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Abusive Supervision and Narcissism as Predictors of Safety Performance: Organizational Commitment as a Stress Buffer in Pakistan's Oil and Gas Sector

Linda Hoffman[1]*, Bernd Keller[1]

1. Department of Leadership Studies, Faculty of Economics, University of Amsterdam, Amsterdam, Netherlands.

Abstract

Maintaining safety is essential for achieving long-term stability, particularly within the oil and gas field. This research investigates how five forms of toxic leadership influence the safety behaviors of engineers employed by Oil and Gas Companies. Using social learning theory together with conservation of resources theory, the study introduces an integrated conceptual model. Data were gathered through a cross-sectional survey of 219 male and female engineers working on-site in oil and gas organizations across Pakistan. The findings indicated that among the five toxic leadership traits, only abusive supervision and narcissism significantly undermined safety outcomes. Moreover, organizational commitment functioned as a protective factor, weakening the adverse relationship between these toxic traits and safety performance.

Keywords: Organizational commitment, Safety behavior, Narcissism, Abusive supervision, Unpredictability, Self-promotion.

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Corresponding author: Linda Hoffman
E-mail ✉ linda.hoffman.academic@gmail.com

Introduction

The International Labour Standard [1] estimated that roughly two million individuals die each year from work-related causes, averaging about 5,500 deaths every day worldwide. Major incidents such as the Deepwater Horizon explosion in 2010 and the Costa Concordia sinking in 2012 demonstrate inadequate workplace safety systems [2]. Scholars have long sought to identify ways to reduce these occupational accidents and enhance employees' safety-related actions, as such events affect not only workers but also organizations and communities [3, 4]. Safety performance encompasses "behaviors that individuals engage in across various professions to maintain the protection and well-being of coworkers, clients, the public, and the environment" [5]. It is a vital aspect of job performance that directly predicts the likelihood of accidents [6]. Research shows a strong negative link between safety performance and accident rates [3], while neglecting safety practices leads to more workplace incidents [4].

Both organizational culture and leadership behavior are key determinants of safety performance [3, 4]. Because of this, scholars and organizations have increasingly examined leadership's role in influencing outcomes at both individual and organizational levels [7-9]. Leadership is widely recognized as a major factor shaping workplace safety [10, 11]. However, as Conger [12] pointed out, leadership also has a "dark side." Excessive demands or unfair expectations from supervisors [13] can create job strain, increase errors, and lower organizational performance [14]. Hence, it becomes crucial to explore how destructive leadership behaviors contribute to reduced safety outcomes. Although positive leaders can promote a safety-oriented culture [15], there is still a limited understanding of how toxic leadership relates to safety behaviors.

Watt *et al.* [16] observed that leadership positions may naturally foster toxic tendencies. Modern organizations function in environments marked by volatility, uncertainty, complexity, and ambiguity (VUCA), where some leaders exploit their power for personal benefit. Lacida [17] described such leaders as lacking self-awareness and control, driven by self-interest, and indifferent to the welfare of others. Their behavior often mirrors autocratic tendencies—being rigid, self-absorbed, and dismissive [18]. When managers focus on personal agendas instead of organizational objectives, employees may respond with disengagement or unsafe behaviors, ultimately lowering safety standards. Toxic leaders often display verbal and nonverbal hostility that erodes morale, dignity, and self-confidence among workers, cultivating a hostile and exploitative environment [19]. Recognizing and addressing these harmful dynamics is therefore as critical as studying the constructive side of leadership.

Identifying elements that can soften the damaging influence of toxic leadership on employee safety conduct is vital. Studies have repeatedly demonstrated that stronger organizational commitment correlates with higher performance outcomes and weaker commitment corresponds to lower productivity [20-23]. When employees are genuinely attached to their organization, they contribute more effectively to achieving collective goals. Their sense of commitment also drives participation in workplace learning and professional development activities [24, 25], which in turn supports safer work practices. Since toxic leadership typically generates psychological strain and job-related stress, factors like commitment and positive attitudes can act as internal moderators of such tension [26]. Prior evidence confirms that commitment helps reduce the impact of stressors within occupational settings [26, 27]. Hence, this study argues that highly committed employees tend to interpret stressful experiences caused by toxic leadership less negatively. Organizational commitment, therefore, serves as a protective mechanism that weakens the detrimental link between toxic leadership and safety outcomes.

