Factors Associated with Occupational Stress among University Teachers in Pakistan and Finland

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Abstract

The study examines the interplay of psychosocial factors and works conditions on occupational stress among 531 university teachers in Pakistan and Finland with the help of a web-based questionnaire. Results from an MANOVA revealed that good working conditions, social support at work, and promotion and development opportunities were rated as significantly better by the Finnish sample. Workplace bullying occurred considerably less often in Finland than in Pakistan. Male Pakistani teachers reported significantly higher levels of workplace bullying than any other group. Although the working conditions, social support, and promotion and development opportunities were better, and less bullying appeared in Finland than in Pakistan, but the difference in stress symptoms between the two countries was not significant.

Keywords: Occupational stress, social support, university teachers, workplace bullying, work conditions, Pakistan, Finland.

Introduction

Higher education institutions today face multidimensional changes, which are not only challenging their conventional ways but also affect their mandates, authority, and organizational structures (Doyle & Hind, 1998). The stress-free working conditions that once existed within the work environment of higher education institutions have disappeared. Teaching staff and other employees now experience more job constraints, which may expose them to stress and burnout (McCormick & Barnett, 2011).

Thus, this study aims at empirically identifying psychosocial factors associated with occupational stress in higher education institutions in Pakistan and Finland. Finland was selected as it is globally accepted that Finland has one of the best work environments compared to most of the world. According to different life indexes, Finland performs better in

many measures of well-being in comparison to other countries. It is ranked among the best in education, personal safety, and work-life balance (OECD, 2015). Whereas developing countries like Pakistan are going through a transitional phase, and higher education is a sector within this transition, teachers are now under an increased level of stress due to the changed scenario (Rajarajeswari, 2010). Higher education institutions must carry the responsibility of providing the future direction to the nation (Chaudhry, 2012). For this, developing countries should benefit from the effective practices of developed countries, and improve their institutional practices. The disparity between developed and developing countries should be narrowed down; however, this can only be possible by understanding effective practices in various contexts. Today, educators and policymakers are far more aware of the necessity of exploring the practices of education in other countries. Comparisons help them identify the weaknesses and strengths of their educational system and improve their weak areas (Zhao, Zhang, Yang, Kirkland, Han, & Zhang, 2008).

According to the European Agency for Safety and Health at Work, workplace stress is an issue of growing importance (Cox, Griffiths, & González, 2000). Health and job performance of teachers are suffering due to increased job demands (Kearns & Gardiner, 2007). The Health and Safety Executive (2014) reports that 39% of work-related complaints have a connection with stress, anxiety, and depression; it further mentions that the age group of 45—54 has the highest rate of illness due to job stress. Kinman and Wray (2013) pointed out that 75% of teachers believe that their job is stressful and that the trend is increasing with the passage of time. YouGov (2015) found that 53% of teachers are planning to leave their teaching job in the next two years, due to job demands and work stress. To avoid their adverse health outcomes, then there is a need to identify stressors in the work environment.

This study aims at reducing the research gap (Ahsan, Abdullah, Fie, &Alam, 2009; Mark& Smith, 2012; Mostert, Rothmann, Mostert, & Nell, 2008) by focusing on multi-university teachers in two different cultural settings (Barkhuizen&Rothmann, 2008).

Occupational stress is the experience of unpleasant emotions, such as anger, tension, anxiety, frustration, and depression due to work-related factors (Kyriacou & Sutcliffe, 1977). There is a growing tendency towards regarding stress as a mainly negative psychological state, comprising both emotional and cognitive components (Cox, Griffiths, & González, 2000). The Health and Safety Executive (2001) defines stress as a harmful reaction of an individual, due to extreme pressure and demands placed on him or her. Moorhead and Griffin (2004) define stress as an individual's reaction to a stimulus/stressor, which puts extreme physical or psychological strains on him or her.

