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## The effects of workplace bullying on staff self-esteem among manufacturing sector staff in Oman; Testing perceived psychological contract as mediator and moderator

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### Abstract

Workplace bullying is a common organizational and social phenomenon that costs financial and human productivity loss. The present study focuses on workplace bullying and its outcomes especially the underlying mechanism through which it leads to various employee outcomes. Thus, the study objective is set to investigate the effects of workplace bullying on staff self-esteem and perceived psychological contract. Additionally, the perceived psychological contract is tested as a mediator as well as moderator. The data is collected from selected manufacturing units from Oman (n=255). The research methodology was explanatory research design and survey-based cross-sectional method for data collection. The Confirmatory Factor Analysis is used to test the reliability, convergent validity, and discriminant validity of the measures involved. The path analysis is used for hypotheses testing and results indicate that workplace bullying has negative and significant effects on employee self-esteem ( $\beta=-.086$ ,  $P<.05$ ); and employee perceived psychological contract ( $\beta=-.069$ ,  $P<.05$ ). The mediation analysis indicates that perceived psychological contract significantly mediate the relationship between workplace bullying and employee self-esteem ( $\beta=-.038$ ,  $P<.05$ ). Furthermore, moderation analysis result indicate that perceived psychological contract moderate the negative effects of workplace bullying on staff self-esteem ( $\beta=.045$ ,  $P<.05$ ). Based on these results, it is concluded that workplace bullying is present among the manufacturing sector in Oman and leads to negative employee and organizational outcomes. Furthermore, psychological contract plays important role in reducing the negative effects of workplace bullying. Therefore, manufacturing sector firms need to take active action to reduce workplace bullying while striving for developing a positive psychological contract with staff.

**Keywords:** Workplace Bullying, Self-Esteem, Psychological Contract, Manufacturing, Oman.

## INTRODUCTION

The present study is about workplace bullying and its negative effects on staff among the manufacturing sector staff in Oman. Workplace bullying refers to the form of aggression where direct or indirect acts lead an employee to be systematically subjected to acts involving degrading and disrespectful treatment due to serious personal differences between employees (Einarsen, Hoel, & Nielsen, 2005). Different forms of bullying exist including verbal, physical, and sexual. Previous studies mostly focused on predictors and outcomes of workplace bullying but mostly ignored the process and contextual approach. The result of studies investigating outcomes of workplace bullying shows that it has severe negative employee behavioral and attitudinal outcomes such as job stress and negative workplace morale (Akter, 2019; Steele, Rodgers, & Fogarty, 2020). The present study extends the understanding of workplace bullying and its employee outcome by utilizing the employee self-esteem concept. However, in the present study, a new perspective about workplace bullying-employee outcome relationship is added by testing psychological contract as both mediator and moderator. The significance of adding this moderating variable is that it can enhance our understanding of how workplace bullying and its negative outcomes can be reduced by developing a positive psychological contract with the workers.

### Study Objectives

- To test the influence of workplace bullying on workers' self-esteem.
- To test the influence of workplace bullying on workers' perceived psychological contract.
- To test the mediating role of the perceived psychological contract between workplace bullying and workers' self-esteem.
- To test the moderating role of the perceived psychological contract between workplace bullying and workers' self-esteem.

### Significance

The study tests workplace bullying and its employee outcomes in a new context of manufacturing sector staff in Oman. Since there are no known previous studies on this topic so it is a contribution to the literature. Secondly, it adds a new perspective to understand workplace bullying and its employee outcomes by using the perceived psychological contract concept. By testing psychological contracts as both mediator and moderator will benefit in terms of our enhanced understanding of the underlying mechanism and contextual influence of workplace bullying and its employee outcomes. The findings of the present study can be used by the management of the manufacturing firms to devise suitable strategies and practices to overcome workplace bullying and its negative outcomes. The findings can also be used by organizational development consultants, researchers, and students.

