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Soft TQM Practices with Transformational Leadership in SMEs of Developing Country

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ABSTRACT

This research focuses on small medium enterprises (SMEs) of central Punjab, Pakistan, from the perspective of soft total quality management (TQM) practices. This study aims to assess the impact of continuous improvement, employee involvement, top management commitment, employee empowerment, teamwork, appraisal system, employee training, and employee satisfaction on work performance in the context of effort and quality with the moderating role of transformational leadership. Data were taken from 637 employees from 361 SMEs from three districts including Gujrat, Gujranwala, and Sialkot. Our results claimed that continuous improvement, employee involvement, employee empowerment, teamwork, appraisal system, top management commitment, employee training and employee satisfaction have significant positive effects on work performance. Similarly, transformational leadership positively moderates the relationship between continuous improvement, appraisal system, employee satisfaction, and employee training with work performance and strengthens these associations, contributing to the enhancement of SMEs. Moreover, transformational leadership negatively moderates the association of employee involvement, employee empowerment, top management commitment, and teamwork with work performance, which weakens the associations between these variables. All these soft TQM practices played a major role in the performance of SMEs, but transformational leadership is favorable with following soft TQM practices that involve continuous improvement, appraisal system, employee satisfaction, and employee training but unfavorable with employee involvement, employee empowerment, top management commitment, and teamwork. SMEs must prioritize the soft TQM practices in all conditions to maximize their performance. Findings revealed that by managing conflict between employees and customers, organizational leadership can improve the quality of the customer-company relationship and lead to customer loyalty.

Today's dynamic and competitive environment requires that manufacturing companies harness the full potential of their employees to come up with innovative ideas and make timely decisions (Aithal, 2023; Pun et al., 2001). In manufacturing enterprises, elective involvement practices may result in increased employee satisfaction, product quality, and productivity (Abu-Rumman et al., 2022; Hosseini et al., 2022; Pun et al., 2001). Employee involvement may act as a framework for quality efforts and strategy development, as well as ensure that organizational activities adhere to quality standards that are adhered to by all employees (Faeq, 2022; Foster, 2017). It thus subsequently assists in designing, developing, implementing, and managing TQM-oriented systems (Foster, 2017). When proper and effective lean management practices are implemented in the organization, quality, and higher organizational performance are experienced (Akanmu et al., 2023; McIntosh et al., 2014). Soft total quality management (TQM) practices have a constructive and effective effect on work performance and innovative work behavior (Vihari et al., 2022). TQM serves as a long-term strategic practice for organizational development with proper and effective implementation (Sandelands, 1994a; Wassan et al., 2022).

In organizations, implementation of TQM practices with strategic integration of all principles efficiently and effectively increases work performance (Abdullah, 2010; Bahia et al., 2023; Kaur et al., 2013). Application of TQM practices effectively and efficiently enhanced people management, strategic management, performance, and innovative work behaviors (Ahmad et al., 2021; Hoang et al., 2006). Organizations that adopt TQM principles are associated with the enhancement of work-related outcomes (Aichouni et al., 2023; Canbay & Akman, 2023; Morrow, 1997). Organizations with much higher awareness of TQM practices tend to show much greater work performance than those with low awareness (Al-Zoubi et al., 2023; Fok et al., 2023; Mensah et al., 2012). Those organizations that implemented the TQM practices including customer focus, quality tools, and techniques, are much more likely to enhance the company's performance (Adem & Viridi, 2023; Fotopoulos & Psomas, 2010). It is most important for organizations to learn and adopt the effectiveness of TQM practices so that their benefits can be availed to achieve competitive advantage (Ferdousi et al., 2018; Waldman, 1994).

The purpose of this study is to inspect the soft TQM practices in small medium enterprises (SMEs) operating in developing countries. SMEs contribute a major part to the economy of any country but face many problems related to quality issues in the context of performance. Previously, scholarly investigations about soft TQM practices in SMEs have been limited in scope including continuous improvement, employee involvement, employee empowerment, top management commitment, teamwork, appraisal system, employee satisfaction, and employee training with transformational leadership. Therefore, on the basis of these concerns, the following research questions are derived:

RQ1: What is the impact of soft TQM practices on work performance?

RQ2: What is the moderation effect of transformational leadership on the relationship of different soft TQM practices with work performance?

In this study, we present a proposed integrated model aimed at improving the work performance of SMEs. Details of eight direct hypotheses and eight moderation hypotheses are proposed in the next section after an extensive literature review.

Literature Review and Hypotheses Development

Theoretical Background

The categorization of TQM aspects into soft and hard dimensions is derived from the sociotechnical system (STS) theory proposed by Trist and Bamforth (1951). STS theory elucidates the dynamic interaction between individuals and technology and both must be evaluated together to achieve maximum performance, but the idea of STS is grounded in the interaction of two fundamental elements: the social component, which encompasses society and individuals, and the technical component, which encompasses machinery and technology (Kessler, 2013; Zeng et al., 2017). The idea of science, technology, and society posits that different forms of organizations are comprised of two distinct interconnected systems: a social system and a technical system. The present investigation employs the sociotechnical perspective due to two primary justifications. Firstly, it enables a full and holistic examination of TQM without neglecting any crucial elements. Additionally, this study has the potential to offer novel perspectives to SMEs administrators by shedding light on two aspects of TQM practices including soft and hard. STS theory says that a firm is made up of two types of systems: social and technical. The social system includes things like how people act and interact with each other, their jobs and responsibilities, how they depend on each other, and whether they work together or against each other. The technical system includes materials, tools, processes, and buildings (Abdallah et al., 2019; Zeng et al., 2015).

Soft TQM Practices and Work Performance

Continuous Improvement and Performance

It is essential that TQM be adopted by many organizations so that international economic growth and stability can be achieved (Bahia et al., 2023; Hchaichi, 2023). Moreover, organizations that focus on quality concepts, continuous quality awareness building, and providing training to employees to improve work-related skills tend to show much higher internal quality work performance than those who did not consider it (Rao et al., 1999; Tan et al., 2023). Those individuals who effectively integrate standardized production and continuous improvement in work are much more capable of having higher job satisfaction, less stress, and effective quality work (Tan et al., 2023; Victor et al., 2000). Organizations that focus on employee quality, efficiency, and innovation are much more capable of sustaining their continuous improvement in their organizational context (de Koeijer et al., 2014; Yusuf et al., 2007). Therefore, we proposed the following hypothesis:

H1: *Continuous improvement has a positive significant effect on work performance.*

Employee Involvement and Performance

By implementing employee involvement and TQM practices, an organization can build a much stronger and more skillful workforce, but companies can start partnering and increasing focus on the customers to enhance work performance (Pun, 2002; Lehyani et al., 2023). Worker and cross-functional executive involvement positively and substantially influences performance and social and environmental stability (Chaudhuri & Jayaram, 2019; Longoni & Cagliano, 2015). Employee involvement and innovation have a noteworthy effect and contribute to non-financial performance (Abdi & Singh, 2021). Employee involvement enhanced the business

performance (Coffie et al., 2023; Sun et al., 2014). Along with improving TQM models incorporating employee involvement, business improvement and adopting learning attitudes allow an organization to foresee the issues and contribute to better results (Henderson et al., 1999). Thus, we proposed the following hypothesis:

H2: Employee involvement has a positive significant effect on work performance.

Employee Empowerment and Performance

TQM practices influence the quality of work performance, but teamwork, empowerment, and continuous improvement influence 35% of job involvement (Karia & Mahmoud Saleh, 2021). Management of service quality and high-performance features like training and development, selection and recruitment, teamwork, empowerment, and customer focus are considered to get the desired results (Boon et al., 2007; Ueno, 2010). TQM, leadership, and customer focus have a noteworthy and constructive impact on employee satisfaction and organizational performance (Qasrawi et al., 2017). When human resource practices are applied effectively, then financial, organizational, and human resource outcomes are enhanced with satisfaction (Vermeeren et al., 2014). In organizations, those employees who are empowered and working in a team are appreciated, then commitment, work satisfaction, and involvement are enhanced, which further leads to work performance (Durairatnam et al., 2021; Karia & Asaari, 2006; Lee et al., 2015; Zaheer et al., 2023). So, we proposed the following hypothesis:

H3: Employee empowerment has a positive significant effect on work performance.