This research contributes to the ongoing discussion on safety performance in three notable ways. First, earlier studies have explored safety across multiple industries—municipal operations [28], construction [29-31], healthcare [32, 33], and education [29, 34]—yet limited work addresses engineers in oil and gas organizations. As oil and gas extraction remains one of the most hazardous occupational environments [35], leadership behaviors in this sector can critically affect employees' mental states and misconduct frequency [19]. Establishing a framework to counteract the consequences of toxic leadership is therefore necessary.

Second, since most existing evidence arises from Western contexts, examining this framework in a developing nation like Pakistan broadens its relevance. Developed economies generally enforce stricter safety standards, while developing economies often lack equivalent regulatory enforcement. Numerous studies recognize that leaders strongly shape how employees think and act, as workers depend on their superiors for information, direction, and resources. Subordinates tend to model their leaders' ethics and behavior, which can enhance or erode performance [19, 36]. However, an increasing body of research notes that abusive leadership has become widespread, contributing to emotional exhaustion and counterproductive work behaviors [37]. These patterns highlight the need to understand how social and cultural contexts interact with leadership toxicity and influence employee and organizational well-being. Finally, the current study positions organizational commitment as a boundary variable moderating the adverse connection between toxic leadership and safety performance.

Literature review

Toxic leadership and safety performance

Toxic leadership is often described as a destructive influence that diminishes employees' confidence and detaches them from their work roles [8, 38]. While leadership is typically viewed as a source of motivation and inspiration [39], attention has shifted toward leaders whose negative behaviors reduce efficiency at both individual and organizational levels [16, 40]. Within oil and gas enterprises, leaders significantly determine the safety culture that governs operational behavior. Social learning theory illustrates that employees often emulate their supervisors' conduct and adopt their behavioral cues. Past studies [39, 41, 42] show that effective leadership—such as transformational or ethical leadership [9]—enhances motivation and safety adherence among teams.

Clarke [43] proposed that refining leadership practices is a direct path to improved occupational safety. This aligns with the idea that transformational leaders strengthen safety awareness by guiding and inspiring employees [28]. Similarly, McCaughey *et al.* [44] emphasized the necessity of safety-centered leadership for shaping safety perception. Dartey-Baah and Addo [39] demonstrated that charismatic and corrective leadership positively predict engineers' safety compliance and recommended additional investigation of other leadership styles and their link to safety behavior. Conversely, toxic leaders cultivate hostility through self-centeredness and disregard for others, which damages the social and operational environment [45]. Their behavior undermines productivity and well-being. Lipman-Blumen [46] described toxic leadership as behavior that attacks subordinates' self-worth, ability, and emotional stability, creating persistent workplace tension. Likewise, such toxicity undermines creativity, satisfaction, and goal achievement [47]. Employees faced with unrealistic demands from toxic superiors often fail to meet performance expectations [23].

Negative and pervasive outcomes of toxic leadership

A toxic leader fosters a damaging organizational atmosphere that generates widespread negative outcomes. The resulting environment becomes tense and psychologically demanding, diminishing both employee health and work output [48]. Such leaders intensify workplace strain and impair collective efficiency. In some cases, they selectively permit individuals to overlook safety practices, or worse, manipulate these procedures to achieve self-serving goals. This leniency toward unsafe conduct [48] directly undermines employees' safety behaviors. Schmidt [49] categorized toxic leadership into five main traits: self-promotion, abusive supervision, unpredictability, narcissism, and authoritarianism. The present study evaluates the independent effects of each of these dimensions. Therefore, the hypotheses are stated as follows:

Hypothesis 1a: Self-promotion (toxic leadership) negatively influences engineers' safety performance.

Hypothesis 1b: Abusive supervision (toxic leadership) negatively influences engineers' safety performance.

Hypothesis 1c: Unpredictability (toxic leadership) negatively influences engineers' safety performance.

Hypothesis 1d: Narcissism (toxic leadership) negatively influences engineers' safety performance.

Hypothesis 1e: Authoritarian leadership (toxic leadership) negatively influences engineers' safety performance.

