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TOP MANAGEMENT SUPPORT AND PROJECT LEADER WORKPLACE ANXIETY IN RELATION TO PROJECT CITIZENSHIP BEHAVIOR: THE MODERATING ROLE OF PROJECT MEMBER CORE-SELF EVALUATION

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ABSTRACT
The study examines the relationship between top management support (TMS), project leader workplace anxiety (PLWA), and project citizenship behavior (PCB), with a focus on the alteration of project member core self-evaluation (PMCSE). The model is supported by Social Information Processing Theory (SIPT), which posits that individuals internalize and interpret cues from their social environment, thereby influencing their attitudes and behaviors. The study model proposes that individuals with strong (PMCSE) can sustain PCB and consistent performance independently of the organizational environment. Using a quantitative approach, data was collected from 300 professionals in Pakistan's software industry using self-report questionnaires and analyzed using SPSS. The study demonstrates that TMS significantly enhances PCB, highlighting the importance of leadership support in fostering discretionary behaviors. Contrary to existing literature, PLWA positively influences PCB, suggesting that moderate levels of leader anxiety may increase vigilance and proactive behaviors. In this regard, PMCSE plays a critical role, with high levels of core self-evaluation enhancing the positive effects of TMS on PCB and preventing the negative impacts of PLWA. The research contributes to the fields of organizational behavior and project management by extending the Social Information Processing Theory (SIPT) by demonstrating critical role of moderator to ensure positive behaviors even in negative environment.
Keywords: Top Management Support, Project Leader Workplace Anxiety, Project Citizenship Behavior, Core Self-Evaluation, social information processing theory

INTRODUCTION

Besides technical performance, the social and psychological dynamics of teams are also important to ensure project success. In this regard, the present study examines the interaction of Top Management Support (TMS) and Project-Leader Workplace Anxiety (PLWA) from a leadership perspective, Project Member Core Self-evaluation (PMCSE), and Project Citizenship Behavior (PCB) from team perspectives, as well as a leadership perspective as a core construct influencing project outcomes over time. Top management support (TMS) is significant as it ensures the timely provision of strategic direction, resource allocation, and expresses commitment to project success by supporting the project team and manager in the smooth execution of the project (Rodgers, Hunter et al. 1993). The effective support of top management signals organizational priorities and fosters an organizational culture adorned with trust and cooperation (Young and Poon 2013). Suppose the top management fails to ensure the required support. In that case, project leaders can suffer from anxiety, and the state of anxiety can further exacerbate because of excessive workload, performance pressure, or organizational ambiguity. This refers to Project-Leader Workplace Anxiety (PLWA), higher leader anxiety leads to impaired decision-making and will transfer anxiety to the team, which may lead to team demotivation (Verkuil, Atasayi et al. 2015). However, if project team members have higher levels of self-evaluation than they will display confidence, resilience, and optimism even in stressful situations (Erez and Judge 2001). This is known as Project Member Core Self-Evaluation (PMCSE), it reflects an individual's overall appraisal of their self-worth, competence, and control over the environment (Judge and Bono 2001). Therefore, PMCSE can support project team members to perform voluntary behaviors even in stressful environments. Therefore, with top management support the project citizenship behavior will improve and further enhance, if project team appraise their worth and competencies, even if there is no support and leadership anxiety. Project citizenship behavior (PCB) is a derived from

the concept of Organizational citizenship behavior (Podsakoff, Whiting et al. 2009). Project team members with PCB, go beyond formal job requirements, including helping colleagues, sharing knowledge, and taking initiative.

According to social Information Processing Theory, employees interpret social cues (Salancik and Pfeffer 1978), that is , in case of supportive top management employees will foster citizenship behaviors, but in case of negative behaviors that may arise from leadership workplace anxiety, can communicate negative or poor week signals to employees that may reduce employees' willingness to engage in extra-role behaviors. However, if employees manage and evaluate themselves regularly to meet the organizational goals, then negative clues from stressful environment due to anxiety can be reduced.

