

Impact of Cognitive Reappraisal on Transformational Leadership Among Leaders of Contemporary Organizations in Pakistan

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<https://doi.org/10.62345/jads.2025.14.4.9>

Abstract

Transformational leadership is essential for enhancing organizational effectiveness and motivating employees in contemporary workplaces. Leaders in Pakistan face complex challenges that require not only strategic decision-making but also effective emotion regulation to maintain a positive work environment. Cognitive reappraisal, an adaptive emotion regulation strategy, enables leaders to reinterpret emotionally challenging situations constructively, potentially influencing their leadership behaviours. The present study examined the relationship between cognitive reappraisal and transformational leadership among 200 organizational leaders from diverse sectors in Pakistan, using a cross-sectional correlational design and purposive sampling. Cognitive reappraisal was measured with the cognitive reappraisal subscale of the emotion regulation questionnaire, and transformational leadership was assessed with the Transformational Leadership subscale of the multifactor leadership questionnaire. Pearson correlation analysis revealed a strong positive association between cognitive reappraisal and transformational leadership ($r = .96$, $p < .01$). Regression analysis indicated that cognitive reappraisal significantly predicted transformational leadership ($B = 3.40$, $SE = 0.06$, $\beta = .96$, $p < .001$, $R^2 = .93$). Gender comparisons showed that men scored higher than women on cognitive reappraisal ($t(198) = 2.36$, $p = .01$, $d = 0.34$), whereas no significant gender difference was observed in transformational leadership ($t(198) = 1.58$, $p = .11$, $d = 0.22$). These findings suggest that cognitive reappraisal is a critical psychological mechanism supporting transformational leadership among leaders in Pakistani organizations.

Keywords: Cognitive Reappraisal, Transformational Leadership, Emotion Regulation.

Introduction

Transformational leadership is widely recognized as a critical leadership style for fostering innovation, motivation, and organizational effectiveness in contemporary workplaces. Transformational leaders inspire followers by articulating a shared vision, providing

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individualized consideration, stimulating intellectual growth, and modelling ethical and value-based behaviour (Bass, 2015). In dynamic organizational environments, particularly within developing economies such as Pakistan, leaders are frequently exposed to high levels of emotional demands, interpersonal conflicts, and role-related stressors, making emotional regulation an essential psychological competency for effective leadership.

Emotion regulation refers to the processes by which individuals influence the experience, expression, and management of emotions (Görgens-Ekermans & Roux, 2021). Among various emotion regulation strategies, cognitive reappraisal is considered one of the most adaptive and effective. Cognitive reappraisal involves reframing or reinterpreting emotionally challenging situations to alter their emotional impact, enabling individuals to respond more constructively. Leaders who employ cognitive reappraisal are better able to manage stress, maintain emotional balance, and engage in thoughtful decision-making, which may directly support transformational leadership behaviours.

Empirical research has demonstrated that leaders who effectively regulate their emotions are more likely to display transformational leadership qualities, such as inspirational motivation and individualized consideration (Kumar, 2014). While much of the existing literature has examined emotional intelligence as a broad construct, fewer studies have focused specifically on cognitive reappraisal as a distinct psychological mechanism underlying leadership effectiveness. This distinction is important, as cognitive reappraisal represents a skill that can be explicitly trained and developed through leadership interventions.

In the Pakistani organizational context, leaders operate within collectivistic cultural norms, hierarchical structures, and resource-constrained environments, which intensify emotional challenges at the workplace. Effective leadership in such settings requires not only strategic competence but also the ability to reinterpret setbacks, manage interpersonal tensions, and sustain motivation among followers. Despite its relevance, empirical research on the role of cognitive reappraisal in transformational leadership in Pakistani organizations remains limited. Therefore, the present study aims to investigate the relationship between cognitive reappraisal and transformational leadership among leaders working in contemporary organizations in Pakistan, contributing to leadership psychology literature by highlighting the role of emotion regulation processes in leadership effectiveness.

Theoretical Framework

Transformational Leadership Theory (Bass, 2015)

Transformational Leadership Theory posits that effective leaders transcend transactional exchanges by inspiring followers to achieve higher levels of motivation, morality, and performance. Transformational leaders engage in idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 2015). These leadership behaviours require emotional awareness, regulation, and flexibility, particularly in emotionally charged organizational situations.

