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Research paper



## **Prevalence Level and Predictors of Face to Face and Cyberbullying in Selected Service Sectors of Pakistan.**

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## Abstract

There found a scarcity of academic research on understanding of both the traditional and cyberbullying jointly at workplace of organisations. As an emerging field of research area, detailed understanding about the predictors of cyberbullying has yet not been fully established. Drawing on the sample of 285 officials working in 4 service sectors [banking, telecom, hoteling and education] of Pakistan, this research endeavoured to investigate about prevalence rate, extent and frequency of both the traditional and cyberbullying and predictors responsible for causing bullying among workers of service sectors of Pakistan. Using NAQ-21 and NAQ-R on the basis of the layman's cut-off criteria for measuring bullying and cyberbullying prevalence, results highlighted that 36%, 55%, 50% and 59% of the respondents were categorised as bullied traditionally and 18%, 30%, 27% and 49% were cyberbullied in education, banking, telecom and hoteling service sectors respectively, and this is unfortunately a very high ratio. Overall bullied [traditionally] percentage was 50 and cyberbullied was 31. Smart PLS-SEM based analysis verified that, multiple dimensions of organisational climate were found to be the predictors of workplace bullying, while technology [social networking and ICT's] is significantly related to the prevalence of cyberbullying at workplace of service sector organisations. This research provides new insights about new type of bullying i-e cyberbullying and its predictors/causes. Prevalence percentages of workplace traditional and cyberbullying have also been determined that shows bullying spread in service sectors at an alarming rate, which needs to be controlled.

Keywords: Workplace traditional bullying; Cyberbullying; Organisational climate; Technology; Social networking.

## 1. Introduction

The current study is focusing on prevalence rate and causes/predictors of workplace bullying [face to face and cyber]. There can be multiple reasons that may cause bullying and cyber bullying at workplace. Some psychosocial dangers for violence at workplace, mostly bullying or harassment, are related to poor environmental and organisational structures at the workplace, also the deficits in organizations and negative leader behaviours might be reflected as hazardous for organisational workplace [1]. There found lots of dimensions of organisational climate but while making the construct of organisational climate for the current research, those dimensions that are directly related to workplace bullying as depicted by the literature, are used in this research. The study proposes that organisational climate with its dimensions like, changing leadership styles, job descriptions, working conditions, cultural norms, time pressures and technology usage [social networking and ICT's] may widen the experience of workplace face to face bullying and cyber bullying as well.

It is quite certain that there exist a very blur and thin line between what is and what is not psychological workplace violence and this brings us to the aim of this research that what type of psychological violence literally called workplace bullying may occur at the workplace of service sector organizations. Apart from this, electronic media usage both within and outside of the workplace is rapidly rising. With the revolution of ICT's [Information and Communication Technology] from the last decade, medium of communication becomes internet, mobile phones and other electronic devices even at workplace of organizations. Keith and Martin [2] researched and concluded that this extensive use of latest communication devices and easy access to them has provided another [alternate] medium to bullies to target their victims in the form of cyber bullying. So traditional bullying and cyberbullying both are becoming global issues [3]. In a joint programme of ILO/ICN/WHO/PSI, integral work has been done and guidelines were provided on workplace violence [workplace bullying] in service sector in 2000 to 2002. They stated that organisational employees should be provided with violence free workplace and it is the responsibility of employers to promote and provide healthy work environment to their workers. They should recognise the overall responsibility and to ensure the health and safety as well as wellbeing of employees. According to national legislation and practice, employers must ensure the elimination of the predictable risk of workplace hazards and violence. The main emphasis was on the following points:

To create a climate in their organizations in which rejection of violence should be promoted.

Assessment of incidences of workplace violence on daily basis and to investigate what factors support or create workplace violence in their organizations.

Giving responsibilities to managers to implement policies and procedures in order to eliminate workplace violence

To provide suitable information, guidance and training regarding to workplace violence to workers.



On the basis of above connotation this research proposes that organisational climate can be the major cause of generating workplace violence in the form of bullying and cyberbullying.

For this purpose it is vital to study that what types of bullying may occur at workplace of organizations and to what extent. What can be the causes of workplace traditional and cyberbullying? As the study suggested that some of the elements of organizational climate may act as a cause of workplace bullying and the use of ICT's and Social networking at workplaces can be an another important contributor of cyber type of bullying in service sector of Pakistan.