Previous research has examined TMS and workplace anxiety separately in relation to employee outcomes, whereas combine effect of TMS and leadership anxiety in relation to positive outcomes needs to be examined, especially with the effect of Project member core self-evaluation (PMCSE) as a moderator to control the effect of social positive or negative cues.

Research Questions

- How does Top Management Support (TMS) and Project-Leader Workplace Anxiety (PLWA) affect Project Citizenship Behavior (PCB)?
- How does Project Member Core Self-Evaluation (PMCSE) moderate the relationship of Top Management Support (TMS) and Project-Leader workplace Anxiety (PLWA) with Project Citizenship Behavior (PCB)?

Research Objectives

- To examine the direct influence of Top Management Support on Project Citizenship Behavior.
- To examine the direct influence of Project Leader Workspace anxiety on Project Citizenship Behavior.
- To investigate the role of the moderator in the relationship of Top Management Support on Project Citizenship Behavior.
- To investigate the role of the moderator in the relationship between the Project-Leader workplace anxiety on Project Citizenship Behavior.

LITERATURE REVIEW

Social Information Processing Theory (SIPT) suggests that individuals process and make sense of social cues based on the social information they receive from their environment, which in turn effect their attitudes and behaviors (Salancik and Pfeffer 1978). In project-based organizations, the signals from leaders and management influence project team behaviors, as they inform members about organizational stability and expectations. Top management support (TMS) shares positive cues that indicate a safe and valued environment and promote positive behaviors of team members, like Project Citizenship Behavior (PCB). On the other hand, the negative signals shared by leaders with stress and anxiety convey instability and promote stress within the organization, alternatively discouraging members from engaging in positive behaviors.

The present study proposes that if members do self-evaluation, then they can control the processing of the interpretation of cues. In this regard, Project members core self-evaluation (PMCSE) is checked as moderator in the relationship between top management support and project leader workplace anxiety with project citizenship behaviors. The members with higher CSE perceive supportive cues more positively and are less deterred by leader anxiety, while those with lower CSE are more vulnerable to negative cues. Therefore, the model of the study provides a theoretical framework for understanding how organizational and psychological factors interact to shape PCB.

Top Management Support (TMS) and Project Citizenship Behavior (PCB)

Top management involves the active participation of senior managers, allocation of resources, and commitment to project goals and hence fosters motivation, trust, and perceived fairness. Therefore, TMS is recognized as a critical success factor in Project implementation (Marble 2003, Lewis 2004). Following the Social Information Processing Theory (SIPT), when employees perceive genuine support from management, they respond through voluntary behaviors such as helping colleagues and taking initiatives in the support of organization. Therefore, TMS creates an environment of trust and justice that ultimately enhances inherent motivation and team cohesion (Deluga 1994, Akgun, Byrne et al. 2006). Based on the discussion it is hypothesized that.

H1: Top management Support positively (TMS) impacts positively Project Citizenship Behavior (PCB).

Project-Leader Workplace Anxiety and Project Citizenship Behavior

In the current dynamic environment of organizations, project leaders are prone to lengthy deadlines that lead to stress and uncertainty. This uncertainty creates workplace anxiety which further weakens personal functioning and team performance (Haslam, Atkinson et al. 2005, Akgun, Byrne et al. 2006). According to SIPT, the negative cues, signals instability and vulnerability of leadership lead to reducing member's willingness to engage in PCB. This is because of social contagion, where team members get influenced by leader anxiety spread in the environment like a pandemic and hence lowering moral and trust of team members (Gruda, Ojo et al. 2022). In these attitudinal processes, subordinates interpret anxious leaders' behavior as incompetence or lack of confidence, which further undermines

team cooperation. In addition, leader anxiety negatively affects the organizational climate that leads to discouraged voluntary behaviors and collaborations. Therefore, it can be hypothesized that.

H2: Project Leader workplace Anxiety (PLWA) impacts negatively on Project Citizenship Behavior (PCB).

