



Modeling the workplace bullying the mediator of “Workplace climate-employee health” relationship

Mehwish Iftikhar¹, Muhammad Imran Qureshi^{2*}

^{1,2} Department of Management Sciences, COMSATS Institute of Information Technology, Abbottabad, Pakistan.

* Corresponding author: miqureshi80@gmail.com

Abstract

Mobbing is relatively new concept for behavioral scientists, which illustrates in the form of unfriendly behavior of employee at workplace. The objective of the study is to examine the relationship between organizational climate, workplace bullying and workers health in Higher education institutes of Pakistan. In addition, this study investigates how workplace bullying acts as a mediator between organizational climate and workers physical & psychological health. Structural equation modeling and path analysis was conducted using the AMOS software program. The reliability of the questionnaire is measured by Cronbach's coefficient alpha (α). The results from the study show a Cronbach's α score of each dimensional scale: organizational climate has been measured on the basis of 7 factors. Reliability of each factor has been calculated like the first factor leadership has been measure through 4 items. Direct and indirect effects were calculated in order to test the endogenous and exogenous variables. The results derived from seventeen Higher Educational Institutes which comprises 9 public and 8 private educational institutions of Pakistan that indicates the fitness of the extended model and depicted that workplace bullying mediates the relationship of organizational climate and workers health. Organizational climate causes workplace bullying that affect workers physical and psychological health. The basic cause of bullying at workplace is the organizational climate along with its various elements that can better contribute in making valuable strategies to manage workplace bullying. It is important to emphasize that these findings might be used effectively in order to guide organizational interventions and theoretical developments.

ARTICLE INFORMATION

Received: 25 April 2015
Revised: 25 May 2015
Accepted: 25 June 2015

DOI:

<http://dx.doi.org/10.31580/jmi.v4i1.27>

Keywords: Organizational Climate, Workplace Bullying, Employee Health, Pakistan

© Readers Insight Publication

Introduction

In today's workplace, bullying act as a reality, it is estimated that one-fifth of all workers have experienced harassment and bullying at workplaces. Bullying at workplace is very extensive and is spreading just like an epidemic. People could sensibly expect to go through their working lives in the past without having a serious bullying happenings, but everyone can be at risk of being a victim of bullying, maybe several times throughout their career. This issue has come out of the secret in recent years. In addition, workplace bullying becomes a serious global problem [1]. It is recognised as a common problem in the workplace in various countries [2]. On the other hand, different studies and models have been designed in order to test bullying consequences and antecedents were mainly conducted in Western societies. It is ambiguous if these conclusions and results are generalizable to non-western societies or not, such as Pakistan. Until now, very few studies have investigated bullying at workplaces in cross-national or cross cultural settings. These few studies, though, focused exclusively on the prevalence of bullying and on the frequencies of negative behaviours and acts [3]. With the increases in work pressures recently within higher education it is probable that those behaviours which exclusively focus on changed work relationships may broaden the bullying experience. This arouses an intensive need for an investigation of such experiences and also for its linkage with workers health. Effects of workplace bullying on health are often revealed as an unwanted outcome of being bullied, up till now these health effects of bullying have not been studied thoroughly or systematically. Few studies have been conducted on bullying

behaviours in non-western societies and focused solely on bullying occurrence and frequencies of negative acts. The present study is initiated with an objective to sort out the root causes, nature and the extent of bullying behaviours at workplace of higher educational institutes of Pakistan and to investigate its relationship with organizational climate and health.

Key objectives

- 1) To explore the nature, causes and extent of bullying in higher education institutes of Pakistan.
- 2) To assess the relationship of workplace bullying with organizational climate and health.
- 3) To find out the direct and indirect relationships of organizational climate with psychological and physiological health.
- 4) To investigate the relationship between psychological and physiological health with hours of sleeping.

Literature review

Research on bullying at workplace started in Sweden in the 1980s, subsequent to the country's groundbreaking research on schoolyard bullying [4]. Leymann [5], a psychiatrist and a physician, is called the pioneer of this work [6]. His original interest in bullying at school afterward expanded to include bullying at work (what he called “mobbing”), when he recognized same dynamics in adult patients. After few years, researchers [7-8] conducted researches on harassment and mobbing. In 1990, a British journalist, Andrea Adams [9] tried to capture the public attention towards this much labeled



‘bullying’ through BBC broadcasts. A number of UK scholars have conducted and published bullying research, as a result of Adams’ work [10-11]. Since the initial UK work, bullying research has emerged in South Africa [12, Australia [13], Austria (e.g. 14), Germany [15], and lots of other countries [16]. This remained continues topic of interest, particularly in the fields of organizational psychology and business/management internationally. Researchers described bullying as a “persistent pattern of negative acts”. There are different categories of bullying behaviours existing in the literature [17]. Researchers differentiate between personal bullying and workplace bullying. They describe personal bullying as exposure to behaviours like insulting remarks, gossip, extreme teasing and continual criticism, and work-related bullying is related to the exposure to negative acts such as unmanageable workloads, unreasonable deadlines, unnecessary monitoring, and a feeling that essential information is being withheld.