Organizational commitment and safety outcomes

Highly committed workers tend to show greater initiative and persistence, aligning their motivation with organizational visions and goals [50], which enhances their output and effectiveness [51]. Dirani [52] noted that the degree of employee commitment is a strong determinant of productivity. Numerous theoretical and empirical studies have validated the positive association between commitment and employee performance [53-56]. In the oil and gas sector of Pakistan, Zia ud and Khan [57] similarly observed that organizational commitment has a significant and favorable effect on employee job performance. According to Cesário and Chambel [21], organizational commitment and engagement serve as foundational factors for handling complex work settings. Higher degrees of commitment and engagement result in stronger individual performance. Hettiarachchi and Jayaeathua [54] further pointed out that when commitment is elevated, employees exhibit beneficial behaviors such as loyalty, retention intention, and improved productivity. Conversely, low commitment may trigger indifference and neglect [58], which in turn decreases safety performance. Following this reasoning, stronger commitment levels are expected to improve adherence to safety standards [28]. Hence, the following hypothesis is presented:

Hypothesis 2: Organizational commitment positively affects the safety performance of engineers.

Organizational commitment as a moderating variable

Mowday *et al*. [59] defined organizational commitment as the extent of an employee's emotional attachment and involvement in their organization (p. 26). It encompasses three elements: (1) identification with goals, (2) willingness to exert effort, and (3) desire to maintain membership [26]. Toxic leadership, which fosters stress and dysfunction, makes commitment a relevant moderating mechanism [26, 27, 59-61]. Commitment buffers the impact of stress on well-being and performance [26], such that low commitment intensifies stress effects.

From the Conservation of Resources (COR) theory perspective [62], stress develops when individuals lack sufficient mental or physical resources to handle challenges. Commitment operates as a cognitive asset that enables employees to counteract the strain caused by toxic supervision. COR theory also posits that individuals with greater internal resources are more resilient under stress. Therefore, organizational commitment provides a defense mechanism that helps employees regulate emotions, recognize frustration from toxic leaders, and deploy adaptive coping behaviors [63]. Adequate personal resources also prevent burnout and sustain task accomplishment [64]. Despite its moderating significance, few investigations have explored how commitment mitigates toxic leadership's effects. Drawing from COR theory, it is proposed that organizational commitment, as a psychological resource, weakens the detrimental influence of toxic leadership on safety outcomes. Hence, the hypothesis is:

Hypothesis 3: Organizational commitment moderates the association between toxic leadership and engineers' safety performance.

Theoretical framework

The proposed conceptual framework integrates insights from social learning theory and the conservation of resources (COR) theory. Social learning theory suggests that individuals observe and emulate their leaders' behaviors, meaning that toxic leadership can diminish employees' safety practices and heighten workplace tension. In line with COR theory, personnel who possess greater psychological or physical resources—such as a strong sense of organizational commitment—are more capable of resisting the harmful effects of stress caused by toxic supervision. Consequently, organizational commitment is anticipated to function as a stress-buffering mechanism that weakens the negative relationship between toxic leadership and safety performance. The structure of the proposed framework is displayed in **Figure 1**.

