

From Conventional to Outstanding Leadership: Exploring Role of CIP Leadership in Innovative Work Behavior (IWB)

* Mr. Muhammad Mursaleen, Research Scholar (Corresponding Author)

** Dr. Mahwish Parveen, Assistant Professor

*** Dr. Asif Shahzad, Assistant Professor

Abstract



One important question in today's corporate world: Which leadership style is more effective in running a successful enterprise? Previously, the research on the effectivity of transformational and transactional leadership styles was limited due to the mere comparison of one's effectivity over the other. However, the single leadership approach may not yield more incredible benefits. The present study intends to explore the combination of leadership styles that are more effective in handling ill-defined problems. The study intends to explain the unique combination of future-focused charismatic, past-focused ideological, and present-focused pragmatic leadership in creating a conducive environment for knowledge creation and subsequent employees' innovative work behavior (IWB). The software developers in IT companies registered under Pakistan Software Export Board make up the study population. The research comprised quantitative data collected from four cities in Pakistan: Karachi, Lahore, Islamabad, and Rawalpindi, using a purposive sampling approach. PLS-SEM has been used for the analysis of 362 responses. The results found a positive relationship between charismatic and pragmatic leadership and employee IWB; however, the effect was insignificant for ideological leadership. The study found a positive association between Charismatic, Ideological, and Pragmatic (CIP) leadership and employees' Knowledge Creation. An indirect relationship was observed for mediation analysis and found significant positive mediation of employees' knowledge creation between CIP leadership and employees' IWB. The findings depicted that there is no fit-for-all approach to leadership, and a context-specific CIP leadership approach may serve the best. The IT sector may yield more advantages from the study as the success of the software projects is based on IT professionals' knowledge and innovative behavior. The present study has novelty as it is the first to explain the role of CIP leadership in employee IWB in the IT industry. Moreover, also novel in explaining the mediation of Knowledge creation between CIP leadership and employees' IWB.

Keywords: CIP Leadership, Outstanding Leadership, Knowledge Creation, Innovative Work Behavior, Dynamic Theory of Knowledge Creation

Introduction

Organizations face many challenges in today's competitive world related to performance and innovation. Leaders' prime responsibility is building a conducive culture to encourage employees' creativity and innovation. However, the study on the role of different leadership styles and approaches to employee and organizational innovation is still evolving. The present study intends to highlight the dichotomy generated by the literature where transformational leadership has dominated the entire domain (Erhan et al., 2022; Gorgens-Ekermans & Roux, 2021). However, the present research argues that a uniform approach to leadership may not be effective in every situation and every domain; instead, a context-specific CIP approach to leadership may yield better results. The CIP approach is a unique combination of future-focused charismatic, past-focused ideological, and present-focused pragmatic leadership styles and is expected to address the shortcomings of each other (Higgs, 2021).

Previously transformational leadership has dominated the leadership research, and excessive positivity toward transformational styles has created a fog over the whole domain (Antonakis et al.,

* Department of Management Sciences, COMSATS University, Islamabad
Email: mursaleenmursaleen@gmail.com

** Department of Management Sciences, COMSATS University, Islamabad
Email: mahwish.parveen@comsats.edu.pk

*** Department of Management Sciences, COMSATS University, Islamabad
Email: asif_shehzad@comsats.edu.pk

2016; Cai, 2021; Zhu et al., 2019). Besides notable positive features of the transformational approach, it may bring undesirable consequences to the followers and the organizations (Cai, 2021). Charisma is the fundamental part of the transformational approach, and the same is liable to influence followers to take the risk and may instigate the followers to breach ethical values. Transformational leadership can also lead to workaholism in the quest to achieve goals (Cai, 2021; Fragouli, 2018). Literature on leadership has evolved over the last three decades, and on the consensus, the unifocal leadership approach is no longer effective in highly dynamic present-day organizations. Instead, leadership requires a combination of leadership styles capable of fulfilling the limitations of each other (Higgs, 2021).

The highly competitive environment demands visionary leadership capable of creating a knowledge-sharing culture for subsequent creativity and innovation (Li et al., 2019). The studies exploring the conduciveness of leadership roles in building a knowledge-sharing culture are evolving. According to Alblooshi et al. (2020), future studies can investigate the contribution of different leadership roles in innovation other than organizational innovation. Innovation and incredibly innovative work behavior are essential to ensure survival and a competitive edge in the highly dynamic environment of the IT industry. Software developers working in the IT companies of Pakistan are the population of the present study. Innovation is crucial in the IT industry for different reasons; products are fastmoving, survival in such a competitive environment requires innovative employees, and a shorter product life cycle requires continuous innovation (Ahsan et al., 2022; Ali et al., 2020; Bhatti et al., 2021; Latif et al., 2020).

The study may present different theoretical contributions and practical implications. The study contributes to the Dynamic Theory of Knowledge Creation by explaining that all three styles of CIP leadership are productive for knowledge creation. Moreover, the dynamic interaction of explicit and tacit knowledge creates new knowledge, which augments employee IWB. The present study also presents practical implications for the IT industry by explaining that a single leadership style is no more effective in contemporary organizations. Instead, the combination of leadership styles may yield better outcomes. Leadership styles are domain-specific, such as charismatic style for politics, ideological for religion, and pragmatic for business domains (Hunter & Lovelace, 2020). The present study presents that charismatic and pragmatic leadership styles are effective for employee innovation; however, no significant relationship has been observed between ideological leadership and employee innovation. Moreover, all three CIP leadership styles are found effective for employee knowledge creation. The study presents another practical implication concerning the organizational environment. The more the leadership can create a conducive environment for knowledge creation, highly will employee innovation.

