

# Northumbria Research Link

Citation: Rasool, Samma Faiz, Maqbool, Rashid, Samma, Madeeha, Zhao, Yan and Anjum, Amna (2019) Positioning Depression as a Critical Factor in Creating a Toxic Workplace Environment for Diminishing Worker Productivity. *Sustainability*, 11 (9). p. 2589. ISSN 2071-1050

Published by: MDPI

URL: <https://doi.org/10.3390/su11092589> <<https://doi.org/10.3390/su11092589>>

This version was downloaded from Northumbria Research Link:  
<http://nrl.northumbria.ac.uk/id/eprint/45474/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)



**Northumbria  
University**  
NEWCASTLE



**UniversityLibrary**

Article

# Positioning Depression as a Critical Factor in Creating a Toxic Workplace Environment for Diminishing Worker Productivity

Samma Faiz Rasool <sup>1</sup>, Rashid Maqbool <sup>2</sup>, Madeeha Samma <sup>1,\*</sup>, Yan Zhao <sup>1,\*</sup> and Amna Anjum <sup>3</sup>

<sup>1</sup> School of Management, Shanghai University, Shanghai 200444, China; samma@i.shu.edu.cn

<sup>2</sup> Department of Construction Management, Tsinghua University, Beijing 100084, China; rashid@bjtu.edu.cn

<sup>3</sup> Glorious Sun School of Business and Management, Donghua University Shanghai, Shanghai 200051, China; amnaeem14@gmail.com

\* Correspondence: madeeha@i.shu.edu.cn (M.S.); zhaoyan87@shu.edu.cn (Y.Z.)

Received: 7 February 2019; Accepted: 17 April 2019; Published: 5 May 2019



**Abstract:** This study determined how a toxic workplace environment can influence worker productivity, directly and indirectly, using work depression as a mediating variable. A toxic workplace environment with multiple dimensions (harassment, bullying, ostracism, and incivility) was used in this study. We used a questionnaire survey approach to evaluate the data. A total of 53 items were used in the questionnaire with a five-point Likert scale. The data were collected from 23 branches of five Chinese banks in the vicinity of Shanghai. The authors distributed 250 questionnaires among targeted employees (senior managers, middle managers, and administrative staff) and received 186 filled questionnaires, among which six were incomplete. Thus, the completed sample size of the research was 180, and the overall response rate was 72%. To estimate the proposed relationships in the research model, we used partial least-squares structural equation modeling (PLS-SEM 3.2). The outcomes of this study indicate that for direct and indirect relationships, a toxic workplace environment negatively influences worker productivity. Moreover, the outcomes of this study also show that work depression negatively impacts worker productivity. The study concludes with a discussion, limitations, and future research directions.

**Keywords:** toxic workplace environment; work depression; worker productivity

## 1. Introduction

The effects of a toxic workplace environment on employee productivity are discussed in the literature [1–3]. However, insights into the depression it creates among organizational personnel are still lacking in the academic body of knowledge. This study puts forth an effort to fortify the mediating effect of work depression between a toxic workplace environment and worker productivity to determine implications for academicians and practitioners. Past studies exemplified that most organizations show concern about measuring “profit” to calculate their productivity [4–6]. However, depression and harmful workplace determinants leading to employee turnover are other vital indicators for computing organizational productivity. Employees are the most significant asset for any organization, but, in many sectors, they are ignored in the computation of productivity [7]. The literature categorizes employees as “star” (incremental) or “spark” (toxic) [8] because they are direct sources of incremental organizational outcomes, while “toxic” workers drive organizations to unproductive circumstances. Prior studies also indicated that most of the working issues are directly related to worker productivity or work performance. The workplace environment is especially involved when employees are assigned

tasks [9]. The literature describes that workers and working environments change over time. At times, workers are engaged in only one dimension of work, while at other times they have different work assignments. While switching work assignments, they can encounter varied working environments [10]. The working environment controls all the situations and systems in which employees have to be involved to perform their work [11]. Significantly, there exist two types of working environment: toxic workplace environments and collaborative workplace environments [12–14].

A cooperative workplace environment can enhance worker productivity, but a toxic workplace environment can deteriorate worker performance [15]. In the extant literature, a toxic workplace environment manifests with bullying, inactivity, ostracism, and harassment [16,17]. A toxic environment is considered a disaster for organizational stakeholders and permeates the whole environment of the organization with toxicity such as a lack of employee involvement, toxic culture, and eventually toxic leaders [18]. Toxic workplace behavior and low self-esteem raise organizational cost, subsequently leading to organizational losses, high turnover, ill repute in terms of positive company image, low employee morale, conflicts between work and life, high absenteeism, lower employee performance, loss of organizational productivity, and reduced employee well-being [19,20].

Research has shown that a toxic workplace environment diminishes organizational outcomes at a noticeable scale. This problem is in dire need of further exploration and the attention of researchers to determine the potential consequences and deep-rooted causes of the toxic workplace for business entities and stakeholders [21,22]. This study intends to draw the attention of management researchers to various forms of toxic workplace environments and the potential effects related to the loss of productivity, low employee efficiency, social comparisons, and high levels of workplace depression. Workplace depression is considered to be a distasteful issue in the workplace. Many people face workplace depression. Most workers do not reveal their depression because of fear of discrimination and stigmatization among their peers. However, most workers face workplace discrimination and negative reactions from employers and coworkers due to depression and anxiety. Workplace depression is a mental illness associated with disadvantages from toxic workplace environments [23].

Based on the insights about the toxic workplace environment, workplace depression, and worker productivity in the above literature, this study proposes the following research questions:

**RQ1.** *How is work productivity influenced by a toxic workplace environment (bullying, inactivity, ostracism, and harassment)?*

**RQ2.** *How does work depression intervene between worker productivity and the toxic workplace environment (bullying, inactivity, ostracism, and harassment)?*

The paper is structured as follows: Section 2 is devoted to the literature review. Section 3 provides logical arguments for the development of the hypotheses and research model of the study. Section 4 shows the research methods of the study, and Section 5 presents the analysis and results. Section 6 provides a discussion, and Section 7 presents the practical implications, limitations, and future research directions. The last section presents the conclusion of the study.

## 2. Literature Review

### 2.1. Toxic Workplace Environment

According to Azuma, Ikeda [24], the intra- and interrelationships of workers within the workplace present a clear picture of the workplace environment [17]. Researchers note that there are two types of workplace environment: toxic and collaborative. The collaborative workplace environment has a sense of agreeableness, pleasure, and high involvement, including a feeling of empathy and organizational citizenship behavior (OCB) [25,26]. The toxic workplace generates narcissistic behavior, abusive leadership, threatening behavior, harassment, humiliation, and bullying among employees. The toxic workplace is prone to high absenteeism, depression, job burnout, and severe psychological health

issues such as work strain and counterproductive work behavior (CWB), eventually leading to the loss of organizational efficiency and repute [27].

### 2.1.1. Workplace Harassment

Von Gruenigen and Karlan [21] argued that an individual's dignity is ruined by deviant or unwanted behavior. Humiliation and terrorization of one individual by another at the workplace is called workplace harassment [28]. Therefore, sexual intimations, pornographic jokes, images, and taunts, and nude mockery at the workplace related to sex, beliefs, race, religion, genes, origin, color, ethnicity, or age are all part of a toxic workplace environment [29,30]. The concept of workplace harassment was considered in 1978 [31], and is a trendy topic in the recent era that is gaining consideration and attention by researchers due to its significance. Research and investigations have been done at a very limited level in Asian countries because Asian people do not want to talk about this topic, considering it as "taboo" relative to workplace or domestic matters, and that it even has disgrace for victims too [32]. Very few people are willing to talk or communicate about harassment, specifically in the Chinese working context. Most research conducted on the topic of workplace harassment is with women at an alarming ratio. Unfortunately, the topic of workplace harassment in men does not get much attention [33]. Men and women of every age and at any stage experience workplace harassment. Feminist scholars relate this concept with bourgeois or male-dominated society, in which women have to face gender discrimination, male stereotypes, job threats, and a paradoxical power threat, which leads to low literacy for women due to the male-dominated society [34]. Workplace harassment is deep-rooted and has traumatic effects on the emotional well-being of an entire workplace [35]. Workplace harassment lowers employee morale, which directly affects organizational productivity [36].