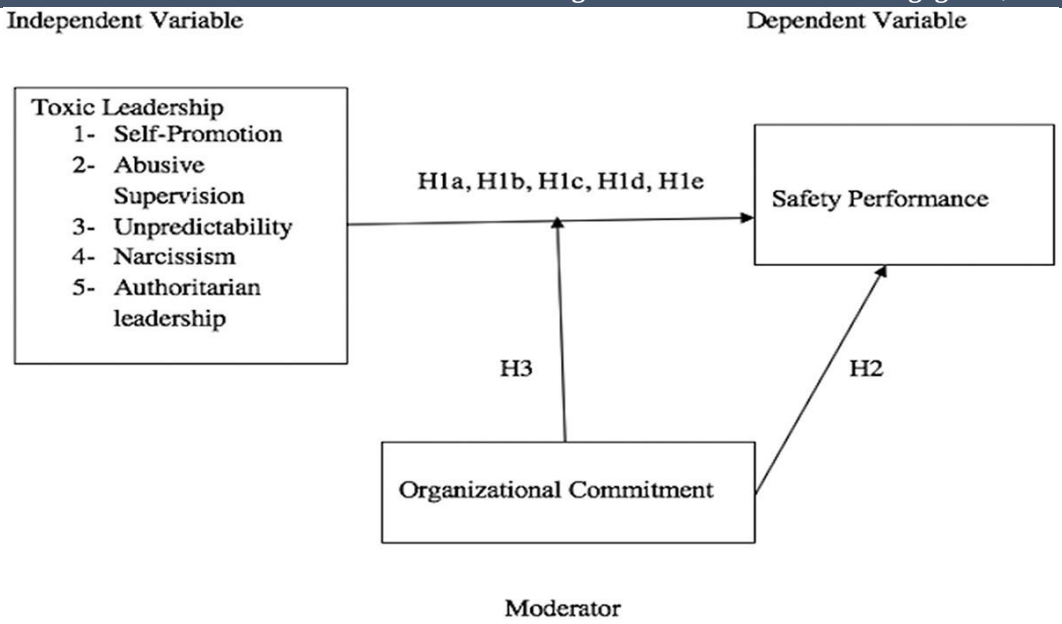

Figure 1. Proposed theoretical model

Materials and Methods

A quantitative research design was employed using primary data gathered via structured questionnaire surveys. The sample included 219 site engineers working across multiple project sites. For data analysis, we used stepwise linear regression and Hayes' PROCESS Macro (2013). Of all respondents, 75% were male, the minimum age was 22 years, and the average age was 38 years. Participants had a mean professional experience of 5.4 years and had each completed at least three projects on average.

Instrumentation

A self-administered, closed-ended questionnaire served as the data collection instrument. It consisted of two parts: the first gathered demographic information, and the second measured the study constructs. All measurement items (excluding demographics) used a five-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree."

The toxic leadership construct contained 15 items divided into five subdimensions—self-promotion, abusive supervision, unpredictability, narcissism, and authoritarianism—with three items per dimension, adapted from Schmidt [49].

Organizational commitment was assessed using six items adapted from Meyer and Allen [65], while safety performance was captured with a seven-item scale adapted from Neal and Griffin [22].

Operational definitions

To ensure conceptual precision, constructs were operationalized as follows:

- Toxic leadership refers to persistent harmful behavior that obstructs organizational objectives and is recognized as the destructive or "dark" facet of leadership [46].
- Safety performance denotes the level of organizational safety achieved through accident prevention and injury reduction [66]. It encompasses compliance with safety procedures and active participation in safety-related initiatives [67].
- Affective organizational commitment represents the emotional attachment between employees and their organization, fostering proactive involvement and alignment with organizational goals [65, 68].

Common method bias

Several procedural and statistical measures were employed to minimize potential common method bias (CMB).

First, respondents were assured of anonymity and confidentiality, and were instructed not to include any identifying details. Consent was obtained prior to data collection to reduce social desirability effects.

Second, the independent and dependent variables were presented in separate sections of the questionnaire to prevent respondents from inferring links between them, thus limiting contextual bias [69].

Finally, Harman's single-factor test was conducted, and the unrotated single-factor solution accounted for 26.8% of the total variance—well below the 50% threshold, confirming that CMB was not a concern.

Results and Discussion

Control variables

An ANOVA test was performed to determine the statistical significance of demographic variables in relation to the study constructs.

The number of projects completed was significantly associated with TLNA (F = 2.4, p = 0.04), OC (F = 2.36, p = 0.04), and SP (F = 2.33, p = 0.04).

Education correlated significantly with OC (F = 6.4, p = 0.00) and experience with OC (F = 4.44, p = 0.00). However, age and gender showed no significant association with any variables. All demographic variables were therefore retained as control variables for subsequent analyses.

Scale validation

Scale validity was established using Confirmatory Factor Analysis (CFA) performed in AMOS 17. The measurement model included all five toxic leadership dimensions as first-order constructs.

Two items—TLSP3 and TLNA3—were removed due to cross-loading issues. The CFA outcomes demonstrated acceptable model-fit indices, which are presented in **Table 1** below.