## LITERATURE REVIEW

### Workplace Bullying

Einarsen, Hoel, Zapf, and Cooper (2011) describe workplace bullying as harassing, offending, or socially excluding someone or negatively affecting someone's work. An individual who is involved in workplace bullying utilizes various types of aggressive and negative communication (verbal and non-verbal) towards an individual or group. Examples of workplace bullying include verbal aggression, physical intimidation, attack, humiliating co-workers, spreading rumors, and

creating obstruction (Nielsen, Tangen, Idsoe, Matthiesen, & Mageroy, 2015). The target of repeated behavior of bullying or victims often feel helpless against such bullying behavior and experience negative outcomes such as anxiety, psychosomatic symptoms, depressive symptoms, and burnout (Conway, Høgh, Balducci, & Ebbesen, 2021; Nielsen et al., 2015). Individuals who are targets of bullying also experience negative job-related behavior and attitudes such as an increase in turnover intention and reduced job satisfaction and commitment (Nielsen et al., 2015; Park & Ono, 2016; Steele et al., 2020). Based on such a wide range of negative outcomes of workplace bullying, organizations need to devise a mechanism to reduce the incidents of workplace bullying.

### **Self-Esteem**

Smith, Seger, and Mackie (2007) define self-esteem as a concept about what we think about the self; and positive and negative evaluations of the self. Normally, individuals maintain high self-esteem and defend it if required (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). Pelham and Swann (1989) suggest that three factors are making up an individual's self-esteem. The three factors are an individual's tendency of experiencing positive as well as negative affective state; self-view of an individual; and way individuals frame their self-views. An individual with higher self-esteem is highly confident about their ability compared to those individuals who score less on self-esteem (Schwarz & Clore, 2007). Such individuals are less prone to stress and have a clear self-concept (Brown, 2010). Research suggests that self-esteem can influence an individual ability to handle workplace bullying (Li, Liu, & Chen, 2020). In other words, there is a two-way relationship between workplace bullying and self-esteem; however, in the present study, we only limit our analysis for workplace bullying effects on self-esteem while not testing the reverse effects.

### **Psychological Contract**

The psychological contract refers to the individually held beliefs of an individual towards the employer firm (Rousseau, 2000). The perception of a psychological contract is influenced by the quality of the relationship between an employer and an employee. If there is a positive and healthy relationship between employer and employee, an individual will form a positive perception of psychological contract (Griep & Vantilborgh, 2018). On the other hand, if there are issues such as lack of trust or unmet expectations, so an individual will perceive psychological contract as violated or weak (Griep, Bankins, Vander Elst, & De Witte, 2021; Van den Heuvel, Schal, & Van Assen, 2015). Previous studies mostly focused on workplace bullying and its outcomes but the underlying mechanism remains unknown. However, some studies are emerging exploring the underlying mechanism (Kakarika, Gonzalez, & Dimitriades, 2017; Trepanier, Fernet, & Austin, 2016). We use the psychological contract as a mediator and moderator in the present study to understand workplace bullying and its employee outcomes.

### **The Effects of Workplace Bullying on Staff Self-Esteem**

Previous studies show that workplace bullying leads to negative employee outcomes such as job dissatisfaction and high turnover intentions (Naseer, Raja, Syed, & Bouckenooghe, 2018; Nielsen et al., 2015). Furthermore, empirical studies also indicate that workplace bullying influences staff self-esteem among the victims of bullying. For example, a study by Upton (2010) showed that workplace bullying leads to reduced self-esteem among the bullying victims. Another study by Bernstein and Trimm (2016) shows that workplace bullying is negatively associated with the self-esteem of victims of bullying. Other studies also reported similar results

(e.g. Cakirpaloglu, Čech, & Kvintová, 2018; Li, et al., 2020; Rong & Tharbe, 2018). Based on the previous studies' findings and workplace-bullying and self-esteem literature, we propose the following hypothesis.

H1: Workplace bullying has significant and negative effects on staff self-esteem.