There can be lots of reasons that may cause bullying at workplace. Jenkins [18] has also highlighted various factors that have been found to be contributors of bullying at workplace. Current empirical studies provide additional support for the relationship of organization with bullying at workplace, particularly job design and working conditions [19], organizational change and laissez-faire leadership [20], and organizational climate and violence climate. In literature it is identified that personal characteristics of perpetrators, personal characteristics of bullying victims, organizational environment, and the leadership style of managers in organisations appear to be a reasons for the presence of workplace bullying. Leymann [21] projected several reasons for bullying that are the managerial styles of the leader’s organizational relationships, and the dominance problems within organizations. The bullying impact has been well documented in the literature and has found to have a negative affect on self esteem, psychological wellbeing, physical health and emotional health [22- 23]. A substantial amount of research over the past decade has revealed that bullying targets are likely to experience various health problems like depression, anxiety and physical problems [24-25], it also diminishes mental health [26], and creates post-traumatic stress disorders [27]. Findings regarding to the outcome of bullying have shown that bullying is allied to the serious health consequences for the victims. These may include anxiety, low self-esteem, concentration disorders, anger, depression, fatigue, post traumatic stress disorder, and the occurrence of psychosomatic symptoms [28]. Bullying is also related to the development of sleep disorders [29]. According to Vartia [30], bullying victims use sleep-inducing drugs more than those respondents who are not being the victim of bullying. Negative environment of work may have serious effects on health of employees. Employees might suffer from psychological effects, such as impaired judgment, anxiety, irritability, anger, memory loss and an inability to concentrate [31]. Consequently, a huge sample of French employees revealed that bullying in the workplace was associated with sleep disturbances [32]. Qureshi et al. [33] conclude that mobbing has a positive relationship with stress and leads to negative employee behaviour at workplace. Long-lasting exposure to negative acts may also direct individuals to engage in coping behaviours like alcohol use, which may have negative effects on employee’s health.

Conceptual framework

Here we are going to explore the premise that bullying at workplace is associated with organizational climate and employee’s health. Previous literature has been suggested that organizational climate is related to employee health significantly [34]. Though, in our model of bullying, we position perceptions of bullying at workplace as a mediator between climate and health relationship. Individuals might particularly be likely to view a situation that occurs in a negative and hostile organizational climate as bullying. Therefore, yet ambiguously negative acts might be considered as more intentional and thus more harmful in light of a negative climate of an organization. As a result, perceptions of being bullied might

have short and long term relationships with employee’s health. That may include smoking or drug misuse and poor sleep quality. We chose to focus on excessive smoking/drug misuse as a short-term health consequence and sleep disturbance as a long-term health consequence in the light of evidences suggesting that these sorts of issues are particularly widespread in Pakistan.

The mediation of smoking/drug misuse on hours of sleeping has been also tested in the model. In fact, excessive smoking or use of drugs might induce sleep disorders by disturbing the sequence and duration of sleep states and by altering total sleep time [35]. Figure 1 shows the conceptual framework of the study.

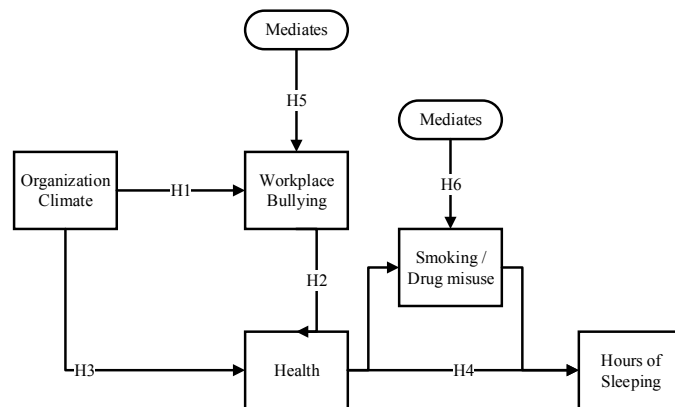


Fig. 1. Workplace Bullying

Hypotheses of the study

Following are the hypothesis formulated on the basis of above discussion i.e.,

- H1: Workplace bullying mediates the relationship of climate with health.
- H2: There is a negative relationship between workplace bullying and organizational climate.
- H3: There is a positive relationship between workplace bullying and bad health.
- H4: There is a positive relationship between organizational climate and bad health.
- H5: There is a positive relationship between bad health and hours of sleeping.
- H6: Smoking/Drug misuse will mediate the association between health and sleeping hours.

Methodology

Population and sample

The population consisted of Higher education commission (HEC) recognized public and private Higher Educational Institutes of Pakistan. The universe selected for this study is Higher Education industry or Universities of Pakistan. There are 144 HEC recognized Higher Educational Institutes out of which 80 are public where as remaining are private.

Sampling techniques

A proportionate random sampling technique was applied for the selection of Higher Educational Institutes. Seventeen Higher Educational Institutes comprise the sample out of which 9 are public and 8 are in private sector. Further explanation regarding to sampling is given in the Tables 1 and 2 respectively.

Data collection

The faculty members contain Lecturers, Assistant Professors, Associate Professors and Professors of HEC recognized Higher Educational Institutes of Pakistan were the participants in this study.

