

THE EFFECT OF DARK LEADERSHIP TRAITS ON EMPLOYEE JOB EMBEDDED: A CHAIN MEDIATION ANALYSIS OF LEADER-MEMBER EXCHANGE AND PERCEIVED INSIDER STATUS

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ABSTRACT

The study focus on dark leadership traits (narcissistic, psychopathic, and Machiavellian), highlights the negative effects on employee job embeddedness, and emphasizes the mediating roles of Leader-Member Exchange and Perceived Insider Status. Leadership characterized by narcissistic, psychopathic, or Machiavellian traits collectively referred to as "dark leadership" that integrates self-serving behaviors with manipulative tendencies, often driven by arrogance and personal gain. This style of leadership can have profound negative impacts on both organizations and their employees. The growing interest in understanding the detrimental effects of dark leadership on subordinates has become a focal point in organizational behavior research. This study, grounded in social exchange theory and resource conservation theory, develops a chain mediation model to examine how dark leadership influences employee job embeddedness. Utilizing data from a survey of 405 corporate employees, the study's findings reveal a significant negative relationship between dark leadership traits and job embeddedness. Additionally, leader-member exchange (LMX) and perceived insider status are shown to act as mediating variables in this relationship, both independently and in a chain mediation framework. These findings offer valuable insights into the complex dynamics of dark leadership, contributing to the theoretical understanding of its impact and providing practical implications for improving leadership practices across various organizational contexts.

Keywords: dark leadership, narcissistic traits, psychopathic traits, Machiavellian traits, leader-member exchange (LMX), perceived insider status, job embeddedness, chain mediation

INTRODUCTION

As more post-90s and post-95s employees join the workforce, they bring unique traits shaped by digital advancements. Known for their boldness, openness, and innovation, they prioritize personal values and recognition, showing adaptability and enthusiasm for new challenges. This generation

offers dynamic talent across sectors (Xu et al., 2021; Yang et al., 2021). A gap exists between young employees' expectations and traditional leadership in Pakistani workplaces, leading to reduced loyalty and job embeddedness, which hinders organizational efficiency and sustainability

(Khan, M. A., & Ali, S. (2021). Organizational leaders face the critical challenge of developing strategies to motivate, guide, and retain the new generation of employees. Understanding factors influencing job embeddedness and reducing turnover rates have become urgent concerns for businesses (Fang et al., 2020). Job embeddedness, a key predictor of turnover, reflects employees' connection to their organization, including trust and reliance on it (Liao et al., 2021). Previous research has focused on individual, organizational, and environmental factors, while leadership's impact remains underexplored (Mitchell et al., 2001; Awan et al., 2021; Elshaer & Azazz, 2021). Dark leadership traits such as narcissism, psychopathy, and Machiavellianism negatively affect employees' psychological well-being and behaviors, contributing to issues like low job satisfaction, cynicism, and higher turnover intentions (Alhasnawi & Abbas, 2021). These traits are more common in collectivist cultures (Weng et al., 2018; Xiao et al., 2018). This study explores how these traits impact job embeddedness in Pakistan, examining the mediating roles of leader-member exchange (LMX) and perceived insider status, offering insights for improving organizational practices (Alhasnawi & Abbas, 2021).

Theoretical Background and Hypotheses

New Generation Employees: Egri and Ralston (2004) introduced the concept of the "new generation" in the workplace, identifying three generational cohorts in Pakistan. This study focuses on individuals born after 1990, aged 18-32, who are becoming significant contributors to the workforce. They are commonly referred to as Generation Y (Egri & Ralston, 2004). New generation employees possess unique traits: (1) they are bold, open-minded, and challenge traditional authority while pursuing equality, with an innovative and dynamic approach. (2) They prioritize personal values, seek respect, and prefer flexible work environments due to their strong sense of autonomy. (3) Influenced by emotions, they are tech-savvy, exposed to diverse perspectives, and tend to be impulsive. (4) Highly educated, they have higher academic attainment than previous generations. Characterized by "three

highs and one low" (high education, career expectations, and material demands, but low work tolerance), they can be self-centered, less resilient, and lack organizational loyalty (Fang et al., 2020; Xu et al., 2020, 2021).

Related Studies on Narcissistic, Psychopath and Machiavellian Leaderships: The DSM-5 defines traits associated with narcissistic, psychopathic, and Machiavellian personalities within personality disorders: **Narcissistic Personality Disorder (NPD)** is marked by grandiosity, excessive admiration, and lack of empathy, with individuals often exploiting others for personal gain (American Psychiatric Association, 2013). **Psychopathy**, part of Antisocial Personality Disorder, involves disregard for others' rights, deceit, and aggression (American Psychiatric Association, 2013).

Machiavellianism, part of the "dark triad," is characterized by manipulation, self-interest, and a cynical worldview (Christie & Geis, 1970). These traits highlight manipulative and harmful behaviors in individuals.

Narcissistic, psychopathic, and Machiavellian leadership, known as the "dark triad," negatively impacts organizational dynamics, leading to decreased job satisfaction, increased turnover intentions, and counterproductive behaviors (Alhasnawi & Abbas, 2021). These leaders create toxic environments, fostering mistrust and low morale (O'Boyle et al., 2012). In collectivist cultures, hierarchical leadership further amplifies these effects (Weng et al., 2018; Xiao et al., 2018), as such leaders seek recognition to maintain their fragile self-esteem (Duchon & Burns, 2008; Ouimet, 2010).

