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MANAGEMENT | RESEARCH ARTICLE

Toxic Leadership and Safety Performance: Does Organizational Commitment act as Stress Moderator?

Farida Saleem¹, Muhammad Imran Malik^{2*} and Muhammad Kamran Malik³

Abstract: Ensuring safety is the key to sustainability especially, in the oil and gas sector. The study aims to examine the effects of five dimensions of toxic leadership on the safety performance of engineers working in Oil and Gas Companies. Through social learning theory and conservation of resource theory, an overarching framework of the research model has been proposed. Cross-sectional data from a sample of 219 site engineers, male and female, working in oil and gas companies operating in Pakistan, were collected and analyzed. Results revealed that out of five dimensions of toxic leadership, only abusive supervision and narcissism had a significant negative impact on safety performance. Similarly, organizational commitment appeared as an essential stress moderator and has successfully dampened the negative impact of abusive supervision and narcissism on safety performance.

Subjects: Production, Operations & Information Management; Management of Technology & Innovation; Critical Management Studies; Organizational Studies

Keywords: Organizational commitment; safety performance; self-promotion; abusive supervision; unpredictability; narcissism; authoritarian leadership

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PUBLIC INTEREST STATEMENT

Ever-increasing accidents in organizations is a global problem. It has negative effects on the effectiveness. Leaders play a vital role in ensuring effectiveness. In literature the positive role of leadership has been frequently examined. However, minimal research exists on the negative role of leaders and its effects on employee safety performance, especially in Asia. It is well noted that the effects of toxic leadership can influence the efficiency of employees. To fill this gap, the relationship between toxic leadership and employee safety performance is examined empirically. The results found that the leader's toxicity, lack of concern for others and self-centered behavior, negatively affects safety performance whereas the committed employees are less likely affected by this negativity. This study calls for more attention of the policymakers to curb out toxicity/abusiveness to boost safety performance. Additionally, committed employees can decrease the adverse effects of toxic behaviors by fully concentrating on their work and meeting the organizational targets.

1. Introduction

The International Labour Standards (2012) reported two million life losses at work each year that counts for 5,500 lives per day throughout the globe. The accidents like the Deepwater Horizon oil spill in 2010 and the Costa Concordia disaster in 2012 are clear indications of deficient occupation safety measures (P.Y. Chen & Li, 2014). The researchers are curious to eliminate workplace accidents and ensure workers' safety performance to cope with the ever-increasing number of occupational injuries affecting employees, organizations, and societies (Christian et al., 2009; Nahrgang et al., 2011). Safety performance is the set of "actions or behaviors that individuals exhibit in almost all jobs to promote the health and safety of workers, clients, the public, and the environment" (Burke et al., 2002, p. 432). Safety performance is a critical element of job performance and directly predicts occupational mishappenings (Neal & Griffin, 2004). Safety performance is negatively linked with accidents (Christian et al., 2009), and safety ignorance has positive contributions towards workplace accidents (Nahrgang et al., 2011).

It is noted that organizational climate and positive leader roles play an active role in predicting safety performance in an organization (Christian et al., 2009; Nahrgang et al., 2011). The importance of safety performance encouraged the researchers and organizations to examine leaders' role in shaping individual and organizational outcomes (Aboyassin & Abood, 2013; Appelbaum & Roy-Girard, 2007; Bass & Riggio, 2006). Leadership is seen as a critical factor influencing safety at the workplace (Lu & Yang, 2010; Zohar, 2011). However, likely, the leaders do not always play a positive role, as mentioned by Conger (1990), "the dark side of leadership." Employees' imbalance in the work practices due to the un-due demands put by the leaders (Hogan & Hogan, 2001) leads to workplace accidents and unfavorable organizational outcomes (Lin, 2012). This draws attention towards examining the role of toxicity of leadership prevailing in the organizations and safety performance of employees. The leadership could induce higher safety performance standards by developing a safety culture (Flin & Yule, 2004), but little evidence is seen regarding toxic leader's behavior and safety performance.

Watt et al. (2016) agreed that leadership positions could breed toxicity. Organizations have to operate under conditions characterized by volatility, uncertainty, complexity, and ambiguity (VUCA). VUCA provides an opportunity for the toxic leaders to adopt practices as per their will as they abuse power. Lacida (2012) highlighted toxic leader's characteristics like lack of self-awareness, lack of self-control and confidence, stemming from their self-interest and they do not take care of others' interests, and they prefer their feelings and disregard those of others. Having resemblance with autocratic leadership style, people perceive them as arrogant, self-serving, inflexible, and petty (Bullis & Reed, 2003). When leaders are not showing interest in organizational operations and are more concerned about their self-interest, they provide employees an opportunity to adopt deviant work behaviors that result in reducing safety performance standards. Toxic leaders are characterized by a hostile display of verbal and non-verbal behaviors. Not only do the undesirable supervisory practices undermine the morale, dignity, and self-efficacy of the subordinates, but they also account for the exploitative and hostile organizational environment (Jabbar et al., 2020). Hence, there is a dire need to identify the detrimental effect of toxic leadership to understand it as a phenomenon as important as a positive leadership.