## 2. Critical Review of Literature

97% of individuals at the workplace have experienced some kind of maltreatment and psychological mistreatment in the form of bullying for the last 5 years [Fox & Stallworth, 2005]. Braun [4] reported that, at some point in their professional life, about 30% of participants surveyed had experienced bullying at their workplaces. In today's professional work environment bullying is found to a real bitter fact as workers are becoming the victims of bullying with the ratio of 1/5, indicated by Giorgi [5]. Therefore the risk of being bullied is increasing as it is widely spreading just like an epidemic at workplaces of organisations.

Among all service sectors, Telecommunication industry is speedily flourishing in Pakistan and most multinational companies are having greater diversity as employees with different origins, cultural and ethnic backgrounds are working so the work environment is new for them [6-10] Therefore, workers are facing various devastating problems where bullying is at rife [11]. Very short history of research is found on banking sector of Pakistan regarding to bullying sort of issues that shows the prevalence of bullying in banking sector [12].Small scale studies have been conducted but detailed research is significantly needed. In academic sector bullying is common at the most as depicted by Ahmad et al., [2017] nearly half of the employees working in Education of Pakistan experienced bullying at workplace. In hotel and tourism industry of Pakistan this problem may arise, as it is the severe problem that exist in this sector as researched before in various countries [13-15] but not in Pakistan. Thus it would be quite significant to study bullying occurrence/prevalence, its types, level, frequency, extent and its antecedents [causes] in all these four service sectors of Pakistan.

Dual understanding of Workplace face to face bullying and cyberbullying and their joint effects at workplace has not been widely studied, even the prevalence of cyberbullying at workplaces of organizations is relatively unknown [16]. Antoniadou et al., [2015] indicated that cyber-bullying is a recently emerging form of violence, and is significantly gaining much more media and research attention. But there founds a scarcity of academic literature that specifically focus on cyberbullying among employees at workplace [17]. Initially, this comparatively new field of research has focused only on adolescents and school children [18, 19]. But only a bit of researches have been done on cyberbullying at workplace. Nature wise, workplace cyberbullying is different from youth cyberbullying but until yet has not been analysed in detail and is currently unknown [20]. Various studies have been conducted in the past that shows that different dimensions of organizational climate may cause bullying at workplace. As an emerging field of research area, through understanding of the causes/predictors of cyberbullying has not been completely developed until now. Literature shows that one of the important dimensions of organizational climate i-e Technology and social networking has not been widely studied as the cause of new form of bullying i-e cyberbullying. In Gerber [21] model of organizational climate, technology is represented as one of the important elements that contribute in making organizational climate. The structural approach of organizational climate proposed by Payne and Pugh [22] also portrayed that along with other factors, technological advancement is also an objective aspect of work environment that shows major contribution in making organizational climate, so it might be the cause of cyberbullying. Very few studies have been conducted on workplace cyberbullying. It is required to further explore about the factors that may cause cyberbullying. In order to eliminate this gap, this study proposed that the use of technology as social networking and ICT's for communication among employees in organizations is one of the element of organizational climate and might be the major cause of cyber bullying at workplace.

Study is targeting the four sub sectors [Banking, Telecom, hotel and education] of service sector of Pakistan jointly in order to find out the bullying prevalence, types, and antecedents that has not been done before in such way the current study is going to be conducted.

### 2.1 The Prevalence of Bullying in Service Sector

Stress and violence at workplace are commonly found in service sectors as compare to other sectors like economic or manufacturing, as they may arise to a large degree by the interaction between workers and consumers. Stress and violence in service sector may found among workers in an unexpected situation or work environment which becomes difficult to control and provoke workers toward inappropriate actions and reactions.

## 2.1.1. Banking

In banking sector, with the introduction of ICT's, the complication of products and services supplied is also increasing, especially in the multinational organizational structures. Banks are required workers with increasing competencies and skills and also promoted the employment of a more skilled and sophisticated human resource and coming up with new contractual appointments. Therefore, the concept of flexibility at work is emerging [short term contracts, increased competencies, and temporary jobs, flexible policies of pay and part time work]. It is reported that temporary workers are more prone to bullying as well as sexual harassment [[23-25]. Previous researches conducted on banking sector in various countries depicting the prevalence of bullying at workplace of banks with a bullied percentage given in the table 1, shows the existence of bullying acts in banking.