Narcissistic leadership, characterized by grandiosity, a need for admiration, and a lack of empathy, can have detrimental effects on organizations. Such leaders often prioritize personal success over organizational well-being, leading to unethical practices, poor collaboration, and low employee morale (Rosenthal & Pittinsky, 2006; Braun, 2017). While narcissistic leaders may demonstrate charisma and vision, fostering innovation in certain situations (Chatterjee & Hambrick, 2007), their impulsiveness and intolerance of criticism lead to instability and

failure (Campbell et al., 2011). Ultimately, narcissistic leaders' self-centeredness undermines team cohesion and performance (Grijalva et al., 2015; Judge et al., 2009). Leaders with psychopathic traits, including impulsivity, lack of empathy, and manipulation, can create toxic work environments, leading to unethical decisions, high turnover, and stress (Babiak & Hare, 2006; Boddy, 2011). Similarly, Machiavellian leaders, driven by self-interest, employ strategic manipulation and deceit, resulting in lower employee morale, trust, and increased workplace deviance (Kiazad et al., 2010; Dahling et al., 2009). Together, these "dark triad" leadership styles foster fear and mistrust, harming organizational culture and performance (O'Boyle et al., 2012; Jonason et al., 2012).

Dark traits in Leadership and Employee Job Embeddedness: Leadership characterized by dark personality traits, such as narcissism, psychopathy, and Machiavellianism, is often motivated by self-serving needs rather than the organization's interests (Rosenthal & Pittinsky, 2006). Such leaders are typically arrogant, irritable, unpredictable, and stubborn, which significantly affects employee attitudes and behaviors (Ouimet, 2010).

Job Embeddedness refers to factors influencing an individual's decision to stay with an organization, comprising three components: connection, fit, and sacrifice. Connection relates to interactions with colleagues and leaders; fit refers to the compatibility between employees and their work environment; and sacrifice involves the potential loss of material or psychological benefits when leaving (Mitchell et al., 2001; Lee et al., 2004; William et al., 2014). Unlike job satisfaction, job embeddedness considers both workplace and community factors, focusing on an employee's attachment to the organization (Yuan & Chen, 2008). Research suggests that leadership styles significantly affect employees' job embeddedness (Khorakian et al., 2021; Amankwaa et al., 2022). According to social exchange theory and resource conservation theory, narcissistic leadership negatively impacts job embeddedness. Narcissistic leaders' arrogance, lack of empathy, and hypersensitivity create an imbalance in the leader-

subordinate relationship, leading to decreased organizational commitment and job embeddedness (Cropanzano et al., 2017; Wang et al., 2021). These leaders' behaviors undermine trust and perceived support, diminishing employees' job embeddedness (Ogunfowora, 2013; Haggard & Park, 2018).

Resource Conservation Theory suggests individuals manage their resources under stress, seeking new ones while preserving existing ones. Abusive leadership depletes employees' self-resources, such as willpower and self-esteem (Hobfoll, 1989; Tepper et al., 2007). Narcissistic leadership's self-centered behaviors hinder employees from acquiring or maintaining resources, reducing job embeddedness and causing employees to distance themselves from the organization to protect their resources (Saks & Gruman, 2018).

Leader-Member Exchange (LMX) Theory, developed by Dansereau, Graen, and Haga in the 1970s, emphasizes the unique relationships between leaders and followers. LMX theory asserts that leaders do not treat all subordinates equally, but instead form individualized relationships based on mutual trust, respect, and obligation (Graen & Uhl-Bien, 1995). These relationships can be classified as high-quality or low-quality exchanges.

High-quality LMX relationships are characterized by trust, communication, support, and respect, leading to increased motivation, job satisfaction, and organizational citizenship behaviors. Conversely, **low-quality exchanges** are based on formal agreements and lack emotional support, resulting in reduced satisfaction and higher turnover intentions. The theory suggests that the quality of these exchanges is dynamic and influenced by ongoing interactions. Leaders are encouraged to develop high-quality exchanges with as many followers as possible to improve organizational performance, employee satisfaction, and retention (Gerstner & Day, 1997). Overall, LMX theory highlights the importance of leader-follower relationships in shaping organizational outcomes.

Hypotheses: Based on the above theoretical framework, it is hypothesized that dark traits leadership negatively affects employees' job embeddedness due to its impact on the perceived balance of social exchange and resource conservation within the organization.

Hypothesis 1: Dark Traits Leadership and Employee Job Embeddedness

Leaders displaying dark traits—narcissism, psychopathy, and Machiavellianism—tend to negatively affect employees' job embeddedness. Leader-Member Exchange (LMX) theory explains that the quality of leader-subordinate relationships depends on ongoing interactions (Martin et al., 2018; Andersen et al., 2020). Due to resource limitations, leaders often categorize employees into “insiders” or “outsiders” (Chen et al., 2009; Lam et al., 2015). High-quality LMX arises when leaders demonstrate care and support, while low-quality LMX develops when leaders neglect employees' needs (Tang et al., 2020). Dark-trait leaders frequently prioritize self-interests, undermining employee contributions and taking credit for successes, thus eroding LMX quality (De Vries & Miller, 1985; Khoo & Burch, 2008; Liu et al., 2017). These leaders' deceptive and hostile behaviors foster mistrust, damaging LMX (Ouimet, 2010; Back et al., 2013). Their disregard for subordinates often generates negative emotions, leading employees to distance themselves, ultimately weakening job embeddedness.