Therefore it is essential to identify the potential factor that can reduce the negative impact of toxic leadership on the safety performance of employees. It has been observed that higher organizational commitment predicts better performance and vice versa (Amponsah-Tawiah & Mensah, 2016; Cesário & Chambel, 2017; Neal & Griffin, 2006; Zhao et al., 2013). Committed employees help organizations to accomplish their standards and goals. Employees' commitment is also linked with their involvement in occupational skill development activities (Aryee et al., 1994, Meyer et al., 1993) and has a positive impact on safety performance. As toxic leadership is associated with creating a work stress environment in an organization, organizational commitment, and attitudinal variables, can act as stress moderators (Siu, 2003). Prior literature has identified organizational commitment as an essential factor that reduces the negative implications

of stress at the workplace (Begley & Czajka, 1993; Siu, 2003). Hence, in the current investigation, we have argued that the positive attitudes of committed employees help them perceive less stress due to toxic leadership at the workplace. Organizational commitment acts as a buffering mechanism for reducing the negative impact of toxic leadership on safety performance.

The current investigation has three important potential contributions to the growing body of literature on safety performance. First, safety performance is studied in different sectors like municipal utilities (DeArmond et al., 2018), construction (Kines et al., 2010; Stup, 2006; Taba, 2018), Healthcare (Baker & Norton, 2002; Yıldız & Yıldız, 2016), schools (Alolah et al., 2014; Kines et al., 2010). However, there is a deficiency of literature available regarding the safety performance of engineers in the oil and gas sector. As it is more commonly known, energy extraction, or oil and gas exploration and production, is considered a dangerous industry (Mearns & Yule, 2009). The toxic leader's behavior directly affects the employee's psychological states and counts towards an enhanced misconduct rate (Jabbar et al., 2020). It becomes necessary to propose a framework that counts towards minimizing the negative effects of toxic leadership.

Second, as most literature on safety performance has originated from Western industrialized countries, testing the proposed model in a developing country, Pakistan, will help generalize the concepts that have primarily been established based on developed economies where safety procedures are more strictly followed. Various organizational studies have identified leadership behavior shaping employees' work outcomes as employees depend upon their leaders for resources and guidelines, and they generally model their leaders' work ethics. Therefore, leaders are believed to positively shape subordinates' work ethics and work outcomes (Jabbar et al., 2020; Khan and Din, 2010). However, a growing stream of research delineates abusive leadership to be on the constant rise, adding to employees' mental distress and workplace deviance (Lopez et al., 2020). This calls to investigate contextual and cultural aspects and other variables to understand the downside of leadership on employee and organizational outcomes. Lastly, we have proposed organizational commitment as a boundary condition for the negative impact of toxic leadership on safety performance.

2. Literature review

2.1. Toxic leadership and safety performance

Toxic leadership is seen as a pain that strips people of their self-esteem and remains a source of disconnection from work for employees (Appelbaum & Roy-Girard, 2007; Seeger et al., 2005). Generally, the leaders are energizers and contribute positively (Dartey-Baah & Addo, 2018), but in recent years, attention is diverted towards the leaders with negative attitudes and behaviors that harm individual and organizational performance (Chua & Murray, 2015; Watt et al., 2016). The leaders are the driving force for the organization, especially in oil and gas extraction companies. The positive attitude of leaders encourages them to adopt positive ways of performing the tasks. The interplay of the social learning theory can be well observed here, where people learn and perform by looking at their role models—their leaders. An array of studies (Dartey-Baah & Addo, 2018; Mayfield & Mayfield, 2016; Wiley, 1997) have highlighted leaders motivating employees for success by adopting effective leadership styles (Bass & Riggio, 2006), such as the transformational leadership style, ethical leadership and so forth.

According to Clarke (2013), the potential alternatives to improved occupational safety are improved leadership practices. This argument provides roots for the transformational leaders that are more safety-oriented and provide guidance by inspiring and boosting safety achievement in followers (DeArmond et al., 2018). Similarly, McCaughey et al. (2014) argued that safety leadership is necessary for developing safety perception in organizations. Dartey-Baah and Addo (2018), after examining the charismatic and corrective leadership dimensions as antecedents to engineer's safety behavior, not only have identified the positive impact of these two dimensions on safety performance but have also encouraged to explore further other leadership behaviors/styles and safety performance linkage. Toxic leaders play an essential role in creating a destructive

environment by focusing on self-interest and lack of concern for others that negatively affect the organizational environment (Skeppers & Mbohwa, 2015). Their decisions and behaviors harm their performance. Lipman-Blumen (2005) argued that leadership toxicity can be manifested as having a direct attack on followers' personalities, characters, abilities, and emotional stability and can create a stressful work environment. Similarly, toxicity is the killer to the satisfaction and creativity of employees and hampers their performance (Whicker, 1996). The employees become incapable of performing up to the standards against the unjustified demands put by their leaders (Zhao et al., 2013).