Table 1: Public Sector Universities/Degree Awarding Institutes

Universities/DAI'S Chartered by	Total	Percentage	No of selected	Selected Universities
---------------------------------	-------	------------	----------------	-----------------------



Government of:	Population		Universities	
Pakistan	22	28%	3	Bahria University NUST Quid-e-Azam university
Punjab	18	22%	2	University of Gujarat; University of Punjab
Sindh	15	18%	2	Benazir Bhuto Medical University University of Karachi
KPK	16	21%	2	Hazarah University University of Peshawar
Balochistan	5	6%	0	-----
AJK	4	5%	0	-----
Total	80	55%	9	

Table 2: Private Sector Universities/Degree Awarding Institutes

Universities/DAI'S Chartered by Government of:	Total Population	Percentage	No of selected Universities	Selected Universities
Pakistan	6	9%	1	Lahore University of Management Sciences University of Lahore
Punjab	21	32%	3	University of Wah Lahore School of Economics Indus University, Karachi.
Sindh	24	35%	3	Iqra University, Karachi Gandhara University, Peshawar Sarhad University, Peshawar
KPK	10	15%	2	
Balochistan	1	1%	0	
AJK	2	3%	0	
Total	64	45%	8	

The survey was conducted on random basis that is questionnaires were distributed without any discrimination/bias. 20 questionnaires per university were distributed and the potential respondents were provided with full briefing, by the researchers in the form of personal discussions. It is a cross-sectional study. It is expected that all of the respondents have given the response correctly and honestly up to their understanding of the questionnaire and briefing.

Questionnaire

The research question “Do workplace bullying act as a mediator between organizational climate and workers health?” is to investigate the relationships between workplace bullying, organization climate and workers health i-e faculty members of higher educational institutes of Pakistan. In the field of social sciences it is a common practice to collect data through questionnaires. The cost associated with this methodology compared to other techniques is low, this can be one of the reasons to collect the data by this technique. Another reason behind this type of technique, in the light of the studies is that when the research objectives are clear and is not that much complex then it is always fine and preferred to use questionnaires for data collection. Standardized questionnaires were taken from relevant literature that attempted to gather information regarding all the variables i-e workplace bullying, organizational climate and health (psychological and physiological). Likert Scale is used in this study as it is the most commonly used measure in scale design, with the 3-point, 5-point and 7-point Likert scales usually enjoying the largest popularities. 5-point likert scale is used for this study. The study adopted the 5-point Likert Scale, with the following responses: 1 as strongly disagree, 2 as disagree, 3 as somewhat agree, 4 as agree, and 5 as strongly agree. Combination of three standardized scales was used in this study with some additions and deletions i.e.,

Negative Acts Questionnaire Revised (NAQ-R): Bullying at workplace was analyzed by a reduced version of the NAQ-R, The items are divided into personal bullying (12 items) and work-related bullying (five items). This survey was also validated for Japanese populations successfully (Asakura et al., 2008).

Majer D’Amato Organizational Questionnaire (MDOQ10): Organizational climate was assessed by a reduced version (17 items) of the MDOQ10. Some questions are deleted and some are further added according to our study. The selection of seven out of the original ten climate dimensions was inspired by a previous Italian study on the climate-bullying relationship.

Center for Epidemiologic Study for Depression: This scale assessed levels of depression and anxiety, using several items.

Individuals were asked to respond to each item using a five-point scale ranging from 1 to 5. It has also been validated successfully for Japanese populations. More information about psychological as well as physical health is also taken from the participants by adding more questions in this scale.

Behavioral variables: Variables regarding to behavior i-e smoking/drug abuse and hours of sleep were also measured with some items based on 5 points likert scale ranging from 1-5.

Results

Table 3 shows the details of respondents who participated in this study. The data describes gender, age, marital status, post, degree and professional experience of the respondents. There are 231 gender who were contacted on random basis without any quota or discrimination.

Table 3: Demographic Data

Demographics	Categories	Percentages
Gender	Male	68%
	Female	32%
Age	20-29	34%
	30-40	57%
	Above 40	
Designation	Lecturers	49%
	Assistant professors	25%
	Assoc. professors	11%
Marital status	Professors	14%
	Single	43%
Total professional experience	Married	57%
	1-3 years	19%
	4-6 years	35%
	7-9 years	24%
Qualification	More than 9 years	22%
	Masters	14%
	Ms/Mphil	49%
	Ph.D	36%

As shown in the Table 3, male response rate is more then female. There were about 68 percent of male respondents while remaining 32 percent were females. One reason can be the general proportion in our country for female workers is less as comparison to male members. Secondly it was also difficult to approach female faculty members because of their home commitments and teaching schedules. Major portion of ranging between the ages of 30 to 40. Percentage demographic shows that the percentage of the respondents between



categories 20-29 is 34 percent. Respondents who are between 30-40 are having the percentage of 57 percent. And remaining 9 percent of the respondents were above the age of 40, 43 percent of the respondents were single while 57 percent were married respondents of the study. The proportion of lecturer respondents is more than other respondents. As the percentage demographic shows that 49 percent of the respondents were lecturers, 25 percent were assistant professors, 11 percent were associate professors and remaining 14 percent were professors. Work experience of the respondents is also considered as a demographic variable, 19 percent of the respondents belong to the category of 1-3years. 35 percent belongs to the category 4-6years. 24 percent lie between 7-9 years and 22 percent were of the respondents were having the total professional experience of more than 9 years. Qualification was also considered as demographic, 14 percent of the respondents were having qualification of Masters, 49 percent were MS/Phil and 36 percent were PHD.

Table 4 shows the descriptive data and factor loading of the constructs for the ready reference.

Exploratory factor analysis (EFA)

Principal component analysis

The results of principal component analysis are shown in Table 6. Five factors were extracted by considering that the eigen value of the correlation matrix should be more than one, and that the selected factors explain around 50.899 percent of the total variance. The eigen value for a given factor measures the variance in all the variables that is accounted for by that factor.

Reliability analysis

In the questionnaire, there were five basic dependent and independent variables. The variable organizational climate has been measured on the basis of seven dimensions based on the literature review. Each construct is measured on the basis of different number of questions with an itemized ranking scale of 1-5 i.e. from *strongly disagree to strongly agree* (see, Table 5).