Top Management Commitment and Performance

Organizational commitment and work satisfaction positively influence the company's performance (Karia & Mahmoud Saleh, 2021; Silva et al., 2023). TQM practices involve customer focus, strategic quality planning, top management commitment, and worker involvement directed toward higher operations (Psomas & Antony, 2017; Talib et al., 2011; Wijaya et al., 2023). Company communication positively and substantially influences job satisfaction and company commitment, with communication satisfaction as a mediator (Carrière & Bourque, 2009). Human resource departments in organizations should adopt TQM principles in their internal operations to make organizations high-class in quality (Akanmu et al., 2023; Albloushi et al., 2023; Fotopoulos & Psomas, 2010). Moreover, such human resource practices should be designed to support total quality orientation in the company, thus enhancing the performance of the company (Bou & Beltrán, 2005.; Fok et al., 2023; Schiavone et al., 2023). Dimensions of all TQM practices have a noteworthy and constructive influence on institutional performance (Sayeda & Rajendran, 2010). Consequently, we proposed the following hypothesis:

H4: *Top management commitment has a positive significant effect on work performance.*

Team Work and Performance

Individual involvement, training, and teamwork are TQM's most momentous and effective practices in work attitudes (Durairatnam et al., 2021; Vihari et al., 2022). Those firms that implement TQM practices, research and development, involvement of employees in innovation, and providing proper training to employees to integrate environmental

management activities into their production system are more likely to enhance and improve their respective performance (Cavallone & Palumbo, 2022; Theyel, 2000). In organizations, the effective involvement of employees is assured, and certain practices are involved that enhance employees' participation at work, leading to employee satisfaction, quality improvement, and enhancement in the production and manufacturing process (Pun et al., 2001; Ugboro & Obeng, 2000; Zaheer et al., 2022). TQM practices and individual change readiness are important practices for finding effective employee performance (Laseinde et al., 2020). Hence, we proposed the following hypothesis:

H5: *Teamwork has a positive significant effect on work performance.*

Employee Satisfaction and Performance

Organizations with TQM practices enhanced job satisfaction and work-related performance at both organizational and individual levels (Prajogo & Cooper, 2017). TQM practices strongly influence work satisfaction and are directed toward work-related outcomes (Jun et al., 2006; Prajogo & Cooper, 2010; Torre et al., 2023). Applying TQM practices in an organizational context increases employee satisfaction, which is directly linked with work performance (Alsughayir, 2014; Fok et al., 2022). Organizations that desire to enhance job satisfaction and performance, and reduce turnover intention should consider the perfect implementation of TQM practices (Mo & Borbon, 2022; Yue et al., 2011). Wide and perfect implementation of TQM ensures a high work-life quality, which makes the employee move toward the road to success, increases work satisfaction, and has considerable influence on employee performance (Liu, 2016; Ooi et al., 2013). So, we proposed the following hypothesis:

H6: *Employee satisfaction has a positive significant effect on work performance.*

Appraisal Satisfaction and Performance

Performance appraisal focuses on assessing individual behavior at the workplace (Na-Nan et al., 2022; Ooi, 2014; Soltani et al., 2023). Moreover, TQM focuses much on the work process (Ho et al., 2022; Ooi, 2014). When implemented effectively, TQM reduces, modifies, and eradicates the need for an official performance appraisal process as it enhances good face-to-face communication (Kikoski & Ph, 1999). Perception of performance appraisal quality is completely and substantially related to innovative work behavior (Matter, 2018; Rodrigues & Rebelo, 2023; Thneibat, 2022). Process focus appraisal has a more significant impact on result-oriented appraisal and appraisal satisfaction, along with the expectation of performance improvement (Lam & Schaubroeck, 1999). Developmental performance appraisal focuses on the involvement of all employees in the TQM process so that they can achieve relevant competency and fit effectively in the TQM environment (Daley et al., 1992). Thus, we proposed the following hypothesis:

H7: *Appraisal satisfaction has a positive significant effect on work performance.*

Employee Training and Performance

When employees receive competency-based training, they show higher work performance (Khanna & Gupta, 2014; Maizar & Indra Nara Persada, 2023; Maunsell-terry & Taşkin, 2023). Human resources practices including career planning, training and development, recruiting,

and selection, play a vital role in enhancing the total quality management model and implementing quality work performance (Abu-Doleh, 2012; Fening et al., 2008; Wickramasinghe, 2012). Perceived workplace incivility has negative impacts on work satisfaction and efficiency of quality programs, which are directed towards client focus and continuous improvement (Morrow et al., 2011). When proper training and effective performance appraisal are implemented in the organization, then employees perform in the most effective manner, which creates a competitive advantage for the company in the long run (Al-sinawi et al., 2015; Weiss & Hartle, 2023). Therefore, we proposed the following hypothesis:

H8: *Employee training has a positive significant effect on work performance.*

Moderating Role of Transformational Leadership

Ineffective leadership can constrain the benefits of implementing TQM which affects work performance negatively (Birasnav et al., 2023; Kumar et al., 2020). When leadership accuracy is aligned with TQM practices, then high and effective work performance is developed (Mohsen Alawag et al., 2023; Svensson, 2005). Effective improvements in safety chain outcomes can be observed, and transformational leadership plays a vital role in creating such a culture (McFadden et al., 2009; Seljemo et al., 2020). Quality improvement models and TQM create a strong bond between leaders and the quality process, thus making leaders' roles move towards quality improvement, creating value for the organization (Glogovac et al., 2023; Walker, 2012). Leadership and management support for the enhancement of quality programs and improvement of quality have a substantial and constructive impact on total factor productivity (Myeda et al., 2023; Spasojević Brkić et al., 2013). Organizations with remarkable aspects and competencies of leadership execute all facets of TQM and are more likely to produce high-quality products (Antony et al., 2023; Das et al., 2011; Lehyani et al., 2023). Effective leadership is crucial in changing any organizational culture and is vital in accomplishing TQM practices (Buch & Rivers, 2001; Coelho et al., 2022; Fok et al., 2023). When the quality of work life intervenes in the association between spiritual leadership and employee performance, employee potential with work outcomes is significantly enhanced (Pio, 2022). Competency, work discipline, leadership, and TQM have a substantial influence on employee performance (Cahyadi et al., 2022; Rimbayana et al., 2022; Roeleejanto & Payangan, 2015; Sutaguna, I Nyoman Tri Yusuf et al., 2020). TQM practices have a constructive and noteworthy impact on organizational innovativeness with leadership and people management (Hoang et al., 2006; Niyi Anifowose et al., 2022; Vihari et al., 2022). Therefore, we developed the following hypotheses of moderation:

H9: *Transformational leadership moderates the link between continuous improvement and work performance.*

H10: *Transformational leadership moderates the link between employee involvement and work performance.*

H11: *Transformational leadership moderates the link between employee empowerment and work performance.*

H12: *Transformational leadership moderates the link between top management commitment and work performance.*

H13: Transformational leadership moderates the link between teamwork and work performance.

H14: Transformational leadership moderates the link between employee satisfaction and work performance.