Negative and pervasive consequences are the results of a hostile work environment that a toxic leader creates. This hostile workplace is translated into a stressful work environment that adversely affects employee well-being and performance (Winn and Dykes, 2019). Toxic leaders create a stressful workplace and harm the overall performance of employees. A toxic leader may allow specific individuals in an organization certain latitude regarding safety procedures or, in the worst case, to serve his/her purpose. He/she may allow employees to work unsafely (Winn and Dykes, 2019) and negatively influence the safety performance of employees. Schmidt (2008) identified five major dimensions of toxic leadership: self-promotion, abusive supervision, unpredictability, narcissism, and authoritarian leadership. For the current investigation, we have taken the impact of all these five dimensions of toxic leadership separately. Based on the above discussion, we propose the following hypothesis.

Hypothesis 1a: Self-promotion (toxic leadership) has a negative effect on the safety performance of engineers

Hypothesis 1b: Abusive supervision (toxic leadership) has a negative effect on the safety performance of engineers

Hypothesis 1 c: unpredictability (toxic leadership) has a negative effect on the safety performance of engineers

Hypothesis 1d: narcissism (toxic leadership) has a negative effect on the safety performance of engineers

Hypothesis 1e: authoritarian leadership (toxic leadership) has a negative effect on the safety performance of engineers

2.2. Organizational commitment and safety performance

The committed employees are more likely to put in the extra effort. They are more motivated to achieve organizational goals, mission, and vision (Jafri & Lhamo, 2013), resulting in higher performance levels (Berberoglu, 2015). According to Dirani (2009), employees' output in performance is significantly influenced by their commitment levels. Prior literature has theoretically and empirically identified a significant positive relationship between organizational commitment and employee performance (e.g., Ahmad et al., 2014; Hettiarachchi & Jayaeathua, 2014; Meyer et al., 1989; Wright & Bonett, 2002). Zia ud and Khan (2010), while examining the organizational commitment and job performance relationship of employees from Pakistan's oil and gas sector, concluded that there is a significant positive impact of organizational commitment on job performance.

Cesário and Chambel (2017) reported organizational commitment and work engagement as critical success factors for managing complex situations. The higher the commitment and engagement, the higher will be the performance of employees. According to Hettiarachchi and Jayaeathua (2014), higher levels of organizational commitment of employees are linked with

positive behavioral outcomes for an organization, including higher levels of loyalty and willingness to stay in the organization and higher levels of work performance. Similarly, low levels of commitment can result in a lack of care and an irresponsible attitude (Eliyana & Muzakki, 2019), resulting in lower levels of safety performance. Building on this argument, the higher commitment may likely lead to higher safety compliance (DeArmond et al., 2018). Based on the above discussion, we propose the following hypothesis

Hypothesis 2: Organizational commitment has a positive effect on an engineer's safety performance.

2.3. Organizational commitment as a moderator

According to Mowday et al. (1982), organizational commitment is “the relative strength of an individual's identification with and involvement in an organization” (Mowday et al., 1982, p. 26). The three dimensions of commitment include 1) organizational goal acceptance, 2) willingness to work hard, and 3) desire to stay affiliated with the organization (Siu, 2003). The negative consequences of toxic leadership lead to a stressful work environment. Literature has identified organizational commitment as an important work stress moderator (Begley & Czajka, 1993; Cohen et al., 1992; Mowday et al., 1982; Siu, 2003; Somers, 1995). Organizational commitment acts as a buffer for transmitting the negative impact of work stress on employee performance and well-being (Siu, 2003). This means stressful situations decrease employee performance and their well-being when commitment levels are low.