Moderation role of Project Member Core Self-Evaluation in shaping Project citizenship Behavior (PCB)

Project Member Core Self-Evaluation (CSE) acts as psychological filter that enhances or weakens the influence of top management's supportive influence. Individuals with high core self-evaluation characteristics possess self-confidence, emotional stability, and a strong internal locus of control, that further guide them to respond tactfully towards supportive or challenging stress and anxiety laden situations (Judge and Bono 2001). CSE enhances team members psychological empowerment, encompasses individual's subconscious appraisal of their capabilities, significantly enhances individual resilience to respond stabilizers of stressors (Piwowar-Sulej and Iqbal 2025).

Therefore, in the relationship of top management support and PCB, individuals with higher CSE may further enhance individual capacities to provide voluntary behaviors within organizations (Wu, Li et al. 2025). Conversely, in the relationship between Project Leader workplace anxiety and PCB, the relationship may vary because of CSE. Individuals with higher CSE can behave optimistically and maintain motivation even under anxious leadership (Liu, Liu et al. 2025). Members with low CSE are more sensitive to negative cues, they may internalize leader anxiety and lead to lose confidence and withdraw from voluntary behaviors. Based on the discussion, the role of moderator can be hypothesized as.

H3: Project member Core Self-Evaluation moderates the relationship between Top management support and project citizenship behavior, such that the relationship is stronger when CSE is high

H4: Project member Core Self-Evaluation moderates the relationship between Project-Leader Workplace Anxiety and project citizenship behavior, such that the negative relationship is weaker when CSE is high

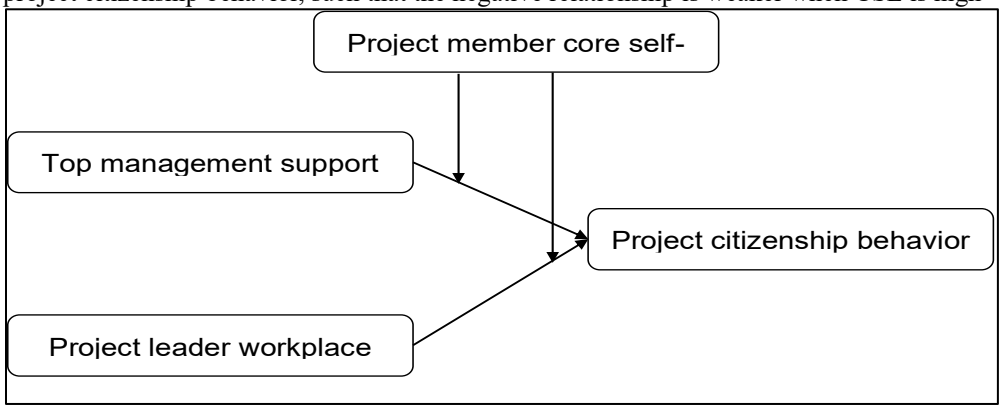

Figure 1: Research Model

METHODOLOGY

The study conducted through a quantitative approach. Data was collected from employees working in Pakistan's software industry, as they work in dynamic project environment conducive to collect behavioral influences. The study used a 5-point Likert scale to collect data from project employees of software industry through a convenience sampling technique. The study has adopted 4-item scale for top management support (TMS) by Garrett and Neubaum (2013), 8-item scale for Project Leader Workplace anxiety (PLWA) by McCarthy et al. (2016), 12-item scale for Project-member core self-evaluation by Judge et al. (2005), and 21-item scale for project citizenship behavior(PCB) by Korkmazyurek (2003) (Judge and Bono 2001, Garrett Jr and Neubaum 2013, McCarthy, Trougakos et al. 2016, Korkmazyürek 2024), to collect data from software industry project managers. Initially, questionnaires were distributed to targeted sample of 375 respondents, after data cleaning valid responses were retained at 300, which was consistent with recommended sample to item ration. Data was collected through self-administered questionnaires in natural work settings to ensure authenticity and minimize bias. The data was entered into Excel and converted to CSV files to analyze using SPSS. The data analysis tools like descriptives, correlations and process hayes.

Data Analysis

The analysis of the study initiated from the frequency distribution of demographic characteristics of data. The demographic characteristics include age, gender, education and work experience. Table 1 below shows the description.