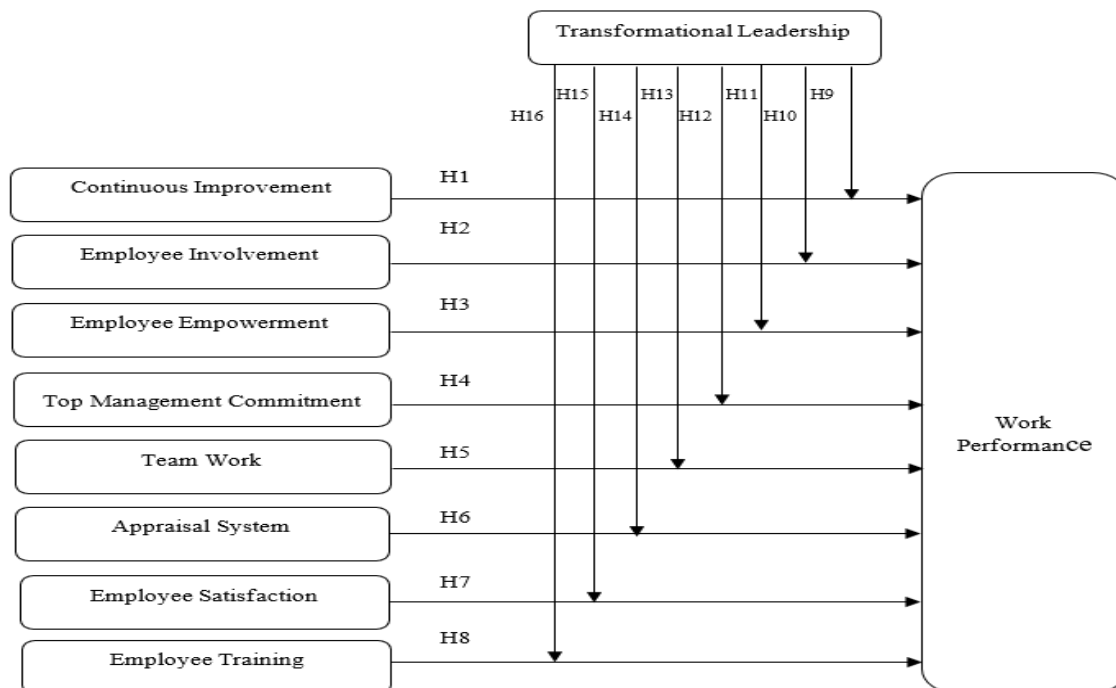
H15: Transformational leadership moderates the link between appraisal satisfaction and work performance.

H16: Transformational leadership moderates the link between employee training and work performance.

The theoretical framework is shown in Figure 1.

Figure 1

Research Model



Method

Sample

Currently, SMEs are considered the spine of the economy in developing countries. This research specifically focused on soft TQM practices including continuous improvement, employee involvement, employee empowerment, top management commitment, teamwork, appraisal system, employee satisfaction, and employee training with the interactive role of transformational leadership. Moreover, this is a quantitative study, and a deductive research approach is used to measure the effect of soft TQM practices on work performance in the context of quality and effort. Data were gathered from staff working in different SMEs in three districts of Punjab, Pakistan including Gujrat, Gujranwala, and Sialkot because these three districts are considered the center of SMEs in province (Afraz et al., 2014; Anwar ul Haq et al., 2021; Hamid, 2017; Khalique et al., 2011; Khan & Siddiqi, 2011; Malik et al., 2010; Qureshi & Administration, 2010; Tariq et al., 2021). A convenient sampling technique was utilized, and a final sample of 637 respondents was collected from 361 SMEs.

Instruments

The following scales are adapted because they appear more authentic and modified. Six items of top management commitment and three items of employee involvement were taken from (Ahire et al., 1996), four items of continuous improvement and teamwork were taken from (Morrow, 1997), four items employee empowerment, employee training, appraisal satisfaction and employee satisfaction were taken from (Jun et al., 2006), eight items of transformational leadership were taken from Bass and Avolio (1990) and used by Dai et al. (2013) and ten items of work performance were taken from (Kuvaas & Dysvik, 2009). Each item is measured on a 7-point Likert scale, and the details of all items are given in the [Appendix](#).

Results

Measurement and Validity

Confirmatory Factor Analysis (CFA) was executed using SmartPLS, and factor loadings of all items were > 0.5 , Average Variance Extracted (AVE) was > 0.5 , Composite Reliability (CR) and Cronbach alpha were > 0.60 respectively, which met the standard criteria (Fornell & Larcker, 1981; Hair et al., 2019). The details of the measurement model are shown in [Table 1](#).

Table 1

Measurement Model (Estimates)

Constructs	Items	Loadings	α	CR (rho_c)	AVE
AS	AS1	.86	.88	.92	.74
	AS2	.86			
	AS3	.86			
	AS4	.86			
CI	CI1	.89	.90	.93	.78
	CI2	.89			
	CI3	.88			
	CI4	.87			
EE	EE1	.88	.88	.91	.74
	EE2	.87			
	EE3	.82			
	EE4	.86			
EI	EI1	.89	.83	.90	.75
	EI2	.82			
	EI3	.88			
ES	ES1	.87	.89	.92	.76
	ES2	.88			
	ES3	.87			
	ES4	.85			
ET	ET1	.80	.87	.91	.73
	ET2	.88			
	ET3	.86			
	ET4	.85			
TL	TL1	.81	.92	.94	.66
	TL2	.80			
	TL3	.81			
	TL4	.81			
	TL5	.84			
	TL6	.82			
	TL7	.81			
	TL8	.79			
TMC	TMC1	.82	.91	.93	.69
	TMC2	.84			
	TMC3	.84			
	TMC4	.85			
	TMC5	.82			
	TMC6	.82			
TW	TW1	.86	.89	.92	.75

	TW2	.88								
	TW3	.87								
	TW4	.86								
WP	WP1	.83	.94		.94				.65	
	WP2	.82								
	WP3	.76								
	WP4	.81								
	WP5	.82								
	WP6	.81								
	WP7	.80								
	WP8	.80								
	WP9	.81								
	WP10	.78								

Note. Abbreviations: CI=Continuous improvement, EI=Employee involvement, EP=Employee empowerment, TMC=Top management commitment, TW=Team work, AS=Appraisal system, ES=Employee satisfaction, ET= Employee training, TL=Transformational leadership, WP=Work performance

Discriminant Validity

The data presented in Table 2 demonstrates that the values of all variables fall below the predetermined minimum threshold level of .85. This suggests that the HTMT ratio, when used as a criterion for assessing discriminant validity, is adequate.

Table 2
HTMT Ratio

	AS	CI	EE	EI	ES	ET	TL	TMC	TW	WP
AS										
CI	.78									
EE	.80	.76								
EI	.79	.73	.74							
ES	.72	.78	.75	.64						
ET	.80	.75	.72	.72	.74					
TL	.78	.81	.82	.72	.68	.75				
TMC	.78	.75	.75	.80	.71	.75	.74			
TW	.64	.64	.63	.60	.69	.57	.63	.61		
WP	.77	.75	.77	.80	.75	.71	.79	.75	.65	

Note. Abbreviations: CI=Continuous improvement, EI=Employee involvement, EP=Employee empowerment, TMC=Top management commitment, TW=Team work, AS=Appraisal system, ES=Employee satisfaction, ET= Employee training, TL=Transformational leadership, WP=Work performance

Table 3 demonstrates that the research variables' discriminant validity, as assessed by the Fornell and Lacker criterion, is substantiated by the observation that all diagonal values exceed non-diagonal values.

Table 3
Fornell and Lacker's Criterion

	AS	CI	EE	EI	ES	ET	TL	TMC	TW	WP
AS	.86									
CI	.85	.88								
EE	.86	.86	.86							
EI	.81	.81	.81	.86						
ES	.64	.70	.67	.55	.87					
ET	.82	.85	.81	.79	.66	.85				
TL	.70	.75	.74	.64	.62	.68	.81			
TMC	.81	.86	.85	.82	.64	.83	.68	.83		
TW	.57	.58	.56	.52	.62	.50	.57	.55	.87	
WP	.82	.86	.82	.83	.69	.83	.74	.8	.59	.80

Note. Abbreviations: CI=Continuous improvement, EI=Employee involvement, EP=Employee empowerment, TMC=Top management commitment, TW=Team work, AS=Appraisal system, ES=Employee satisfaction, ET= Employee training, TL=Transformational leadership, WP=Work performance

Figure 2 demonstrates a path diagram of valid items and an R square.