### 2.1.2. Workplace Bullying

Mushtaq, Sultana [37] suggested that workplace bullying causes disastrous mental trauma for any individual or employee. Abusive blaming, humiliation, social isolation, bullying, criticism, and sarcastic mockery by an employee or employer is marked as workplace bullying [38,39]. Bullying rises in different situations with different styles and is not restricted to the workplace [40–42]. It can be seen as deeply rooted in organizational culture and climate, negatively affecting the well-being of employees, causing mental sickness, and job burnout [43]. Bullying can be organizational or individual. Individual bullying is related to disputes and can be described as wrong guy/good guy, escalated, delegated, complex, merry-go-round, bystander, subordinate, personality disorder, or gang bullying. Organizational bullying includes organizational cultural bullying, bully processing, and senior team bullying (from senior peers' tactics) [44,45]. Leymann [46] introduced the concept of organizational bullying, which has been adopted in different sectors and countries with different styles [44,47,48]. A toxic workplace environment and bullying create and accelerate work depression, stress, low levels of work engagement, a high ratio of absenteeism, a lack of work performance, and work destruction [49].

### 2.1.3. Workplace Ostracism

Workplace ostracism is described as workplace isolation that is perceived by an employee due to his/her peers or employers [50–52], with negative consequences for and by the employee toward organizational development in the form of high turnover, lack of work involvement, and high job dissatisfaction [9]. Previous studies have presented findings showing that workplace ostracism has an embedded impact on the psychological and physical well-being of employees, and this traumatic experience results in hostility, stress, and adversarial outcomes [53,54]. Therefore, workplace ostracism produces counterproductive work behavior [54,55], negative work behavior, depressive behavior, and emotional exhaustion [56]. In critical situations, an employee may start to avoid doing tasks and hold back due to the stress of ostracism. Workplace ostracism lessens motivation among employees, and both employees and the workplace have to suffer in the form of lower efficiency.

#### 2.1.4. Workplace Incivility

In the literature, there are also reports showing that—with a specific or abusive purpose—an employee or employer can be troubled or saddened by the workplace's norms with his/her intentions of generating stressful situations for personal gain [57–59]. Nonverbal abuse or verbal actions and disrespectful/hostile behavior toward peers are also part of incivility at the workplace [38,60]. Educators, management scientists, health care practitioners, and researchers have focused on eliminating the foundational roots of nonproductive employees, such as when they have to sacrifice their self-esteem, level of satisfaction, degree of respect, and productivity. Moreover, a business entity has to face socially harmful, depressive, and isolated circumstances with a lower level of development [30]. This type of deviancy and modest intensity prompt employees to undermine performance and create a bad image of the workplace among their peers [61,62].

#### 2.2. Work Depression

Depression is also considered a taboo subject in the workplace. Many people face workplace depression. Most employees do not reveal their depression because of the fear of discrimination and stigmatization among their peers. However, most employees face workplace discrimination and negative reactions from employers and coworkers due to depression and anxiety. Workplace depression is a mental illness associated with disadvantages due to a toxic workplace environment [23]. Employees spend approximately 90,000 h at work throughout their working life [63]. An employee's poor mental health can be caused by internal and external factors at the workplace as well as ineffective management, which has a toxic and severe impact on productivity, career prospects, and, more broadly, organizational development [64]. Workplace depression is considered a stigma, and most employees who suffer mental illness face additional challenges; they conceal their mental status at the workplace because people have a lack of awareness about workplace depression. Presentism is also considered part of workplace depression, which is another loss of employee productivity when the employee comes to work, but the level of function is very low or there is low involvement (mentally absent). Turnover costs come when employees leave the workplace due to workplace depression and other employees replace them, and the organization has to bear the employment cost [65].

#### 2.3. Worker Productivity

Cocker, Martin [66] reported that work productivity indicates the measurement of employee effort, and that work engagement, efficiency, accuracy, and effectiveness indicate the input of human resources into productive output. Therefore, to spend time for the desired outcome, it is expected that employees will expend effort and have high work engagement by using limited resources, and this is known as work productivity [67]. Previous researchers suggested in their studies that productivity does not have a single operational definition, but it varies according to multifaceted situations and the types of organizations and their cultures [39,68,69]. Worker productivity is integrated with organizational productivity and employee work performance, which determines the quality of work [70]. The productivity of a job is connected to multiple factors, such as working environment, supportive supervision, individual abilities, and an integrated motivational set of policies and organizational standard operational procedures (SOPs). It can be measured in monetary terms, by which organizational attributes (social, human, financial, and organizational capital) can measure and monitor worker productivity [71,72]. The work environment also plays a vital role in producing and raising worker productivity in line with the employee's ability and social network. Employees who are satisfied with their work environment will be more productive and engaged with their work. Thus, business entities should focus on generating a workplace conducive to the well-being of the organization and the workforce as a priority [73].

### 3. Hypothesis Development

#### 3.1. Toxic Workplace Environment and Worker Productivity

Organizations are designed to organize and arrange the workforce according to their social nature for better output within groups as the toxic workplace environment causes panic and is unpleasant. This is significant for the workplace, where the frequency of a diverse workforce and teamwork is increased and the business entity is in dire need of charismatic leadership to communicate between employees, colleagues, and stakeholders [74]. The above-mentioned arguments described that a toxic workplace environment creates lower levels of satisfaction, negative organizational commitment, and high degrees of anxiety, depression, and turnover [27].

Furthermore, by deteriorating psychological well-being and job-related attitudes, a toxic workplace environment plays a vital role in undermining worker productivity. First, the toxic workplace environment threatens employees' necessities and their psychological resources [17]. Limited psychological resources are critical for employee growth, and to redeem or recapture such resources, the employee has to spend time, effort, and energy managing interpersonal problems and family conflicts to achieve the core job tasks to upgrade work productivity [75]. Second, toxic workplace environments and workplace ostracism cut employee targets and social unity with organizational peers [76]. In this critical situation, employees cannot get access to work-related information and resources because they are cut off from social ties, which ultimately results in low worker and organizational productivity [77]. Ferris et al. (2008) conducted an empirical study on the relationship between workplace ostracism and job performance, and found that a toxic workplace environment has a negative relationship with worker productivity [78]. Some previous studies pointed out that a toxic workplace environment has a negative relationship with worker productivity [79,80]. These findings generate significant understanding of the connection between a toxic workplace environment and work productivity. Thus, the negative relationship of a toxic workplace environment with work productivity is depicted in the following hypotheses (Figure 1):

**Hypothesis 1a.** *Work harassment negatively influences worker productivity.*

**Hypothesis 1b.** *Work bullying negatively influences worker productivity.*

**Hypothesis 1c.** *Work ostracism negatively influences worker productivity.*

**Hypothesis 1d.** *Work incivility negatively influences worker productivity.*

#### 3.2. Mediating Effect of Work Depression

A toxic workplace environment creates work depression among employees and negatively affects the overall performance of the organization. Similarly, work depression plays a significantly negative role in mental illness in organizations worldwide. Also, a toxic workplace environment, including inductive and depressive working environments, affect employees' decision-making power and work synergy [81], which will be disadvantageous to the organization due to low production, high absenteeism, high turnover, and excessive economic costs [82]. Employee quality of life suffers from the toxic and depressive workplace environment [83]. Work depression pushes employees at high risk of stress and anxiety rather than other occupational employees [13]. Prior studies found that 65.3% of Chinese workers experienced depression [44,84]. Frank and Dingle demonstrated that severe workplace depression leads to suicide attempts [9]. A toxic and depressive workplace environment not only reduces the performance and productivity of employees and organizations, but also causes lower professional behavior of employees [85].