Table 1: Frequency distribution of data

variable	**Category**	**%**
Gender	Male	46.7%
	Female	53.3%

Age	18-25	28.3%
	26-35	58.7%
	36-45	11.3%
	46-55	4%
	56 or above	1%
Education	Intermediate	3%
	Bachelors	58%
	Masters	32%
	PhD	7.3%
Work Experience	0-5 Years	50.3%
	6-10 Years	37.7%
	11-15 Years	10.3%
	16-20 Years	2%
	Over 20 Years	3%

Further the descriptive analysis of collected data was conducted including mean and standard deviation of all the variables to show where the inclination of the data is.

Table 2: Descriptive analysis of data

Variables	**Mean**	**Standard Deviation**
Top Management Support	4.081	.700
Project Leader Workplace Anxiety	3.855	.666
Project member core self-evaluation	3.995	.443
Project Citizenship behavior	4.062	.444

Correlations

The correlation analysis conducted to determine how the variables are interrelated, indicating whether their relationships are positive, negative, or insignificant. The correlation coefficients of all variables are summarized in table 3.

Table 3: Correlation analysis

	Mean	**SD**	**1**	**2**	**3**	**4**
TMS	4.08	.70	(.80)			
PLWA	3.85	.66	.32*	(.85)		
PMCSE	3.99	.44	.32*	.44*	(.71)	
PCB	4.06	.44	.51*	.21*	.37*	(.81)
N=300, *p<0.05, NS=not significant, alpha values in brackets						

Regression Analysis

Role of moderator in the relationship between TMS→PCB

As the study aims to investigate the impact of top management support (TMS) on Project Citizenship Behavior (PCB) and how appraisal of self-worth via Project member core self-evaluation moderates the direct relationship. Through the regression analysis using process hayes model 1. In consistent with the prior research, the results show that TMS has a significant positive impact on PCB. As previous research has shown that supportive leadership fosters positive workplace behaviors. The results support the phenomenon that support of top management provides a feeling of being valued, motivated and hence employees go beyond their formal roles in the support of organizations.

Further, the study observed how moderating role of Project member Core self-evaluation representing their self-esteem, self-efficacy and sense of control strengthen the link between TMS and PCB. Previous research suggests that people with high CSE are proactive, optimistic and goal-oriented and hence more positively respond to managerial support. This leads to enhance performance and engagement in extra-role behaviors. The analysis shows that there is a significant positive moderation of PMCSE in the relationship between TMS and PCB, which is aligned with previous research as discussed in literature review.

Table 4: Moderation analysis TMS-PMCSE-PCB

Predictors	**β**	**SE**	**T**	**p**	**LLCI**	**ULCI**
TMS → PCB	.2491	.0472	5.1255	.0000	.1490	.3348