According to Hancock and Weaver (2005), when individuals are in distress they exploit extra resources to enhance their speed in handling information. If employees control their anticipatory actions properly, the reaction to stress may be helpful in aligning body and brain to face the challenge (Crum, Salovey, & Anchor, 2013). Stress may negatively affect the competence and productivity of teachers (Watts & Robertson, 2011). In the last three decades, research has confirmed that poor work conditions are associated with job stress and burnout. Factors such as workload, emotional pressure, lack of support, and role ambiguity may cause fatigue and create negative attitudes towards one's job (Bakker, Demerouti, &Euwema, 2005).

A large number of studies (De Lange de, Taris, Kompier, Houtman, &Bongers, 2003; Podsakoff & LePine, 2007; Skakon, Nielsen, Borg, &Guzman, 2010) have revealed that there is a significant relationship between work attributes and employee stress and health. Kinman

(1998), in a UK national survey about the causes and consequences of stress in higher education, found the main stressors to be high expectations, extreme job demands, low levels of support, and very long work hours.Although the aforementioned results show a variation in stressors from country to country and by type and size of the institution, they also provide indications of an overall present condition of work-related stress amongst university teachers. The present study will focus on the following major stressors: working conditions, social support at work, promotion and development opportunities, and workplace bullying.

Working conditions are the facilities or possibilities that could be found in our daily working life (Rodríguez, & Martín, 2017). Inadequate working conditions may be a central stress causing factors (Kazmi, Amjad, & Khan, 2008). Inadequate job conditions trigger job stress and burnout (Bakker et al., 2005; Barkhuizen& Rothman, 2008).Generally, it has been confirmed that poor physical working conditions can affect employees' psychological and even physical health (Warr, 1992).

Social support at work has been defined as the availability of helping relationships and the quality of those relationships (Leavy, 1983, p.5). Social support refers to emotional and practical resources resulting from an individual's social interaction with family, friends, colleagues and other social contacts (Bickford, 2005). There is considerable evidence suggesting that absence or lack of social support may lead to ill health, whereas when existing, it generates health and works as a buffer against harmful effects of stress (Wainwright & Calnan,2002; Wichert, 2002).

Promotion and development opportunities: Career development for academia refers to progress in academic position and, accordingly, it is associated with both salary increase and benefits revolving around their research output (Archibong, Bassey, &Effiom, 2010). At the same time, career development is a key source of stress among university teachers, the most stressful indicators being the imbalance between individual expectations and those of the university, which may result in delayed career development, deficiency of social support, and poor work environment (Ofoegbu &Nwandiani 2006).

Workplace bullying: A person is defined as bullied if he or she is repeatedly subjected to negative acts in the workplace (Einarsen & Skogstad, 1996). Rodríguez and Martín (2017) stated that bullying is indeed the most harmful expression that may occur at a workplace, due to the continuous negative interactions with other individuals, the countless psychosocial hazards, and its damaging health effects.

Karasek's (1979) Job Demand-Control (JDC) model and the related Job Demand-Control-Support (JDCS) model (Johnson & Hall, 1988) are commonly used theoretical frameworks attempting to explain occupational stress. The core concept of the JDC model is that control reduces the impact of job demands on stress, increasing the level of job satisfaction among employees (Kain & Jex, 2010). The latter model suggests that high levels of job demand in combination with low level of support result in serious health issues (Mark & Smith 2012). Bakker, Van Veldhoven and Xanthopoulou (2010) state that a common criticism of the JDC model is that it is unable to grab the complexity of work environments. This limitation of the JDC model initiated the Job Demand-Resources (JD-R) model, which is based on the hypothesis that job characteristics of every occupation can be classified into two general categories, i.e., job demands and job resources, which regulate employees' well-being (Bakker & Demerouti, 2007). It suggests that high demands and low resources increase the intensity of stress, whereas the combination of high demands and high resources increases motivation.