### **The Effects of Workplace Bullying on Staff Perceived Psychological Contract**

The effect of workplace bullying is also influencing staff's perceived psychological contract since staff expects that management will take reasonable action to stop or avoid any bullying against them. However, if an organization fails to stop workplace bullying against staff either from customers, managers, or co-workers, it leads to a deteriorated perceived psychological contract. Empirical work also suggests that workplace bullying can influence the staff's perception of the psychological contract. For instance, Kakarika et al., (2017) in their empirical study reported that workplace bullying results in breached psychological contract perception among staff which further leads to decreased job and life satisfaction while the psychological contract was found to be mediating this relationship. Another study conducted by Salin and Notelaers (2020) shows that workplace bullying not only influences target victims but also influence other employees who witness bullying in terms of violated psychological contract. Other studies also reported similar results including Rai and Agarwal (2018); and Ali, Bilal, Raza, and Ghani (2019). Based on previous studies and the workplace bullying literature, we propose the following hypothesis;

H2: Workplace bullying has significant and negative effects on staff perceived psychological contract.

### **Mediating and Moderating Role of Psychological Contract**

Additionally, we propose that psychological contracts mediate as well as moderate the negative effects of workplace bullying on staff self-esteem. The justification of proposing this dual nature relationship is that psychological contract is based on overall met and unmet expectations between the employer and employee. Accordingly, it is also an expectation of employees that he/she will not be physically or psychologically bullied at the workplace by managers or other co-workers. Thus, if an employer fails to fulfill this obligation as in the case of bullying, it will reduce the health of the psychological contract. However, it can also be argued that a psychological contract is an overall evaluation of the relationship between staff and organization, whereas, bullying is initiated by an individual or group within an organization. Therefore, bullying will negatively but partially influence the psychological contract perception since it is influenced by other factors such as pay and working conditions. There are other workplace bullying-related studies that investigated psychological contract as mediator (Ali et al., 2019; Kakarika et al., 2017; Salin & Notelaers, 2020); and moderator (Rai & Agarwal, 2018). Therefore, we propose that the perceived psychological contract will function as both mediator and moderator. Thus, we propose;

H3: Perceived psychological contract mediate the relationship between workplace bullying and staff self-esteem.

H4: Perceived psychological contract moderate the relationship between workplace bullying and staff self-esteem.

## RESEARCH METHODOLOGY

### Research Design

The present study is explanatory research since it attempts to explain the influence of one or more variables over the other (Sekaran & Bougie, 2016). The design is also cross-sectional means data is only collected once (Bell, Bryman, & Harley, 2018).

### Population and Sampling

The population of the study is the staff of the manufacturing sector in Oman. Since the population is large and inaccessible, so we use the sampling approach. Accordingly, we selected a sampling frame consisting of 10 manufacturing facilities located in the industrial area of two cities i.e. Muscat and Nizwa. From these selected manufacturing facilities, we draw samples based on a random sampling method. The formula proposed by Cochran for calculating sample size is used for sample size calculation. Accordingly,

$$n = \frac{Z^2 pq}{e^2}$$

Where:

e refers to the desired precision level

p is the (estimated) proportion of the population that has the attribute in question,

q is  $1 - p$ .

Thus, using 95% confidence and associated Z value of 1.96, and 80% population proportion with attribute in question, and 95% confidence interval, required sample size is;

$$n = \frac{(1.96)^2 (0.8) (0.2)}{(0.05)^2} = 245$$

### Data Collection Measure

We utilized the Google Form tool to collect data from the sample manufacturing units. An adopted survey was used to collect data. The measure of the psychological contract includes 4 items and is adapted from Rousseau (2000). Workplace bullying is measured by 23 items adapted from Einarsen & Hoel (2001). This measure is known as the Negative Acts Questionnaire-Revised version. Employee self-esteem is measured by 5 items and adapted from Quinn and Shepard (1974).