According to the study of Warr [86], employees who suffer from a high level of work-related depression are also vulnerable to mental sickness and react with aggression, anxiety, isolation, low

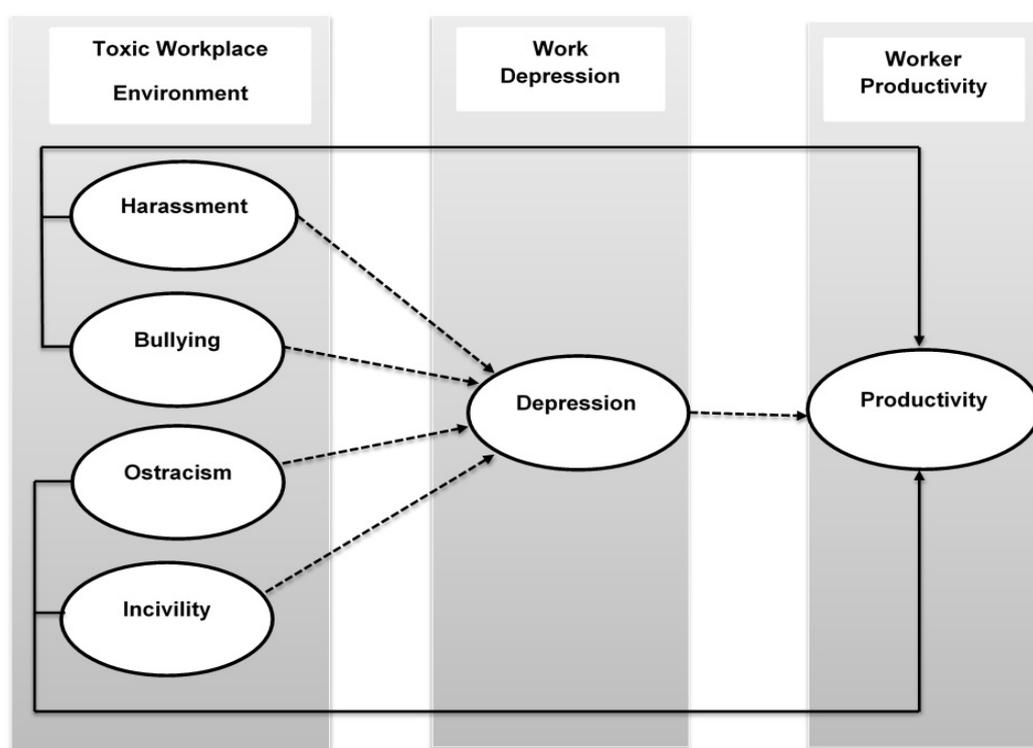
morale/confidence, and the feeling of self-denial. Work-related depression is a contributive mediator of the association between the toxic workplace environment and employee productivity. In line with the model from Spector and Fox including Affective events theory (AET), internal status including mental status is the territory of employee assessments, which they get from the workplace environment, resulting in the influential behavior with a range of worker performance and behavior [87]. Hence, according to the above discussion, this study indicates that work depression plays a mediating role in the relationship between the toxic workplace environment and worker productivity. Thus, taking the above arguments together, we propose the following hypotheses (Figure 1):

**Hypothesis 2a.** *Work depression mediates between toxic workplace harassment and worker productivity.*

**Hypothesis 2b.** *Work depression mediates between toxic workplace bullying and worker productivity.*

**Hypothesis 2c.** *Work depression mediates between toxic workplace ostracism and worker productivity.*

**Hypothesis 2d.** *Work depression mediates between toxic workplace incivility and worker productivity.*



Note: Arrows indicate hypothesized negative relationship. Solid arrows suggest a direct relationship and dashed arrows suggest an indirect relationship in the model.

**Figure 1.** Proposed research model.

## 4. Research Methods

### 4.1. Research Approach

The questionnaire survey approach takes into account a real investigation of circumstances that supplements the quantitative approach [88,89]. The quantitative method typically begins with designing a questionnaire and collecting data based on a hypothesis, and it is followed by applying descriptive or inferential statistics [90]. Therefore, according to Hartley [91], surveying is a research technique that allows the collection of data directly from persons involved in the research through a set of questions organized in a particular order. It is one of the most frequently used quantitative

techniques since it allows obtaining information about a given phenomenon by formulating questions that reflect the opinions, perceptions, and behaviors of a group of individuals. Quantitative surveys offer several benefits, and in this study, this method was selected due to the high representativeness of the entire population and the low cost of the technique when compared to other alternatives. On the other hand, the reliability of survey data is dependent on the survey structure and the accuracy of the answers provided by the respondents [92,93].

#### 4.2. Instrument Development

The purpose of this study was to determine how a toxic workplace environment (harassment, bullying, ostracism, and incivility) directly and indirectly influences worker productivity, using work depression as a mediating variable. All the items of the toxic workplace environment and worker productivity were adopted by Anjum et al. [44], which were adapted and modified from prior studies [94–98]. The items of the mediating variable, work depression, have been adopted and modified from Kroenke et al. [99]. A total of 53 items were used in the questionnaire with a 5-point Likert scale (ranging from 1, “strongly disagree,” to 5, “strongly agree”). Then, a pilot study was conducted to check the reliability and validity of the instrument. The respondents of the pilot study recommended some changes. Thus, the instrument was revised according to feedback from the respondents. The revised instrument was disseminated among the selected population for data collection.

#### 4.3. Sampling and Data Collocation

Data were collected from 23 branches of 5 banks of China in the vicinity of Shanghai. Due to data confidentiality, we renamed the selected banks as Bank A, B, C, D, and E. We focused on the banking sector for 2 reasons: first, to concisely interpret the views of banking executives, and second, because of the importance of the toxic workplace environment and work depression which affect work productivity in the banking sector. The data were collected from banking personnel (senior managers, middle managers, and administrative staff) as we believe that all concerned banking employees were aware of the topic of the research. The authors provided necessary explanations about the aim of survey analysis and the related definitions of the constructs used. The respondents were also addressed with the research objects at the start of the questionnaire. A purposive sampling technique with the questionnaire survey was followed to collect data from staff members. The goals of the study were introduced to all respondents at the start of the questionnaire in the guidelines. Moreover, according to the ethical rules of research, respondents were told that the information they provided would not be revealed to anyone and would be used for research purposes only. At the time of designing the questionnaire, a pilot study was conducted. There were 20 pilot study respondents who were aware of the topic of this study. Nunnally and Bernstein recommended that the ideal value of Cronbach’s alpha for data reliability is 0.7 or higher [100]. Thus, outcomes show that the overall Cronbach’s alpha of this study is according to the suggested standard value. The results indicate that all scales are acceptable. Hence, the measures used in this study were considered highly reliable.

#### 4.4. Measures

In this study, we used 4 independent variables (harassment, bullying, ostracism, and incivility), 1 mediating variable (work depression), and 1 dependent variable (worker productivity).

The workplace harassment items were adopted from Kamal et al. [94]. A total of 10 items were used for work harassment with a 5-point Likert scale (ranging from 1, “strongly disagree,” to 5, “strongly agree”). Sample items included “My supervisor/co-worker/subordinate tried to touch my hands while giving me something,” and “My supervisor/co-worker/subordinate often shares some dirty jokes with me.” The ideal Cronbach’s alpha value for data reliability is 0.7 or higher, which is considered adequate [101,102]. Our results show that the Cronbach’s alpha value is 0.805 for work harassment. The results indicate that the value of workplace harassment is greater than the standard value. Hence, the measures used in this study were considered highly reliable.

The workplace bullying items were adopted from Carteret et al. [95]. To measure work bullying, 8 items were used with a 5-point Likert scale (ranging from 1, “strongly disagree,” to 5, “strongly agree”). Sample items included “My supervisor/co-worker/subordinate ignores me or gives me a hostile reaction when I approach,” and “My supervisor/co-worker/subordinate spreads gossip and rumors about me.” Our results show that the Cronbach’s alpha value is 0.717 for workplace bullying, which is higher than 0.70. The results indicate that the scale is acceptable. Therefore, the measures used in this study were considered adequate.

Workplace ostracism used 9 items developed by Lindenberg [96]. All items were measured with a 5-point Likert scale (ranging from 1, “strongly disagree,” to 5, “strongly agree”). Sample items included “I noticed my supervisor/co-worker/subordinate would not look at me during work,” and “My supervisor/co-worker/subordinate refused to talk to me at work.” The Cronbach’s alpha was 0.783 for work ostracism. Hence, the measures used in this paper were considered highly reliable.

Workplace incivility used 9 items developed by Handoyo et al. [97]. All items were measured on a 5-point Likert scale (ranging from 1, “strongly disagree,” to 5, “strongly agree”). Sample items included “I often talk to someone who can help me with the situation,” and “I took my anxiety out on other people.” The Cronbach’s alpha was 0.810 for workplace incivility. The results indicate that the scale is acceptable. Hence, the measures used in this study were considered adequate.

Workplace depression used 7 items developed by Kroenke et al. [99]. All items were measured on a 5-point Likert scale (ranging from 1, “strongly disagree,” to 5, “strongly agree”). Sample items included “I have little interest or pleasure in doing things,” and “I feel tired or have little energy.” The Cronbach’s alpha was 0.766 for workplace depression, which is higher than 0.7. Thus, the measures used in this research were highly reliable.