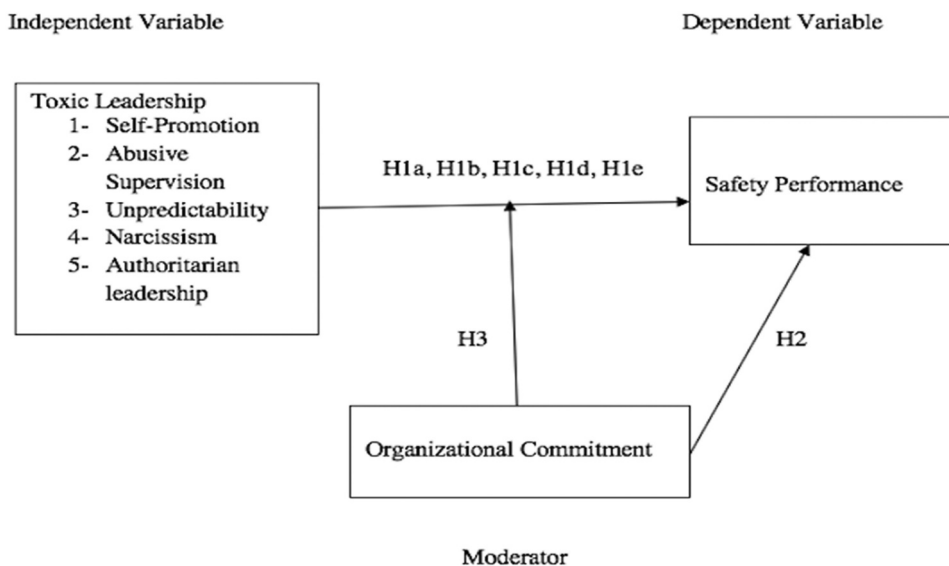
Similarly, conservation of resource (COR) theory suggests that individuals experience stress when they do not have adequate physical or psychological resources to cope with the stressor (Hobfoll, 2011). Organizational commitment acts as an employee's cognitive resource for coping with the stress due to toxic leader behavior. COR also suggests that employees who have more resources available are better positioned to fight off the adverse effects of stress. Personal cognitive resources like commitment to an organization can play a buffering role against stress due to the toxic behavior of a leader. Employees with higher organizational commitment can regulate their emotions under stressful situations. Committed employees are able to identify their feeling of stress and frustration due to toxic leaders and can develop strategies to reduce stress and meet their job demands (Sy et al., 2006). Personal solid resources can help safeguard the employees from burnout and help them meet their job demands (Bakker et al., 2007). Despite the importance of organizational commitment as a stress moderator, very few studies have considered its impact on the negative consequences of toxic leadership. Based on COR theory, we propose that higher organizational commitment is a personal resource that mitigates the harmful effects of toxic leadership on safety performance. Based on the above discussion, we propose the following hypothesis.

Hypothesis 3: The organizational commitment moderates the relationship between toxic leadership and the safety performance of engineers.

3. Theoretical framework

We have developed the proposed theoretical model based on social learning theory and conservation of resource (COR) theory. According to social learning theory, people learn and perform by looking at their role models—their leaders and a toxic leader can negatively influence employees' safety performance and create a stressful work environment. Similarly, according to the conservation of resource (COR) theory, employees with more physical or psychological resources in the form of higher organizational commitment can better defend themselves against the negative consequences of stress (i.e., toxic leadership). Hence, we propose that organizational commitment will

Figure 1. Proposed theoretical model.



act as a stress moderator and moderate the negative relationship between toxic leadership and safety performance. Based on the above arguments, the framework formulated is given in [Figure 1](#).

4. Methodology

The quantitative approach was adopted using primary data collected through questionnaire surveys. Data were collected from 219 site engineers working on different projects. We have used stepwise linear regression analysis and PROCESS Macro by Hayes (2013) as data analysis techniques. Out of 219 respondents, 75% of respondents were males. The minimum age of respondents was 22 years, with an average age of 38 years. The respondents had an average experience of 5.4 years and had completed at least three projects on average.

4.1. Instrumentation

A closed-ended, self-report questionnaire was used to gather responses. The questionnaire was divided into two sections; the first section was regarding the respondent's demographic information, and the second section was related to the variables present in the proposed model. All items presented in the scale except demographic information of respondents were measured on five points Likert scale where one was "strongly disagree" to 5 as "strongly agree." The toxic leadership scale consisted of fifteen items with five sub-dimensions, including self-promotion, abusive supervision, unpredictability, narcissism, and authoritarian leadership. Each dimension was measured with the help of three items. The toxic leadership scale was adopted from Schmidt (2008). The organizational commitment was measured with the help of six items adapted from Meyer and Allen (1991). Similarly, The safety performance was measured with the help of a seven-item scale adapted from Nealand Griffin, (2006).

4.2. Operational definitions

The operationalization was ensured by defining toxic leadership as systematic harm caused that impairs the organization to achieve its mission and is regarded as a dark side of leadership (Lipman-Blumen, 2005). It is also known as bad leadership and destructive leadership. Safety performance is seen as a level of safety ensured in an organization by avoiding accidents and reducing injury rates (Fernandez-Muniz et al., 2009). It is about safety compliance and participation in safety activities (Luz et al., 2018). Affective organizational commitment has substantial effects on individual outcomes. It is a social bond established between the individual and the

organization, pushing employees to pro-actively participate in organizational affairs (Menezes, 2009; Meyer & Allen, 1991).