Figure 2

Structural Model (Algorithmic Analysis)

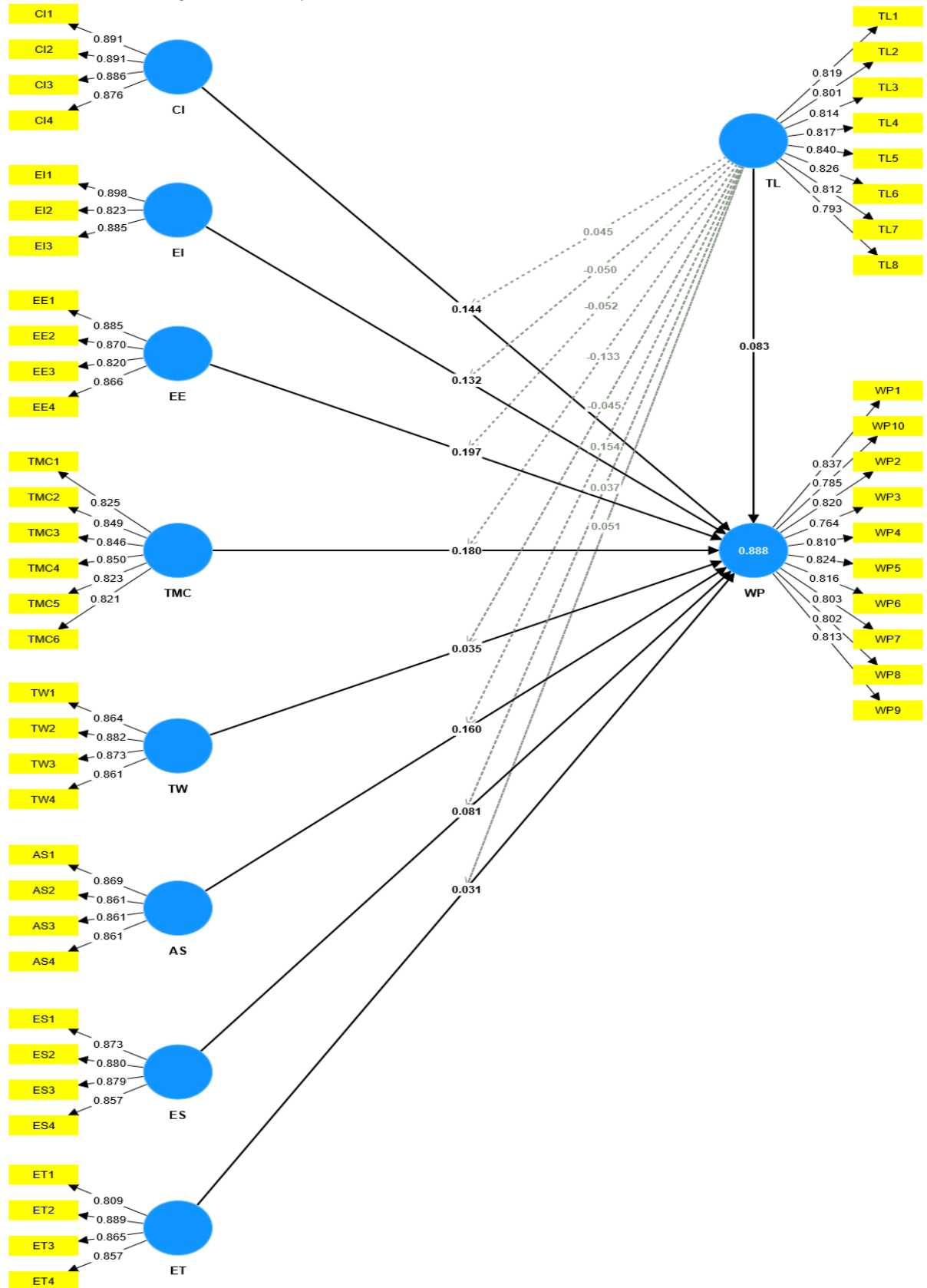
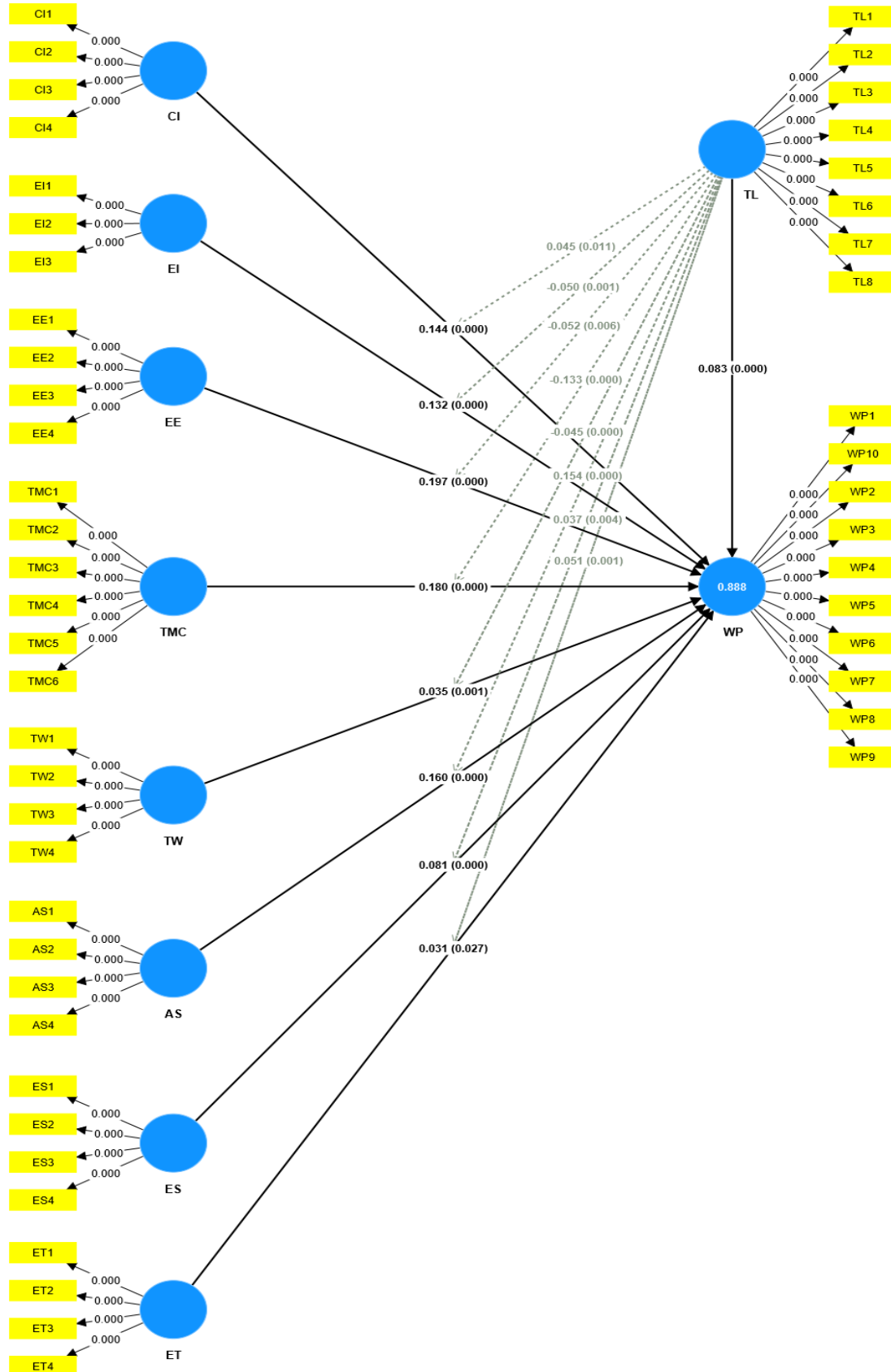


Figure 3 demonstrates the path coefficient and p value with factor loading of items and R square.

Figure 3

Structural Model (Bootstrapping)



All soft TQM practices have significant positive effects on work performance, i.e., continuous improvement has ($\beta = .14, p < .001$), employee involvement has ($\beta = .13, p < .001$), employee empowerment has ($\beta = .19, p < .001$), top management commitment has ($\beta = .18, p < .001$), teamwork has ($\beta = .03, p < .005$), appraisal satisfaction has ($\beta = .16, p < .001$), employee satisfaction has ($\beta = .08, p < .001$) and employee training has ($\beta = .03, p < .05$) respectively, hence supporting hypotheses 1, hypotheses 2, hypotheses 3, hypotheses 4, hypotheses 5, hypotheses 6, hypotheses 7 and hypotheses 8, therefore these are accepted. Similarly, transformational leadership positively moderates and strengthens the relationship of continuous improvement ($\beta = .04, p < .05$), appraisal satisfaction ($\beta = .15, p < .001$), employee satisfaction ($\beta = .03, p < .005$), and employee training ($\beta = .05, p < .005$), which supports the hypotheses 9, hypotheses 14, hypotheses 15 and hypotheses 16, so these are accepted. Moreover, transformational leadership negatively moderates and weakens the relationship of employee involvement ($\beta = .04, p < .05$), employee empowerment ($\beta = .15, p < .001$), top management commitment ($\beta = .03, p < .005$), and teamwork ($\beta = .05, p < .005$), which supports the hypotheses 10, hypotheses 11, hypotheses 12 and hypotheses 13, so these are accepted. Further details are shown in [Table 4](#).