Hypothesis 2: The Negative Impact of Dark Traits Leadership on Leader-Member Exchange (LMX)

Leaders with dark traits—narcissism, psychopathy, and Machiavellianism—tend to damage the quality of Leader-Member Exchange (LMX) relationships. In high-quality LMX, employees benefit from enhanced organizational support, resources, and autonomy, fostering a sense of value and belonging (Volmer et al., 2012; Saeed et al., 2019). Leaders who trust and delegate empower employees, reinforcing their roles and connection to the organization. This supportive climate promotes adaptation, increases role alignment, and strengthens job embeddedness. In contrast, leaders

with dark traits are often self-centered and unsupportive, weakening LMX and diminishing employees' organizational connection. Xu et al. (2018) found that high-quality LMX enables leaders to recognize and address employees' needs, enhancing job fit and retention. Poor LMX has the opposite effect, reducing job embeddedness as employees feel disconnected and undervalued. Thus, dark-trait leaders compromise LMX quality, leading to decreased employee job embeddedness and organizational commitment.

Hypothesis 3: The Mediating Effect of Leader-Member Exchange (LMX) on the Relationship Between Dark Traits Leadership and Employees' Job Embeddedness

Perceived insider status—how integrated and valued employees feel within their organization—mediates the relationship between leadership styles and employee outcomes, according to social exchange theory. Leaders with dark traits, such as narcissism, often prioritize personal interests, engaging in undermining or critical behaviors that damage employees' self-esteem and organizational connection (Back et al., 2013). Such leaders' sensitivity and defensiveness erode trust, and their tendency to centralize power limits employees' autonomy and decision-making involvement. Self-determination theory posits that autonomy, competence, and relatedness are fundamental needs for motivation (Wang et al., 2021; Xiang et al., 2021). Dark-trait leaders' disregard for these needs undermines employees' perceived insider status, causing them to feel disconnected. This weakened sense of belonging affects job embeddedness, as employees feel less integrated and valued. Thus, perceived insider status significantly mediates the impact of dark traits leadership on employees' embeddedness, shaping their workplace experiences and overall engagement.

Hypothesis 4: The Negative Relationship Between Dark Traits Leadership and Perceived Insider Status

Resource conservation theory suggests that employees who feel integrated as insiders within their organization receive essential support, attention, and resources, fulfilling their social and

esteem needs and fostering pro-organizational behavior (Hobfoll, 1989, 2011; Hobfoll et al., 2018). Zhang et al. (2020) found that a strong sense of insider status enhances employees' relationships with leaders and colleagues, increasing organizational commitment and lowering turnover intentions. Conversely, when employees feel like outsiders, they lack the support and resources necessary for a robust organizational connection, reducing their emotional and material investment. Leaders with dark traits, such as narcissism, psychopathy, and Machiavellianism, undermine insider perceptions by focusing on personal goals and neglecting meaningful engagement with subordinates (Back et al., 2013). This self-centered approach reduces employees' sense of belonging, weakening job embeddedness and increasing disengagement or turnover likelihood. Thus, dark traits leadership negatively impacts perceived insider status, leading to diminished organizational commitment.

Hypothesis 5: Perceived Insider Status as a Mediator Between Dark Traits Leadership and Employees' Job Embeddedness

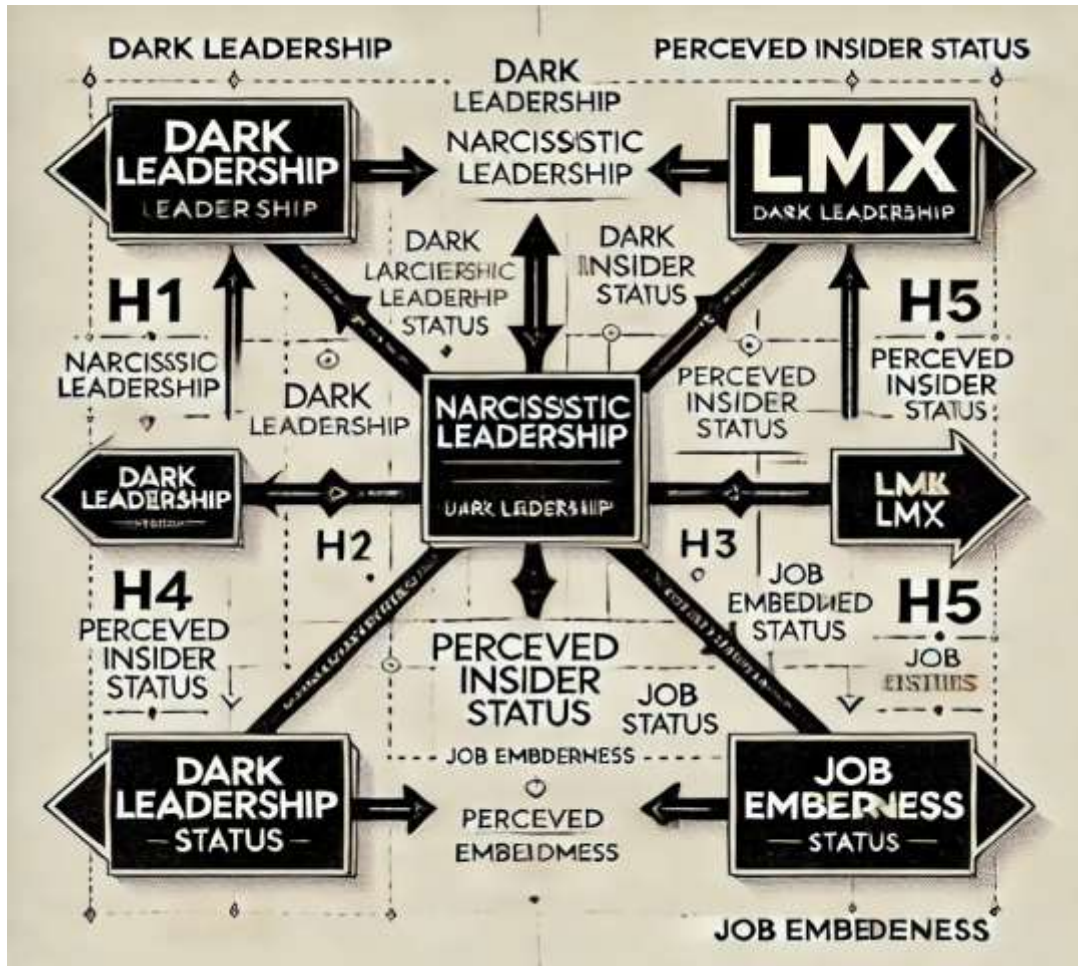
This study suggests that Leader-Member Exchange (LMX) and perceived insider status serve as sequential mediators between dark traits leadership and employees' job embeddedness. Leaders with dark traits, who often focus on self-interest, neglect the psychological and developmental needs of employees, resulting in a weakened LMX (Rosenthal & Pittinsky, 2006). Social exchange theory indicates that low-quality LMX relationships provide insufficient emotional

