leave due to burnout among 476 university teachers in Pakistan and Finland and its relationship with a number of psychosocial concomitants with the help of a web-based questionnaire. Sick leave due to burnout was significantly more frequent in Pakistan. An alarming finding was that 19.2 % of 26–35 year old Pakistani teachers had been on sick leave due to burnout, while in Finland, the percentage for this age group was zero. Results from a MANOVA revealed that good working conditions, social support at work, and promotion opportunities were all rated as significantly better by the Finnish sample. Workplace bullying was also significantly less frequent in Finland. The findings suggest that young university teachers in Pakistan are especially at risk of experiencing occupational stress and burnout.

**Keywords:** burnout, sick leave, occupational stress, workplace bullying, university teachers, Finland, Pakistan

### Introduction

The aim of the study was to explore psychosocial factors related to sick-leave due to burnout in a sample of higher education institutions in Pakistan, a developing country, and compare the situation in Pakistan with that in Finland, a socioeconomically more developed country. Burnout is a relatively well-researched phenomenon in the western world, but comparatively little is known about the situation in Pakistan, which right now is going through a transitional phase in which higher education plays an important role.

Finland was selected as a country of reference, since the Finnish educational system is one of the best in the world, ranked as number five worldwide according to the PISA ranking list of 2016 (OECD, 2016). Besides being ranked among the best in education, the country also scores well above average in civic engagement, environmental quality, social connections, subjective well-being, housing, personal safety, and work-life balance (OECD, 2015). Accordingly, a comparison with Finnish higher education could provide insights into how Pakistani higher education could be improved.

Maslach and Jackson (1986) defined burnout as a syndrome of emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment, occurring especially among individuals whose occupation requires much social interaction and empathy, such as nurses. Their study made the phenomenon known worldwide; however, they did not coin the term themselves as often is assumed – it was previously used already in an article by Freudenberger (1975).

Since the seminal work by Maslach and Jackson, burnout has been in focus for much study within organizational psychology. A vast number of negative outcomes have been associated with the syndrome such as insomnia, physical exhaustion, depression, anxiety, decreased self-esteem, increased health problems in general, weak memory, decreased performance, excessive use of drugs and alcohol, and family and marital problems (Maslach, Schaufeli, & Leiter, 2001; Peterson, Demerouti, Bergström, Samuelsson, Åsberg, & Nygren, 2008).

The two major classification systems for medical diseases (ICD-10 and DSM-5) are not in agreement about whether the burnout syndrome is a distinct category in its own right or not. In the ICD-10 of 1992, it was introduced under Z.73.0 as 'Burnout – state of total exhaustion' (World Health Organization, 1992). In the 2011 version of ICD-10, it is categorized under Z.73.0 as 'Burnout – state of *vital* exhaustion' (our italics) (World Health Organization, 2011). However, the DSM-5 does not regard burnout to be a distinct syndrome at all (American Psychiatric Association, 2013).

Burnout, clearly, is closely related to occupational stress (Tsai, Huang, & Chan, 2009; Wu, Zhu, Li, Wang, & Wang, 2008); in fact, the burnout syndrome could be regarded as the logical consequence when continuous stressful demands exceed the individual's resources. Theoretical models used within stress studies such as the Job Demand-Control (JDC) model (Karasek, 1979) and its revision the Job Demand-Control-Support (JDCS) model (Johnson & Hall, 1988) should thus be applicable also in research on burnout. When perceived demands are high, one's sense of control low, and there is no moderating effect of social support, strain and stress will follow. If these circumstances continue with no end in sight, the risk for burnout is imminent.

Research on occupational stress reveals it to be common among university academia (Blix, Cruise, Mitchell & Blix, 1994; Boyd & Wylie, 1994; Doyle & Hind, 1998; Jack & Punch, 2001; Kinman, 1998, 2010; Kinman & Jones, 2003; Kinman & Wray, 2013). Nakada, Iwasaki, Kanchika, Nakao, Deguchi, Konishi, and Inoue (2016) examined which job stressors that physically and mentally burden teachers in Japan: they found that high role conflict, high role ambiguity, low social support, and a heavy workload were all related to stress symptoms.