Table 4*Direct and Moderation Effects*

Hypotheses	Relationship	Original sample (O)	M	SD	t	P
H1	CI → WP	.14	.14	.01	7.76	.000
H2	EI → WP	.13	.13	.01	9.60	.000
H3	EE → WP	.19	.19	.01	10.40	.000
H4	TMC → WP	.18	.18	.01	11.18	.000
H5	TW → WP	.03	.03	.01	3.47	.001
H6	AS → WP	.16	.16	.01	9.18	.000
H7	ES → WP	.08	.08	.01	6.44	.000
H8	ET → WP	.03	.03	.01	2.21	.027
H9	TL x CI → WP	.04	.04	.01	2.53	.011
H10	TL x EI → WP	-.05	-.05	.01	3.27	.001
H11	TL x EE → WP	-.05	-.05	.01	2.75	.006
H12	TL x TMC → WP	-.13	-.13	.01	7.78	.000
H13	TL x TW → WP	-.04	-.04	.01	4.38	.000
H14	TL x AS → WP	.15	.15	.01	8.73	.000
H15	TL x ES → WP	.03	.03	.01	2.92	.004
H16	TL x ET → WP	.05	.05	.01	3.40	.001

Note. Abbreviations: CI=Continuous improvement, EI=Employee involvement, EP=Employee empowerment, TMC=Top management commitment, TW=Team work, AS=Appraisal system, ES=Employee satisfaction, ET= Employee training, TL=Transformational leadership, WP=Work performance

Figure 4 demonstrates the moderation of transformational leadership from the perspective of continuous improvement and work performance.

Figure 4

Moderation Graph

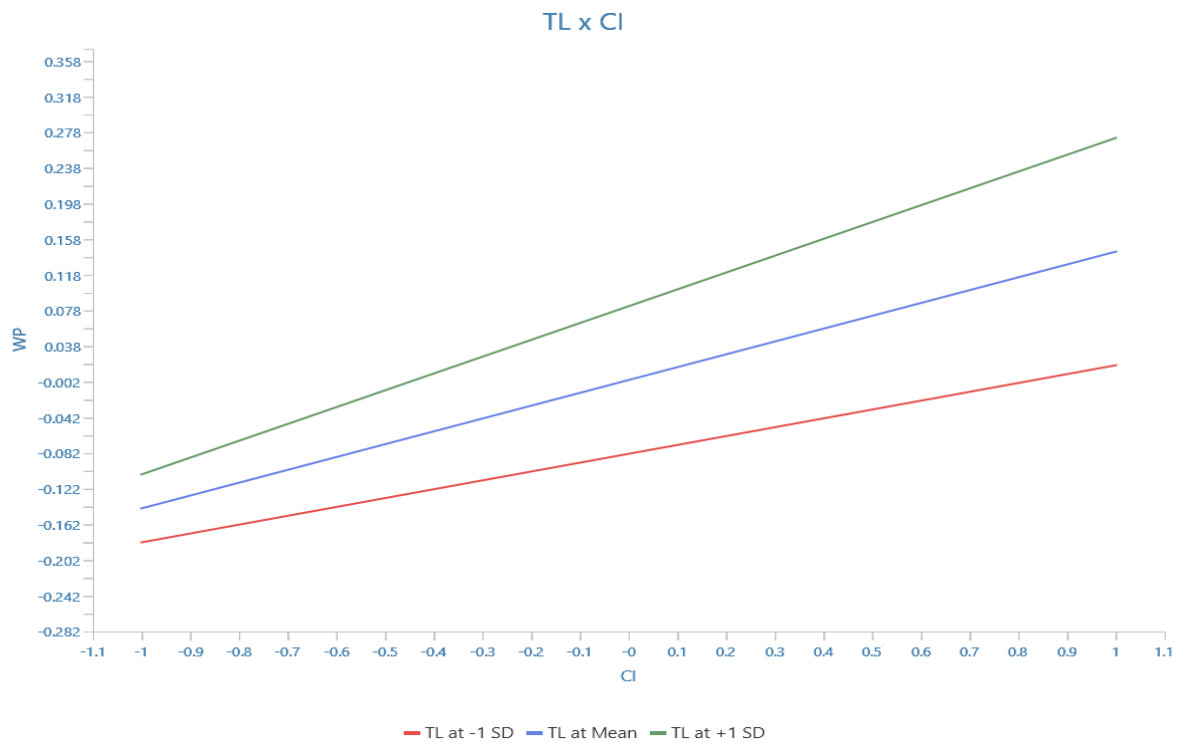


Figure 5 demonstrates the moderation of transformational leadership from the perspective of employee involvement and work performance.

Figure 5

Moderation Graph

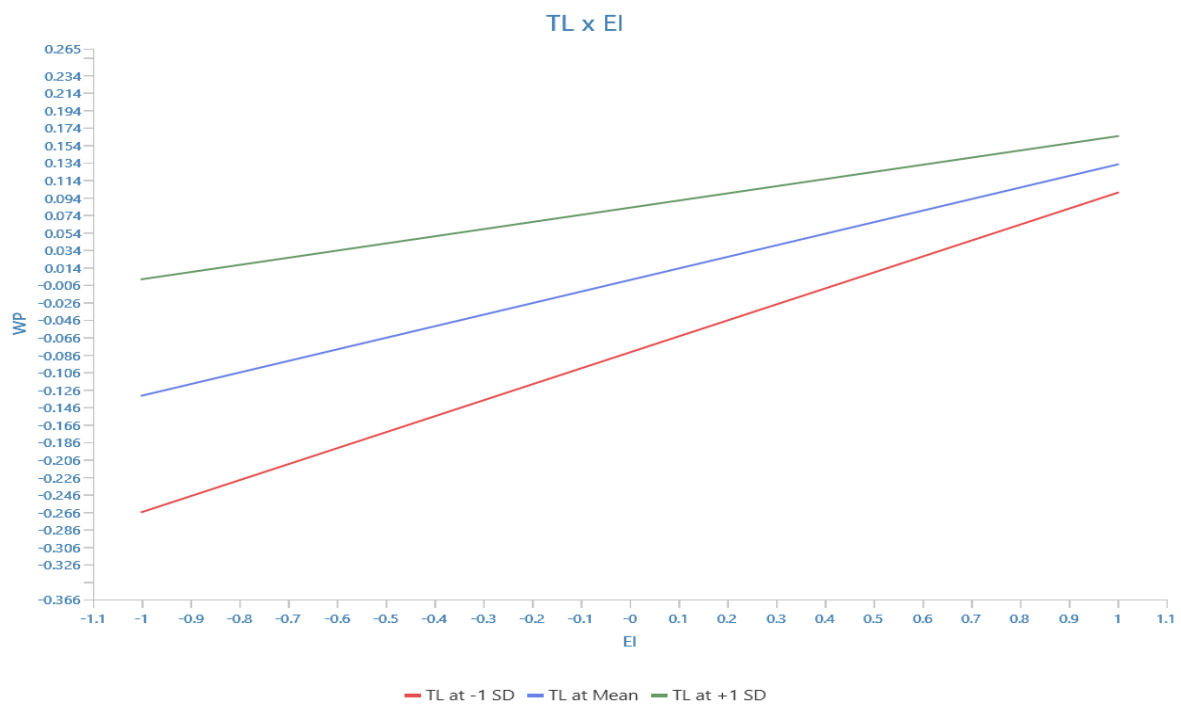


Figure 6 demonstrates the moderation of transformational leadership from the perspective of employee empowerment and work performance.