Research findings regarding the JDC model have been inconsistent (De Lange, Taris, Kompier, Houtman, & Bongers, 2003; Van Der Deof & Maes, 1999), and the major cause cited for their inconsistency are the various variables employed to measure demand, strain, and control (Kain, & Jex, 2010**).**The present study is not intended to test JDC or any other specific model, although it is not in disagreement with it. The main purpose is to identify and measure job stressors in higher education/university settings.

Method

Sample

To collect the data, the official list of e-mail addresses of permanent/full-time teachers (lecturers-professors) was obtained from the websites of 25 public universities, and the link to the web-based questionnaire was sent to all names on the lists. The procedure of selecting universities depended on the availability of e-mail addresses: not all universities had e-mail addresses available on their websites. A total of 531 responses were subsequently obtained. An exact response rate is difficult to estimate since there is no way to certify how many of the e-mail addresses were, in fact, valid and active.

The questionnaire was filled in by 228 females and 305 male university teachers in Pakistan and Finland (Table 1). The mean age was 39 years (*SD* 10.1) for females, and 39 years (*SD* 11.1) for males; no age difference was found between the two genders. The mean age was 37 years (*SD* 9.4) for the Pakistani university teachers and 48 years (*SD* 9.5) for the Finnish teachers; the age difference, in this case, was significant $p < .001$].

Table 1
Number of female and male university teachers in Pakistan and Finland taking part in the study

	Females (*n*)	Males (*n*)	Total
Pakistan	17 % (92)	31% (166)	258
Finland	26% (136)	26 % (139)	275
	228	305	533

Table 2
Items and Cronbach's Alphas of the scales in the study

Good Working Conditions (5 items, α = .75)
My workplace conditions (e.g. space, light, and noise) are satisfactory
I have all the necessary equipment and 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, α = .86)
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 and Development Opportunities (5 items, α = .74)
There are enough promotion opportunities in the job
Performance rather than politics determine who gets promoted in my department
My annual appraisal process has fairly recognized my achievements and abilities
The university has enough facilities for undertaking research
The university offers proper training and development opportunities
Workplace Bullying (5 items) α = .92
I have been exposed to insulting remarks at my workplace
I have been exposed to verbal abuse
I have been exploited at my workplace
I was told indirectly to quit my job
I have been exposed to bullying at my workplace
Work Stress Symptoms (10 items) α = .91
Exhaustion
Difficulties to concentrate
Weariness and feebleness
Insomnia
Nervousness
Irritation
Depression
Indifference towards everything
Reduced work performance
Reduced self-confidence

Instrument

A questionnaire intended to measure potential sources of work stress was adapted from previous research on this subject has a focus on higher education/university settings (Dua, 1994; Kinman, 1998). It included four subscales: Good Working Conditions, Social Support at Work, Promotion and Development Opportunities, and Workplace Bullying (Einarsen, Hoel, & Notelaers, 2009). The Work Stress Symptoms scale (Björkqvist, & Österman, 1992) was also adopted. The responses for all scales were given on a five-point scale (0 = never, 1 = seldom, 2 = occasionally, 3 = often, 4 = very often), and for other variables (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 item analyses. The reliability scores of the scales varied between α= .74 and α=.92. 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. For Cronbach's Alphas and some items in the scales, see Table 2.

Results

Correlations between the scales in the study

The highest positive correlations were found between the three scales of Good Working Conditions, Promotion Opportunities, and Social Support at Work (Table 3). The strongest negative correlation was found between Workplace Bullying and Promotion/Development Opportunities. Bullying was also negatively correlated with Good Workplace Conditions and Social Support at work, and positively correlated with Work Stress Symptoms. Work Stress Symptoms were negatively correlated with Promotion/Development Opportunities, Social Support, and Good Working Conditions.