support and limited resources, causing employees to feel like organizational outsiders. As perceptions of insider status decrease, employees' commitment and enthusiasm also wane, ultimately reducing job embeddedness (Cropanzano et al., 2017; Tang et al., 2020). Thus, dark traits leadership diminishes LMX quality, subsequently lowering employees' perceived insider status. This lowered sense of belonging negatively affects job embeddedness, creating a sequential effect where poor leadership undermines organizational commitment and engagement.

Hypothesis 6: Chain Mediation of LMX and Perceived Insider Status in the Relationship Between Dark Traits Leadership and Employees' Job Embeddedness

This study proposes a chain mediation model where Leader-Member Exchange (LMX) and Perceived Insider Status mediate the relationship between dark leadership traits and employees' job embeddedness. Dark leadership traits—such as narcissism, psychopathy, or Machiavellianism—often undermine employee well-being and satisfaction. However, high-quality LMX (reflecting a strong leader-employee relationship) and a sense of insider status (feeling accepted and valued within the organization) may offset negative impacts. This mediation suggests that, despite dark leadership traits, positive interpersonal dynamics (LMX) and a strong sense of belonging (insider status) could enhance employees' desire to stay embedded within their jobs.

Figure 1 Theoretical Model

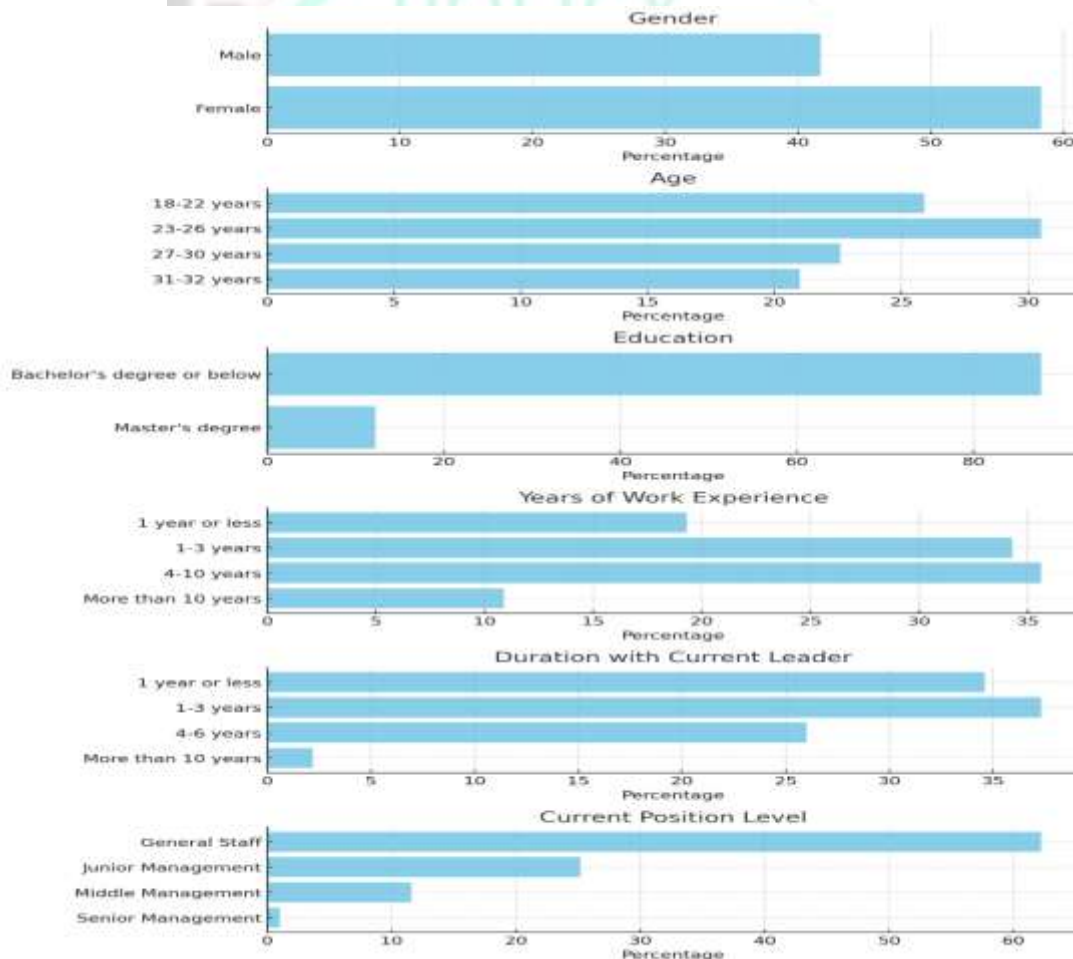


Methodology: Sample and Procedure: This study aims to examine the impact of dark trait leadership—specifically traits like narcissism, psychopathy, and Machiavellianism—on employees' job embeddedness. To achieve this, data were collected using an online questionnaire distributed to new-generation employees working in enterprises across Islamabad, Lahore, Karachi, Peshawar, and Quetta. A total of 480 responses were received. After excluding surveys with more than 20% missing data, 405 valid responses were retained, resulting in an effective response rate of 84.38%.

The demographic characteristics reflect diversity across gender, age, education, work experience, leadership tenure, and position level. Gender includes both male and female participants. Age ranges from 18 to 32 years, and education is largely at the bachelor's level, with some holding master's degrees. Work experience varies from less than a year to over ten, and duration with the current leader spans from under one year to over ten. Position levels include general staff, junior, middle, and senior management. This range of demographics provides a comprehensive view of various career stages, relationship tenures, and organizational roles within the sample.

Table 1: Demographic Characteristics

Demographic Characteristic	Category	Percentage
Gender	Male	41.7%
	Female	58.3%