Some factors are more likely to initiate stress amongst teachers than others. Barkhuizen and Rothman (2008) found four occupational stressors which drastically affected the teachers' commitment to their organisations: resources, communication, overwork, and job characteristics. Doyle and Hind (1998) found that for all higher education staff, job insecurity was the most prominent source of stress. Tytherleigh, Webb, Cooper, and Ricketts (2005) analysed 14 U.K. universities and colleges, and found that work-life balance, job security, work relations, control, workload, overall job nature, communication and resources, salary and benefits, all constituted sources of stress.

Boyd and Wylie (1994) also identified some major stressors among teachers. These included excessive workloads, time restrictions, a dearth of promotion opportunities, insufficient appreciation, insufficient salary, changing job roles, inappropriate administration, and insufficient resources and funding. Kinman (1998), in a U.S. national survey about the causes and consequences of stress in higher education, found the main stressors to be high expectations, extreme job demands, a low level of support, and long working hours.

Since burnout appears to be a common source for absenteeism, sick leaves, and job turnover, as Maslach et al. (2001) found, the syndrome has severe socioeconomic consequences not only for the individual, but for the organization and society as a whole. Accordingly, there is a need to identify risk factors for sick leave due to burnout within higher education organizations.

A decision was made to use sick leave due to burnout as the key indicator of burnout rather than any subjective measure like for instance the Maslach Burnout Inventory. First, sick leave is an objective measure, while a scale is a subjective one. Either you have been on sick leave, or then you have not, there is no in-between. The decision to grant a sick leave has been made by a physician, who has made a medical diagnosis. Second, we were particularly interested in sick leaves due to the negative socioeconomic impact they have on individuals and organizations. The use of sick leave

instead of a scale for the measurement of burnout has previously been employed by Varhama and Björkqvist (2004b) who investigated municipal employees in Finland, industrial workers in both Poland and Finland (Varhama & Björkqvist, 2004a), and municipal employees in Spain (Varhama et al., 2010).

## Method

### Sample

The official list of e-mail addresses of permanent/full time teachers were obtained from the websites of 15 randomly sampled public universities in Pakistan and Finland. More than 2,000 emails were sent out; a total of 476 responses were subsequently obtained. An exact response rate is impossible to estimate, since there is no way to certify how many of the e-mail addresses were in fact valid and active. There are reasons to believe that a substantial number of the addresses were no longer valid, since some emails were bounced back to the sender.

The questionnaire was filled in by 199 female and 277 male university teachers in Pakistan and Finland. The mean age was 44.4 years (*SD* 11.1) for females, and 45.3 years (*SD* 11.1) for males; the age difference was not significant. The mean age was 37.7 years (*SD* 8.4) for the Pakistani university teachers and 50.5 years (*SD* 9.5) for the Finnish teachers, the age difference was in this case significant [ $t_{(476)} = 15.26, p < .001$ ].

### Instrument

A questionnaire was constructed in order to measure potential sources of burnout that would be culturally adequate in both countries, also keeping in mind results from previous research on the subject (Dua, 1994; Kinman, 1998; Einarsen, Hoel, & Notelaers, 2009). It included five scales: four were constructed for the study (Good Working Conditions, Social Support at Work, Promotion Opportunities, Heavy Workload, and Workplace Bullying), and the fifth, the Work Stress Symptoms scale (Björkqvist, & Österman, 1992) was a previously used measure. The responses for all scales were given on a five-point scale (0 = never, 1 = seldom, 2 = occasionally, 3 = often, 4 = very often, or 0 = strongly disagree, 1 = disagree, 2 = neutral, 3 = agree, 4 = strongly agree). A pilot study was conducted with the questionnaire being sent by e-mail to university teachers in both countries. The reliability of the scales was estimated with Cronbach's alpha. The reliability scores of the scales varied between .72 and .84. The same procedure was then adopted for the collection of the final data. All the teachers were informed about the aims of the study and confidentiality was emphasized. The items of the scales and Cronbach's alphas are presented in *Table 1*.

For the measurement of sick leave due to burnout, the following question was asked: "Have you been on sick leave due to burnout?" The participants could then respond on a dichotomous scale, either "yes" or "no".