4.3. Common method bias

We used various methods to control the potential common method bias. Firstly we ensured the anonymity of the respondents, and we assured the respondents of the confidentiality of their responses. Moreover, we asked them not to mention their personal identification information in the questionnaire. Furthermore, we obtained the respondent's consent before conducting the survey. These steps helped reduce social desirability bias. Secondly, we placed dependent and independent variables at separate positions in the questionnaire because placing the variables closely on the questionnaire could provide cues to the respondents by providing a common context. Hence, the correlation between the two might potentially be biased (Podsakoff et al., 2003). Thirdly, we used Harman's single factor test. The single factor in the un-rotated solution explained only 26.8% of the acceptable variance because it is less than 50% as per the statistical experts. Therefore the risk of common method bias was minimized.

5. Data analysis and results

5.1. Control variables

We have used the ANOVA test to identify the significance of the demographic variables with reference to the proposed variables. No. of projects completed was related to TLNA (F: 2.4; p: 0.04); OC (F:2.36; p: 0.04) and SP(F:2.33; p: 0.04). Education was significantly related to OC (F:6.4; p: 0.00). The experience was related to OC (F:4.44; p: 0.00). Age and gender were not significantly related to any variable. We have taken all demographic variables as control variables for further analysis.

5.2. Scale validation

The scale was validated with the help of confirmatory factor analysis. Confirmatory factor analysis (CFA) was conducted using AMOS 17. The confirmatory factor analysis, also called the measurement model, was run while taking all five dimensions of toxic leadership as a first-order construct. Two items (TLSP3 and TLNA3) were excluded from further analysis due to their cross-loading of these two items. The results of CFA provided acceptable model fit indices and are presented in [Table 1](#).

5.3. Reliability and validity

The reliability of scales was assessed with the help of Cronbach Alpha values and Composite Reliability. The results identified that values of both reliability measures were greater than the cut-off value of 0.70 (Nunnally & Bernstein, 1994). Similarly, validity was assessed with the help of convergent validity and AVE values. For convergent validity, all observed variables were successfully loaded (having regression weights greater than 0.70) into their respective latent construct. Similarly, the AVE of all variables was greater than the proposed cut-off value of 0.5. Results of reliability and validity analysis are presented in [Table 1](#).

Finally, the discriminant validity was assessed with the help of the criteria mentioned by Fornell and Larcker (1981). It was concluded that the values of AVE for all latent constructs presented in the proposed model were greater than the square of all correlations (shared variances) present in the correlation matrix. Hence, there was no issue of discriminant validity to report. Discriminant validity and correlation of latent constructs are presented in [Table 2](#).

5.4. Hypotheses testing

5.4.1. Stepwise linear regression analysis

We have treated all five dimensions of toxic leadership as separate independent constructs. We have used stepwise linear regression in SPSS to test the impact of these five dimensions of toxic leadership and organizational commitment on safety performance. In the first step, all control variables were entered, and in the second step, five dimensions of toxic leadership and moderator were entered.

Table 1. Results of confirmatory factor analysis

Construct/ Variable	Factor loadings	Alpha	CR	AVE
Toxic Leadership				
Self-Promotion		.84	.85	.73
TLSP1	.843			
TLSP2	.869			
Abusive Supervision				
TLAS1	.856	.90	.90	.76
TLAS2	.879			
TLAS3	.879			
Unpredictability				
TLUP1	.789	.89	.88	.72
TLUP2	.858			
TLUP3	.918			
Narcissism		.88	.88	.79
TLNA1	.883			
TLNA2	.859			
Authoritarian Leadership		.86	.86	.67
TLAL1	.827			
TLAL2	.810			
TLAL3	.826			
Organizational Commitment		.97	.97	.84
OC1	.907			
OC2	.898			
OC3	.936			
OC4	.930			
OC5	.921			
OC6	.906			
Safety Performance		.96	.96	.80
SP1	.904			
SP2	.824			
SP3	.891			
SP4	.924			
SP5	.895			
SP6	.911			
SP7	.893			

Goodness of fit Indices

$\chi^2 = 342.946$; d.f. = 278; $\chi^2/d.f. = 1.23$; $p < 0.001$; CFI = 0.99; GFI = 0.89; AGFI = 0.87; RMR = 0.05; RMSEA = 0.03

The results identified that out of five dimensions of toxic leadership, only abusive supervision (TLAS) ($B = -0.275$; $P < 0.01$) and narcissism (TLNA) ($B = -0.310$; $P < 0.01$) have a significant negative impact on safety performance in the presence of control variables and moderator. Similarly, OC also significantly impacted safety performance ($B = 0.152$; $P < 0.01$). The results of stepwise linear regression analysis are presented in [Table 3](#).