Cognitive reappraisal aligns closely with transformational leadership theory, as it enables leaders to reinterpret challenges as opportunities, regulate negative emotions, and model adaptive emotional responses for followers. Leaders who use cognitive reappraisal are more likely to communicate optimism, remain resilient in the face of adversity, and foster psychologically safe environments that encourage innovation and commitment. Thus, cognitive reappraisal serves as a psychological mechanism that supports the enactment of transformational leadership behaviours.

Rationale

Although prior research has established links between emotional intelligence and transformational leadership, the specific contribution of cognitive reappraisal has received comparatively less empirical attention, particularly in non-Western contexts. In Pakistan, organizational leaders face unique socio-cultural and economic challenges that necessitate effective emotion regulation strategies. Understanding how cognitive reappraisal influences transformational leadership can provide valuable insights for leadership development initiatives.

This study addresses a significant gap in the literature by focusing on cognitive reappraisal as a key emotion regulation strategy among leaders in Pakistani organizations. The findings are expected to inform organizational training programs, leadership coaching practices, and policy-level interventions to enhance leadership effectiveness through psychological skill development.

Objectives

1. To examine the relationship between cognitive reappraisal and transformational leadership among leaders in Pakistan.
2. To assess the predictive role of cognitive reappraisal in transformational leadership.
3. To evaluate the gender difference in the study variables, i.e., cognitive reappraisal in transformational leadership.

Hypotheses

1. Cognitive reappraisal is positively and significantly associated with transformational leadership among leaders in Pakistani organizations.
2. Cognitive reappraisal significantly predicts transformational leadership among leaders in Pakistani organizations.
3. There is likely to be a gender difference in the study variables, i.e., cognitive reappraisal in transformational leadership.

Methodology

Research Design

The present study employed a cross-sectional correlational research design to examine the relationship between cognitive reappraisal and transformational leadership among organizational leaders in Pakistan.

Sampling and Participants

A purposive sampling technique was used to recruit 200 leaders working in contemporary organizations across various sectors in Pakistan. Inclusion criteria required participants to (a) hold a formal leadership or managerial role, (b) be at least 23 years of age, (c) possess a minimum of a bachelor's degree, and (d) have at least one year of leadership experience.

Instruments

Emotional Regulation Questionnaire

Cognitive reappraisal was assessed using the Cognitive Reappraisal subscale of the Emotion Regulation Questionnaire (ERQ) developed by Gross and John (2003). The subscale consists of six items rated on a 7-point Likert scale, with higher scores indicating greater use of cognitive reappraisal. Previous studies have reported satisfactory internal consistency for this subscale, with

Cronbach's alpha values typically exceeding .80. In the present study, the internal consistency was acceptable ($\alpha = .82$).

Transformational Leadership

Transformational leadership was measured using the Transformational Leadership subscale of the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1995). The subscale consists of 20 items rated on a 5-point Likert scale ranging from 0 (not at all) to 4 (frequently, if not always). Higher scores reflect higher levels of transformational leadership. The scale demonstrated excellent reliability in the present study ($\alpha = .93$).

Ethical Considerations and Data Analysis

The study strictly adhered to APA 7 ethical standards. Participants provided informed written consent prior to participation and were assured of confidentiality, anonymity, and the voluntary nature of their involvement. Participants were informed of their right to withdraw at any stage without penalty. Completion of the questionnaire took approximately 15 minutes. Data were analysed using IBM SPSS Statistics (Version 26). Descriptive statistics, Pearson correlation, and regression analyses were conducted to test the study hypotheses.

Results

Table 1: Socio-demographic Characteristics of the Participants

	Frequency	Percentage	Mean	SD
Age			35.32	10.22
Gender				
Men	87	43.5		
Women	113	56.5		
Education				
Bachelor	71	35.5		
Master	79	39.5		
Ph.D.	50	25		
Designation				
Chief Executive Officer	29	14.5		
Chief Operating officer	31	15.5		
Department Head	28	14		
General Manager	32	16		
Operations Manager	24	12		
HR Head	19	9.5		
Project Manager	37	18.5		
Types of Industries				
Information Technology	32	16		
Construction and Engineering	17	8.5		
Telecommunications	13	6.5		
Finance	13	6.5		
Education	49	24.5		
Healthcare	26	13		
Manufacturing	50	25		