Table 3

Correlations between the scales of the study (N =531)

		1	2	3	
1	Good Working Conditions				
2	Social Support at Work	.49***			
3	Promotion and Development Opportunities	.48***	.45***		
4	Workplace Bullying	-.30***	-.42***	-.43***	
5	Work Stress Symptoms	-.20***	-.24***	-.28***	.32***

*** $p \leq .001$

Psychosocial factors and work conditions of university teachers in Pakistan and Finland

A multivariate analysis of variance (MANOVA) was conducted with country and sex as independent variables, the five scales related to the psychosocial workplace environment as dependent variables, and age as a covariate, due to the age difference between Pakistani and Finnish university teachers (cf. Table 4 and Fig. 1). The multivariate analysis was significant

for country and gender; the univariate analyses showed that Good Working Conditions, Promotion/Development Opportunities, and Social Support at Work were rated as significantly higher in Finland than Pakistan. There was only one gender difference, only a relatively weak but significant difference in Stress Symptoms, with females scoring higher than males. Workplace Bullying appeared significantly less in Finland.There was an interaction effect between country and gender, indicating that Pakistani males scored highest and Finnish males lowest regarding workplace bullying.

Table 4

Results of a multivariate analysis of variance (MANOVA) with country and sex as independent variables and the six scales of the study as dependent variables (N = 533).

	F	*df*	*p* ≤	η_p^2	Group differences
Effect of Country					
Multivariate Analysis	9.912	6, 523	.001	.102	
Univariate Analyses					
Good Working Conditions	33.41	1, 529	.001	.059	Fi > Pk
Social Support at Work	25.75	"	.001	.048	Fi > Pk
Promotion Opportunities	18.66	"	.001	.034	Fi > Pk
Workplace Bullying	15.41	"	.001	.028	Pk > Fi
Work Stress Symptoms	1.00	"	*ns*	.002	
Effect of Gender					
Multivariate Analysis	2.059	6, 523	.045	.023	
Univariate Analyses					
Good Working Conditions	.010	1, 529	*ns*	.001	
Social Support at Work	1.96	"	*ns*	.004	
Promotion Opportunities	.050	"	*ns*	.001	
Workplace Bullying	.01	"	*ns*	.001	
Work Stress Symptoms	3.58	"	.050	.007	Female >Male
Interaction Effect of Country and Gender					
Multivariate Analysis	1.677	6, 523	.059	.019	
Univariate Analyses					
Good Working Conditions	.510	1, 529	*ns*	.001	
Social Support at Work	.215	"	*ns*	.001	
Promotion Opportunities	.983	"	*ns*	.002	
Workplace Bullying	4.31	"	.037	.008	Pk Male highest Fi Male lowest
Work Stress Symptoms	.609	"	*ns*	.001	