Age	18-22 years	25.9%
	23-26 years	30.5%
	27-30 years	22.6%
	31-32 years	21.0%
Education	Bachelor's degree or below	87.6%
	Master's degree	12.3%
Years of Work Experience	1 year or less	19.3%
	1-3 years	34.3%
	4-10 years	35.6%
	More than 10 years	10.9%
Duration with Current Leader	1 year or less	34.6%
	1-3 years	37.3%
	4-6 years	26.0%
	More than 10 years	2.2%
Current Position Level	General Staff	62.2%
	Junior Management	25.2%
	Middle Management	11.6%
	Senior Management	1.0%



Measures: Unless specified otherwise, all responses were rated on a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). The variables in this study were assessed using well-established scales that have been validated in international contexts and have also demonstrated validity in Pakistani settings. Leadership (DTL) was evaluated using a 33-item scale developed by Deenz (2015), which measures narcissism, Machiavellianism, and psychopathy. This scale has proven effective in capturing these traits, with a sample item being, "My leader is a very self-centered person." In this study, the scale achieved a Cronbach's α of 0.906.

Leader-Member Exchange: Leader-Member Exchange (LMX) was measured using the six-item scale developed by Scandura and Graen (1984).

A sample item from this scale is, "My leader understands my job potential." The Cronbach's α for this scale in the study was 0.857.

Perceived Insider Status: Perceived Insider Status (PIS) was assessed with a five-item scale created by Stamper and Masterson (2002). An example item is, "I feel that I fit into the organization." The Cronbach's α score for this scale in the study was 0.881.

Job Embeddedness: Job Embeddedness (JE) was measured using a five-item scale from Crossley et al. (2007), which was adapted from the research by Feldman (2012). A representative item is, "It is difficult for me to leave my current job." This scale demonstrated a Cronbach's α of 0.871 in the study.

Table 2: Scale details

Measure	Test/Scale	Number of Items	Sample Item	Cronbach's α
Dark Trait Leadership	Deenz Dark Triad Scale (2015)	33	"My leader is a very self-centered person."	0.906
Leader-Member Exchange	Scandura and Graen Scale (1984)	6	"My leader understands my job potential."	0.857
Perceived Insider Status	Stamper and Masterson Scale (2002)	5	"I feel that I fit into the organization."	0.881
Job Embeddedness	Crossley et al. Scale (2007)	5	"It is difficult for me to leave my current job."	0.871

Control Variables: Additionally, six individual difference variables were included as control variables in this study: employees' gender, age, education, tenure, current position level, and duration of time spent with their leader. These

variables were controlled to eliminate alternative explanations and ensure a more reliable analysis. All control variables were dummy coded for the purpose of the study.