Note: N = 200, SD = Standard Deviation

Table 1 presents the socio-demographic characteristics of the participants ($N = 200$). The mean age of the participants was 35.32 years ($SD = 10.22$), indicating variability across the leadership sample. Regarding gender, the majority of participants were women ($n = 113$, 56.5%), while men comprised 43.5% ($n = 87$) of the sample. In terms of education, most participants held a master's degree ($n = 79$, 39.5%), followed by those with a bachelor's degree ($n = 71$, 35.5%), while a substantial proportion possessed doctoral qualifications ($n = 50$, 25%). Participants occupied diverse leadership designations, with project managers representing the largest group ($n = 37$, 18.5%), followed by general managers ($n = 32$, 16%), chief operating officers ($n = 31$, 15.5%), chief executive officers ($n = 29$, 14.5%), department heads ($n = 28$, 14%), operations managers ($n = 24$, 12%), and human resource heads ($n = 19$, 9.5%). With respect to industry type, participants were drawn primarily from manufacturing ($n = 50$, 25%) and education ($n = 49$, 24.5%), followed by information technology ($n = 32$, 16%) and healthcare ($n = 26$, 13%), while construction and engineering ($n = 17$, 8.5%), telecommunications ($n = 13$, 6.5%), and finance ($n = 13$, 6.5%) were also represented, indicating broad sectoral representation of leaders from contemporary organizations in Pakistan.

Table 2: Correlational Analysis

Variables	1	2
1. Cognitive Reappraisal	-	.96**
2. Transformational Leadership		-

Note. $N = 200$, ** $p < .01$

Table 2 shows a strong, positive, and statistically significant relationship between cognitive reappraisal and transformational leadership ($r = .96$, $p < .01$), indicating that higher use of cognitive reappraisal is associated with greater transformational leadership behaviours.

Table 3: Regression Analysis: Predicting Transformational Leadership from Cognitive Reappraisal

Variables	<i>B</i>	<i>SE</i>	95% CI (LL-UL)	<i>B</i>	<i>P</i>
Constant	-20.17	1.18	-22.50 - -17.80		<.001
Cognitive Reappraisal	3.40	.06	3.28 – 3.52	.96	<.001

Note: $N = 200$, $R^2 = .93$, $F = 3005.46$, *** $p < .001$

Table 3 indicates that cognitive reappraisal is a significant positive predictor of transformational leadership ($B = 3.40$, $SE = .06$, $\beta = .96$, $p < .001$). The regression model was statistically significant, $F(1, 198) = 3005.46$, $p < .001$, explaining 93% of the variance in transformational leadership ($R^2 = .93$).

Table 4: Mean Differences of Age Gender (Men and Women) of the Participants

Variables	Men (n=87)		Women(n=113)		<i>t</i> (198)	<i>P</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
CR	19.36**	5.14	17.46	5.97	2.36	.01	0.34
TL	44.62	18.76	40.11	20.76	1.58	.14	0.22

Note: ** $p \leq .01$, CR = Cognitive Reappraisal, TL = Transformational Leadership

An independent samples *t*-test showed that men scored significantly higher than women on cognitive reappraisal, $t(198) = 2.36$, $p = .01$, with a small-to-moderate effect size (Cohen's $d = 0.34$). However, no significant gender difference was found in transformational leadership, $t(198) = 1.58$, $p = .14$, indicating comparable leadership scores between men and women.

Discussion

The present study examined the relationship between cognitive reappraisal and transformational leadership among organizational leaders in Pakistan, as well as the predictive role of cognitive reappraisal and potential gender differences. Consistent with the first hypothesis, Pearson correlation analysis revealed a strong, positive, and statistically significant relationship between cognitive reappraisal and transformational leadership ($r = .96$, $p < .01$). This finding indicates that leaders who effectively reinterpret emotionally challenging situations are more likely to demonstrate transformational leadership behaviors, such as inspirational motivation, individualized consideration, and intellectual stimulation. These results align with prior research suggesting that effective emotion regulation enhances leadership capabilities by improving decision-making, interpersonal communication, and team engagement (Durosini et al., 2021; Davies et al., 2010; Cheng et al., 2005; Bredillet et al., 2015).