Worker productivity was measured by 9 items adopted from Beck et al. [98]. However, the items of work productivity were modified according to the needs of the research. Therefore, work productivity was calculated by averaging the items to ensure that higher scale values would represent higher levels of productivity. Sample items included “During the past six months, often I could not complete my work because of my health problems,” and “I don’t sleep well, which affects my work productivity.” Our results show that Cronbach’s alpha value is 0.791 for workplace bullying. Hence, the results indicate that the measures used in this study were considered highly reliable.

#### 4.5. Demographics

The authors distributed 250 questionnaires among the targeted employees and received 186 filled questionnaires, among which 6 were incomplete. Thus, the completed sample size of the research was 180 and the overall response rate was 72%. The majority of respondents were men; women made up just 25% of the total respondents. In this sample, the working experience of respondents was as follows: 25.5% had less than 5 years of working experience, 43.9% had 5–10 years of working experience, and 30.5% had more than 10 years of working experience; 11.1% of respondents were senior managers, 30.5% were middle managers, and 58.3% were administrative staff. Also, 6.1% were under 25 years of age, 42.2% were between 25 and 34 years, 31.7% were between 35 and 44, and 20% were older than 44 years. Participants’ responses showed that 43.3% had an undergraduate education, 40.5% had a graduate education, and 16.1% were postgraduates. Of the 5 major Chinese banks considered for this study, the distribution was: Bank A, 26.7%; Bank B, 28.3%; Bank C, 23.3%; Bank D, 21.7%; and Bank E, 20.3%. Details of the demographics of the study are shown in Table 1.

**Table 1.** Demographics.

Measure	Items	Frequency	Percentage (%)
Gender	Male	135	75
	Female	45	25
Working Experience	Less than 5 years	46	25.5
	5–10 years	79	43.9
	More than 10 years	55	30.5
Position	Senior manager	20	11.1
	Middle manager	55	30.5
	Administrative staff	105	58.3
Respondent Age	Younger than 25 years	11	6.1
	25–34 years	76	42.2
	35–44 years	57	31.7
	Older than 44 years	36	20
Education	Undergraduate	78	43.3
	Graduate	73	40.5
	Postgraduate	29	16.1
Banks	A	48	26.7
	B	51	28.3
	C	42	23.3
	D	39	21.7

## 5. Analysis and Results

The partial least-squares structural equation modeling (PLS-SEM 3.2) approach was used to analyze the relationships drawn in the theoretical framework [103]. The reason for selecting variance-based structural equation modeling (SmartPLS) was its comparatively lower sensitivity to sample size as compared to covariance-based SEM approaches like AMOS (analysis of moment structures) [104]. First, we examined the reliability and validity of the scales used [105]. Table 2 presents the statistics for the reliability and validity of all constructs used. The reliability measures (Cronbach's alpha, rho A) for all constructs were found to be greater than the proposed benchmark value of 0.7 [106]. Similarly, Table 2 shows that the average variance extracted (AVE) value for each construct is greater than or equal to 0.50 [107], which indicates that the data used for this study are valid and reliable.

**Table 2.** Construct reliability and validity.

Construct	Alpha	Rho_A	AVE
Harassment	0.805	0.802	0.634
Bullying	0.717	0.714	0.545
Ostracism	0.783	0.786	0.606
Incivility	0.810	0.822	0.636
Work Depression	0.766	0.769	0.588
Worker Productivity	0.791	0.792	0.706

Note: Alpha, Cronbach's alpha; AVE, average variance extracted.

Also, to check the reliability of constructs used and their specified convergent validity, it is believed that the condition of discriminant validity must be achieved [107]. For this purpose, the square root of the AVE for each construct should be higher than the shared variance among constructs. Table 3 shows the diagonal values in bold as higher than the inter-construct correlation values. The discriminant validity is recognized.

**Table 3.** Discriminant validity of constructs.

	Harassment	Bullying	Ostracism	Incivility	Depression	Productivity
Harassment	0.798					
Bullying	0.331	0.796				
Ostracism	0.392	0.44	0.895			
Incivility	0.416	0.461	0.584	0.825		
Depression	0.407	0.534	0.48	0.597	0.767	
Productivity	0.426	0.614	0.498	0.514	0.577	0.778

### 5.1. Hypothesis Testing

Hypothesis testing was done through a bootstrapping mechanism in Smart PLS. [103]. Table 4 shows the direct effects discussed in the theoretical framework along with t-values and *p*-values. The results indicate that workplace harassment negatively influences worker productivity ( $\beta = 0.824$ ;  $p < 0.000$ ), which supports hypothesis H1a. This means that if harassment increases in the organization, then worker productivity will decrease. Workplace bullying, as an independent variable, also negatively influences worker productivity ( $\beta = 0.624$ ;  $p < 0.000$ ), which is supported by hypothesis H1b. This means that if workplace bullying increases, then worker productivity will decrease. There is also a negative influence of ostracism on worker productivity ( $\beta = 0.723$ ;  $p < 0.000$ ), which supports hypothesis H1c. Thus, it has been proven that worker productivity will decrease if workplace ostracism increases. Furthermore, it was found that incivility negatively influences worker productivity ( $\beta = 0.447$ ;  $p < 0.000$ ), thus H1d is also accepted. Findings of this hypothesis indicate that more incivility results in lower worker productivity. Table 4 highlights detailed information about the direct effect of a toxic workplace environment on worker productivity.

**Table 4.** Path model results (direct effects).

Hypothesis	Estimate	S.E.	C.R.	P
<b>Hypothesis 1 a,b,c</b>				
Productivity ← Harassment	0.824	0.034	5.146	***
Productivity ← Bullying	0.624	0.121	6.214	***
Productivity ← Ostracism	0.723	0.036	3.224	***
<b>Hypothesis 1d</b>				
Productivity ← Incivility	0.447	0.052	4.264	***

Note: S.E., standard error; C.R., composite reliability; asterisks (\*\*\*) demonstrate the significance of the variables' relations.

### 5.2. Mediated Effects

To inspect the mediating effects of work depression between a toxic workplace environment and worker productivity, we used the Smart PLS-SEM (Partial least square structure equation modelling) data analysis technique. Table 5 presents the indirect effects of work depression on worker productivity. In hypothesis H2a, we test the mediating relationship of work depression between harassment and worker productivity. The outcomes indicate the presence of the effects of harassment on work depression ( $\beta = 0.272$ ;  $p < 0.000$ ) and worker productivity ( $\beta = 0.112$ ;  $p < 0.000$ ), and work depression on worker productivity ( $\beta = 0.095$ ;  $p < 0.000$ ). Similarly, in hypothesis H2b, we test the mediating relationship of work depression between bullying and worker productivity. The outcomes indicate effects of bullying on work depression ( $\beta = 0.423$ ;  $p < 0.000$ ) and worker productivity ( $\beta = 0.162$ ;  $p < 0.000$ ), and work depression on worker productivity ( $\beta = 0.102$ ;  $p < 0.000$ ). The results of hypothesis H2c indicate that work depression mediates between ostracism and worker productivity. The values are as follows: effects of ostracism on work depression ( $\beta = 0.423$ ;  $p < 0.000$ ) and worker productivity ( $\beta = 0.149$ ;  $p < 0.000$ ), and work depression on worker productivity ( $\beta = 0.98$ ;  $p < 0.000$ ). Similarly, hypothesis

H2d also supports our study. The results show that work depression mediates between incivility and worker productivity, indicating the mediating relationship of incivility on work depression ( $\beta = 0.587$ ;  $p < 0.000$ ) and worker productivity ( $\beta = 0.54$ ;  $p < 0.000$ ), and work depression on worker productivity ( $\beta = 0.42$ ;  $p < 0.000$ ). Hence, the indirect hypotheses H2a, H2b, H2c, and H2d were also accepted. Moreover, Table 5 shows detailed information (estimated, standard error, and composite reliability values) of the mediating effects of work depression between a toxic workplace environment (harassment, bullying, incivility, and ostracism) and worker productivity.