Table 1

### *Items and Cronbach's Alphas of the Scales in the Study*

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Good Working Conditions (5 items, $\alpha = .75$ )
My workplace conditions (e.g. space, light and noise) are satisfactory
I have all the necessary equipment and/or infrastructure support at work
I am not frequently interrupted at work
There are enough instructional facilities in my department
I am satisfied with my monthly salary
Social Support at Work (4 items, $\alpha = .85$ )
The head of my department is reasonable in her/his attitudes towards me
I am happy with the level of support I get from my colleagues
There is a great understanding between staff and head of the department
I get appreciated for my efforts
Promotion Opportunities (5 items, $\alpha = .73$ )
There are enough promotion opportunities in the job

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Performance rather than politics determine who gets promoted in my department  
My annual appraisal process has fairly recognised my achievements and abilities  
The university has enough facilities for undertaking research  
The university offers proper training and development opportunities

Work Stress Symptoms (10 items)  $\alpha = .91$

Exhaustion  
Difficulties to concentrate  
Weariness and febleness  
Insomnia  
Nervousness  
Irritation  
Depression  
Indifference towards everything  
Reduced work performance  
Reduced self-confidence

Workplace Bullying (5 items)  $\alpha = .92$

I have been exposed to insulting remarks at my workplace  
I have been exposed to verbal abuse  
I have been exploited at my work place  
I was told indirectly to quit my job  
I have been exposed to bullying at my work place

## Results

### *Sick leave due to burnout*

Percentages of sick leave due to burnout differed significantly between the countries. Among Pakistani teachers in the sample, 18.3 % had sometimes been on sick leave due to burnout compared with 9.4 % among the Finnish teachers (Table 2). Pakistani female teachers had significantly more often been on a sick leave due to burnout than the Finnish female teachers (25.4 % vs. 8.8 %). The difference was not significant for the males. The difference in percentages between the sexes inside the country was not significant in either country.

In the Pakistani sample, no teacher over 56 years had ever been on a sick leave due to burnout, while in Finland, 10 % in this age group had been on sick leave for this reason sometimes during their working life (Table 3). In the youngest age group, 26–35 years of age, 19.2 % of Pakistani university teachers had been on sick leave due to burnout while in Finland, the percentage for this age group was zero.

Table 2

*Percentages of University Teachers Who Had Been on Sick Leave due to Burnout*

	Pakistan	Finland	Total	
Females	25.4 % (16)	8.8 % (12)	14.1 % (28)	$\chi^2_{(1)} = 9.78, p = .002, \phi^2 = .05$
Males	15.2 % (21)	10.1 % (14)	12.6 % (35)	$\chi^2_{(1)} = 1.66, p = .ns, \phi^2 = .01$
Total	18.3 % (37)	9.4 % (26)		$\chi^2_{(1)} = 8.07, p = .005, \phi^2 = .02$

Table 3

*Experience of Sick Leave due to Burnout in Different Age Groups (n)*

	Age groups	Pakistan	Finland
I	26–35yrs	19.2 % (19)	0 % (0)
II	36–45yrs	18.8 % (13)	11.8 % (8)

III	46-55yrs	19.2 % (5)	8.9 % (8)
IV	56-65yrs	0 % (0)	10.0 % (10)

Table 4

*Correlations between the Scales of the Study (N = 476)*

	1.	2.	3.	4.
1. Good Working Conditions				
2. Social Support at Work	.50 ***			
3. Promotion Opportunities	.58 ***	.54 ***		
4. Work Stress Symptoms	-.32 ***	-.36 ***	-.37 ***	
5. Workplace Bullying	-.36 ***	-.54 ***	-.35 ***	.34 ***

\*\*\*  $p \leq .001$

*Correlations between the scales in the study*

The highest positive correlations were found between the scales of Promotion Opportunities, Social Support at Work, and Good Working Conditions (Table 4). The highest negative correlation was found between Workplace Bullying and Social Support at Work. Bullying was also negatively correlated with Good Workplace Conditions and Promotion Opportunities, and positively correlated with Work Stress Symptoms. Work Stress Symptoms were negatively correlated with Social Support, Promotion Opportunities, and Good Working Conditions.

*Psychosocial concomitants of sick leave due to burnout in Pakistan and Finland*

A multivariate analysis of variance (MANOVA) was conducted with country and sick leave due to burnout as independent variables, and the five scales of the study related to the psychosocial concomitants as dependent variables (Table 5, and Figures 1 and 2). Due to the significant age difference between respondents from the two countries, age was kept as a covariate in the analyses. (Separate analyses of sex differences in regard to the five dependent variables revealed, surprisingly, no differences between the two sexes. Accordingly, sex was not included in the final MANOVA analysis.)