### Data Analysis

Data analysis techniques included descriptive statistics and Structural Equation Modelling including Confirmatory Factor Analysis (Arbuckle, 2009) for testing the reliability and validity and path analysis for hypotheses testing. The analysis is performed using the SPSS version 22 and AMOS version 18.

## RESULTS

### Demographic Information

Table 1

*Demographic Information of the Survey Participants*

	Frequency	%
<i>Gender</i>		
Male	232	90.98%
Female	23	9.02%
<i>Age Group</i>		
18 to 25	141	55.29%
25 to 40	54	21.17%
40 to 60	45	17.68%
Above 60	15	5.86%

Source: Study Survey

The demographic information shows that there are 232 males (90.98%); and 23 females (9.02%) participated in our survey. Furthermore, in terms of age category, 141 participants belonged to the 18 to 25 years (55.29%); 54 participants belonged to the 25 to 40 years (21.17%); 45 participants in the 40 to 60 years' age (17.68%); and 15 participants belonged to the above 60 years age category (5.86%).

**Confirmatory Factor Analysis (CFA)- Measurement Model**

We used the AMOS for conducting the CFA for establishing to test the validity and reliability of the measures (Arbuckle, 2009). Following is the graphical representation of the CFA model.

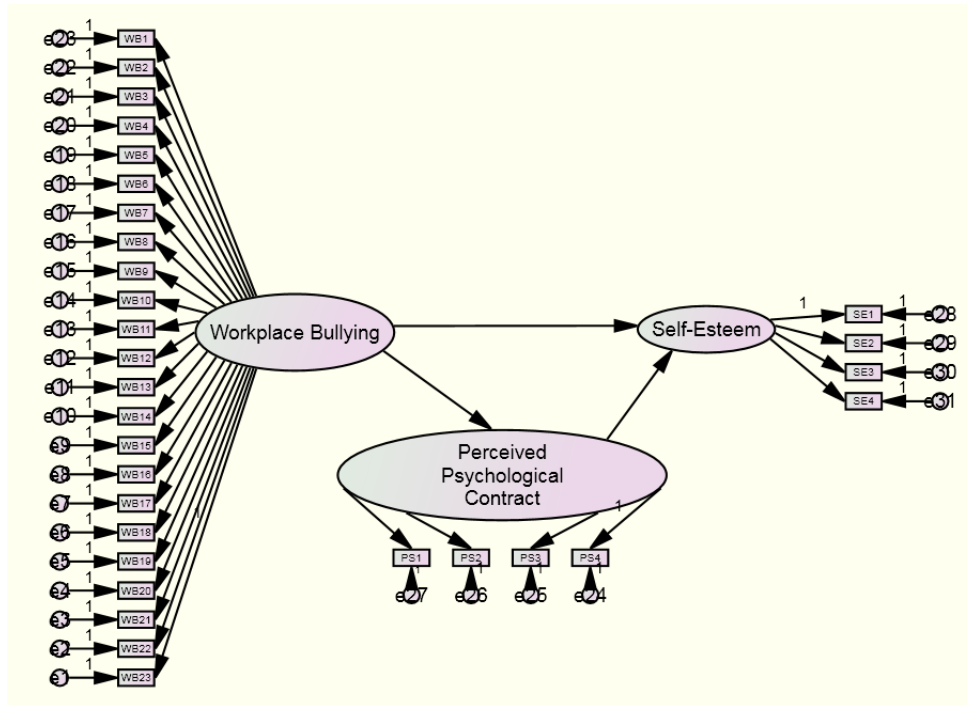


Figure 1: Measurement Model of the Study

Table 2  
*Reliability and Convergent Validity*

Variables	Items	Standardized Factor Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted	Maximum Shared Variance
Workplace Bullying	WB1	.565	.970	.968	.582	.343
	WB2	.788				
	WB3	.878				
	WB4	.989				
	WB5	.881				
	WB6	.876				
	WB7	.756				
	WB8	.772				
	WB9	.890				
	WB10	.934				
	WB11	.943				
	WB12	.764				
	WB13	.566				
	WB14	.764				
	WB15	.663				
	WB16	.552				
	WB17	.589				
	WB18	.761				