TMS x PMCSE	-.2286	.1048	2.1804	.0300	.0223	.4349

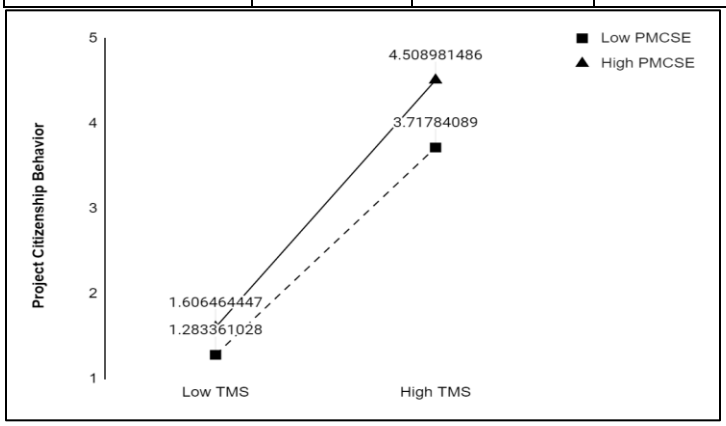

Figure 2: Moderation analysis graph of TMS-PMCSE-PCB

Role of moderator in the relationship between PLWA→PCB

The study analyzes the relationship between project leadership workplace anxiety and project leadership behavior. According to literature, there is a negative relationship between PLWA and PCB, however the analysis of the study shows positive relationships and thus challenges the conventional belief that anxiety is always detrimental. This supports the findings that moderate level of leader anxiety can prompt team members to become more proactive and engaged in problem-solving as it heightens vigilance, attention to detail and sense of urgency (Cheng and McCarthy 2018). However, this positive effect is subject to the level of core self-evaluation (CSE) of project members to determine how members interpret anxious leader's behaviors and respond. The CSE comprising self-esteem, self-efficacy, emotional stability, and locus of control that enables members to stabilize their behaviors and respond strategically. Members with high CSE enable them to show emotional regulation during stressful conditions and hence take leader's anxiety as a sign of dedication rather than weakness. This helps them to maintain focus and contribute to project goals, thereby strengthening PCB. On the other hand, members with low CSE may lead to reducing engagement as they perceive leader anxiety negatively. Therefore, it can be stated that CSE functions as a psychological buffer that withstands the negative influence of leader anxiety. The findings extend leadership and team dynamics literature by emphasizing that team members' self-appraisal through CSE significantly enables them to endure leader behavior and emotions and their collective outcomes.

Table 5: Moderation analysis PWLA-PMSCE-PCB

Predictors	**β**	**SE**	**T**	**p**	**LLCI**	**ULCI**
PWLA → PCB	.2497	.0460	5.4282	.0000	.1592	.3403
PWLA x PMCSE	.2814	.1030	2.7306	.0067	.0786	.4842

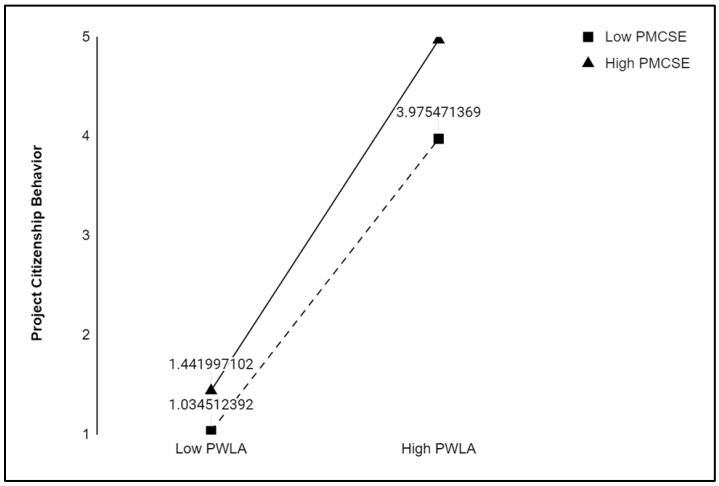

Figure 3: Moderation analysis graph PLWA-PMCSE-PCB

According to analysis, the summary of accepted and rejected hypothesis is as follows.

Table 6: Results summary

H	Hypothesis	Status
H1	Top Management Support positively impacts project citizenship behavior.	Accepted
H2	Project leader workplace anxiety negatively impacts project member OCB.	Rejected
H3	Project member core-self-evaluation moderates the relationship between top management support and project citizenship behavior.	Accepted
H4	Project member core-self-evaluation moderates the relationship between project leader workplace anxiety and project citizenship behavior.	Accepted

DISCUSSION

The study demonstrates a significant role of project members' self-evaluations to be able to withstand in case of support, as well as anxiety to decide wisely instead of just influenced negatively by stressful or highly pleasant ambiance. Following the prior literature, the present study maintains the importance of Top Management support in fostering productive workplace behavior. The support of senior management enhances encouragement, visibility, and adequate resource allocation that feels beneficial to employees and thus enhances employee engagement in extra-role behaviors that further enhance team and project performance. Therefore, supportive top management creates a culture of appreciation and motivation, resulting in higher levels of PCB. In this relationship, Core self-evaluation plays a critical role in helping the project members to decide wisely about utilizing top management support in the favor of organizations. The core self-evaluation is characterized by self-esteem, self-efficacy and an internal locus of control leverage members to avoid façade of support and become more responsible to ensure strategic goals and improve performance. Such individuals take challenges as opportunities and translate organizational support wisely into productive behaviors.