Table 3: Control Variables

Variable	Description	Coding Scheme
Gender	Participant's gender	1 = Male, 2 = Female
Age	Participant's age group	1 = 18-22 years, 2 = 23-26 years, 3 = 27-30 years, 4 = 31-32 years
Education	Highest level of education completed	1 = High school or below, 2 = Associate's degree, 3 = Bachelor's degree, 4 = Postgraduate degree
Working Years	Number of years the participant has been employed	1 = 1 year or less, 2 = 1-3 years, 3 = 4-10 years, 4 = 10 years or more
Current Position Level	Participant's current job position level	1 = General staff, 2 = Junior manager, 3 = Middle manager, 4 = Senior manager
Time Spent with Leader	Duration the participant has been working with their current leader	1 = 1-3 years, 2 = 4-10 years, 3 = More than 10 years

Data Analysis: Initially, we evaluated the reliability and validity of the key variables by conducting Cronbach’s alpha, composite reliability, and confirmatory factor analyses (CFAs). We also assessed common method variance (CMV) to check for potential biases. Next, hierarchical regression analysis was performed to investigate the proposed relationships. Lastly, we employed the bootstrapping method to test for mediation, due to its robust statistical power (Preacher and Hayes, 2004, 2008).

Results: To address reliability and validity, Common Method Variance (CMV) was assessed using Harmon's one-factor test, showing no significant bias (35.89% variance). Cronbach's α and composite reliability for key variables exceeded 0.80, confirming reliability. Confirmatory Factor Analyses (CFAs) demonstrated strong discriminant validity for the five-factor model, with excellent fit indices ($\chi^2/df = 2.946$, RMSEA = 0.069, CFI = 0.923).

Table 4: Reliability and Validity Assessment Procedures and Outcomes

Step	Procedure	Outcome
CMV Assessment	Checked for Common Method Variance (CMV) using Harmon's one-factor test in SPSS 25.0. Included all items of five variables: narcissistic leadership, LMX, perceived insider status, and job embeddedness.	The first emerging factor accounted for 35.89% of the variance, below the 50% threshold, indicating that CMV was not a significant issue.
Reliability Testing	Calculated Cronbach's α and composite reliability for narcissistic leadership, LMX, perceived insider status, and job embeddedness.	Both Cronbach's α and composite reliability values were greater than 0.80, confirming acceptable reliability.
Validity Testing (CFAs)	Conducted a series of Confirmatory Factor Analyses (CFAs) using Amos 23.0 for the scales of the four key variables.	The five-factor model demonstrated a better fit than any alternative model ($\chi^2/df = 2.946$, RMSEA = 0.069, CFI = 0.923, TLI = 0.912, IFI = 0.923, SRMR = 0.062), confirming discriminant validity.

Table 5: Confirmatory factor analyses

Models	Variables	χ^2	df	χ^2/df	IFI	RMSEA	CFI	TLI	SRMR
Four-factor model	NL, LMX, PIS, JE	598.138	203	2.946	0.923	0.069	0.923	0.912	0.062
Three-factor model	NL, LMX + PIS, JE	914.267	206	4.438	0.862	0.092	0.862	0.845	0.075
Two-factor model	NL, LMX + PIS + JE	1427.976	208	6.865	0.763	0.120	0.762	0.736	0.092
One-factor model	NL + LMX + PIS + JE	2631.383	209	12.590	0.529	0.169	0.527	0.477	0.152

Descriptive Statistics and Correlations

It has examined the correlations among the study variables using SPSS 25. As detailed in Table 6.

These findings provided initial support for the proposed hypotheses, which were further tested using hierarchical regression analysis.

Table 6: Correlations Among Study Variables

Variable Relationship	Correlation Coefficient (r)	Significance (p)
Dark traits Leadership – LMX	-0.286	< 0.01
Dark traits Leadership – Perceived Insider Status	-0.305	< 0.01
Dark traits Leadership – Job Embeddedness	-0.123	< 0.01
LMX – Perceived Insider Status	0.518	< 0.01
LMX – Job Embeddedness	0.445	< 0.01
Perceived Insider Status – Job Embeddedness	0.353	< 0.01

Table 7: Correlation Analysis

	1	2	3	4	5	6	7	8	9
1. Gender									
2. Age	0.005								
3. Education	0.002	0.068							
4. Working time	0.031	0.034	-0.004						
5. Current position level	0.045	0.097*	0.079	0.131**					
6. Time spent with the leader	0.006	0.099	-0.004	0.088	0.089				
7. NL	0.067	0.110*	-0.037	0.093	0.057	0.122**			
8. LMX	0.033	0.068	0.048	0.071	0.033	0.034	-0.296**		
9. PIS	0.056	0.012	0.087	0.062	-0.029	0.062	-0.305**	0.518**	
10. JE	0.042	0.054	0.096	0.055	0.135**	0.071	-0.123**	0.445**	0.353**

**p < 0.01, *p < 0.05.

Hypotheses Testing

It has tested the research hypotheses using hierarchical regression analysis. The findings, summarized in Table 8, revealed several key points:

1. Comparing Model 5 with Model 6, the analysis indicated that narcissistic leadership had a negative effect on job embeddedness ($\beta = -0.126$, $p < 0.01$) after accounting for control variables, explaining an additional 1.5% of the variance in job embeddedness ($\Delta R^2 = 0.015$). This result fully supported Hypothesis 1.
2. Model 2, compared to Model 1, demonstrated a significantly negative regression coefficient for narcissistic leadership ($\beta = -0.314$, $p < 0.001$) and

explained an additional 9.7% of the variance in leader-member exchange (LMX) ($\Delta R^2 = 0.097$). This provided strong support for Hypothesis 2.