Sector	Researchers	Countries	Bullied	Duration
			percentage	
Banking	Heloisa	Brazile	7.9%	During last
-	Maciel,			6 months
	Cavalcante			
	[26]			
Banking	Yılmaz and	Turkey	15.9%	During last
_	Uzunçarşılı-	-		6 months
	Soydaş [27]			
Banking	Verdasca [28]	Portuguese	25% frequently	During last
<u> </u>		Ū.	50% occasion-	12 months
			ally	

Table 1: Bullied Percentage in baking sector of different countries

## 2.1.2. Hotel Industry

Very few number of studies in hoteling, catering and tourism services have been conducted precisely focusing on stress or violence. Various indications have proposed that physical violence is also a problem in this service sector. European Agency for Safety and Health reported that industries like hoteling and catering are found to be the sectors that are more inclined towards a risk of physical violence in the EU and the European Free Trade Area [EFTA] countries [European Agency for Safety and Health at Work, 2000]. Table 2 shows the percentage of bullying in hotel industry of various countries.

Sector	Researchers	Countries	Bullied	Duration
			percentage	
Hotel and catering	Safety and Work [29]	EU and EFTA	12%	Last six months
industry		countries		
Hotel	Einarsen and Skogstad [14]	Norwegian	14.1%	Last six months
Hotels	Hoel [15]	United Kingdom	7.5%	Last six months
			[46.3%]	Within last 5 years
Hotel and	Piñuel and	Span	16%	Last six
tourism	Cantero [30]			months

Table 2: Bullied percentages in Hotel and Tourism

### 2.1.3. Education Sector

In higher education sector workplace bullying is found to be a longstanding problem but having a very short history of research. Workplace environment of higher education institutions are unusual. It usually provides the practice of tenure and loose organizational structure of academic unit [Bolman and Deal, 1997] that makes it different from other work environments. One of the researchers revealed that these type of organizations are particularly exposed to promote a prevalence of bullying [Westhues, 2002]. He further argued that poorly organised work environment and ineffective management, such conditions are commonly found in educational institutions that may generates workplace bullying. Table 3 shows the bullied percentages in Education sector.

Table 3: Bullied percentages in Education

Sector	Researchers	Countries	Bullied percentage
Education	<u>Kraft</u> and Wang [31]	New Jersey	10% [cyber]
Higher education	Bi6rkqvist, Osterman [20]	Finland	20.5%
Higher education	Fox and Stallworth [32]	USA	36.6%
Higher education	Giorgi [33]	Italy	19%
Higher education	Gül, İnce [34]	Turkey	70%
Higher education	McKay, Arnold [35]	Canada	52%
Higher education	Raskauskas [36]	New Zea- land	65.3%
Higher education	Simpson and Cohen [37]	UK	25%

### 2.1.4. Telecommunication

In private Telecommunication sector most of the jobs are subcontracted and temporary which increases job insecurity so that it might induce unwanted negative behaviours among workers like bullying [38].

Hoel and Cooper [13] conducted a first nation-wide survey about workplace bullying in which they targeted various occupations and industrial sectors in Britain including Telecom, and have been reported that bullying is the occupational and industrial hazard of considerable magnitude. The maximum prevalence of bullying, occurred in Telecom sector as compare to others, with total bullied percentage of 16.2.

So it is concluded that workplace traditional and cyberbullying is the most common and urgent problem of service sector all over the world. Thus we may postulate the following hypotheses.

H1: There is a prevalence of workplace bullying in service sector of Pakistan.

H1a: There is a prevalence of workplace [i] traditional bullying and [ii] cyberbullying in banking sector of Pakistan.

H1b: There is a prevalence of workplace [i] traditional bullying and [ii] cyberbullying in telecom sector of Pakistan.

H1c: There is a prevalence of workplace [i] traditional and cyber [ii] bullying in hotel sector of Pakistan.

H1d: There is a prevalence of workplace [i] traditional and [ii] cyberbullying in education sector of Pakistan.