	WB19	.774				
	WB20	.645				
	WB21	.565				
	WB22	.585				
	WB23	.781				
Perceived Psychological Contract	PS1	.667				
	PS2	.961				
	PS3	.875	.855	.853	.604	.545
	PS4	.532				
Self-Esteem	SE1	.661				
	SE2	.765				
	SE3	.869	.817	.815	.530	.225
	SE4	.587				
Model Fitness: X <sup>2</sup> =621, df=253, X <sup>2</sup> /df= 2.45, RMSEA=.064, RMR=.024, GFI=.913, CFI=.924						

The result of CFA shows that all model fitness indicators including  $\chi^2/df$  (2.45), RMSEA (.064), RMR (.024), GFI (.913), and CFI (.924) are with the range of accepted values. The guidelines for these values are adapted from Hu and Bentler (1999) and Browne and Cudeck (1992) (RMSEA<.08, RMR<.05, GFI>.90, CFI>.90). All factor loadings are greater than 0.50 and AVE is also above 0.50 so it is an indication of satisfactory convergent validity (Hair, Sarstedt, Ringle, & Gudergan, 2017). Furthermore, since Maximum Shared Variance for each construct is less than its respective AVE so it is also an indication of satisfactory convergent validity. For the reliability, we reported the Cronbach alpha and CR, for which all values are greater than 0.60 so it is an indication of satisfactory reliability.

Table 3

*Discriminant Validity*

	Workplace Bullying	Psychological Contract	Self-Esteem
Workplace Bullying	<b>.763</b>	-.550	-.675
Psychological Contract	-.550	<b>.777</b>	.512
Self-Esteem	-.675	.512	<b>.728</b>

The discriminant validity is tested using the Fornell and Larcker (1981) criteria. Accordingly, the diagonal bold values represent the square root of AVE and the remaining values are inter-variable correlation. The criteria requirement is met as all diagonal bold values are greater than other values in their respective columns and rows. Thus, it indicates that the condition of discriminant validity is fulfilled in our study.

**Hypotheses Testing (Structural Model)**

Table 4

*Hypotheses Testing*

H. No.	Paths	Estimate	S.E.	C.R.	P	Remarks
H1	Workplace Bullying > Self-Esteem	-.086	.023	-3.73	.000	Supported
H2	Workplace Bullying > Perceived Psychological Contract	-.069	.012	-5.17	.000	Supported

The path analysis result indicates that workplace bullying negatively and significantly influences employee self-esteem ( $\beta = -.086$ ,  $P < .05$ ); and employee perceived psychological contract ( $\beta = -.069$ ,  $P < .05$ ). Based on these results, we accept H1 and H2.

### Mediation Testing

We performed the mediation analysis using the guidelines of Baron and Kenny (1986) and analyzed the indirect effects. In this model, workplace bullying is the independent variable, self-efficacy is a dependent variable, and the perceived psychological contract is a mediator variable. The mediation analysis is performed on AMOS by using the Bootstrap procedure (5000) samples and bias-corrected BCI (90%).

Table 5

#### Mediation Analysis

H. No.	Path	Total Effects	Direct Effects	Indirect Effects	Remarks
H3	Workplace Bullying > Perceived Psychological Contract > Self-Esteem	-.124**	-.086***	-.038*	Supported

\*\*\* $< .05$ , \*\* $< .01$ , \* $< .001$

Our result indicates that indirect effects of workplace bullying on staff self-esteem while mediated by perceived psychological contract is statistically significant thus providing support for the mediation hypothesis ( $\beta = -.038$ ,  $P < .05$ ).

### Moderation Analysis

Moderation analysis is performed by creating interaction terms from standardized scores of variables through SPSS software.