3. When comparing Model 6, after controlling for fixed variables and narcissistic leadership, LMX remained significantly positive ($\beta = 0.534$, $p < 0.001$) and accounted for an extra 23.5% of the variance in job embeddedness ($\Delta R^2 = 0.235$). The regression coefficient between narcissistic leadership and job embeddedness also remained significant ($\beta = -0.142$, $p < 0.001$), suggesting that LMX partially mediates the relationship between narcissistic leadership and job embeddedness. These findings supported Hypothesis 3.
4. Model 4, compared to Model 3, showed that narcissistic leadership had a significantly

negative regression coefficient ($\beta = -0.310$, $p < 0.001$), explaining an additional 9.4% of the variance in perceived insider status ($\Delta R^2 = 0.094$). This result fully supported Hypothesis 4.

- Models 4, 6, and 8 indicated that perceived insider status remained significantly positive ($\beta = 0.440$, $p < 0.001$) after considering control variables and narcissistic leadership,

explaining an additional 16.8% of the variance in job embeddedness ($\Delta R^2 = 0.168$). The regression coefficient between narcissistic leadership and job embeddedness also remained significant ($\beta = -0.131$, $p < 0.001$), indicating that perceived insider status partially mediates this relationship. These findings supported Hypothesis 5.

Table 9:

Hypothesis	Model Comparison	Regression Coefficient (β)	Significance (p)	Additional Explained Variance (ΔR^2)	Conclusion
Hypothesis 1	Model 6 vs. Model 5	-0.126	< 0.01	0.015	Narcissistic leadership negatively impacted job embeddedness, supporting the hypothesis.
Hypothesis 2	Model 2 vs. Model 1	-0.314	< 0.001	0.097	Narcissistic leadership had a significant negative effect on LMX, supporting the hypothesis.
Hypothesis 3	Model 6 with LMX	0.534 (LMX)	< 0.001	0.235	LMX positively influenced job embeddedness and partially mediated the relationship between narcissistic leadership and job embeddedness, supporting the hypothesis.
Hypothesis 4	Model 4 vs. Model 3	-0.310	< 0.001	0.094	Narcissistic leadership had a significant negative effect on perceived insider status, supporting the hypothesis.
Hypothesis 5	Models 4, 6, and 8 with perceived insider status	0.440 (Perceived Insider Status)	< 0.001	0.168	Perceived insider status positively affected job embeddedness and partially mediated the relationship between narcissistic leadership and job embeddedness, supporting the hypothesis.

β = Regression Coefficient, p = Significance Level, ΔR^2 = Additional Explained Variance.

Table 10: Hierarchical regression analysis

Variables	LMX		Perceived insider status		Job embeddedness			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Gender	-0.067	-0.074	0.019	0.012	-0.023	-0.026	0.014	-0.031
Age	-0.031	-0.025	-0.027	-0.021	0.160*	0.163**	0.176***	0.172**

Variables	LMX		Perceived insider status		Job embeddedness			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Education	-0.020	-0.048	-0.024	-0.051	0.149**	0.138**	0.163***	0.160***
Working time	-0.176*	-0.159*	-0.178*	-0.161*	-0.219**	-0.212**	-0.127*	-0.141*
Current position	0.213***	0.233***	0.135*	0.155**	0.100	0.108*	-0.016	0.040
Time spent with the leader	0.187**	0.181**	0.113	0.108	0.260***	0.258***	0.161**	0.211***
NL		-0.314***		-0.310***		-0.126**	-0.142***	-0.131***
LMX							0.534***	
PIS								0.440***
R ²	0.078	0.174	0.037	0.131	0.114	0.129	0.365	0.298
ΔR ²	0.078	0.097	0.037	0.094	0.114	0.015	0.235	0.168
F	5.593***	11.980***	2.560*	8.570***	8.526***	8.427***	28.432***	20.967***

***p < 0.001, **p < 0.01, *p < 0.05.

Mediation Analysis: To investigate the mediation effects of LMX (Leader-Member Exchange) and perceived insider status, we employed the methods outlined by Preacher and Hayes (2004, 2008). Specifically, we used the bias-corrected

bootstrapping technique through the "Process" plugin in SPSS 25.0 to enhance statistical power. For the analysis, we set the bootstrapping sample size to 5,000 and established a 95% confidence interval. The detailed results are presented in Table 11.

Table 11: Mediation Effect Analysis

Paths	Effect	LLCI	ULCI
Dark traits leadership → LMX → job embeddedness	-0.167	-0.176	-0.062
Dark traits leadership → perceived insider status → job embeddedness	-0.136	-0.147	-0.053
Dark traits leadership → LMX → perceived insider status → job embeddedness	-0.069	-0.058	-0.005

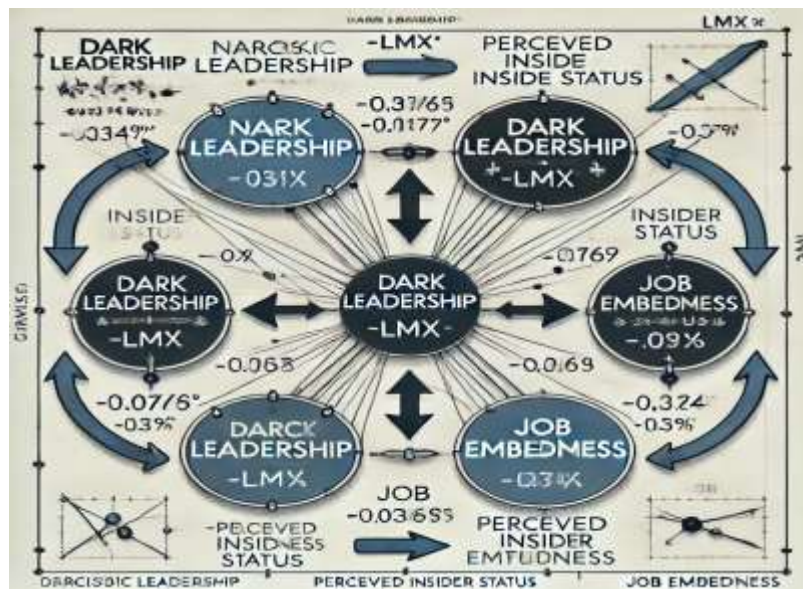
The bootstrapping mediation analysis revealed the following findings at the 95% confidence interval:

1. The indirect effect of LMX (Leader-Member Exchange) on the relationship between narcissistic leadership and job embeddedness was -0.167. Since the confidence interval (LLCI = -0.176, ULCI = -0.062) did not include 0, this result fully supports Hypothesis 3.
2. The indirect effect of perceived insider status on the relationship between narcissistic leadership and job

embeddedness was -0.136. With the confidence interval (LLCI = -0.147, ULCI = -0.053) not crossing 0, this finding fully supports Hypothesis 5.

3. The combined indirect effect of LMX and perceived insider status on the relationship between narcissistic leadership and job embeddedness was -0.069. The confidence interval (LLCI = -0.058, ULCI = -0.005) did not include 0, providing full support for Hypothesis 6 (Cepale et al., 2021).

Figure 2: Estimated Model. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$



Discussion: This study examines how dark leadership traits influence employees’ job embeddedness using social exchange and resource conservation theories. Results reveal three indirect effects: dark traits diminish job embeddedness by lowering leader-member exchange (LMX), decreasing employees’ sense of insider status, and combining both factors.

Theoretical Implications: First research on dark traits leadership in Pakistan has been limited, often focusing only on definitions with few empirical studies. This study addresses this gap by examining how dark traits leadership affects employees’ job embeddedness within the Pakistani context. It not only confirms the impact of dark traits leadership on job embeddedness but also adds depth to the understanding of these effects in a non-Western, collectivist culture. By doing so, it expands the empirical analysis of dark traits leadership beyond Western settings and highlights its negative influence on job embeddedness, thereby broadening research on leadership styles affecting employee behavior. Second This study utilizes social exchange theory and resource conservation theory to investigate how dark traits leadership impacts employees’ job embeddedness. By applying these theories, it not only strengthens the theoretical framework for understanding dark traits leadership but also enhances its practical

application in business contexts. The research identifies two key factors—leader-member exchange (LMX) and perceived insider status—that mediate the relationship between dark traits leadership and job embeddedness. It reveals how LMX and perceived insider status independently influence job embeddedness and whether they serve as separate mediators in this relationship, thus integrating these theories into a cohesive research model. Finally, this study introduces a novel chain mediation model: “dark traits leadership → LMX → perceived insider status → job embeddedness.” This model uncovers the processes linking dark traits leadership to employees’ job embeddedness, filling a gap in previous research that typically focused on single mediators. It examines the roles of both LMX and perceived insider status in this relationship, providing a detailed analysis of their mediating effects. This approach adds significant value to existing research by offering a more comprehensive understanding of how dark traits leadership impacts job embeddedness through these intermediary variables.

Practical Implications: This study offers several practical recommendations for managing dark traits leadership in organizations. Dark traits leadership often leads to decreased leader-member exchange (LMX) and reduced perceived insider

status among employees, which can result in high staff turnover and significant talent loss. To mitigate these negative effects, organizations should carefully screen potential leaders to avoid those with high levels of dark traits. When such leaders are necessary, they should be placed in roles that capitalize on their strengths, such as innovation or risk-taking, rather than in positions that involve leading new or younger employees. Organizations should also match dark traits leaders with appropriate staff in development programs, avoiding placing them with new generation employees who may struggle under their leadership. Implementing a robust supervision mechanism and control system is crucial for enhancing transparency in leadership behavior. Improving the reward and punishment system can help curb undesirable behaviors and encourage dark traits leaders to develop positive traits and focus on improving employee embeddedness. Creating a harmonious work environment and fostering a sense of participation and belonging among employees can also help counteract the negative impact of dark traits leadership. Furthermore, since LMX and perceived insider status are important for enhancing job embeddedness, leaders—particularly those with dark traits—should manage their relationships with new generation employees carefully. In the Pakistani cultural context, where relational orientation is highly valued, leaders should strive to treat all subordinates fairly and supportively to prevent perceptions of unfair treatment. By improving relationships and enhancing employees' sense of insider status, leaders can strengthen their connection to the organization and improve overall job embeddedness.

Limitations and Future Research: This study has some limitations. First, the data were mainly self-reported by new generation employees. Despite using the Harman's single-factor test to check for common method bias, it may not be entirely eliminated. Future research could use a multi-stage data collection approach to address this issue. Second, the study employed established foreign scales that were adapted through back-translation, but their suitability for the Pakistani context still needs further validation. Third, the

cross-sectional nature of the data restricts causal interpretations, so longitudinal studies could provide deeper insights. Lastly, while this study explores how dark traits in leaders affect new generation employees' job embeddedness, it does not examine whether dark traits in employees themselves impact others or the mechanisms behind such effects. Future research should investigate these areas further.

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