## 2.2. Frustration-Aggression Theory and Social Interaction Approach

Ideally, two of the frameworks might clarify the contribution of factors of organisational environment as bullying antecedents' i-e the theory of frustration-aggression by Berkowitz [39] and the social-interaction approach of Felson [40]. Frustration-aggression theory highlights the role of external factors in causing negative effects and aggression and the social-interaction approach explains that stressful environments and events may indirectly affect aggression among workers by having deep effect on the victim's behaviour. Stressful events or environments might induce workers to behave in such ways that persuade others to target them. In a situation like bullying, a worker distressed by stressful or unsatisfactory situation at work may irritate others and because of this reason he/she may aggravate hostile or aggressive behaviour. This research is also going to investigate, how the environment of the organisation specifically organisational climate affects the behaviour of workers, as negative climate may leads them toward aggressive behaviours at workplace like bullying.

### **2.3. Construct Developed for Organisational Climate:**

Construct of organizational climate for this study is developed by combining several elements extracted from above mentioned researches. This construct comprises of Leadership, job descriptions, time pressures, cultural norms, working conditions, and technology. Technology is specifically related to the prevalence of cyberbullying at place of work [41].Those elements of organizational climate are chosen for this study that are directly related to bullying and cyber bullying. According to different researches characteristics of organization and the psychosocial work environment are found to be considered as common antecedents of workplace bullying [42-44]. Multiple dimensions of organizational climate are directly related to workplace bullying and cyberbullying behaviours as are shown in the table 4.

Table 4: Construct of Organisational Climate

Climate di-	Relationship with workplace bully-	Supporters
mensions	ing	
Leadership	Leadership practices can be the major cause of bullying. Autocratic leader- ship might induce frustration and aggression among subordinates, might increases the prospect of peer aggres- sion among group members, and in this way it acts as a precursor of bully- ing at workplace.	Felson [40] [45, 46]
Job descrip-	Unclear job description and role am-	[47, 48]
tions	biguity is associated to workplace	Hauge,
	bullying. Poorly organised work struc-	Skogstad
	tures with unclear roles and descrip-	[49]
	tions were found to be associated with	
Cultural	workplace bullying.	[40, 50]
Norms	According to social interactions theo-	[40, 50]
Norms	ry, those people who are not adjusted to cultural norms and expectations of	
	organisation are more probable at the	
	risk of being the victim of aggressive	
	behaviour i-e bullying.	
Working Con-	There found significant relationship	[46, 47]
ditions	between the rate of bullying occur-	Carnero,
unions	rences and working conditions of an	Martínez
	organization.	[51]
	organization.	[31]
Time pressures	Time pressure influence the degree of	[[43, 52]
F	workplace bullying .It has been docu-	

	mented as an antecedents of bullying at workplace of organisations.	
Technology [Social net- working] at workplace	In addition to the difficulties of man- aging use of social media, a further management challenge arising from the spread of ICT and social network- ing is cyber-bullying	Llewellyn [41]

So from the above construct and literature support we may hypothesize that

H2: Organizational climate has significant negative relationship with workplace bullying.

# **2.4.** Use of Technology as a Cause of Cyberbullying at Workplace

Cyberbullying is relatively a new area of research and understanding of its causes has not yet been developed fully. Previous researches depicted that victims of traditional [face to face] bullying might indulge in cyber bullying by harassing their perpetrators online as a revenge [53]. Little research has been done by handful of researchers on workplace cyberbullying, but more research is required to explain why it happens and what effects it leave. Previous theories in this field highlighted the weakness of communications media that it lacks the appropriate cues which provide awareness about the situation of communication partner, like the mood and work environment of them [54]. In such kind of situation workers are not that much worried about their evaluation, they become less polite, little focus on relationship orientation but more focused on task orientation while working virtually. This increases the likelihood of negative acts like sending of negatively worded messages without having any fear of how they would be interpreted [55]. Workers recognize that technological tools are essential for their business, but are still grappling with how organisations can effectively integrate them into business activities and stop contributing them in the blurring of personal and workplace boundaries. According to Card and Hodges [18] if anyone wants to do bullying with others specially at workplace, it's very easy to do so by several electronic means, now a days because there is an accessibility on everyone's cell phone-every person have Facebook on his/her mobile, LinkedIn on their phone, and also have text messages option in their hands. This research proposed that misuse of technology at workplace, as technology is one of the important component of organisational climate, might be the cause of workplace cyber bullying. For this instance, the current study proposed the following hypothesis:

H3: Technology use has a significant negative relationship with cyberbullying.