Table 6

#### Moderation Testing

H.No	Path	Estimate	S.E.	C.R.	P	Remarks
H4	Interaction workplace Bullying*Perceived Psychological Contract > Self-Esteem	.045	.021	2.14	.004	Supported

\*\*\* $< .001$ , \*\* $< .01$ , \* $< .05$



Figure 2: Psychological Contract as Moderator

The results show that interaction terms of workplace bullying and psychological contract exert a positive and significant influence on staff self-esteem ( $\beta=.045$ ,  $P<.05$ ), therefore, we accept the H4. Furthermore, the result shows that when the psychological contract is considered less healthy, the influence of workplace bullying on self-esteem becomes negative which dampens as the psychological contract is perceived at a higher end. In other words, if a positive psychological contract is present, it reduces the negative effects of bullying on staff self-esteem as we expected.

### **Discussion**

We tested the effects of workplace bullying on staff self-esteem and perceived psychological contract. Furthermore, our objective was to test the both mediating and moderating function of the perceived psychological contract between the relationship of workplace bullying and staff self-esteem. Our findings indicate that workplace bullying significantly and negatively influences staff self-esteem. The results are similar to earlier studies (e.g. Bernstein & Trimm, 2016; Cakirpaloglu et al., 2018; Li et al., 2020). We also found support for the negative and significant influence of workplace bullying on staff perceived psychological contract as reported in earlier studies (e.g. Ali et al., 2019; Kakarika, et al., 2017; Salin & Notelaers, 2020). These findings indicate that workplace bullying is very dangerous for the overall well-being of an individual and the organization as it leads to a negative influence on staff. Therefore, an organization should take this issue very seriously and act proactively to eliminate workplace bullying. We also found support for the mediation hypothesis. This finding is also consistent with the earlier finding which utilizes psychological contract as a mediator to understand the underlying mechanism of workplace bullying and various employee outcome (e.g. Ali et al., 2019; Kakarika et al., 2017; Salin & Notelaers, 2020). Additionally, based on moderation we also found that in a condition where there is the presence of a healthy psychological contract, it reduces the negative influence of workplace bullying on staff. These findings are also consistent with the earlier findings which support the notion that psychological contracts moderate the relationship between workplace bullying and employee outcomes (Rai & Agarwal, 2018). Our finding supports the notion that organizations need to work actively to develop a positive and healthy psychological contract.

### **CONCLUSION**

The study aims to test the effects of workplace bullying on staff self-esteem and mediating and moderating the role of the psychological contract. Our findings indicate that workplace bullying negatively affects staff self-esteem and perceived psychological contract. Additionally, we found that perceived psychological contracts both mediate and moderate the negative influence of workplace bullying on staff. Based on our findings, we conclude that workplace bullying leads to negative and undesirable employee and organizational outcomes for the organization and should be avoided. We can also conclude that the negative influence of workplace bullying can be reduced providing if there is suitable support and a healthy relationship between employer and employee. Our findings contribute to the literature on workplace bullying by highlighting its negative consequences in a new context i.e. manufacturing sector of Oman. Our findings also contribute to the psychological contract literature by showing that how it can set aside some negative effects of workplace bullying.

## Recommendations

- Manufacturing organizations should develop suitable policies and procedures to identify and manage workplace bullying incidents. Managers should be trained to handle workplace bullying issues proactively.
- Manufacturing organizations should provide suitable training to staff to overcome bullying issues. Staff who are victims of bullying should be given suitable psychological counseling.
- Staff who are involved in bullying others should be given a warning. If the problem persists, such staff should be subject to the disciplinary procedure.
- Other aspects of employment such as pay and working conditions should be made favorable to develop a healthy psychological contract between the workers and employer.

## Limitations

Small sample size from selected manufacturing firms is a limitation therefore, generalization of the findings on the entire manufacturing sector needs to be made with caution. The limitation of the study also includes perception-based self-reported measures for the variables involved which may be different from reality.

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