Figure 6

Moderation Graph

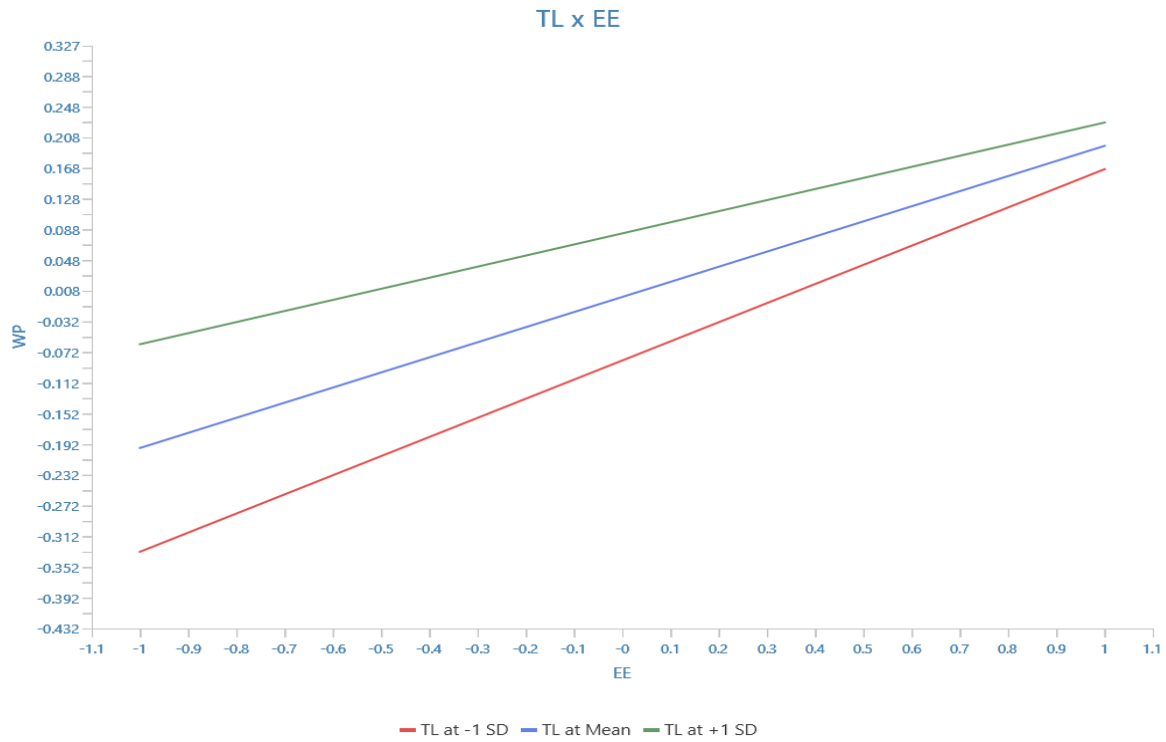


Figure 7 demonstrates the moderation of transformational leadership from the perspective of top management commitment and work performance.

Figure 7

Moderation Graph

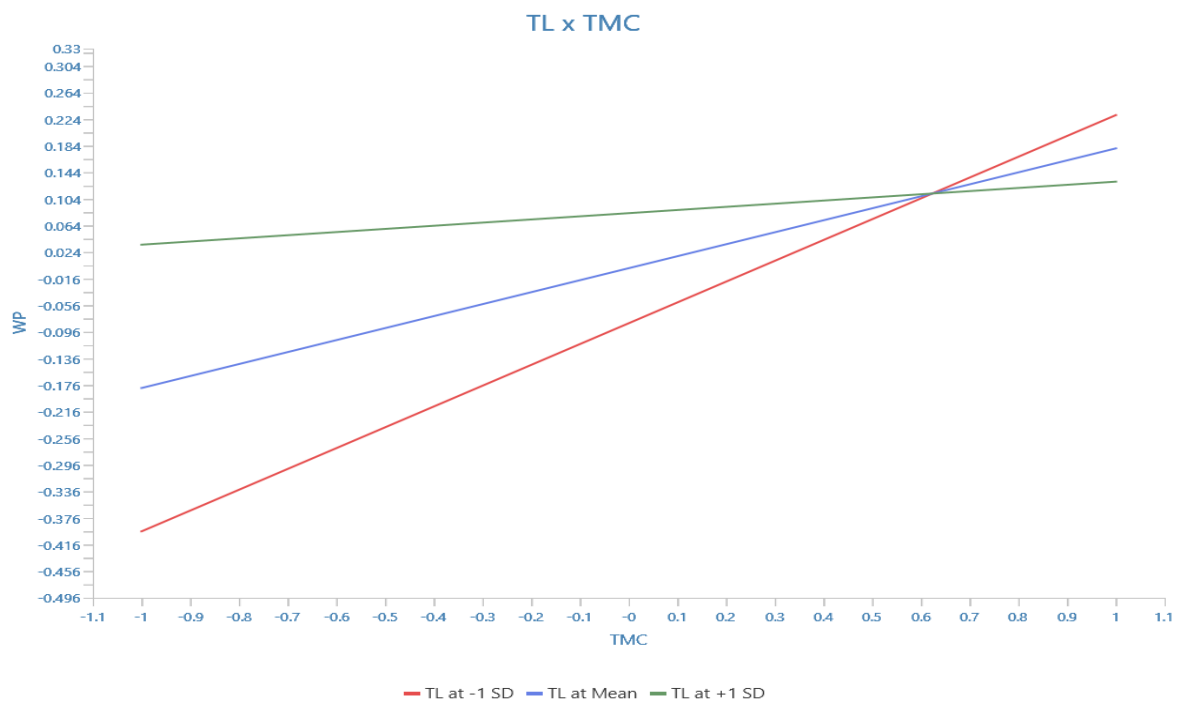


Figure 8 demonstrates the moderation of transformational leadership from the perspective of teamwork and work performance.

Figure 8

Moderation Graph

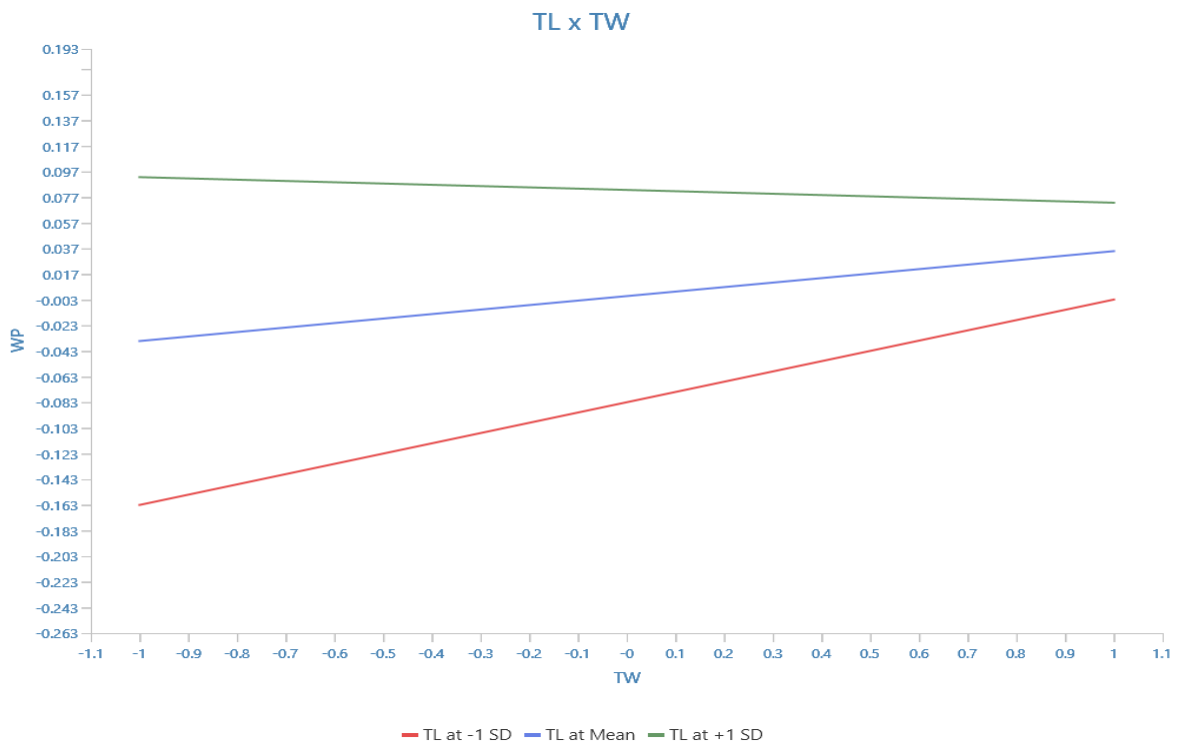


Figure 9 demonstrates the moderation of transformational leadership from the perspective of appraisal satisfaction and work performance.