## 2.5. Conceptual Framework

In order to access the effect of impeding factors by using smart PLS-SEM, there requires a well-constructed conceptual framework that explains the relationship between latent and manifest variables. In the current study conceptual framework is constructed that represents the six dimensions [leadership, working conditions, job description, time pressures, cultural norms and technology] of organisational climate. Organisational climate serves as an exogenous latent variable [LV] with six indicators/items or manifest variables. Usually in smart PLS, the model is comprised of components i-e measurement model and structured model. Measurement model generally represents LV with its relative manifests. While the structural model shows the relationship between all the latent variables [56]. The current conceptual framework describes the relationship between organisational climate and workplace traditional and cyberbullying shown in the figure 1.

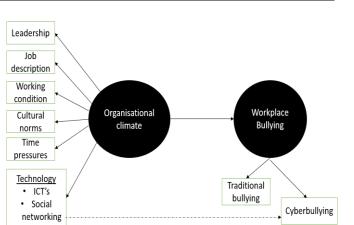


Fig. 1: Conceptual Framework

## 3. Methodology

### **3.1. Data Collection and Sampling**

Structured questionnaire survey method was used to gather data for the current study. Data were collected by two ways, some part is collected through online mean i-e online survey using google doc, a reliable site and some part is collected personally. Survey has been conducted among the employees working in four sub service sectors of Pakistan including banking, telecom, hotels and education. Organisations are selected on the basis of multistage random sampling. A total of 350 questionnaires were distributed among officials working in 15 organisations located in different cities of Pakistan and received back 290. Out of which 5 questionnaire sets were not completed so we excluded them from the data. In the analysis of the study we have used 285 questionnaires that is much more sufficient sample size for PLS-SEM, as depicted by Hair et al. [2011].

### 3.2. Measures

Organizational climate was measured by using a reduced version of the MDOQ10 [57]. Some of the questions are self-developed to evaluate technology use as one of the dimensions of organisational climate. Negative Acts Questionnaire [NAQ] 21-items scale, developed by Einarsen and Hoel [58] was adopted to gather the data related to workplace traditional bullying. It is considered to be a most valid measure as validated by various researcher in multiple countries [Giorgi, Arenas, & Leon-Perez, 2011]. In this measure the term bullying is not directly used so it reduces the possible response biasness. For the identification of victims of workplace bullying Leymann [48] developed a criterion. If the respondents had experienced at least two acts of bullying weekly or more often over the period of last 6 months they will be categorized as "bullied or bullying victims". Instruments for measuring cyber bullying at workplace are quite few that may consider to be well validated measures. Mostly are based on NAQ-R [59]. In this study cyber bullying is measured on the basis of 10 items scale that we developed on the basis of NAQ-R. e.g., "I have received rude, insulting or offensive online communications by people at work". Respondents were asked how often they had experienced cyber bullying behaviours through eight forms of technology [1. Phone calls 2. Pictures or video clips, 3. Text messages 4.chat rooms 5. Emails 6. Instant messaging 7 social networking websites 8. Websites]. The same criterion of "having experienced at least two behaviours weekly or more in a duration of last 6 months" was applied.

## 4. Analysis and Results

Data regarding to workplace bullying and traditional bullying was not normally distributed as depicted by skew and kurtosis analysis.

Workplace traditional bullying is having positive skew of 2.44 while 8.88 of cyberbullying. Kurtosis is 7.11 for traditional bullying with SE=0.77 and 101.21 for workplace traditional bullying with SE=0.812. Table 5 shows the demographic characteristics.

Table 5	Demographics	characteristics	of respondents

Characteristics	Frequency	Percentage	Cumulative Per- centage
Gender			
Male	197	69.1	69.8
Female	86	30.2	100
Age			
Below 20	2	0.7	0.7
20-30	132	46.3	47.0
31-40	120	42.1	89.1
41-50	29	10.2	99.3
51-60	2	0.7	100
Profession			
Banking	70	24.5	24.5
Telecom	60	21.1	45.6
Hoteling	65	22.8	68.4
Education	90	31.5	100
Experience in			
current organiza-			
tion			
6 months-3 years	89	31.2	31.2
3-6 years	113	39.6	70.9
6-9 years	41	14.4	85.3
9-12 years	21	7.4	92.6

In the current study bullying experienced were classified into 4 different service sectors and leymman's criteria [two or more negative acts at least weekly or monthly in a last six months period ] has been applied in order to measure the percentage of victims of workplace traditional and cyberbullying separately in each sector. Table 6 depicts the prevalence percentages in 4 sectors. There exist a very high prevalence of both the traditional and cyberbullying at workplace of service sector of Pakistan that supports H1 and its sub hypotheses. Results also depicted that there is a maximum prevalence of both the traditional cyberbullying found in hoteling sector. A total of 50% workers are the victims workplace traditional bullying and 31% are cyberbullying victims and the total victims who are being traditionally and cyber bullied at a time are also 31% in overall service sector of Pakistan.