**Table 5.** Indirect effects.

Hypothesis	Estimate	S.E.	C.R.	P
<b>Hypothesis 2a</b>				
Depression $\leftarrow$ Harassment	0.272	0.034	5.61	***
Productivity $\leftarrow$ Harassment	-0.112	0.026	6.126	***
Productivity $\leftarrow$ Depression	-0.095	0.031	8.521	***
<b>Hypothesis 2b</b>				
Depression $\leftarrow$ Bullying	0.423	0.078	10.347	***
Productivity $\leftarrow$ Bullying	-0.162	0.076	0.876	***
Productivity $\leftarrow$ Depression	-0.102	0.019	0.910	***
<b>Hypothesis 2c</b>				
Depression $\leftarrow$ Ostracism	0.423	0.054	9.541	***
Productivity $\leftarrow$ Ostracism	-0.149	0.057	1.490	***
Productivity $\leftarrow$ Depression	-0.098	0.032	0.474	***
<b>Hypothesis 2d</b>				
Depression $\leftarrow$ Incivility	0.587	0.072	10.132	***
Productivity $\leftarrow$ Incivility	-0.054	0.023	0.876	***
Productivity $\leftarrow$ Depression	-0.142	0.038	4.465	***

Note: Signs (\*\*\*) demonstrate the significance of the  $p$ -values.

## 6. Discussion

With the impetus to find the direct effects of a toxic workplace environment (harassment, bullying, incivility, and ostracism) on worker productivity and the intervening influence of work depression, this research effort provides insightful results based on the synthesized model framework. To the best of the authors' knowledge, this is among the earliest research paradigms to investigate the impact of a toxic workplace environment on worker productivity in the Chinese organizational context, especially by considering work depression as a mediating construct.

First, we focused on the direct relationship of a toxic workplace environment (harassment, bullying, incivility, and ostracism) on worker productivity. The results show that a toxic workplace environment has a negative relationship with worker productivity, which supports our intuition drafted in hypotheses H1a–d of the study. Prior studies showed that a toxic workplace environment has a negative relationship with worker productivity [32,40,108,109]. Similarly, Wu and Hui examined 208 workers employed at two Chinese companies (petroleum and gas companies), and the outcomes of their study indicated that a toxic workplace environment is directly negatively connected with worker productivity [110]. However, in the banking industry, most of the workers' tasks are operational, and the working culture of banks is very modern and customer oriented. Operational activities are different than project jobs, in which workers are under more pressure to complete their tasks within a limited time. Due to such high demand and limited time, a natural toxic environment can arise, which can ultimately diminish worker productivity.

Second, this study depicts work depression as mediating between a toxic workplace environment (harassment, bullying, incivility, and ostracism) and worker productivity. The mediating effect also produces significant results, which is a novel and original contribution in the context of emerging

or developing countries like China. The mediating results support the findings of past literature and hypothesis H2d [84,86]. Liu and Chang argued that due to work depression, workers cannot sleep well and they have headaches, and these health problems decrease their productivity [110]. Devonish examined the operations of five wholesale and large-sized retail organizations in the small developing nation of Barbados located in the English-speaking Caribbean region, and the outcomes of his study indicate that work-related depression mediates the relationship between a toxic workplace environment and worker task productivity [48]. The findings of these studies support our study. Thus, work depression mediates in the relationship between a toxic workplace environment and worker productivity. In the banking sector, banking professionals are required to cope with numerous demands: skills demanded for the job (such as the ability to understand, alter, lead, and control the behavior of individuals and groups), technical demands (such as customer service skills, teamwork, learning new technological skills, effective communication), and administrative demands (such as the need to address financial considerations when dealing with customers). These demands could naturally result in numerous pressure situations for banking personnel. Furthermore, high job demands and work pressures affect workers' health, resulting in conditions such as headaches, insomnia, social dysfunction, and depression.

## 7. Practical Implications, Limitations, and Future Research

### 7.1. Practical Implications

The results point out several practical implications for managers that could reduce the toxicity of workplaces. First, an optimum work environment, where the bank's leadership should consider workers as the key pillar of the organization, would be imperative for overall productivity. Second, a sense of ownership should be realized in the workers' minds, which would help to diminish depression, ultimately leading to productive outcomes. Third, human resource departments should introduce strict policies against workplace harassment, bullying, incivility, and ostracism. Moreover, human resource departments should conduct training needs assessments (TNAs) at the organizational level, and where they find a high level of toxicity, they should organize training on workplace harassment, bullying, incivility, and ostracism. Finally, managers should encourage a positive work environment and culture to foster teamwork, friendliness, and interpersonal cooperation among workers. For example, organizations should organize some sports and family fairs for workers. These steps can help to reduce the toxic workplace environment, which will reduce headaches, insomnia, social dysfunction, and depression among workers.

### 7.2. Limitations and Future Research

The findings of this study provide empirical insights into the banking sector of China. Based on these findings, the results may not be generalized, as the authors believe that there are certain limitations. (1) the sample size of this study is limited. (2) Due to the selection of data collection, genders are not evenly distributed. The banks targeted for data selection had more male than female personnel. The authors believe that with just drafted limitations, the results cannot be generalized and readers should consider these limitations before recognizing the analyzed results. Future research efforts could increase the sample size and target evenly distributed respondents from the perspective of gender. (3) This research was purely based on respondents' views about workplace depression, ignoring demographic specifications such as gender, age, education, race, etc. Since this was a first-time effort on such a sample for particular research variables, future research would be needed to highlight gender (female-specific) depression issues. (4) The workplace stress taken as a mediator in this research is limited and is not operationalized with further stress dimension. Future research may explore more thoughtful dimensions such as burnout, work-family balance, or many more to generate insights for academicians and practitioners. Furthermore, the authors believe that workers' well-being plays a vital role in improving their productivity, and it also reduces the toxic workplace environment.

Hence, future research efforts could incorporate more determinants of workers' well-being to find new insights. Future research could also explore insights about workplace culture characterized by inherent values, sense of workplace safety, violence reduction, and behavioral mechanisms (such as policies and procedures) to address workplace toxicity.

## 8. Conclusions

The research model of this study was developed based on the insights provided in the previous literature. In this paper, our results support linkages among the determinants of a toxic workplace environment, work depression, and worker productivity. The outcomes of this study show that a toxic workplace environment (harassment, bullying, ostracism, and incivility) directly negatively influences worker productivity (Table 4). This study also verifies that work depression mediates between a toxic workplace environment (harassment, bullying, ostracism, and incivility) and worker productivity (Table 5). The results also indicate that there is an indirect relationship between the toxic workplace environment (harassment, bullying, ostracism, and incivility) and worker productivity.

Specifically, our findings could be summarized as follows: First, workplace harassment is deep-rooted and has traumatic effects on the emotional well-being of the entire workplace. Workplace harassment decreases employee morale, which directly decreases worker productivity. Second, the toxic workplace environment and bullying create and accelerate work depression, stress, low work engagement, high absenteeism, lack of work performance, and work destruction. Third, workplace ostracism condenses and lessens work motivation among employees, and both entities (workers and organization) have to suffer in the form of decreased efficiency. Fourth, workplace intensity prompts employees to undermine performance and leave a bad image of the workplace among their peers. Fifth, workplace depression is considered a stigma among organizational employees, and most employees undergo suffering and mental illness. Another challenge facing workers is concealing their mental status at the workplace because people lack awareness about workplace depression. Not limited to workplace depression, presentism issues are also observed among workers. This is another type of low productivity, which originates when a worker comes to work but projects his/her low work involvement (mentally absent). Moreover, with workplace depression, organizations also experience worker turnover costs. Finally, the findings of this study indicate that the work environment plays a vital role in producing and raising worker productivity in line with the employee's ability and social network. Hence, organizations should focus on generating a conducive workplace environment for the well-being of the workforce. We can conclude that a toxic workplace environment increases the level of work depression. When workers feel negative about the organization, they tend to compromise their productivity level and performance, which could also increase their level of trauma.

**Author Contributions:** S.F.R. designed the research idea, developed the hypotheses, and drafted the final manuscript; M.S. collected the data and drafted the research methodology; R.M. worked on analysis and results; Y.Z. supervised this research and suggested extensive revisions during the research work; A.A. work on discussion part of the article. All authors read and approved the final manuscript.

**Funding:** This article is supported by the National Natural Science Foundation of China (71673179): Empirical Research of China on the Coupling of Clique and Knowledge Flow in Alliance Innovation Network Based on the Self-Organization Theory.