Table 2. Descriptive statistics and correlations

	Variable	No of items	Mean	s.d.	1	2	3	4	5	6	7
1	TLSP	2	3.96	1.00	.73						
2	TLAS	3	3.94	1.02	0.80 (.64)	.76					
3	TLUP	3	3.98	1.02	0.77** (.59)	0.78* (.61)	.72				
4	TLNA	2	3.89	1.02	0.80* (.64)	0.76* (.58)	0.77* (.59)	.79			
5	TLAL	3	2.64	0.84	0.01 (.000)	0.01 (.000)	0.10 (.01)	-0.02 (.000)	.67		
6	OC	6	2.41	1.21	-0.44 (.19)	-0.44 (.19)	-0.42 (.20)	-0.42 (.16)	-0.03 (.001)	.84	
7	SP	7	2.14	1.17	-0.66 (.44)	-0.56 (.31)	-0.61 (.347)	-0.66 (.44)	-0.06 (.004)	0.39 (.15)	.80

TLSP: Toxic Leadership (Self Promotion); TLAS: Toxic Leadership (Abusive Supervision); TLUP: Toxic Leadership (Unpredictability); TLNA: Toxic Leadership (Narcissism); TLAL: Toxic Leadership(Authoritarian Leadership) OC: Organizational Commitment; Shared variance in parenthesis; AVE in diagonal

*P < 0.01; ** P < 0.05; *** P < 0.10; s.d.: Standard deviation

Table 3. Stepwise linear regression

	DV: Safety Performance		
	Standardized coefficient	t-value	p-value
Step1 (Control Variables)			
Gender	0.081	1.197	0.23
Age	-0.020	-0.287	0.77
Education	-0.112	-1.640	0.10
Experience	-0.113	-1.581	0.12
No. of projects worked on	0.088	1.250	0.21
Step2 (Independent Variables)			
TLSP	0.032	0.347	0.73
TLAS	-0.275	-2.786*	0.01
TLUP	-0.115	-1.237	0.22
TLNA	-0.310	-3.401	0.00
TLAL	-0.045	-0.904	0.37
OC	0.152	2.491*	0.01
Model Fit			
F-value	20.34*		
R2	0.52		

TLSP: Toxic Leadership (Self Promotion); TLAS: Toxic Leadership (Abusive Supervision); TLUP: Toxic Leadership (Unpredictability); TLNA: Toxic Leadership (Narcissism); TLAL: Toxic Leadership(Authoritarian Leadership) OC: Organizational Commitment

* p < .01**p < .05***p < .10

5.4.2. Moderation analysis

PROCESS Macro (extension in SPSS) by Hayes (2013) was used to test the moderation hypothesis. The use of PROCESS Macro by Hayes (2013) was preferred over simple regression analysis using interaction terms and structural equation modeling because of its robustness. PROCESS Macro uses a bootstrapping approach with biased corrected 95% confidence intervals and calculates the Johnson-Neyman outputs for the interaction term. Model No 1. of PROCESS Macro was used

where the variables that define product terms were first to mean-centered. Conditioning values at mean and $\pm 1SD$ and Johnson-Neyman outputs for the interaction term for the interaction graph were also calculated. We have used PROCESS Model No1 for the toxic leadership, two dimensions identified as significant for safety performance (TLAS and TLNA). The results of PROCESS Model 1 are presented in Table 4.

The results identified that the interaction terms for TLAS and TLNA were significant, and there was no zero in the lower and upper bound of 95% confidence interval. We plotted an interaction graph for low and high (Mean \pm SD) organizational commitment values for TLAS and TLNA. The interaction graph of TLAS and safety performance relationship (Shown in Figure 2) suggests that the relationship is significant for organizational commitment. The slope test shows that the presence of organizational commitment dampens the TLAS and safety performance relationship. That is, the negative relationship between TLAS and safety performance is lessened or weakened in the presence of organizational commitment.

The interaction graph of TLNA and safety performance relationship (Shown in Figure 3) suggests that this relationship is significant for organizational commitment. The slope test shows that the presence of organizational commitment dampens the TLNA and safety performance relationship. The negative relationship between TLNA and safety performance is lessened or weakened in the presence of organizational commitment.