Table 6: Prevalence	percentage of w	vorkplace	bullying in 4 sectors

Sector	Tradi- tional bullying	cyberbully- ing	Bot h	Hypothe- sis	Results
Banking	55%	30%	29%	H1a	Support- ed
Telecom	50%	27%	26%	H1b	Support- ed
Hotel	59%	49%	49%	H1c	Support- ed
Educa- tion	36%	18%	18%	H1d	Support- ed
Total	50%	31%	31%	H1	Support- ed

## 4.1. PLS-SEM Analysis

PLS-SEM technique is used for estimating the structural model results while conducting analysis. It is considered as a versatile approach to SEM and is based on two step process as recommended by [60]. The first is measurement model evaluation that includes calculations of item loadings, reliability and validity of the construct and the second is structural equation evaluation that comprises of path coefficient estimations.

#### 4.1.1. Measurement Model Analysis

Measurement model analysis deals with the evaluation of consistency and validity of both the manifest variables and the whole construct. Consistency evaluation is consisted of reliability tests.

Reliability of manifest variable describes the variance of each manifest related to its latent variable on the basis of calculations of outer loadings [61]. The cut-off value for outer loading used in this study is 0.5. Consistency analysis also consisted of construct reliability evaluation on the basis of Cronbach's alpha and Composite Reliability [CR].Cronbach's alpha value must be greater than 7.0 and Composite Reliability equal to 0.7 is considered as "Modest reliability" [62]. Table 7 shows that outer loadings of each manifest variable are well above the cut-off criteria that are considered highly satisfactory loadings. Cronbach's alpha values are above 0.7 indicating enough reliability of the constructs. Composite reliability of each constructs is also high.

While validity is measured on the basis of convergent and discriminant validity tests [62]. Convergent validity of variables is extracted by AVE [Average Variance Extracted] test. It explains, because of measurement errors how much variance is captured by latent variable from its related manifest. According to Hair, Ringle [62]at least 50% variance should be captured which means AVE must exceed 0.5. In the current study AVE of each construct is above 0.5 that shows that manifest variable in each construct is related to its relevant Latent variable as is shown in the Table 7.

Table 7: Consistency and Validity Evaluation					
Loadings	AVE	CR	Alpha		
	0.603	0.885	0.829		
0.843					
0.844					
0.901					
0.778					
0.856					
0.926					
	0.933	0.965	0.928		
0.963					
0.968					
	0.824	0.933	0.956		
0.910					
0.884					
0.929					
	0.680	0.962	0.95		
	Loadings 0.843 0.844 0.901 0.778 0.856 0.926 0.963 0.968 0.910 0.884	Loadings         AVE           0.603         0.603           0.843         0.001           0.778         0.856           0.926         0.933           0.963         0.968           0.968         0.824           0.910         0.884           0.929         0.929	Loadings         AVE         CR           0.603         0.885           0.843         0.844           0.901         0.000           0.778         0.000           0.926         0.933           0.963         0.965           0.968         0.824           0.910         0.824           0.929         0.929		

## 0.885 4.1.1.1. Discriminant Validity [cross loadings]

0.841

0.790

0.829

0.860

0.874

0.841

0.856

0.862

CB1

CB2

CB3

CB4

CB5

CB6

CB7

CB8

CB9

Discriminant validity analysis in table 8 indicates how much the manifest variable is relevant to the latent variable in a specific construct and its cross loading values will also be higher for its LV as compare to other constructs [63]. Following table shows that all the manifest variables are having cross loading values higher for their related LV's then other constructs. This testifies the discriminant validity of the measurement model that each of the constructs is having manifest variables a good representative of their assigned LV.