Regarding the second hypothesis, simple linear regression analysis confirmed that cognitive reappraisal significantly predicted transformational leadership ($B = 3.40$, $SE = 0.06$, $\beta = .96$, $p < .001$, $R^2 = .93$). This indicates that cognitive reappraisal explains a substantial proportion of variance in transformational leadership, highlighting its critical role as a psychological mechanism underlying effective leadership. Leaders who manage their emotions adaptively are better equipped to motivate, inspire, and support their teams, which fosters higher organizational performance and cohesive work environments. The predictive strength observed in this study is notably higher than in previous research on emotional intelligence and leadership, suggesting that focusing specifically on cognitive reappraisal may provide a more precise understanding of emotion-based leadership processes (Purwanto, 2022; Qalati et al., 2022; Rizzo et al., 2019; Solih, et al., 2024).

The study also examined gender differences in cognitive reappraisal and transformational leadership. Results showed that men scored significantly higher than women on cognitive reappraisal ($t(198) = 2.36$, $p = .01$, $d = 0.34$), whereas no significant gender differences were observed in transformational leadership ($t(198) = 1.58$, $p = .11$, $d = 0.22$). The observed gender difference in cognitive reappraisal is consistent with prior research indicating that emotion regulation strategies may vary by gender due to socialization patterns and emotional coping norms (Gross & John, 2003; Nolen-Hoeksema, 2012). Similar patterns have been reported in Pakistani samples, where men demonstrated greater reliance on cognitive reappraisal in managing emotions (Shahid & Yaseen, 2025). In contrast, the absence of gender differences in transformational leadership aligns with leadership research suggesting that transformational behaviors are not

inherently gendered and are exhibited comparably by both men and women (Eagly et al., 2003; Judge & Piccolo, 2004). Collectively, these findings suggest that while men may report slightly higher use of cognitive reappraisal strategies, both male and female leaders demonstrate similar levels of transformational leadership. These results underscore the malleability of emotion regulation skills across genders and highlight the value of incorporating cognitive reappraisal training into leadership development programs to enhance leadership effectiveness across diverse organizational contexts.

Overall, the study provides robust empirical evidence that cognitive reappraisal is a key determinant of transformational leadership in contemporary organizations. By demonstrating both a strong association and predictive effect, the findings emphasize the practical and theoretical importance of emotion regulation skills in enhancing leadership behaviors, fostering team cohesion, and supporting organizational success.

Conclusion

The present study demonstrates a strong positive relationship between cognitive reappraisal and transformational leadership among organizational leaders in Pakistan. Leaders who effectively reframe emotionally challenging situations tend to exhibit higher levels of transformational leadership behaviors. Cognitive reappraisal was found to be a significant predictor of transformational leadership, highlighting its role as a key psychological mechanism. Gender differences were observed in cognitive reappraisal, with men scoring higher, although no gender difference emerged for transformational leadership. These findings underscore the importance of emotion regulation skills in leadership effectiveness. Overall, enhancing cognitive reappraisal can strengthen transformational leadership capacities in contemporary organizations.

Limitations and Recommendations

The study employed a cross-sectional design, which limits causal inferences between cognitive reappraisal and transformational leadership. The use of self-report measures may introduce response biases. The sample, though diverse in industry, was limited to Pakistani organizations, restricting generalizability to other cultural contexts. Future research should adopt longitudinal designs and include multi-source assessments of leadership behaviors. Expanding the sample to include leaders from different countries or organizational levels may provide broader insights. Leadership training programs should incorporate cognitive reappraisal skill development to enhance transformational leadership effectiveness.

Implications

The findings have several theoretical and practical implications. Theoretically, the study contributes to leadership psychology by identifying cognitive reappraisal as a critical mechanism underlying transformational leadership. Practically, organizations can enhance leadership effectiveness by integrating emotion regulation training into leadership development programs. Human resource managers and organizational coaches can design interventions to strengthen cognitive reappraisal skills among leaders. Cultivating these skills may improve team motivation, innovation, and overall organizational performance. Additionally, recognizing gender differences in cognitive reappraisal can help tailor training programs effectively. The study emphasizes the relevance of psychological competencies in leadership beyond technical or managerial expertise. These insights are particularly valuable for leadership development in resource-constrained and hierarchical cultural contexts like Pakistan.

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