Table 5: Reliability Analysis of Variables

Variables	Questions/items	Alpha value
Leadership	4	0.97
Job description	2	0.96
Team	2	0.72
Working conditions	5	0.76
Cultural Norms	2	0.93
Time pressures	2	0.77
Dynamisms	2	0.88
Organizational Climate	19	0.78
Work place bulling	17	0.86
Health	28	0.86
Hours of sleeping	4	0.84
Smoking/drug misuse	5	0.86
Overall	73	0.93

The results show that the reliability of leadership is 0.97, job description is 0.968, team is 0.72, working conditions is 0.76, cultural norm is 0.93, time pressure is 0.77, dynamisms is 0.88. Other variables like workplace bulling has the reliability of 0.86, health reliability is 0.86, hours of sleeping is 0.84, smoking/drug misuse is 0.86 while the construct as a whole is 0.93. This indicates that the questionnaire has the sufficient internal consistency, and alpha value is greater than acceptable value of 0.70.

Rotated component analysis

Table 7 shows rotated component matrix, which shows that maximum item loadings on every 5 components are above 0.50.

The results show that the first component organizational climate comprises of 19 items having most of the loadings above 0.50 is contributing in data set with 12.46% of variation caused by this factor.

Second component health is having total contribution of 12.62% variation with 28 item loadings. The component drugs misuse/smoking with the loading values above 0.05 causes overall 10.98% of variation. Hours of sleeping are another component that has been extracted consisting of 4 loaded items produces 7.91% of variation. Last component i-e workplace bullying contributes with 6.71% of variation in data set with 17 loaded items.

Model fit summary (Structural analysis)

Table 8 indicates the values of Fit indices are well above or equal to the standards. This shows that the model exhibits complete fitness of its variables. That supports our **H1** that a mediation model which allows for both direct and indirect relationships of climate with health will best fit the data.

Table 8: Model fit summary

Fitness Indices	Standard Values	Achieved Values
GFI	Greater or equal to 0.90	.920
NFI	Greater or equal to 0.90	.899
RMSEA	p<0.08	.078
CFI	Must exceed 0.80	.86
AGFI	Greater or equal to 0.80	.81
Chi Square (χ^2/df)	Less than 3	2.17

Analysis of the model

Structural model

The structural model was analyzed by using AMOS 18. The final result of SEM for this study is presented in the Figure 2.

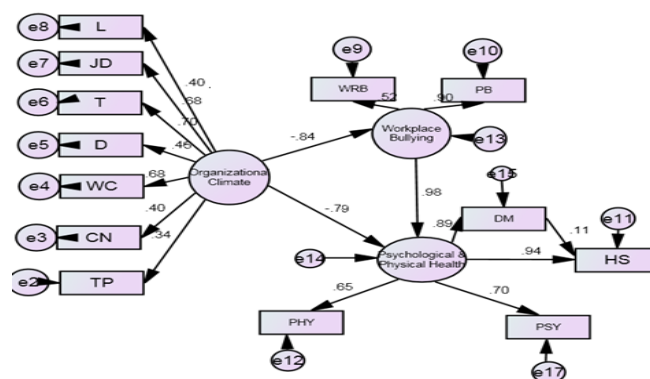


Fig. 2. Structural Equation Model (SEM)

Regarding the association between Organizational Climate and Workplace Bullying, the standard coefficient of Organizational Climate and Workplace Bullying is -0.84 with a p-value less than 0.05 which supports H2. Meanwhile, it is also concluded that there is negative relationship between workplace bullying and organizational climate. In addition, the standard coefficient of workplace bullying and bad health is 0.98 with a p-value less then 0.05, thus, H3 is supported reflecting that workplace bullying positively affects that bad health of employees. More the bullying is, more will be the bad or ill health of employees.

Concerning the relations between organizational climate and bad health the standard coefficient of organizational climate and bad health is -0.79 with p-value less then 0.05, thus H4 is proved showing that organizational climate has negative relationship with bad health psychological and physical health of employees.

The standard coefficient of bad health and disturbed hours of sleeping is 0.94 with a p-value less than 0.05, hence, H5 is supported, and displaying that bad health has positive relationship with disturbed hours of sleeping. More the bad health of the employee is, more will be the disturbed sleeping hours. Table 9 shows the summary of structural model relationships.

Table 9: Summary of Structural Model

Organization climate	Workplace bullying	Bad health
----------------------	--------------------	------------



Organization Climate*		(-)	(-)
Workplace bullying**	(-)		(+)
Bad Health**	(-)	(+)	

* Exogenous variables

** Endogenous variables

Direct and indirect effects

According to hypothesis 1 and 2 organizational climate indirectly affects bad health through the path having indirect influence of -0.823 (by multiplying the path coefficients -0.84×0.98) and the direct influence of -0.79. As a result the overall influence is -1.613 (by adding direct and indirect influence). This shows that organizational climate first affects workplace bullying negatively with path coefficient value of -0.84, then workplace bullying affects bad health positively (0.98) and the total indirect effect is -0.823, that supports H6, proving that workplace bullying act as a mediating variable between organizational climate and bad health.

Regarding to the effect of bad health on hours of sleeping, bad health indirectly affect hours of sleeping with the path having total path coefficient value of 0.097 (by multiplying the path coefficients 0.89×0.11) and also affects directly with the direct influence of 0.94. So the overall influence is 1.03 (by adding direct and indirect influence). It depicts that bad health has direct positive influence of 0.89 on drug misuse/smoking and drug misuse/smoking further influence hours of sleeping positively with path coefficient value of 0.11. This shows that drug misuse/smoking act as a mediating variable between bad health and hours of sleeping with the total mediating effect of 0.097, that supports H7. Brown and Kenny [38] suggest a theory that assigns a mediator role to the control construct, however, it is only secondarily concerned with the independent manipulation of control. The most essential feature of the hypothesis is that perceived control is the mechanism through which the stressor affects the outcome variable.