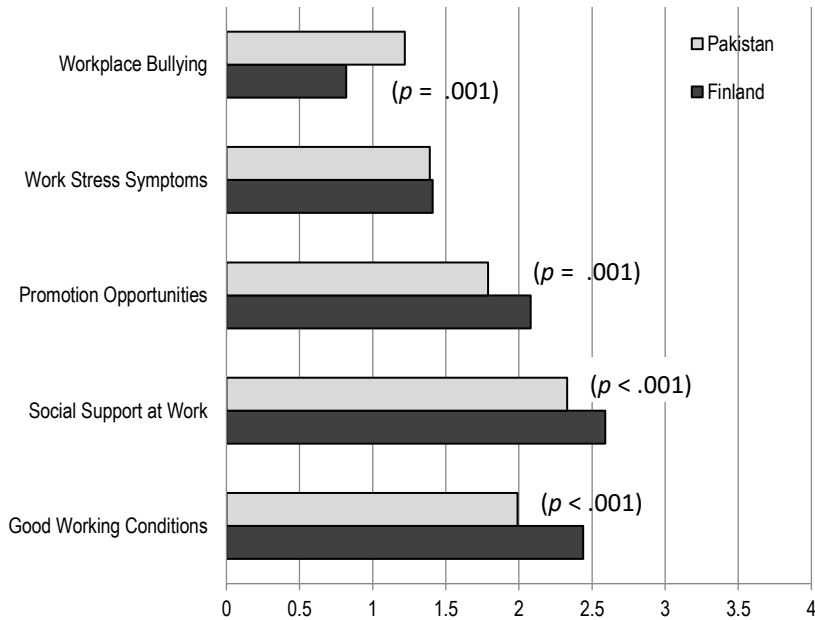


Figure 1. Mean scores of respondents in Pakistan and Finland on the five scales of the study ( $N = 475$ ). Cf. Table 5.

The multivariate analysis revealed a significant effect for both country and sick leave due to burnout, and also for the interaction effect between country and burnout.

*Effects of country:* The univariate analyses showed that Good Working Conditions, Social Support at Work, and Promotion Opportunities were all rated to be significantly better in Finland than in Pakistan. Workplace Bullying was significantly less frequent in Finland (see Table 5 and Fig. 1).

*Effects of sick leave due to burnout:* The univariate analyses revealed significant differences in the expected direction on all five scales. Those who had been on sick leave scored higher on Work Stress Symptoms, and Workplace Bullying, but lower on Good Working Conditions and Social Support at Work (see Table 5 and Fig. 2).

*Interaction effects between country and burnout:* The univariate analyses revealed that Pakistani university teachers who had been on sick leave due to burnout scored lowest on Social Support at Work, and highest on Work Stress Symptoms (cf. Table 5).

Table 5

Results of a Multivariate Analysis of Variance (MANOVA) with Country and Sick Leave due to Burnout as Independent Variables and the Five Scales of the Study as Dependent Variables ( $N = 475$ ). Cf. Figs. 1 and 2.

	<i>F</i>	<i>df</i>	<i>p</i> ≤	$\eta_p^2$	Group differences
<i>Effect of Age (covariate)</i>					
Multivariate Analysis	5.06	5, 468	.001	.051	
<i>Effect of Country</i>					
Multivariate Analysis	7.11	5, 468	.001	.071	

Univariate Analyses					
Good Working Conditions	14.99	1, 472	.001	.031	Fi > Pk
Social Support at Work	24.54	"	.001	.049	Fi > Pk
Promotion Opportunities	10.50	"	.001	.022	Fi > Pk
Work Stress Symptoms	0.15	"	<i>ns</i>	.001	-
Workplace Bullying	11.39	"	.001	.024	Pk > Fi
<i>Effect of Sick Leave due to Burnout</i>					
Multivariate Analysis	7.60	5, 468	.001	.075	
Univariate Analyses					
Good Working Conditions	5.68	1, 472	.018	.012	Group with higher mean: No sick leave
Social Support at Work	9.56	"	.002	.020	No sick leave
Promotion Opportunities	4.61	"	.032	.010	No sick leave
Work Stress Symptoms	32.38	"	.001	.064	Sick leave
Workplace Bullying	16.79	"	.001	.034	Sick leave
<i>Interaction Country and Sick Leave</i>					
Multivariate Analysis	3.36	5, 468	.005	.035	
Univariate Analyses					
Good Working Conditions	0.79	1, 472	<i>ns</i>	.002	-
Social Support at Work	11.45	"	.001	.024	Lowest mean: Pk with sick leave
Promotion Opportunities	2.09	"	<i>ns</i>	.004	-
Work Stress Symptoms	5.42	"	.020	.011	Highest mean: Pk with sick leave
Workplace Bullying	0.23	"	<i>ns</i>	.000	-