Table 1. Results of Confirmatory Factor Analysis

Construct/Variable	Factor loadings	Alpha	CR	AVE
Toxic Leadership				
Self-Promotion		.85	.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; χ^2/d.f. = 1.23; $p < 0.001$; CFI = 0.99; GFI = 0.89; AGFI = 0.87; RMR = 0.05; RMSEA = 0.03

Reliability and validity

The consistency of the measurement scales was evaluated using Cronbach's alpha coefficients and composite reliability (CR) indicators. The analysis showed that both measures exceeded the accepted minimum criterion of 0.70 [70]. In addition, construct validity was verified through convergent validity and Average Variance Extracted (AVE) indices. All observed variables demonstrated satisfactory loadings on their intended latent constructs, with standardized regression weights above 0.70. Furthermore, each AVE value was higher than the benchmark level of 0.5, confirming adequate convergent validity. The summarized outcomes of these reliability and validity assessments are provided in **Table 1**.

For discriminant validity, the approach of Fornell and Larcker [71] was applied. The findings revealed that the AVE values of each latent variable within the conceptual framework were greater than the squared correlations (shared variances) reported in the correlation matrix. Therefore, no evidence of discriminant validity concerns was found. The detailed results for discriminant validity and inter-construct correlations are presented in **Table 2**.

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 (.37)	−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 variances are indicated in parentheses, and AVE values appear on the diagonal.

*p < 0.01; **p < 0.05; ***p < 0.10; s.d. = Standard deviation

Hypothesis testing

Stepwise linear regression analysis

The five dimensions of toxic leadership were treated as distinct predictor constructs. To evaluate their individual and collective influence, a stepwise linear regression was performed in SPSS. During the first stage, control variables were introduced, followed in the second stage by the five toxic leadership factors and the moderating variable.

The regression results indicated that two out of five toxic leadership traits—Abusive Supervision (TLAS) ($B = -0.275$; $p < 0.01$) and Narcissism (TLNA) ($B = -0.310$; $p < 0.01$)—exerted significant negative effects on safety performance after accounting for controls and moderation. Furthermore, Organizational Commitment (OC) displayed a positive and statistically significant impact ($B = 0.152$; $p < 0.01$). The detailed regression outcomes are summarized in **Table 3**.

Table 3. Stepwise linear regression results

	Standardized coefficient	t-value	p-value
DV: Safety Performance			
Step 1 (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
Step 2 (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*		
R^2	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

Moderation analysis

The moderating effects were analyzed using the PROCESS Macro for SPSS, developed by Hayes [72]. This analytical tool was selected instead of conventional regression with interaction terms or SEM, given its enhanced precision and flexibility. The macro utilizes bootstrapping procedures with bias-corrected 95% confidence intervals (CIs) and provides Johnson–Neyman (J-N) outputs for interaction effects.

Model 1 of the PROCESS Macro was employed, with predictor variables mean-centered before forming interaction terms. The analysis computed conditional values at the mean and ±1 standard deviation, along with Johnson–Neyman regions of significance for the moderation graphs. This model was applied specifically to the two toxic leadership components that significantly affected safety performance in the regression phase (TLAS and TLNA). The bootstrapped results based on 5000 samples are reported in **Table 4**.

Table 4. 5000 bootstrap estimates for PROCESS Model No. 1 (simple moderation)

	Model 1				Model 2			
DV: Safety Performance (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	0.012	0.211				
TLNA × OC					0.1110**	0.0473	0.018	0.204

Model Fit	**Model 1**	**Model 2**
F-value	24.57*	25.88*
R^2	0.48	0.49
ΔR^2	0.012**	0.013**

TLAS = Toxic Leadership (Abusive Supervision); TLNA = Toxic Leadership (Narcissism); OC = Organizational Commitment.
*p < .01; **p < .05; ***p < .10

The moderation results indicated that the interaction terms for TLAS and TLNA were significant, as the lower and upper bounds of the 95% CIs did not cross zero. Interaction graphs were generated for low and high organizational commitment (Mean ± SD) conditions.

As shown in **Figure 2**, the interaction between Abusive Supervision (TLAS) and safety performance was significantly influenced by organizational commitment. The slope test confirmed that higher levels of commitment diminish the negative association between TLAS and safety performance, meaning that the adverse influence of abusive supervision weakens when organizational commitment is stronger.