6. Discussion

In the current investigation, we have assessed the impact of five dimensions of toxic leadership on the safety performance of site managers working in the oil and gas sector of Pakistan. Based on conservation of resource (COR) theory, we have integrated organizational commitment as a stress moderator. Our model proposes that toxic leadership diminishes safety performance and organizational commitment acts as a buffer such that it attenuates the harmful effects of toxic leadership on safety performance. We found good support for the hypotheses related to two out of five

Table 4. 5000 bootstrap results for PROCESS Model No.1 simple moderation analysis

	DV: SP				DV: SP			
	Estimate	SE	LL 95% CI	UL 95% CI	Estimate	SE	LL 95% CI	UL 95% CI
Gender	0.0809	0.138	-0.191	0.353	0.0956	0.1350	-0.171	0.362
Age	-0.0001	0.002	-0.004	0.004	-0.0007	0.0021	-0.005	0.003
Education	0.1915**	0.078	-0.345	-0.038	-0.2187*	0.0767	-0.370	-0.068
Experience	-0.0237	0.031	-0.084	0.037	-0.0292	0.0299	-0.088	0.030
No. of projects worked on	-0.1071	0.066	-0.023	0.237	0.1578**	0.0649	0.030	0.286
TLAS	-0.552*	0.083	-0.715	-0.389				
TLNA					-0.5410*	0.0781	-0.695	-0.387
OC	0.1391*	0.063	0.015	0.263	0.1581*	0.0607	0.038	0.278
TLAS* OC	0.1115**	0.050	0.211	0.012				
TLNA* OC					0.1110**	0.0473	0.204	0.018
Model Fit								
F-value	24.57*				25.88*			
R2	0.48				0.49			
R2 Change	0.012**				0.013**			

Toxic Leadership (Abusive Supervision); TLNA: Toxic Leadership (Narcissism); OC: Organizational Commitment

* $p < .01$ ** $p < .05$ *** $p < .10$

Figure 2. Interaction effects of abusive supervision (toxic leadership) and organizational commitment on safety performance.

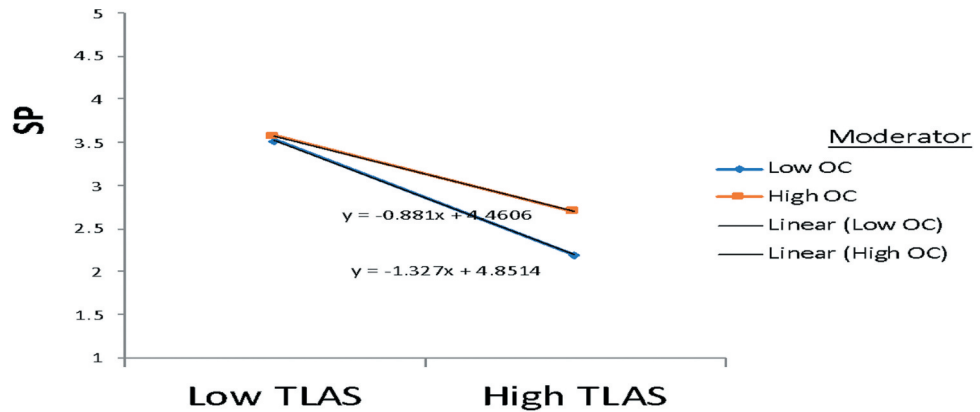
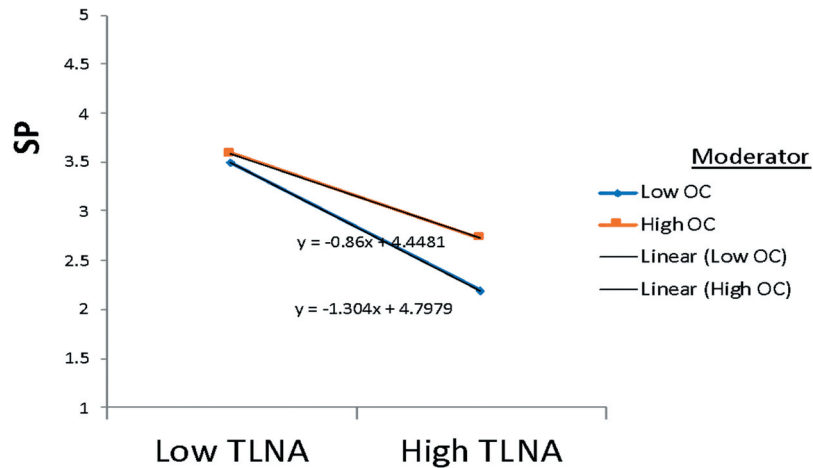


Figure 3. Interaction effects of narcissism (toxic leadership) and organizational commitment on safety performance.



dimensions of toxic leadership (abusive supervision and narcissism). Our results are consistent with the past finding related to the negative impact of toxic leadership on safety performance (Winn and Dykes, 2019).