Conclusion

Workplace bullying is considered to be an important area of debate, mainly among researchers who are adopting a psychological perspective of work. The current study provides support for the importance of bad organizational climate and workplace bullying as predictors of negative psychological and physical health and of negative health behaviors. Study concluded that bad organization climate leads toward workplace bullying, as these findings are also supported by the study of Einarsen [29] that negative social climate, may facilitate bullying in the workplace.

Study also found that bullying and a negative organizational climate were associated with an increased level of ill health that is further related to smoking behavior/drug misuse.

This result follows the study of Bowling and Beehr [36] showed that experiencing bullying at workplace leads to personal health and behavioral consequences. Carnero [37] is another supporter of the same findings depicted that probability of suffering from bad health is significantly higher among bullied workers as compare to those who are not being bullied. The proposed mediation model, which allowed for both direct and indirect associations of climate with health, best fit the data. Our results are inline with the previous researches of Giorgi [39], which suggest that workplace bullying partially mediates the relationship between organizational climate and health. Therefore, a negative climate is associated with increased perceptions of bullying and decreased perceptions of psychological and physical health. In turn, perceptions of decreased psychological and physical health are associated with unhealthy behaviors like smoking, drug misuse and insufficient sleep. This supports work by Berkowitz [40], which suggested that health behaviors are associated with stress and with negative coping behaviors.

Support for a partially mediating role of drug consumption between health and sleeping hours was also obtained as according to our findings that smoking/drug misuse acts as a mediating variable between bad psychological and physical health and disturbed hours of sleep. This is also consistent with prior research indicating that

excessive drugs consumption might induce sleep disorders by disrupting the sequence and duration of sleep states and by altering total sleep time [35]. However, whereas a negative climate and perceptions of bullying were associated with more smoking among males than females via decreased psychological health, females reported sleeping fewer hours than males.

Overall findings depicted that if there is bad organizational climate in organizations like leader's role is not directive and supportive, unclear job descriptions, huge time pressures, poor working conditions etc then it can be the reason of bullying at workplace that may leads toward bad/ill health, that disturbs sleeping hours of workers by way of mediating role of smoking/drug misuse.

Recommendations

The main results of the current study suggested that improvements in the climate of an organization and reductions of negative acts are probable to improve employee's health and reduce smoking or drugs misuse behaviors and increase the quantity of sleeping hours. If organizations focus on negative behaviors, mainly in terms of reducing negative acts in organizational contexts, it will be a valuable strategy in order to promote employees health, or at least alleviate health problems of employees. Current study also recommended that instead of handling bullying situations on a case by case basis, organizations should seek to structure workplaces with programs and policies in order that bullying might be reduced.

If bullying at workplace is not managed well, it might have serious negative implications on employees and the overall performance of the organization as well so a healthy, happy and engaged workforce would not be attainable. Organizations must have to make strategies in order to manage workplace bullying but for this purpose managers should be aware about the reasons and causes of bullying. Our study pointed out the basic cause of bullying at workplace i-e organizational climate along with its various elements. That can better contribute in making valuable strategies to manage workplace bullying.

Lastly, it is important to emphasize that these findings might be used effectively in order to guide organizational interventions and theoretical developments.

Limitations of the study

The present study was conducted in Pakistan. Cultural differences must exist in antecedents of bullying and outcomes across countries [41]. There are also a need of cross cultural researches in this field of study. It is thus essential that existing models of bullying should be tested cross culturally and modified accordingly.

We didn't measure the length of time that participants had remained depressed and stressed; therefore we were not able to determine whether smoking behavior was due to cumulative effects of depression and stress. Other aspects of our sample size reveal the potential limitations of this study. There is a large number of Pakistani Universities that were not included in this research. It is recommended for the future investigators/researchers to include remaining universities and to increase sample size so that to make results more generalize able.

Workplace Bullying appears to be a serious problem for Pakistani workers health. Coping with bullying is a vital issue. But our study did not pay much concentration towards it. So this serious issue warrants further investigation.

Ethical considerations

Ethical issues (including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication, and/or submission, redundancy etc.) have been completely observed by the authors.

Acknowledgement

The researchers are highly grateful to people who cooperated with us in the data collection phase. In addition, we are thankful to the faculty in the



higher education institutions who participated in the study. The author's declare that there is no conflict of interest.