Note. Fi = Finland, Pk = Pakistan

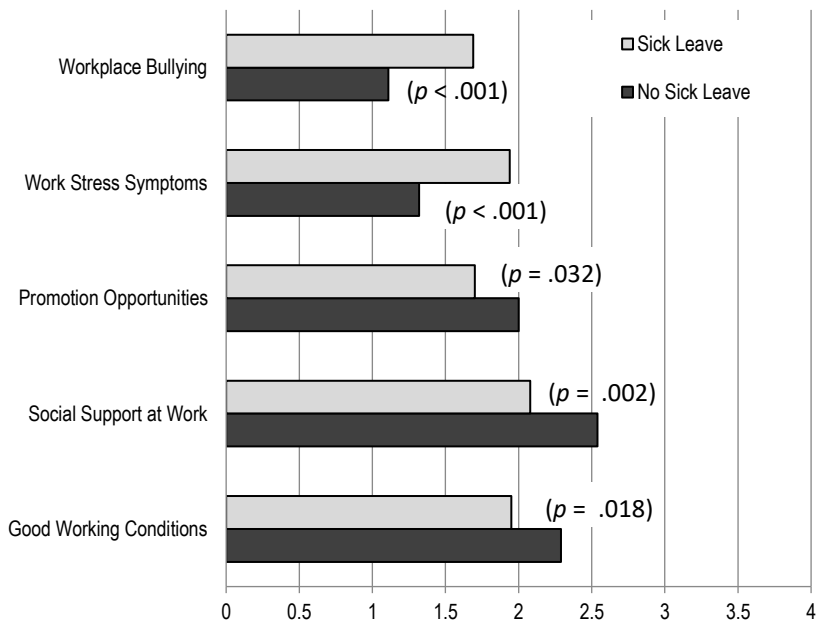


Figure 2. Mean scores on the five scales of the study for university teachers who had or had not experienced sick leave due to burnout in Pakistan and Finland ( $N = 475$ ). Cf. Table 5.

## Discussion

The findings revealed that there were some significant differences between Finnish and Pakistani university teachers. Those from Finland reported better working conditions, more social support at work, and better promotion opportunities than their Pakistani colleagues. The results also showed that workplace bullying was significantly less frequent in Finland.

The percentages of respondents having been on sick leave due to burnout differed between the two countries: in Pakistan, the percentage was overall significantly higher. However, this difference was mainly due to differences between the female teachers in both countries. Pakistani female teachers had significantly more often been on sick leave due to burnout than their Finnish female counterparts (25.4% vs. 8.8%). The difference was not significant for males.

Another noteworthy finding of the study is that in the Pakistani sample, no teacher over 56 years had ever been on sick leave due to burnout; in Finland, however, 10 % of this age group had been diagnosed at least once during their working life. It appears that in Pakistan, teachers over 56 years of age are not over-worked at present and were not over-worked as young teachers either. However, with increasing job demands, young teachers are now facing this problem.

Perhaps the most alarming finding was that in the youngest age group, the 26–35 year olds, 19.2% of the Pakistani university teachers had been on sick leave due to burnout, while in Finland, the percentage for this age group was zero. This is a matter of serious concern. This finding suggests that young university teachers in Pakistan might be more at risk of stress and burnout.

The study has limitations, and generalisations regarding differences between the two countries should be made with caution. An exact response rate is impossible to estimate, since there is no way to assess how many of the e-mail addresses that the link of the electronic questionnaire was sent to actually were valid. However, the response rate was clearly low, and percentages should not be seen as indicators of exact percentages of the work force, only as percentages of the responding sample. Second, it may be argued that a paper-and-pencil questionnaire could have yielded different results than an electronic one. However, Boyer, Olson, Calantone, and Jackson (2002) found that e-surveys are comparable to manual survey questionnaires with minor exceptions, and e-surveys provide workable alternatives to printed questionnaires. Both methods have not only similar response rates but generate comparable results as well.

In conclusion: despite the limitations of the study, the findings suggest that interventions are needed to enhance a better work environment for young university teachers in Pakistan in order to reduce work-related stress and burnout. Reward systems, social support, and a culture of respect are required in order for them to consider their job as more worthwhile.

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