Note. Fi = Finland, Pk = Pakistan

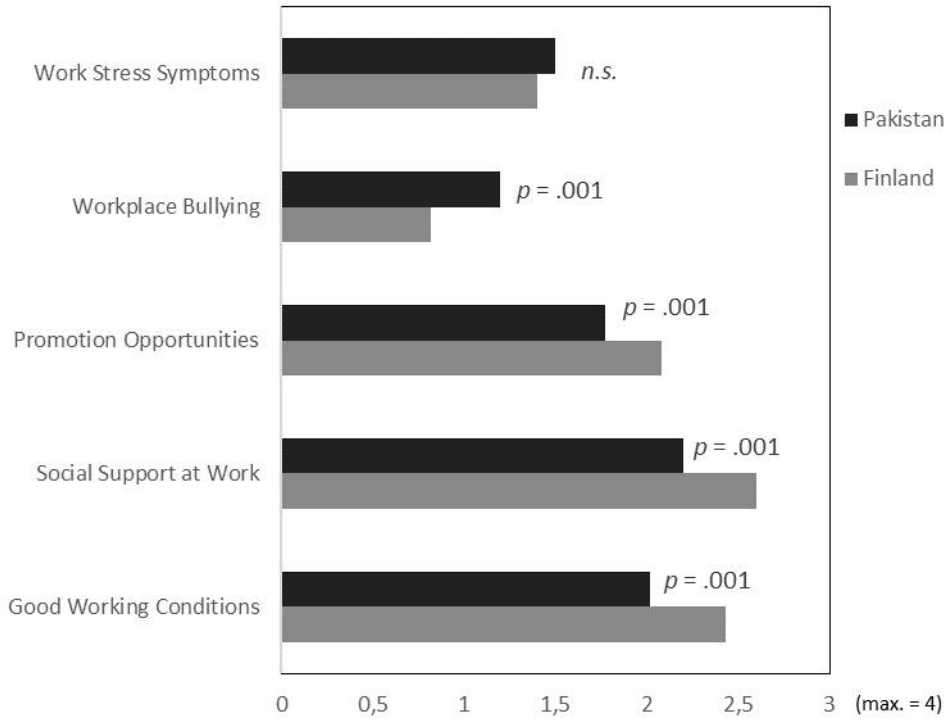

Figure 1. Mean scores of respondents from Pakistan and Finland on the five scales of the study (N = 533). Cf. Table 4.

Discussion

Overall, the results corroborate previous research related to occupational stress. The findings revealed that there were some significant differences between Finnish and Pakistani university teachers. In the present study, teachers from Finland reported better working conditions, more social support, and better opportunities for promotion and development at work than their Pakistani colleagues. The results also showed that workplace bullying was significantly less frequent in Finland. Although the results indicate more stressful conditions at Pakistani universities, only a tendency was found for work stress symptoms to be higher in Pakistan than in Finland. This may be due to individual factors, perhaps response tendencies or the subjectivity of self-reported data, but it may also be due to a recent legislation concerning Finnish universities which changed financial and employment situations, resulting in a massive downsizing and restructuring. To investigate this (as the data was collected during that period), twenty interviews of teachers from Finland were conducted. The teachers were asked to highlight the factors causing stress in their daily work life. All the teachers confirmed that they are under stress due to the layoff of teachers and pressure to publish to secure their jobs. This seems to support findings from previous studies (Doyle & Hind, 1998; Gillespie, Walsh, Winefield, Dua, & Stough, 2001; Tytherleigh, Webb, Cooper, & Ricketts, 2005).

The multivariate analysis showed a significant effect of gender. However, the univariate analyses indicated a significant difference for only one subscale: female teachers reported having more stress symptoms than males. The main conclusion of this research is those female teachers, whether in Pakistan or Finland, are more stressed as compared to male teachers. This finding is in line with Nerdrum, Rustøen, and Rønnestad (2006) and Stallman (2010) in their studies on university students; Chaplain's (2008) research on trainee secondary students; and Blix Cruise, Mitchell, and Blix (1994), and recent work by Skaalvik and Skaalvik (2016) on teachers. There appears to be solid evidence for women getting more easily stressed by their work situation than men.

Thus, effective interventions are required to lower job stress and to improve the work environment for university teachers. Reward and recognition systems, support from colleagues and the head of the department should be provided to the teachers. A culture of trust and respect is needed so that teachers feel secure and appreciate their work.

This study has some limitations. As the data were self-reported, we cannot entirely ignore the possibility of response tendencies or scores affected by social desirability. There are issues regarding the sample. It is not possible to estimate the response rate since there is no way to gauge the number of valid e-mail addresses that the link to the electronic questionnaire was sent. However, Boyer, Olson, Calantone, and Jackson (2002) found that e-surveys are comparable to manual survey questionnaires with minor exceptions, and e-surveys provide effective substitutes to printed questionnaires. Both techniques have not only comparable response rates but similar results as well.

The present study addressed the issue of stress among university teachers, comparing the situation in a developed and a developing country. Although the results showed that there were strong associations between the traditional variables related to occupational stress, there were noteworthy differences between Finnish and Pakistani university teachers. This finding suggests that different types of interventions might be needed to improve the situation in the two countries.

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