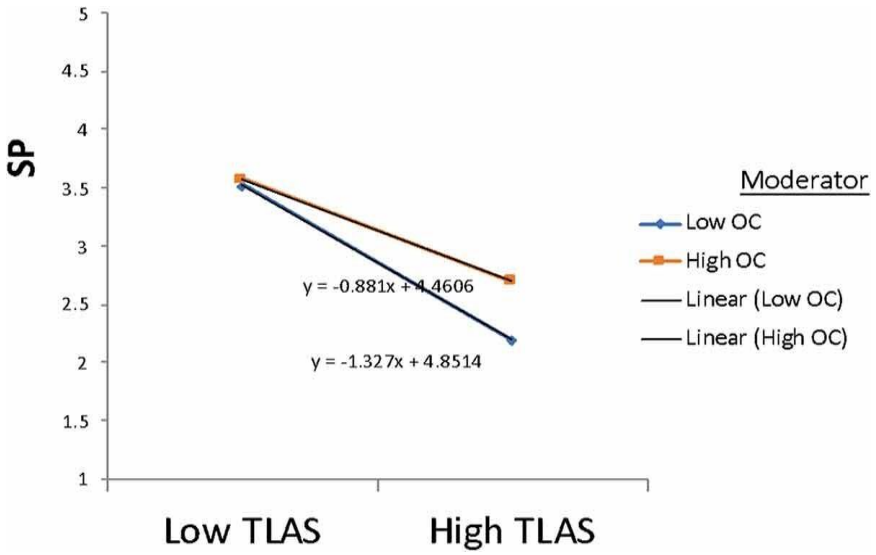

Figure 2. Moderating effect of organizational commitment on the TLAS–safety performance relationship

Similarly, the interaction graph for Narcissism (TLNA) and safety performance **(Figure 3)** indicated that organizational commitment plays a buffering role. The slope analysis revealed that elevated organizational commitment reduces the detrimental impact of TLNA on safety performance. Hence, the negative association becomes less pronounced under conditions of high commitment.

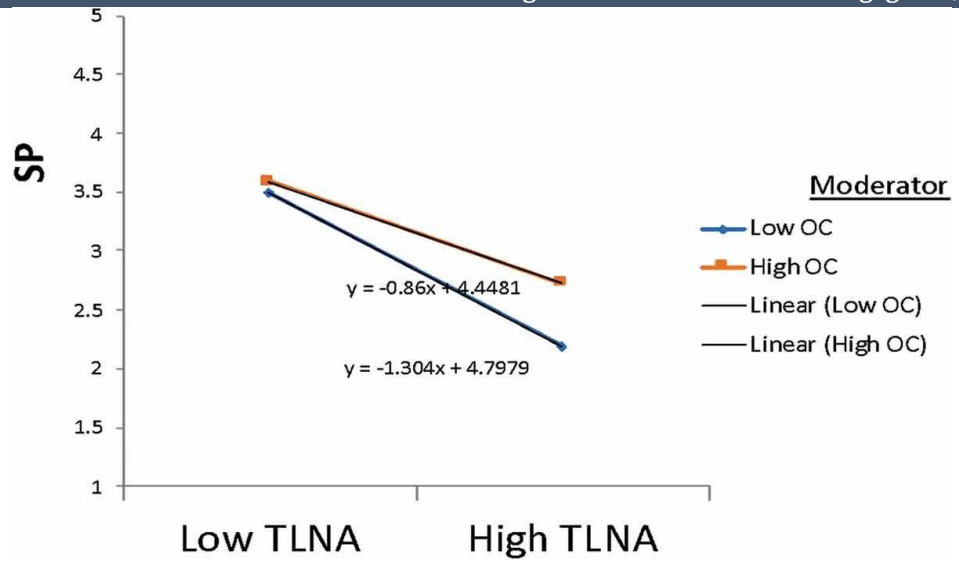

Figure 3. Moderating effect of organizational commitment on the TLNA–safety performance relationship

The present study examined how the five facets of toxic leadership influence the safety performance of site managers employed in Pakistan's oil and gas industry. Grounded in the Conservation of Resources (COR) theory, this research incorporated organizational commitment as a stress-buffering variable. The conceptual model proposed that toxic leadership deteriorates safety performance, while organizational commitment mitigates these adverse effects. The empirical findings supported the hypotheses for two dimensions of toxic leadership—abusive supervision and narcissism—which displayed significant negative associations with safety performance. These results align with earlier studies highlighting the detrimental impact of toxic leadership on employees' safety outcomes [48].