Table 8:	Discriminant	Validity
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	Organisa-	Work-	Technolo-	Cyberbully-
	tional Cli-	place	gy	ing
	mate	bullying		
Job descrip-	0.843	-0.639		
tion				
Leadership	0.711	-0.773		
Technology	0.635	-0.651		
Time pres-	0.778	-0.578		
sures				
Cultural	0.856	-0.640		
norms				

Working	0.926	-0.701		
conditions				
Traditional	-0.732	0.963		
bullying				
Cyberbully-	-0.632	0.898		
ing				
T1			0.910	-0.676
T2			0.884	-0.694
T3			0.929	-0.745
CB1			-0.587	0.841
CB2			-0.692	0.790
CB3			-0.632	0.829
CB4			-0.658	0.860
CB5			-0.717	0.874
CB6			-0.734	0.841
CB7			-0.708	0.865
CB8			-0.635	0.862
CB9			-0.611	0.885
	Table	8:	Validity	

#### 4.1.2. Evaluation of Structural Model

Structural model evaluation represents the relationship between exogenous and endogenous latent variables on the basis of coefficient of determination [R<sup>2</sup>], path coefficient [ $\beta$ ], T-value and P-value [Chin, 1988]. R<sup>2</sup> for the developed model of the current study is 0.41, which is higher than the suggested value of 0.26 showing the considerable degree of explained variance of work-place bullying by organisational climate. Final step of Structural equation modelling is predicting the significance and relevance of variables in a model on the basis of bootstrapping process [taking 5000 samples].

Figures 2a and 2b are showing the findings of structural equation model analysis with strength and direction of relationships on the basis of path coefficients.

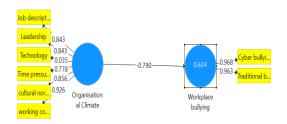


Fig. 2a: Structural Model Analysis

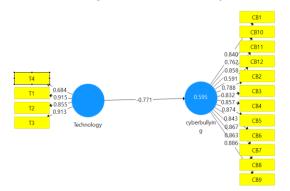


Fig. 2b: Structural Model Analysis

# **4.1.2.1** Path coefficients with t-values and p-values for structural models

Table 9 represents the negative relationship of organisational climate and workplace bullying as well as technology and cyberbullying with Path coefficients of -0.790 and -0.771 respectively with t-values higher than the cut-off point of 1.96 and p-values less than 0.05 [showing the significance of both the paths].

Table 9: Path coefficients with T and P values

Path	Path coeffi- cient[β]	T- values	P- values
Organisational climate → workplace bullying	-0.790	23.662	0.000
Technology $\rightarrow$ cyberbullying	-0.771	25.949	0.000

## 5. Discussion and Conclusion

This study tested what types of bullying exist in workplace of organizations and to what extent, by exploring the nature, level [percentage] and frequency of bullying [traditional and cyber] at workplace of Banking, Telecom, Hotel and Education [Service sectors of Pakistan]. The results of the study proved that there exist a high level of both types [traditional and cyber] of bullying in all these selected service sectors with the overall percentages of 50% and 31% respectively. Findings, regarding to the prevalence or existence of bullying in all these service sectors are validating the previous findings of the researchers that have been conducted by various researchers in service sectors of multiple countries like [23-25] in banking sector, [14, 15] in Hotels, Giorgi [33] and Gül, Ince [34] in education and [38] in telecom sector who have been depicted the workplace bullying as a wide spread problem in all these service sectors. But the current study is identifying the bullying prevalence in Pakistan with a very high ratio as compare to the service sectors of other countries. The reason of such high prevalence is the poor organisational climate structures and policies. As the study is also concluding that poor/bad organisational climate with its 6 dimensions [Leadership, working conditions, job description, time pressures, cultural norms and technology] is one of the predictors/antecedents of workplace bullying occurrence. Results depicted that there founds a negative relationship between organisational climate and workplace bullying that supports frustration aggression theory and social interaction approach of Berkowitz [39] and Felson [40] respectively. Frustrated organisational climate induces aggression among workers that leads them to be indulged in negative behaviours like bullying. Technology use such as social networking and ICT's is found to be one of the predictors of new iteration of bullying that is workplace cyberbullying, supporting the previous findings of Llewellyn [41] who considers ICT's and social networking as antecedents of cyberbullying, which is one of the emerging challenges at workplace of organisations.

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