References

- [1]. Nielsen, M. B., Skogstad, A., Matthiesen, S. B., Glasø, L., Aasland, M. S., Notelaers, G. & Einarsen, S. (2009). "Prevalence workplace bullying in Norway: Comparison across time and estimation methods". *European Journal of Work and Organizational Psychology*, 18, 81–101.
- [2]. Zapf, D., & Einarsen, S. (2003). "Individual antecedents of bullying: Victims and perpetrators", In S. Einarsen, H. Hoel, D. Zapf, & C.L. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International perspectives in research and practice* (pp. 103–126). London: Taylor & Francis.
- [3]. Giorgi, G. and Majer, V. (2008), "Il mobbing in Italia. Uno studio condotto presso 21 organizzazioni (Mobbing in Italy. A study in 21 Italian organizations)", *Risorsa Uomo*, Vol. 14 No. 3, pp. 171-88.
- [4]. Olweus, D. (2003). "Bully/victim problems in school: basic facts and an effective intervention programme". In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 62–78.
- [5]. Leymann, H. (1990). "Mobbing and psychological terror at workplaces". *Violence and Victims*, 5, 119–26.
- [6]. Rayner, C., Hoel, H. and Cooper, C. L. (2002). "Workplace Bullying: What We Know, Who Is To Blame, and What Can We Do?", London: Taylor and Francis.
- [7]. Einarsen, S., Raknes, B. I. and Mattheisen, S. B. (1994). "Bullying and harassment at work and their relationships to work environment quality: an exploratory study". *The European Work and Organizational Psychologist*, 4, 381–401.
- [8]. Bjoërkqvist, K., østerman, K. and Hjelt-Back, M. (1994a), "Aggression among university employees", *Aggressive Behavior*, Vol. 20, pp. 173-84.
- [9]. Adams, A. and Crawford, N. (1992). *Bullying at Work: How to Confront and Overcome it*. London: Virago Press.
- [10]. Hoel, H., Rayner, C. and Cooper, C. L. (1999). 'Workplace bullying'. In Cooper, C. L. and Robertson, I. T. (Eds), *International Review of Industrial and Organizational Psychology*, 14, 195–230.
- [11]. Hoel, H., Cooper, C. L. and Faragher, B. (2001). "The experience of bullying in Great Britain: the impact of organizational status". *European Journal of Work and Organizational Psychology*, 10, 443–65.
- [12]. Marais-Steinman, S. and Herman, M. (1997). *Corporate Hyenas at Work: How to Spot and Outwit Them by Being Hyenawise*. Pretoria: Kagiso Publishers.
- [13]. Sheehan, M. (1998), "Restructuring: rhetoric versus reality", in McCarthy, P., Sheehan, M., Wilkie, S. and Wilkie, W. (Eds), *Bullying: Causes, Costs and Cures*, Beyond Bullying Association, Nathan, Australia, pp. 153-66.
- [14]. Niedl, K. (1996). "Mobbing and wellbeing: economic and personal development implication". *European Journal of Work and Organizational Psychology*, 5, 239–49.
- [15]. Zapf, D. (1999). "Organisational, work group related and personal causes of mobbing/bullying at work". *International Journal of Manpower*, 20, 1/2, 70–85.
- [16]. Zapf, D., Einarsen, S., Hoel, H. and Vartia, M. (2003). "Empirical findings on bullying in the workplace", In Einarsen, S., Hoel, H., Zapf, D. and Cooper, C. L. (Eds), *Bullying and Emotional Abuse in the Workplace: International Perspectives in Research and Practice*. London: Taylor and Francis, 103–26.
- [17]. Einarsen, S. & Mikkelsen, E. G. (2003). Individual effects of exposure to bullying at work. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 127–144). London: Taylor & Francis.
- [18]. Jenkins, M. (2011). "Is Mediation Suitable for Complaints of Workplace Bullying?". *Conflict Resolution Quarterly*, vol. 29, no. 1, Fall 2011, p.15-27.
- [19]. Giorgi, G. and Majer, V. (2009), "Mobbing virus organizzativo (Mobbing Organizational Virus)", Giunti Os Organizzazioni Speciali, Firenze.
- [20]. Skogstad, A., Torsheim, T. and Einarsen, S. (2011), "Testing the Work Environment Hypothesis of Bullying on a Group Level of Analysis: Psychosocial Factors as Precursors of Observed Workplace Bullying". *APPLIED PSYCHOLOGY: AN INTERNATIONAL REVIEW*, 60 (3), 475–495
- [21]. Leymann, H. (1996), "The content and development of mobbing at work", *European Journal of Work and Organizational Psychology*, Vol. 5, pp. 165-84.
- [22]. Crawford, N. (2001). 'Organisational responses to workplace bullying'. In Tehrani, N. (Ed.), *Building a Culture of Respect: Managing Bullying at Work*. London: Taylor and Francis, 21–31.
- [23]. de Wet, C. (2010). "The reasons for and the impact of principal-on-teacher bullying on the victims' private and professional lives". *Teaching and Teacher Education*, 26, pp. 1450–1459.
- [24]. Mikkelsen, E. and Einarsen, S. (2002). "Basic assumptions and symptoms of post-traumatic stress among victims of bullying at work". *European Journal of Work and Organizational Psychology*, 11, pp. 87–111.
- [25]. Hauge, L.J., Skogstad, A., & Einarsen, S. (2007). "Relationships between stressful work environments and bullying: Results of a large representative study". *Work & Stress*, 21(3), 220–242.
- [26]. Hoel, H. and Cooper, C. L. (2000) "Destructive conflict and bullying at work". Unpublished Report. Manchester School of Management, University of Manchester Institute of Science and Technology.
- [27]. Leymann, H. and Gustafsson, A. (1996). "Mobbing at work and the development of post-traumatic stress Disorder". *European Journal of Work and Organizational Psychology*, 5, 251–75.
- [28]. Zapf, D., Knorz, C. and Kulla, M. (1996). "On the relationship between mobbing and bullying at work". *International Journal of Manpower*, 5, 215–37.
- [29]. Einarsen, S. (2000). Harassment and bullying at work: A review of the Scandinavian approach. *Aggression and Violent Behavior*, 5(4), 379–401.
- [30]. Vartia, M. (2001). "Consequences of workplace bullying with respect to the well-being of its targets and the observers of bullying", *Scandinavian Journal of Work Environment and Health*, 27, 63–9.
- [31]. Høgh, A., Mikkelsen, E. G. & Hansen, A. M. (2010). Individual consequences of workplace bullying/mobbing. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International perspectives in research and practice* (pp. 107–128). London: Taylor & Francis.
- [32]. Niedhammer, I., David, S., Degioanni, S. and 143 Occupational Physicians (2006). "Association between workplace bullying and depressive symptoms in the French working population". *Journal of Psychosomatic Research*, 61, pp. 251–259.
- [33]. Qureshi, M. I., Iftikhar, M., Janjua, S. Y., Zaman, K., Raja, U. M., and Javed, Y. (2013). Empirical investigation of mobbing, stress and employees' behavior at work place: quantitatively refining a qualitative mode. Quality and Quantity, DOI 10.1007/s11135-013-9976-4.
- [34]. Einarsen, S., Hoel, H., Zapf, D., & Cooper, C.L. (2003). "The concept of bullying at work: The European tradition". In S. Einarsen, H. Hoel, D. Zapf, & C.L. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International perspectives in research and practice* (pp. 3–30). London: Taylor & Francis
- [35]. Roehrs, T. and Roth, T. (2001), "Sleep, sleepiness, and alcohol use", *Alcohol Research & Health*, Vol. 25 No. 2, pp. 101-9.
- [36]. Bowling, N.A., & Beehr, T.A. (2006). "Workplace harassment from the victim's perspective: A theoretical model and meta-analysis". *Journal of Applied Psychology*, 91(5), 998–1012.
- [37]. Carnero, M.A., Martinez, B. and Sa'nchez-Mangas, R. (2010), "Mobbing and its determinants: the case of Spain", *Applied Economics*, Vol. 42 No. 29, pp. 3777-87.
- [38]. Baron, R. M., and Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- [39]. Gabriele Giorgi, (2010), "Workplace bullying partially mediates the climate-health relationship", *Journal of Managerial Psychology*, Vol. 25 Iss: 7 pp. 727 – 740
- [40]. Berkowitz, L. (1989). "Frustration-Aggression hypothesis: Examination and reformulation". *Psychological Bulletin*, 106(1), 59–73. Brodsky, C.M. (1976), *The Harassed Worker*, Lexington Books, DC Heath and Company, Toronto.
- [41]. Glasø, L., Vie, T., Holmfjord, G. & Einarsen, S. (2011). "An application of affective events theory to workplace bullying: The role of emotions, trait anxiety and trait anger". *European Psychologist*. Advance online publication. doi: 10.1027/1016-9040/a000026.