**Conflicts of Interest:** The authors declare that they have no competing interests.

## References

1. Namie, G. The challenge of workplace bullying. *Employ. Relat. Today* **2007**, *34*, 43. [[CrossRef](#)]
2. Anjum, A.; Ming, X.; Siddiqi, A.; Rasool, S. An Empirical Study Analyzing Job Productivity in Toxic Workplace Environments. *Int. J. Environ. Res. Public Health* **2018**, *15*, 1035. [[CrossRef](#)] [[PubMed](#)]
3. Scott, H.S. Extending the Duluth model to workplace bullying: A modification and adaptation of the workplace power-control wheel. *Workplace Health Saf.* **2018**, *66*, 444–452. [[CrossRef](#)]

4. Maqbool, R. Efficiency and effectiveness of factors affecting renewable energy projects; an empirical perspective. *Energy* **2018**, *158*, 944–956. [[CrossRef](#)]
5. Maqbool, R.; Sudong, Y. Critical success factors for renewable energy projects; empirical evidence from Pakistan. *J. Clean. Prod.* **2018**, *195*, 991–1002. [[CrossRef](#)]
6. Maqbool, R.; Rashid, Y.; Sultana, S.; Sudong, Y. Identifying the critical success factors and their relevant aspects for renewable energy projects; an empirical perspective. *J. Civ. Eng. Manag.* **2018**, *24*, 223–237. [[CrossRef](#)]
7. Pierce, L.; Balasubramanian, P. Behavioral field evidence on psychological and social factors in dishonesty and misconduct. *Curr. Opin. Psychol.* **2015**, *6*, 70–76. [[CrossRef](#)]
8. Hatipoglu, B.; Inelmen, K. Demographic diversity in the workplace and its impact on employee voice: The role of trust in the employer. *Int. J. Hum. Resour. Manag.* **2018**, *29*, 970–994. [[CrossRef](#)]
9. Sergio, M.; Behzadi, H.; Otto, A.; van der Spoel, D. Fullerenes toxicity and electronic properties. *Environ. Chem. Lett.* **2013**, *11*, 105–118. [[CrossRef](#)]
10. Maqbool, R.; Rashid, Y. Detrimental changes and construction projects: need for comprehensive controls. *Int. J. Proj. Organ. Manag.* **2017**, *9*, 154–170. [[CrossRef](#)]
11. Useche, S.; Montoro, L.; Alonso, F.; Oviedo-Trespalacios, O. Infrastructural and human factors affecting safety outcomes of cyclists. *Sustainability* **2018**, *10*, 299. [[CrossRef](#)]
12. Günüşen, N.P.; Wilson, M.; Aksoy, B. Secondary traumatic stress and burnout among Muslim nurses caring for chronically ill children in a Turkish Hospital. *J. Transcult. Nurs.* **2018**, *29*, 146–154. [[CrossRef](#)]
13. Jay, K.; Andersen, L.L. Can high social capital at the workplace buffer against stress and musculoskeletal pain?: Cross-sectional study. *Medicine* **2018**, *97*, e0124. [[CrossRef](#)]
14. Smith, J.G.; Morin, K.H.; Lake, E.T. Association of the nurse work environment with nurse incivility in hospitals. *J. Nurs. Manag.* **2018**, *26*, 219–226. [[CrossRef](#)]
15. Carrer, P.; Wolkoff, P. Assessment of indoor air quality problems in office-like environments: Role of occupational health services. *Int. J. Environ. Res. Public Health* **2018**, *15*, 741. [[CrossRef](#)]
16. Ferris, D.L.; Lian, H.; Brown, D.J.; Morrison, R. Ostracism, self-esteem, and job performance: When do we self-verify and when do we self-enhance? *Acad. Manag. J.* **2015**, *58*, 279–297. [[CrossRef](#)]
17. Yang, J.; Treadway, D.C. A social influence interpretation of workplace ostracism and counterproductive work behavior. *J. Bus. Ethics* **2018**, *148*, 879–891. [[CrossRef](#)]
18. Cheung, T.; Yip, P.S. Depression, anxiety and symptoms of stress among Hong Kong nurses: A cross-sectional study. *Int. J. Environ. Res. Public Health* **2015**, *12*, 11072–11100. [[CrossRef](#)]
19. Pouliakas, K.; Theodossiou, I. The economics of health and safety at work: An interdisciplinary review of the theory and policy. *J. Econ. Surv.* **2013**, *27*, 167–208. [[CrossRef](#)]
20. Acquadro Maran, D.; Varetto, A.; Zedda, M.; Magnavita, N. Workplace violence toward hospital staff and volunteers: A survey of an Italian sample. *J. Aggress. Maltreatment Trauma* **2018**, *27*, 76–95. [[CrossRef](#)]
21. Daniels, K.; Watson, D.; Gedikli, C. Well-being and the social environment of work: A systematic review of intervention studies. *Int. J. Environ. Res. Public Health* **2017**, *14*, 918. [[CrossRef](#)]
22. Herr, R.M.; Barrech, A.; Riedel, N.; Gündel, H.; Angerer, P.; Li, J. Long-Term Effectiveness of Stress Management at Work: Effects of the Changes in Perceived Stress Reactivity on Mental Health and Sleep Problems Seven Years Later. *Int. J. Environ. Res. Public Health* **2018**, *15*, 255. [[CrossRef](#)]
23. Evans-Lacko, S.; Knapp, M. Is manager support related to workplace productivity for people with depression: A secondary analysis of a cross-sectional survey from 15 countries. *BMJ Open* **2018**, *8*, e021795. [[CrossRef](#)]
24. Azuma, K.; Ikeda, K.; Kagi, N.; Yanagi, U.; Osawa, H. Prevalence and risk factors associated with nonspecific building-related symptoms in office employees in Japan: Relationships between work environment, Indoor Air Quality, and occupational stress. *Indoor Air* **2015**, *25*, 499–511. [[CrossRef](#)]
25. Pickering, C.E.; Nurenberg, K.; Schiamborg, L. Recognizing and Responding to the “Toxic” Work Environment: Worker Safety, Patient Safety, and Abuse/Neglect in Nursing Homes. *Qual. Health Res.* **2017**, *27*, 1870–1881. [[CrossRef](#)]
26. Wolf, L.A.; Perhats, C.; Delao, A.M.; Clark, P.R. Workplace aggression as cause and effect: Emergency nurses’ experiences of working fatigued. *Int. Emerg. Nurs.* **2017**, *33*, 48–52. [[CrossRef](#)]
27. Anjum, A.; Ming, X. Combating toxic workplace environment: An empirical study in the context of Pakistan. *J. Model. Manag.* **2018**, *13*, 675–697. [[CrossRef](#)]