When the study examines the influence of Project Leader workplace Anxiety on PCB, it shows results contrary to traditional assumptions, that PLWA links positively with PCB. Although leader anxiety creates an environment of tension that may lead to reduction in subordinates' performance, in the case of present study, the role of moderator PMCSE shows that individuals with high PMCSE are not influenced by leader anxiety and instead withstand in the situation using its self-esteem, self-efficacy and internal locus of control. In this situation, the project members CSE become so strong that they become self-regulatory teams and support each other. Considering the anxiety of leaders in difficult situations, members become more vigilant to meet deadlines, detail oriented to avoid confusion and responsive to meet stakeholder expectations. Therefore, team members foster with internal encouragement, stimulate engagement, and adopt proactive strategies to solve problems collectively. Therefore, this is essentially the members' psychological resilience that transforms potential tension by anxious leaders into a performance-enhancing force.

In conclusion, the study shows that project members with characteristics of psychological resilience through self-appraisal can withstand in both highly supportive leadership, that may sometimes become pseudo-supportive behavior as well as in stressful environment created by anxious leaders. In software industry, where agile project management methods are adopted, the role of self-regulated teams is highly significant, and their psychological resilience can play a significant role in uncertain circumstances.

Theoretical contributions

The present research has significantly contributed to project management literature specifically as well as organization behavior on a wider scale. The study demonstrates how project members' psychological abilities of self-appraisal led to control the influence of environment created by leader's behaviors. The recent project management trends are more oriented towards team competency, relying more on self-regulatory teams and hence core self-evaluation plays a significant role in achieving a stress-free situation as well as identifying instrumental support. In this way, the study shows how leadership behaviors operate as subtle social cues and shape employee's cognitive and behavioral responses in project environments. However, contrary to conventional understanding Social Information theory (SIPT) that positive leadership invariably conveys positive signals and negative leadership conveys negative ones, the study advances its understanding through the role of moderator. The results advance the SIPT understanding leadership signals, whether, seemingly positive or negative, do not always elicit correspondingly positive or negative outcomes. The findings reveal that leader anxiety, under certain conditions, may act as a constructive cue that heightens team vigilance and empathy, thereby promoting favorable outcomes. Furthermore, although supportive top management enhances PCB and moderator CSE further enhance the relationship, it also supports members to identify any self-serving or pseudo-support. The study emphasizes the importance of individual psychological resources in preventing adverse effects and enhancing positive support. This integrative perspective highlights that project environment is structured through interaction of leadership behavior, individual disposition, and collective mechanisms, which

together create social cues that continuously transmit and reinforce signals within project-based organizations, ultimately influence overall environment.

Limitations and Future Research Recommendations

The research contributed significantly to project management literature, however, there are limitations that should be addressed in future research. The study design was composed of a cross sectional that restricts causal inferences. The future research should focus on longitudinal research for more rigorous understanding of how these relationships evolve over time. Furthermore, the data for the study was collected from one sector only that limits generalizability, thus future research should investigate other industries, organizational sizes and cultural settings. Most importantly, the self-reported data raises concerns about social desirability bias, future research should collect data from multiple sources, including peers, supervisors, and subordinates. Besides, core self-evaluation, future research should investigate other individual psychological factors such as emotional intelligence, resilience and adaptability. Additionally, the toxic factors should be examined in relation to individual psychological abilities in enhancing project citizenship behavior. Besides moderation, future studies should also investigate potential mediators to bridge the relationship between leadership and PCB, particularly considering negative and toxic leadership styles. Most importantly, considering the dynamic nature of project environments, there is need of qualitative studies to explore project-based organizations' temporary culture and environment including employee's adaptability with such highly dynamic environments. These future research recommendations will extend the social information theory (SIPT) in understanding the complexity of social cues in rising more dynamic environments.

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