Table 4: Descriptive Data and factor loading of the Constructs

S.no	Statement	Mean	Std dev	Factor loading
Leadership in organizational climate				
1	I am given supportive feedback by my head of department on the work I do.	3.28	1.006	.829
2	I can talk to my head of department about the something that has upset or annoyed me about work.	3.52	.918	.927
3	I am supported by my head of department to complete the tasks assigned to me.	3.91	.897	.835
4	My head of department encourages me at work.	3.74	.901	.713
Job description in organizational climate				
1	There is lack of informational resources to carryout responsibilities assigned to me.	2.58	.988	.718
2	I am not clear on the scope and responsibilities of my role (job).	2.06	.978	.761
Team in organizational climate				
1	If the work gets difficult I can rely on my colleagues to help me.	3.63	.974	.747
2	I get the help and support I need from my colleagues	3.88	.901	.758
Working conditions				
1	I feel emotionally tired by my work.	2.03	.950	.781
2	I feel fatigue when I have to get up early in the morning to face another day on the job	2.31	1.075	.806
3	Working with people all the day is really a tension for me.	2.08	.791	.725
4	My role/job at office does not allow me enough time for my family.	2.42	.890	.685
5	My head of department cares about my opinion.	3.42	1.005	.788
Cultural norms in organizational climate				
1	My organization has some cultural norms that are against my norms.	2.16	.956	.659
2	I have various other interests (social, religious etc) which remain neglected because of nature of my job.	2.46	1.126	.739
Time pressures in organizational climate				
1	My workload is too excessive.	2.28	.924	.842
2	I feel overburdened in my role at my university.	2.13	.969	.725
Dynamisms in organizational climate				
1	My new ideas are tried out in the organization.	3.88	.957	.733
2	The initiatives and personal results are considered positively.	3.88	.987	.769
Workplace Bullying				
1	Someone is withholding information that affects my performance.	2.39	1.144	.701
2	I am being humiliated or reticulated in connection with my work.	2.26	1.017	.686
3	I am being ordered to do work below my competence level.	2.57	1.228	.714
4	My key areas of responsibility are removed or replaced with more trivial/unpleasant task.	2.65	1.234	.797
5	There is Spreading of gossips and rumors about me.	2.04	.995	.826
6	I am being ignored, excluded or being 'sent to Coventry'.	2.26	1.084	.743
7	Offensive or insulting remarks are made about my personality, attitudes or private life.	2.75	1.041	.904
8	I am being shouted at or being the target of spontaneous anger (or rage).	3.06	1.068	.860
9	In my organization people are having intimidating behavior such as finger-pointing, invasion of personal space, shoving.	3.11	1.140	.915
10	I get hints or signals from others that you should quit your job	3.49	1.197	.891
11	I get repeated reminders of errors or mistakes	2.41	.923	.912
12	I am being ignored or facing a hostile reaction when I approach	2.53	.898	.891
13	Persistent criticism of my work and effort.	2.72	.925	.904
14	I am being given tasks with unreasonable or impossible targets or deadlines.	2.86	.917	.896
15	Allegations are being made against me.	2.61	1.006	.903
16	I am being the subject of excessive teasing and sarcasm	2.95	1.033	.873
17	I am being exposed to an unmanageable workload	2.98	1.087	.870
Health				
1	Everything seems meaningless and useless to me.	2.44	.971	.797
2	I was bothered by things that usually don't bother me.	2.41	.874	.681
3	I did not feel like eating; my appetite was poor.	2.25	.912	.780
4	I feel frequent anxiety.	2.23	.901	.766
5	I had trouble keeping my mind on what I was doing.	2.86	1.062	.747
6	I felt depressed.	2.35	.851	.620
7	I felt that everything I did was an effort.	2.24	.757	.765
8	I thought my life had been a failure.	2.31	.859	.698
9	I felt fearful.	2.26	.861	.736
10	I talked less than usual	2.13	.813	.727
11	I felt lonely.	2.55	1.069	.707
12	People were unfriendly.	2.68	1.323	.887
13	I felt sad.	2.62	1.158	.894
14	I felt that people dislike me.	2.57	1.245	.870
15	I could not get "going."	2.52	1.004	.885
16	I feel stress most of the times.	2.96	1.027	.779
17	I feel palpitations (heartbeat) without any reason.	2.37	1.025	.842
18	I have developed blood pressure problems.	2.68	1.323	.887
19	I have regular headaches.	2.62	1.158	.894
20	I feel upset stomach (digestion problems).	2.58	1.245	.866
21	I feel pain in back and or neck.	2.52	1.004	.885
22	I feel tense and get easily irritated.	2.96	1.027	.779
23	I cannot enjoy anything anymore.	2.36	1.025	.844
24	I feel no charm even if I do something productive.	2.75	1.041	.904
25	Sometimes I get inexpressible feeling of fear without any reason.	3.06	1.068	.860
26	I easily become emotional in response to simple problem.	3.11	1.140	.915
27	Life seems boring and colorless.	3.49	1.197	.891