28. Burgess, E.O.; Barmon, C.; Moorhead, J.R., Jr.; Perkins, M.M.; Bender, A.A. "That Is So Common Everyday... Everywhere You Go": Sexual Harassment of Workers in Assisted Living. *J. Appl. Gerontol.* **2018**, *37*, 397–418. [[CrossRef](#)]
29. Wright, T. Uncovering sexuality and gender: An intersectional examination of women's experience in UK construction. *Constr. Manag. Econ.* **2013**, *31*, 832–844. [[CrossRef](#)]
30. Adikaram, A.S. "Unwanted" and "bad," but not "sexual" Non-labelling of sexual harassment by Sri Lankan working women. *Pers. Rev.* **2016**, *45*, 806–826. [[CrossRef](#)]
31. Farley, L. *Sexual Shakedown: The Sexual Harassment of Women on the Job*; McGraw-Hill Companies: New York, NY, USA, 1978.
32. Henning, M.A.; Zhou, C.; Adams, P.; Moir, F.; Hobson, J.; Hallett, C.; Webster, C.S. Workplace harassment among staff in higher education: A systematic review. *Asia Pac. Educ. Rev.* **2017**, *18*, 521–539. [[CrossRef](#)]
33. Merkin, R.S.; Shah, M.K. The impact of sexual harassment on job satisfaction, turnover intentions, and absenteeism: Findings from Pakistan compared to the United States. *SpringerPlus* **2014**, *3*, 215. [[CrossRef](#)]
34. Branch, S.; Ramsay, S.; Barker, M. Workplace bullying, mobbing and general harassment: A review. *Int. J. Manag. Rev.* **2013**, *15*, 280–299. [[CrossRef](#)]
35. Maqbool, R.; Sudong, Y.; Manzoor, N.; Rashid, Y. The impact of emotional intelligence, project managers' competencies, and transformational leadership on project success: An empirical perspective. *Proj. Manag. J.* **2017**, *48*, 58–75. [[CrossRef](#)]
36. Miller, L. Workplace violence: Prevention, response, and recovery. *Psychother. Theoryresearchpracticetraining* **1999**, *36*, 160. [[CrossRef](#)]
37. Mushtaq, M.; Sultana, S.; Imtiaz, I. The trauma of sexual harassment and its mental health consequences among nurses. *J. Coll. Phys. Surg. Pak.* **2015**, *25*, 675–679.
38. Nielsen, M.B.; Knardahl, S. Is workplace bullying related to the personality traits of victims? A two-year prospective study. *Work Stress* **2015**, *29*, 128–149. [[CrossRef](#)]
39. Khan, S.; Sabri, P.S.U.; Nasir, N. Cost of Workplace Bullying For Employees: An Anti-Bullying Policy Through Introduction of Workplace Spirituality In Higher Education Sector of Lahore, Pakistan. *Sci. Int.* **2016**, *28*, 514–549.
40. Ariza-Montes, A.; Muniz, N.M.; Montero-Simó, M.J.; Araque-Padilla, R.A. Workplace bullying among healthcare workers. *Int. J. Environ. Res. Public Health* **2013**, *10*, 3121–3139. [[CrossRef](#)]
41. Ariza-Montes, J.A.; Muniz, N.M.; Leal-Rodríguez, A.L.; Leal-Millán, A.G. Workplace bullying among managers: A multifactorial perspective and understanding. *Int. J. Environ. Res. Public Health* **2014**, *11*, 2657–2682. [[CrossRef](#)]
42. Tao, N.; Zhang, J.; Song, Z.; Tang, J.; Liu, J. Relationship between job burnout and neuroendocrine indicators in soldiers in the Xinjiang arid desert: A cross-sectional study. *Int. J. Environ. Res. Public Health* **2015**, *12*, 15154–15161. [[CrossRef](#)]
43. Takaki, J.; Taniguchi, T.; Hirokawa, K. Associations of workplace bullying and harassment with pain. *Int. J. Environ. Res. Public Health* **2013**, *10*, 4560–4570. [[CrossRef](#)]
44. António, R.; Moleiro, C. Social and parental support as moderators of the effects of homophobic bullying on psychological distress in youth. *Psychol. Sch.* **2015**, *52*, 729–742. [[CrossRef](#)]
45. Leymann, H. The content and development of mobbing at work. *Eur. J. Work Organ. Psychol.* **1996**, *5*, 165–184. [[CrossRef](#)]
46. Notelaers, G.; De Witte, H.; Einarsen, S. A job characteristics approach to explain workplace bullying. *Eur. J. Work Organ. Psychol.* **2010**, *19*, 487–504. [[CrossRef](#)]
47. Devonish, D. Workplace bullying, employee performance and behaviors: The mediating role of psychological well-being. *Empl. Relat.* **2013**, *35*, 630–647. [[CrossRef](#)]
48. Longo, J.; DeDonno, M.A. Development of vignettes to explore workplace bullying. *Issues Ment. Health Nurs.* **2018**, *39*, 608–612. [[CrossRef](#)]
49. Chung, Y.W. Workplace ostracism and workplace behaviors: A moderated mediation model of perceived stress and psychological empowerment. *Anxietystresscoping* **2018**, *31*, 304–317. [[CrossRef](#)]
50. Mikkelsen, M.F.; Jacobsen, C.B.; Andersen, L.B. Managing employee motivation: Exploring the connections between managers' enforcement actions, employee perceptions, and employee intrinsic motivation. *Int. Public Manag. J.* **2017**, *20*, 183–205. [[CrossRef](#)]

51. Fiset, J.; Robinson, M.A. Considerations related to intentionality and omissive acts in the study of workplace aggression and mistreatment. *Ind. Organ. Psychol.* **2018**, *11*, 112–116. [[CrossRef](#)]
52. Yang, Q.; Wei, H. The impact of ethical leadership on organizational citizenship behavior: The moderating role of workplace ostracism. *Leadersh. Organ. Dev. J.* **2018**, *39*, 100–113. [[CrossRef](#)]
53. Waldeck, D.; Tyndall, I.; Riva, P.; Chmiel, N. How do we cope with ostracism? Psychological flexibility moderates the relationship between everyday ostracism experiences and psychological distress. *J. Contextual Behav. Sci.* **2017**, *6*, 425–432. [[CrossRef](#)]
54. Hobfoll, S.E. Conservation of resource caravans and engaged settings. *J. Occup. Organ. Psychol.* **2011**, *84*, 116–122. [[CrossRef](#)]
55. Abbas, M.; Raja, U.; Darr, W.; Bouckenooghe, D. Combined effects of perceived politics and psychological capital on job satisfaction, turnover intentions, and performance. *J. Manag.* **2014**, *40*, 1813–1830. [[CrossRef](#)]
56. Shafran-Tikva, S.; Chinitz, D.; Stern, Z.; Feder-Bubis, P. Violence against physicians and nurses in a hospital: How does it happen? A mixed-methods study. *Isr. J. Health Policy Res.* **2017**, *6*, 59. [[CrossRef](#)]
57. Bar-David, S. What's in an eye roll? It is time we explore the role of workplace incivility in healthcare. *Isr. J. Health Policy Res.* **2018**, *7*, 15. [[CrossRef](#)] [[PubMed](#)]
58. Hershcovis, M.S.; Cameron, A.-F.; Gervais, L.; Bozeman, J. The effects of confrontation and avoidance coping in response to workplace incivility. *J. Occup. Health Psychol.* **2018**, *23*, 163. [[CrossRef](#)]
59. Shi, Y.; Guo, H.; Zhang, S.; Xie, F.; Wang, J.; Sun, Z.; Dong, X.; Sun, T.; Fan, L. Impact of workplace incivility against new nurses on job burn-out: A cross-sectional study in China. *BMJ Open* **2018**, *8*, e020461. [[CrossRef](#)]
60. Schindeler, E.; Reynald, D.M. What is the evidence? Preventing psychological violence in the workplace. *Aggress. Violent Behav.* **2017**, *36*, 25–33. [[CrossRef](#)]
61. Koser, M.; Rasool, S.F.; Samma, M. High Performance Work System is the Accelerator of the Best Fit and Integrated HR-Practices to Achieve the Goal of Productivity: A Case of Textile Sector in Pakistan. *Glob. Manag. J. Acad. Corp. Stud.* **2018**, *8*, 10–21.
62. Avogaro, M. The Highest Skilled Workers of Industry 4.0: New Forms of Work Organization for New Professions. A Comparative Study. *E-J. Int. Comp. Labour Stud.* **2019**, *8*, 31–50.
63. Rasool, S.; Koser, M. Two folded layers of organizational justice. *Int. J. Res.* **2016**, *3*, 368.
64. McTernan, W.P.; Dollard, M.F.; LaMontagne, A.D. Depression in the workplace: An economic cost analysis of depression-related productivity loss attributable to job strain and bullying. *Work Stress* **2013**, *27*, 321–338. [[CrossRef](#)]
65. Cocker, F.; Martin, A.; Scott, J.; Venn, A.; Sanderson, K. Psychological distress, related work attendance, and productivity loss in small-to-medium enterprise owner/managers. *Int. J. Environ. Res. Public Health* **2013**, *10*, 5062–5082. [[CrossRef](#)]
66. Enis Bulak, M.; Turkyilmaz, A. Performance assessment of manufacturing SMEs: A frontier approach. *Ind. Manag. Data Syst.* **2014**, *114*, 797–816. [[CrossRef](#)]
67. Chang, T.Y.; Graff Zivin, J.; Gross, T.; Neidell, M. The Effect of Pollution on Worker Productivity: Evidence from Call Center Workers in China. *Am. Econ. J. Appl. Econ.* **2019**, *11*, 151–172. [[CrossRef](#)]
68. Street, T.; Lacey, S.; Somoray, K. Employee stress, reduced productivity, and interest in a workplace health program: A case study from the Australian mining industry. *Int. J. Environ. Res. Public Health* **2019**, *16*, 94. [[CrossRef](#)]
69. Newmann-Godful, M. *Distraction as a Mediator of Productivity: Measuring the Role of the Internet*; University of Phoenix: Ann Arbor, MI, USA, 2013.
70. Yusoff, R.M.; Khan, F. Stress and burnout in the higher education sector in Pakistan: A systematic review of literature. *Res. J. Recent Sci. ISSN* **2013**, *2*, 90–98.
71. Faisal Ahammad, M.; Mook Lee, S.; Malul, M.; Shoham, A. Behavioral ambidexterity: The impact of incentive schemes on productivity, motivation, and performance of employees in commercial banks. *Hum. Resour. Manag.* **2015**, *54*, s45–s62. [[CrossRef](#)]
72. Shier, M.L.; Nicholas, D.B.; Graham, J.R.; Young, A. Preventing workplace violence in human services workplaces: Organizational dynamics to support positive interpersonal interactions among colleagues. *Hum. Serv. Organ. Manag. Leadersh. Gov.* **2018**, *42*, 4–18.
73. Mathieu, J.E.; Wolfson, M.A.; Park, S. The evolution of work team research since Hawthorne. *Am. Psychol.* **2018**, *73*, 308. [[CrossRef](#)]