Toxic leaders tend to claim credit for subordinates' achievements, disregard employee contributions, and create distrustful, stressful workplaces [7]. Such leaders often focus on self-promotion rather than collaboration, display narcissistic and unpredictable tendencies, and adopt abusive or authoritarian management styles. Their erratic behavior and unwillingness to address followers' needs or feedback can lower morale and, consequently, reduce safety performance [16].

A further manifestation of toxicity arises from fostering excessive competition, which can hinder safe practices [45]. Moreover, toxic leaders frequently monopolize information and centralize decision-making [73], resulting in delayed or neglected safety actions. Additionally, unrealistic demands from such leaders can divert employees' focus from safety obligations [13].

Findings also revealed a positive relationship between organizational commitment and the safety performance of site engineers. This is consistent with prior literature connecting commitment to improved job outcomes [53-56, 74]. Similar evidence from Zia ud and Khan [57] confirmed this association in Pakistan's oil and gas workforce.

Furthermore, organizational commitment significantly moderated the links between abusive supervision and safety performance as well as narcissism and safety performance. Employees demonstrating high commitment appeared better equipped to withstand the negative consequences of these toxic leadership styles. Conversely, individuals with low organizational commitment exhibited reduced safety performance when exposed to high levels of abusive or narcissistic supervision. These outcomes align with the extensive literature identifying commitment as a stress-buffering mechanism [26, 27, 59-61, 75].

Managerial implications

Reducing workplace toxicity requires systematic approaches such as whistle-blowing systems, which allow employees to report unethical conduct anonymously [14, 76]. Persistent negative leadership can cause serious organizational damage and long-term performance losses [17, 29]. Therefore, policymakers must prioritize eliminating toxic leadership behaviors when selecting and appointing leaders to ensure effectiveness and safety.

Enhancing organizational commitment can strengthen team cohesion [28], improving engineers' safety performance and overall productivity. However, the presence of toxic leadership traits—self-promotion, abuse, unpredictability, narcissism, and authoritarian control—creates stressful conditions that harm both individuals and organizations [16].

Organizational commitment serves as a psychological asset enabling employees to maintain safety performance despite the strain caused by toxic leaders. Thus, managers should implement strategies that foster commitment among their teams. A highly committed workforce functions as an organizational resource, helping to reduce safety risks, prevent operational errors, and promote a healthier work environment.

Limitations and future research directions

This study employed a cross-sectional design and relied on self-administered questionnaires, which may have introduced common method variance. To address this, Harman's single-factor test was applied [69]. Nevertheless, future research should consider multi-source data and longitudinal designs to enhance validity. The sample size of 219 participants could also be expanded in future studies for broader generalization.

Although meaningful insights were obtained, adding more variables to either side of the model may uncover further dimensions. This study tested organizational commitment as a moderator; subsequent work could explore alternative moderators such as job satisfaction or work engagement. Because the data were perceptual, findings should be interpreted cautiously. Future research could also examine whether toxic behaviors exist among employees themselves or whether toxicity is solely leader-driven. Moreover, exploring why leaders exhibit toxic behaviors and developing methods to prevent and manage such tendencies would contribute valuable practical and theoretical understanding.

Conclusion

Maintaining safety remains a critical concern for organizations across Asia. While the positive facets of leadership have received considerable attention, the destructive side has often been overlooked. This study empirically investigated how toxic leadership behaviors undermine employee safety performance. Leaders exhibiting self-centeredness and a lack of empathy negatively affect workplace safety; however, employees with strong organizational commitment are less vulnerable to these detrimental effects.

The findings emphasize the need for policy interventions aimed at reducing toxic behaviors and promoting supportive work climates. Additionally, committed employees play a vital role in counteracting the negative impact of toxic leaders by maintaining focus, adhering to safety standards, and achieving organizational objectives.

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