Figure 9

Moderation Graph

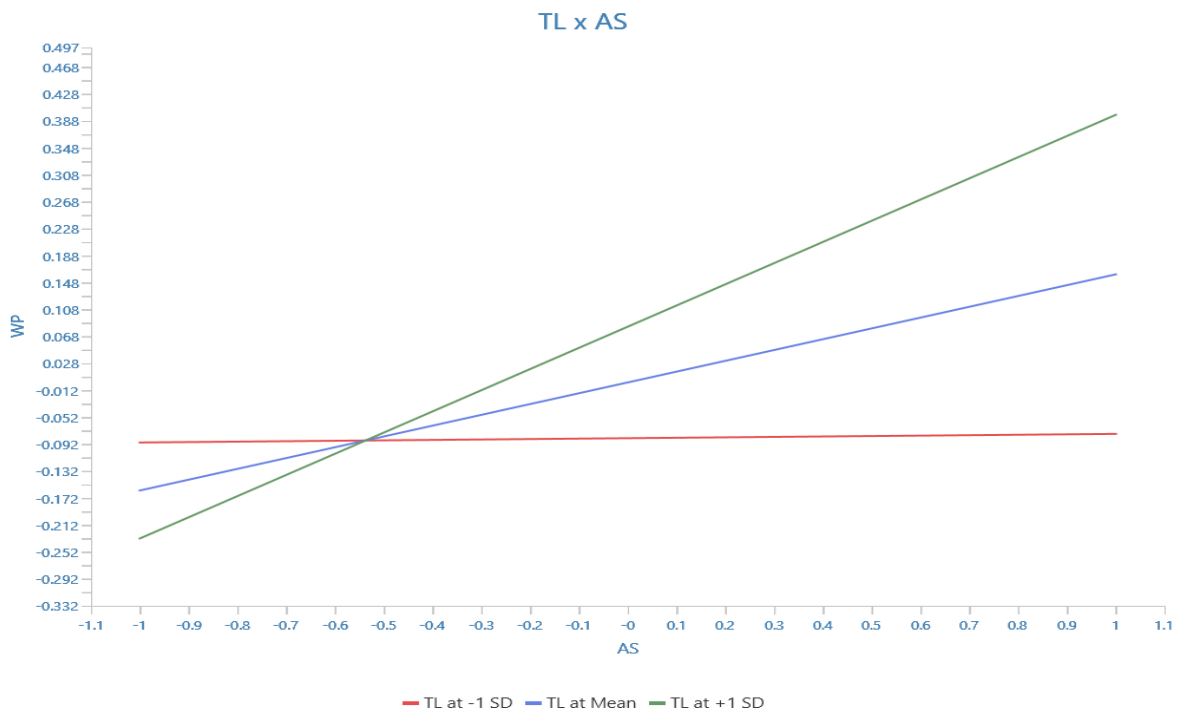


Figure 10 demonstrates the moderation of transformational leadership from the perspective of employee satisfaction and work performance.

Figure 10

Moderation Graph

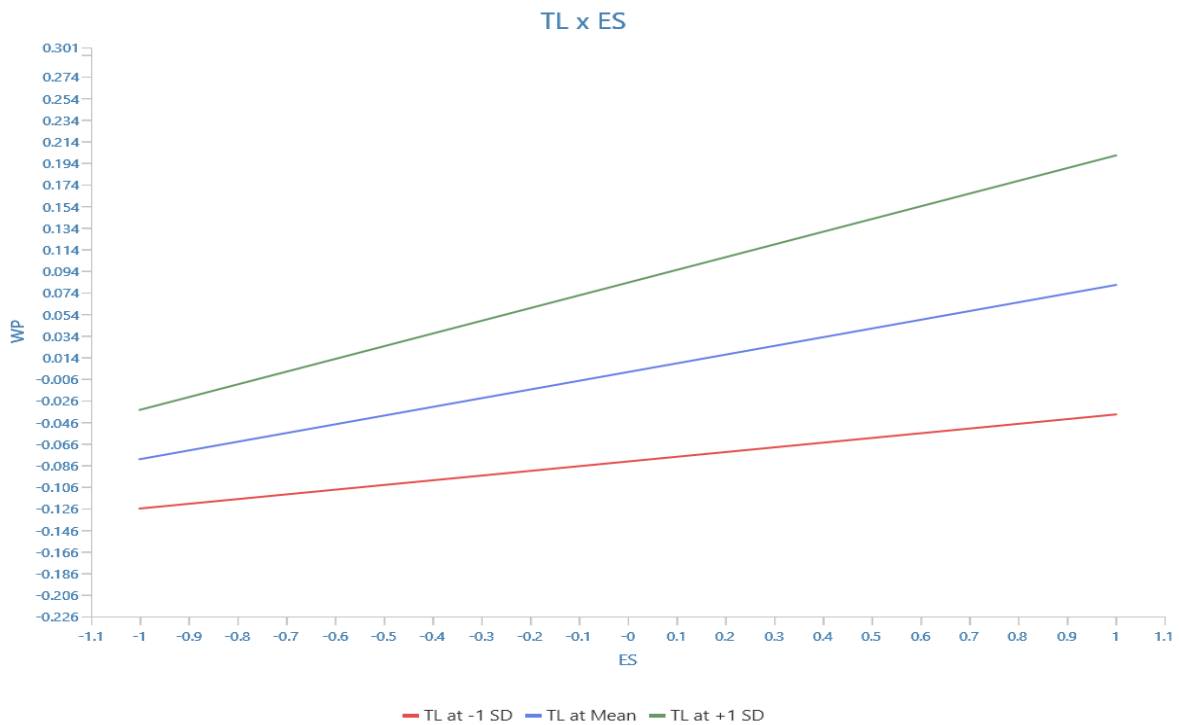
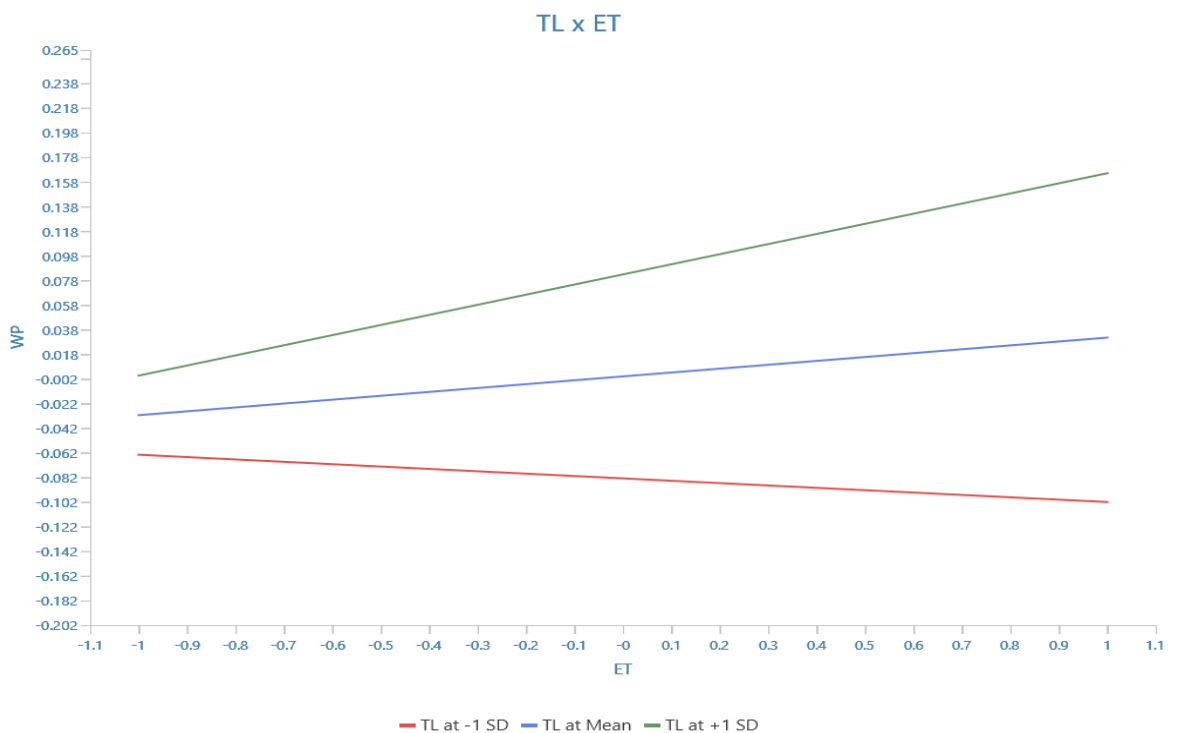


Figure 11 demonstrates the moderation of transformational leadership from the perspective of employee training and work performance.