74. Sprigg, C.A.; Niven, K.; Dawson, J.; Farley, S.; Armitage, C. Witnessing workplace bullying and employee well-being: A two-wave field study. *J. Occup. Health Psychol.* **2018**, *24*, 286–296.
75. Kagawa, M.N. *The Workplace as a Teaching and Learning Environment for Undergraduate Medical Education in Uganda*; University of the Free State: Bloemfontein, South Africa, 2018.
76. Kwan, H.K.; Zhang, X.; Liu, J.; Lee, C. Workplace ostracism and employee creativity: An integrative approach incorporating pragmatic and engagement roles. *J. Appl. Psychol.* **2018**, *103*, 1358–1366. [[CrossRef](#)]
77. Leung, A.S.; Wu, L.; Chen, Y.; Young, M.N. The impact of workplace ostracism in service organizations. *Int. J. Hosp. Manag.* **2011**, *30*, 836–844. [[CrossRef](#)]
78. Colligan, T.W.; Higgins, E.M. Workplace stress: Etiology and consequences. *J. Workplace Behav. Health* **2006**, *21*, 89–97. [[CrossRef](#)]
79. Abbasi, S.M.; Hollman, K.W. Turnover: The real bottom line. *Public Pers. Manag.* **2000**, *29*, 333–342. [[CrossRef](#)]
80. Kitila, E.T. *Effects of Workplace Environment on Workers Performance and Productivity in Tanzania*; Mzumbe University: Morogoro, Tanzania, 2018.
81. Pinheiro, M.; Ivandic, I.; Razzouk, D. 28 The Economic Impact of Mental Disorders and Mental Health. *Ment. Health Econ. Costs Benefits Psychiatr. Care* **2017**, *1*, 415.
82. Raphadi, T.F. Coping Strategies by Leeuwkop Prison Correction Officers When Dealing with Occupational Stress. Ph.D. Thesis, The department of social work, University of the Witwatersand, Johannesburg, South Africa, 2017.
83. Lelei, L. *Factors Influencing Employee Productivity In The County Government Of Kajiado-Kenya*; KCA University: Nairobi, Kenya, 2017.
84. Maharaj, S.; Lees, T.; Lal, S. Prevalence and risk factors of depression, anxiety, and stress in a cohort of Australian nurses. *Int. J. Environ. Res. Public Health* **2019**, *16*, 61. [[CrossRef](#)]
85. Laguna, M.; Mielniczuk, E.; Rasmus, W.; Moriano, J.A.; Gorgievski, M. Cross-culture and gender invariance of the Warr (1990) job-related well-being measure. *J. Occup. Organ. Psychol.* **2017**, *90*, 117–125. [[CrossRef](#)]
86. Eissa, G.; Lester, S.W. Supervisor role overload and frustration as antecedents of abusive supervision: The moderating role of supervisor personality. *J. Organ. Behav.* **2017**, *38*, 307–326. [[CrossRef](#)]
87. Roby, D.D.; Lyons, D.E.; Craig, D.P.; Collis, K.; Visser, G.H. Quantifying the effect of predators on endangered species using a bioenergetics approach: Caspian terns and juvenile salmonids in the Columbia River estuary. *Can. J. Zool.* **2003**, *81*, 250–265. [[CrossRef](#)]
88. Heeringa, S.G.; West, B.T.; Berglund, P.A. *Applied Survey Data Analysis*; Chapman and Hall/CRC: Boca Raton, FL, USA, 2017.
89. Hennessy, J.L.; Patterson, D.A. *Computer Architecture: A Quantitative Approach*; Elsevier: Amsterdam, The Netherlands, 2011.
90. Hartley, J. Case study research. *Essent. Guide Qual. Methods Organ. Res.* **2004**, *1*, 323–333.
91. Jones, H.G. *Plants and Microclimate: A Quantitative Approach to Environmental Plant Physiology*; Cambridge University Press: Cambridge, UK, 2013.
92. Van Dalen, A.; de Vreese, C.H.; Albæk, E. Mixed Quantitative Methods Approach to Journalistic Role Performance Research. In *Journalistic Role Performance. Concepts, Contexts, and Methods*; Mellado, C., Hellmueller, L., Donsbatch, W., Eds.; Routledge: New York, NY, USA, 2016; pp. 189–206.
93. Kamal, A.; Tariq, N. Sexual harassment experience questionnaire for workplaces of Pakistan: Development and validation. *Pak. J. Psychol. Res.* **1997**, *12*, 1–20.
94. Carter, M.; Thompson, N.; Crampton, P.; Morrow, G.; Burford, B.; Gray, C.; Illing, J. Workplace bullying in the UK NHS: A questionnaire and interview study on prevalence, impact and barriers to reporting. *Bmj Open* **2013**, *3*, e002628. [[CrossRef](#)]
95. Robin, C.; Lindenberg, S. *Employee Well-Being. The Effects of Workplace Ostracism and Bullying and the Buffering Role of Social Support*; Tilburg University: Tilburg, The Netherlands, 2017.
96. Handoyo, S.; Samian, D.S.; Suhariadi, F. The measurement of workplace incivility in Indonesia: Evidence and construct validity. *Psychol. Res. Behav. Manag.* **2018**, *11*, 217. [[CrossRef](#)]
97. Beck, A.; Crain, A.L.; Solberg, L.I.; Unützer, J.; Glasgow, R.E.; Maciosek, M.V.; Whitebird, R. Severity of depression and magnitude of productivity loss. *Ann. Fam. Med.* **2011**, *9*, 305–311. [[CrossRef](#)]
98. Kroenke, K.; Spitzer, R.L.; Williams, J.B. The PHQ-9: Validity of a brief depression severity measure. *J. Gen. Intern. Med.* **2001**, *16*, 606–613. [[CrossRef](#)]

99. Nunnally, J.C.; Bernstein, I. *Psychometric Theory (McGraw-Hill Series in Psychology)*; McGraw-Hill: New York, NY, USA, 1994; Volume 3.
100. Ling, T.C.; Nasurdin, A.M. Human resource management practices and organizational innovation: An empirical study in Malaysia. *J. Appl. Bus. Res.* **2010**, *26*, 105. [[CrossRef](#)]
101. Cronbach, L.J. Coefficient alpha and the internal structure of tests. *Psychometrika* **1951**, *16*, 297–334. [[CrossRef](#)]
102. Hair, J.F., Jr.; Hult, G.T.M.; Ringle, C.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*; Sage Publications: London, UK, 2016.
103. Bhattacharjee, A.; Perols, J.; Sanford, C. Information technology continuance: A theoretic extension and empirical test. *J. Comput. Inf. Syst.* **2008**, *49*, 17–26. [[CrossRef](#)]
104. Anderson, J.C.; Gerbing, D.W. Structural equation modeling in practice: A review and recommended two-step approach. *Psychol. Bull.* **1988**, *103*, 411. [[CrossRef](#)]
105. Nunnally, J.; Bernstein, I. *Psychometric Theory*; McGraw-Hill: New York, NY, USA, 1978.
106. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [[CrossRef](#)]
107. O'Reilly, J.; Robinson, S.L.; Berdahl, J.L.; Banki, S. Is negative attention better than no attention? The comparative effects of ostracism and harassment at work. *Organ. Sci.* **2014**, *26*, 774–793. [[CrossRef](#)]
108. von Gruenigen, V.E.; Karlan, B.Y. *Sexual Harassment in the Work Place: Its Impact on Gynecologic Oncology and Women's Health*; Elsevier: Amsterdam, The Netherlands, 2018.
109. Wu, L.; Wei, L.; Hui, C. Dispositional antecedents and consequences of workplace ostracism: An empirical examination. *Front. Bus. Res. China* **2011**, *5*, 23–44. [[CrossRef](#)]
110. Liu, L.; Chang, Y.; Fu, J.; Wang, J.; Wang, L. The mediating role of psychological capital on the association between occupational stress and depressive symptoms among Chinese physicians: A cross-sectional study. *BMC Public Health* **2012**, *12*, 219.



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).