S.no	Statement	Mean	Std dev	Factor loading
28	Being a faculty member at a university is one of the most stressful professions when I compare it with others.	2.41	.923	.912
Hours of Sleeping				
1	My sleep is restless.	2.53	.898	.891
2	I feel difficulty in getting asleep even if sleeping environment is comfortable.	2.72	.925	.904
3	I feel my sleeping routine is quite disturbed.	2.86	.917	.896
4	Even if I want to sleep, I cannot sleep.	2.61	1.006	.903
4	Even if I want to sleep, I cannot sleep.	2.61	1.006	.903
Smoking/Drug misuse				
1	I am a smoker.	2.05	1.033	.873
2	Smoking gives me relief from stress while working.	2.99	1.085	.866
3	After smoking I can do my work with more concentration.	2.71	1.011	.828
4	I use different sort of medicines to reduce anxiety.	2.01	.922	.922
5	I take medicines without doctor's prescription.	2.09	.900	.831

Table 6: Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	18.993	26.018	26.018	18.993	26.018	26.018	9.234	12.649	12.649
2	6.844	9.376	35.393	6.844	9.376	35.393	9.217	12.626	25.276
3	4.801	6.577	41.970	4.801	6.577	41.970	8.020	10.986	36.262
4	3.545	4.857	46.827	3.545	4.857	46.827	5.780	7.918	44.180
5	2.973	4.072	50.899	2.973	4.072	50.899	4.905	6.719	50.899

Table 7: Rotated Component Matrix

Items Code	Components				
	Organizational climate	Health	Drug misuse/smoking	Hours of sleeping	Workplace bullying
OCL1	.653				
OCL2	.44			.549	
OCL3	.649				
OCL4	.616				
OCJD5	.573				
OCJD6	.641				
OCT7	.585				
OCT8	.695				
OCWT9	.748				
OCWT10	.455				
OCWT11	.684				
OCWT12	.391			.492	
OCWT13	.641				
OCCN14	.533				
OCCN15	.474				
OCTP16	.615				
OCTP17	.601				
OCD18	.711				
OCD19	.576				
PHY1		.403			
PHY2		.567		.654	
PHY3		.547			
PHY4		.506			
PHY5		.403			
PHY6		.534			
PHY7		.513			
PHY8		.460			
PHY9		.452	.547		
PHY10		.514			
PHY11		.532			
PHY12		.827			
PHY13		.808			
PHY14		.773			



Items Code	Components				
	Organizational climate	Health	Drug misuse/smoking	Hours of sleeping	Workplace bullying
PSY15		.431			
PSY16		.604			
PSY17		.604			
PSY18		.827			
PSY19		.808			
PSY20		.769			
PSY21		.431			
PSY22		.604			
PSY23		.605			
PSY24		.631			
PSY25		.740			
PSY26		.737			
PSY27		.744			
PSY28		.631			
HS1			.625		
HS2			.769		
HS3			.532		
HS4	.607		.543		
DM1				.793	
DM2				.618	
DM3				.651	
DM4				.546	
DM5		.647		.576	
WRB1					.475
WRB2				.552	.431
WRB3				.641	.431
WRB4					.656
WRB5					.467
WRB6				.474	.444
WRB7					.631
WRB8					.740
WRB9					.737
PB10					.744
PB11				.431	.390
PB12					.625
PB13					.769
PB14					.544
PB15					.607
PB16					.793
PB17					.618

Note: Rotation Method: Varimax with Kaiser Normalization.