The toxic leader took credit for the achievements of others without appreciating followers/employees, thus mutilating their rights and create an environment of mistrust and a stressed work environment (Aboiyassin & Abood, 2013). The toxic leader focused only on promoting himself instead of caring for others and sharing ideas with others. They are narcissists, and their behavior is unpredictable. They use abusive and authoritative supervision. In connection to the above, these leaders drastically changed their mood while dealing with the subordinates and are least interested in listening to the follower’s requirements, problems, and suggestions (Watt et al., 2016). This results in the shattering of morale of the employees while causing decreased safety performance.

Another aspect of a leader’s toxicity can be linked to the hostile environment of competition that might hamper the safety performance of employees (Skeepers & Mbohwa, 2015). Further such leaders control work-related information and decision-related matters (Y. Chen & Huang, 2016). The resources accumulated at one place may defer the safety tasks to be performed at the appropriate time and place. Similarly, the toxic leader’s undue assignments may influence employees’ attention to safety measures (Hogan & Hogan, 2001).

Our results also showed that organizational commitment is positively related to the safety performance of site engineers. This result corroborated previous studies related to employee performance (Ahmad et al., 2010, Hettiarachchi & Jayaeathua, 2014; Meyer et al., 1989; Riketta, 2002; Wright & Bonett, 2002). Similarly, the results are also consistent with the findings of Zia ud and Khan (2010). They have investigated the commitment and performance relationship while using data from employees of the oil and gas sector of Pakistan.

Organizational commitment was also found to have moderating effects on the two (abusive supervision and narcissism) out of five dimensions of toxic leadership and safety performance relationships. For abusive supervision and narcissism, we are able to show that employees with higher organizational commitment are capable of managing the negative impact of abusive supervision and narcissism on safety performance. We also found support for the idea that when abusive supervision and narcissism are high, individuals with low organizational commitment will show lower levels of safety performance. This finding is consistent with the literature where organizational commitment has been identified as a work stress moderator (Begley & Czajka, 1993; Cohen et al., 1992; Mathieu & Zajac, 1990; Mowday et al., 1982; Siu, 2003; Somers, 1995).

7. Managerial implications

The toxicity in the organizations can be decreased, if not eradicated, by using various mechanisms such as whistle-blowing, a mechanism for reporting the organization's misconduct unanimously (Lin, 2012; Longenecker & Fink, 2014). The negativity of the leader's behavior may lead to heavy losses and irredeemable damage to an organization (Kines et al., 2010; Lacida, 2012). The organizational policy-makers have to think about removing toxicity for achieving effectiveness. It might be possible when the leaders are selected for appointment as heads of any organization or department.

Any action to improve employees' organizational commitment will lead to team cohesiveness (DeArmond et al., 2018), which enhances the safety performance of engineers and ultimately will bring positive outcomes. However, the presence of toxicity, the dark side of leadership (Watt et al., 2016), in the form of self-promotion, abusive supervision, unpredictability, narcissism, and authoritarian leadership, may develop a stressful workplace. Moreover, stress always has negative consequences for both the employee and the organization.

Similarly, organizational commitment has been identified as an important psychological resource for employees to fight back the stressful situations created by toxic leaders while maintaining their safety performance. Hence, it is recommended that managers and organizations should focus on improving the organizational commitment of their employees. The committed employees will be a resource for an organization that can help in developing a competitive edge by eliminating safety problems from their work environment and ensuring error-free practices.

8. Limitations and future research directions

The study employed a cross-sectional data collection design by using self-report questionnaires that were likely to generate common method variance. We used Harman's single factor test to rule out the issue of common method variance (Podsakoff et al., 2003). However, it is recommended that future investigations can overcome this by using multiple data collection sources and longitudinal data collection design. The sample size was 219 that may be enhanced for future examinations to reap better results. Although the current study revealed meaningful results, adding constructs to either side of the model may bring interesting insights. The current investigation studied organizational commitment as a moderator. Future studies can test job satisfaction, work engagement, etc., as stress moderators. The perceptual nature of measures may also limit the generalizability of the results. Similarly, it may be more interesting to examine whether toxicity also prevails at the employee's side or only the leaders can affect the performance of employees working under them. Further, it will be of more concern to the researchers and practitioners to find out why leaders are being toxic and advise how to control and manage this.

9. Conclusion

Ensuring safety is a concern for organizational leaders across Asia. The positive aspects of leaders have been highlighted earlier whereas, the negative aspects are ignored. To fill this gap, the relationship between toxic leadership and employee safety performance is examined empirically. The leader's with negative behaviors (toxicity), lack of concern for others and self-centered behavior, negatively affects safety performance whereas the committed employees are less likely affected by this negativity. This study calls for more attention of the policymakers to curb out toxicity/abusiveness to boost safety performance. Additionally, committed employees can decrease the adverse effects of toxic behaviors by fully concentrating on their work and meeting the organizational targets.

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