Figure 11

Moderation Graph



Discussion

Implementation of ISO 9000 standards is partially related to total quality management practices along with business performance (Lepistö et al., 2022a, 2022b; Sun, 2000). Our results exhibited that all soft TQM practices including continuous improvement, employee involvement, employee empowerment, top management commitment, teamwork, appraisal system, employee satisfaction, and employee training, have a considerable constructive effect on work performance in SMEs and confirmed all the direct hypotheses. It is essential to implement TQM most effectively so that not even a single factor of total quality management is inadequate to meet desired targets (Mohsen Alawag et al., 2023; Ullah et al., 2021). When total quality management is implemented, it effectively promotes corporate social responsibility that enhances work performance (Hussain et al., 2023; McAdam & Leonard, 2003). TQM practices enhance and intervene in quality management in an organizational context, having a stronger impact on work performance (Pereira & Osburn, 2007). Work engagement has a positive influence on all dimensions of TQM, thus enhancing work performance (Abu-Mahfouz et al., 2023; Heyns, 2019). When employees are fully satisfied with their job, their mental health, well-being, self-esteem, and happiness are at their top level, which in turn makes the employee work much harder, resulting in increased performance (Satuf et al., 2018; Walsh et al., 2023). Similarly, moderation results revealed that transformational leadership positively moderates the association of continuous improvement, appraisal system, employee satisfaction, and employee training with work performance, strengthening these links and enhancing work performance in SMEs. Sustainable growth and development should be achieved in the long run by implementing TQM practices and productive maintenance improvement programs (Chaurey et al., 2023; Kaur et al., 2013). When value analysis is blended with basic tools and principles of TQM, quality function development and effective work performance are assured (Ho et al., 2000). Implementing total performance management and TQM practices effectively boosts operational performance (Acquah et al., 2023; Modgil & Sharma, 2016). Customer focus is the driving element for TQM programs in United Kingdom service organizations (Hing Yee Tsang & Antony, 2001). Moreover, transformational leadership negatively moderates the association of employee involvement, employee empowerment, top management commitment, and teamwork with work performance, which weakens the links between these variables. A quality improvement framework model should be implemented to fulfill the needs of quality and manufacturing professionals along with top management people (Maganga & Taifa, 2023; Navas et al., 2019). Pakistani Aviation Manufacturing Industry followed the TQM model by agreeing with researchers to enhance their quality performance (Mahmood et al., 2014). When TQM practices are implemented in the most significant manner, the chance for the organization to achieve competitive advantage is increased, through which employees can achieve their full potential (Sandelands, 1994b). The establishment of quality performance management practices creates awareness about the benefits of quality processes and, in turn, reduces the cost of quality. In addition, effectively implemented TQM improves the quality of care and the system trying to enhance quality, which enhances contextual performance and leads the organization toward success (McLaughlin et al., 1990).

Implications

A theory base has been built for this study to look into how soft TQM practices directly influence the quality performance in SMEs. This study builds on the STS theory and looks at TQM from the point of view of its soft aspects. It shows how these aspects can help improve work effort and work quality performance. The outcomes of this research are important for people who work in the SMEs.

Managers should know how important soft TQM practices are for improving both work quality and work effort. When managers are personally involved in quality projects and efforts, providing resources, and getting rid of obstacles, they can ensure that the TQM philosophy is easily put into place and accepted.

Managers should utilize leadership skills in order to create awareness of soft TQM practices among employees for better work performance. Moreover, management should ensure the implementation of soft TQM practices to exert the full potential of employees and achieve predetermined targets.

Conclusions and Future Recommendations

It is concluded that soft TQM practices, i.e., continuous improvement, employee involvement, employee empowerment, top management commitment, teamwork, appraisal system, employee satisfaction, and employee training, directly improve the work performance in SMEs. Therefore, the management of the organization should focus on soft TQM practices for sustainable performance, but the type of leadership matters in achieving desired results. Secondly, transformational leadership is favorable with continuous improvement, appraisal system, employee satisfaction, employee training, and enhanced work performance. Moreover, contrary to this, transformational leadership is unfavorable with employee involvement, employee empowerment, top management commitment, and teamwork, which weaken the association with work performance.

This study is limited to three districts of central Punjab, Pakistan, and a large number of SMEs are found in these districts of Punjab province. In the future, researchers should focus on different geographical locations and jurisdictions with various leadership styles, hard TQM practices, and sustainable performance.

Declarations

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Appendix

Top Management Commitment (TMC)

Top-level managers view quality as being more important than cost.
 Top-level managers view quality as being more important than meeting production schedules
 Our performance evaluation by the top-level management depends heavily on quality
 Top-level managers allocate adequate resources toward efforts to improve quality
 We have clear quality goals identified by top-level managers.
 At company-wide meetings top-level managers often discuss the importance of quality

Continuous Improvement (CI)

My work unit understand the concept of 'continuous improvement'.
 My work unit has accepted the goal of continuous improvement.
 I am committed to continuous improvement in my work.
 My boss really believes we can improve our work continuously.

Teamwork (TW)

My work unit uses teams to solve problems.
 My organization has embraced the team concept.
 Many work problems are now being solved through team meetings.
 During team meetings, we make an effort to get all team members' opinions and ideas before making a decision.

Employee empowerment (EE)

I am provided with substantial autonomy and responsibility
 I am encouraged to develop new ways to provide better products and services
 I am not punished for quality improvement ideas that are unsuccessful
 I am provided with sufficient information to arrive at good quality suggestions

Employee training (ET)

I have received sufficient training at this firm to do my job effectively
 I am trained in quality improvement skills
 Much of the training at our facility emphasizes product and service quality
 I am trained in group-discussion and communication techniques

Appraisal systems (AS)

The quality of my work is an important factor in evaluating my job performance
 I am regularly given feedback on my job performance
 Part of my job performance evaluation is based on how well I work with teams
 Part of my job performance evaluation is based on customer feedback on product and service quality

Employee Involvement (EI)

Cross-functional teams are often used.
 All employee suggestions are evaluated.
 Most employee suggestions are implemented.

Employee satisfaction (ES)

I would recommend this company to a friend if he/she were looking for a job
I feel personal satisfaction when I do my job well
I am proud to tell people that I am part of this company
This is the best organization for me to work for

Transformational Leadership (TL)

The supervisor can understand my situation and gives me encouragement and assistance
The supervisor encourages me to take challenges
I believe the supervisor can overcome any challenge at work
The supervisor encourages me to make efforts towards fulfilling the company vision
The supervisor encourages me to think about problems from a new perspective
The supervisor encourages me to rethink opinions that have never been doubted in the past
I believe I can complete my work under the leadership of the supervisor
The supervisor spends time to understand my needs

Work Performance (WP)

Work Effort

I try to work as hard as possible
I intentionally expend a great deal of effort in carrying out my job
I often expend extra effort in carrying out my job
I almost always expend more than an acceptable level of effort
I usually don't hesitate to put in extra effort when it is needed

Work Quality

The quality of my work is usually high
The quality of my work is top-notch
I deliver higher quality than what can be expected from someone with the type of job I have
I rarely complete a task before I know that the quality meets high standards
Others in my organization look at my work as typical high-quality work