Literature Review and Research Hypotheses

CIP Leadership

CIP leadership is often called outstanding leadership due to its potential and effectiveness in achieving exceptional performance (Lovelace et al., 2019). CIP leadership comprises three distinct leadership styles: charismatic, ideological, and pragmatic. CIP leadership is gaining more popularity than previous transformational and transactional approaches due to the ability to use multiple pathways in achieving the desired outcomes. CIP leadership styles are distinct but equally viable approaches to leading and influencing people in various fields (Hunter & Lovelace, 2020). Since its inception, CIP leadership has been applied to multiple domains, like politics (Crayne & Medeiros, 2021), religion (Watts et al., 2019), and business (Figueiredo et al., 2022). CIP leadership theory was introduced almost two decades ago (Strange & Mumford, 2002) and is grounded in the notion that there is no single best approach to leadership.

Charismatic is a future-oriented transformational style of leadership; where leaders' vision influences followers' motivation (Higgs, 2021). Charisma brings a future-oriented positive vision and has a variety of objectives to inspire and motivate followers. However, it may have negative consequences. Charismatic leaders are enthusiastic and self-confident, which may lead to overconfidence and narcissism (Fragouli, 2018). In contrast, ideological is a past-oriented, transformational style of leadership, where leaders' emotions inspire followers (Mumford & Strange, 2013). Ideological leadership is more effective where leaders and followers have shared beliefs (Mumford, 2006). However, ideological leaders' past orientation limits their flexibility by influencing followers to achieve previously attained goals (Higgs, 2021). Pragmatic leadership is a present-

focused, transactional style consider both positive and negative aspects to reach a viable solution. Pragmatic leaders use logical arguments to convince followers. Unlike charismatic and ideological, pragmatic leaders are not committed to a single philosophy or ideology.

Charismatic, ideological, and pragmatic leadership differs in their cognitive styles. Charismatic leaders are skilled communicators, ideological leaders work comfortably with like-minded followers, and pragmatic leaders rely on logical appeal and rational persuasion. Although these styles are distinct according to their orientation; however, they may exist in a single domain (Hunter & Lovelace, 2020).

Table 1: Prescriptive mental models of differences among charismatic, ideological, and pragmatic leaders

	Charismatic	Ideological	Pragmatic
Time frame	Future	Past	Present
Type of experience used	Positive	Negative	Both
Nature of outcome sought	Positive	Transcendent	Malleable
Number of outcomes sought	Multiple	Few	Variable
Focus in model construction	External	Internal	External
Locus of causation	People	Situation	Interactive
Controllability of causation	High	Low	Selective

Adopted from (Hunter & Lovelace, 2020)

CIP approach differs from other approaches as it does not speak to the leaders’ performance. Instead, it concerns how leaders think to get to the problem (Lovelace et al., 2019).

Employee Innovative Work Behavior (IWB)

Creativity is the most important determinant of employee innovative work behavior, leading to organizational innovation (Figueiredo et al., 2022). Employees’ innovative work behavior is the intentional generation, promotion, and implementation of valuable ideas for innovative outcomes. Employee innovation is the three-step behavioural process. Problem recognition is the first step, where the employee identifies the problem and bring some idea for resolution. Innovation is a socio-political process and can be resisted by those committed to the existing framework of beliefs and actions. Promotion of the idea is the second stage, where the innovator seeks approval or necessary power behind the idea to convert it into an innovative product. The last stage of innovative work behavior is idea implementation, where employees build prototypes to transform the idea into something tangible or presentable form (Grobben, 2022). Besides many other industries, the software industry is fast-moving, where continuous innovation determines the survival and competitive edge (Onhon, 2019). The firms operating in the IT industry should be more innovative than in the past (Bhatti et al., 2021). Innovative Work Behavior entails that individuals should go beyond their job requirements to produce something different. The distinction between creativity and innovation is essential. Employee creativity focuses on the detection and generation of ideas and sets the first stage of employees’ innovation; however, employee innovation goes beyond for promotion and implementation of the concept.

Role of CIP Leadership in Employee Innovative Work Behavior

The literature review by Alblooshi et al. (2020) found that various leadership styles influence the organizational climate, employee and leadership behavior, learning, and knowledge sharing and directly or indirectly contribute to organizational innovation. Previous studies on leadership and employee innovation revolve around transactional and transformational approached to leadership and established a positive impact of transformational leadership on employees innovation (Sutardi et al., 2022) and a negative effect on transactional leadership (Tian et al., 2018), but with few exceptions (Udin et al., 2022b).

The introduction of the CIP approach to leadership has changed the landscape dominated by typical transformational and transactional approaches to leadership by arguing that effective leadership is context-dependent and mere comparison of transactional and transformational leadership approaches to innovation does not meet the cause. In contrast, the organization may explore the contribution of CIP leadership due to its potential to understand past, present, and future concerns (Higgs, 2021). The literature is on the shift from typical leadership approaches to those more effective in twenty-first-century organizations. Charismatic, ideological, and pragmatic leadership present a unique combination of leadership styles that assist leaders in understanding the context and behavior accordingly and can address shortcomings of each other (Higgs, 2021).

According to forgoing research, charismatic, ideological, and pragmatic leadership are positively related to performance (Lovelace et al., 2019). However, their contribution to innovation is comparable. Charismatic leaders perform well in politics, ideological in religion and pragmatic in business domains (Hunter & Lovelace, 2020).

Role of Charismatic Leadership in Innovative Work Behavior

Charismatic is a value-based, future-oriented leadership style that presents greater flexibility and is known for transformational intent. These styles are known for their ability to formulate vision and guide followers in critical situations (Watts et al., 2019). Conceptualization of charismatic leadership in the CIP approach differs from earlier as Mumford emphasized leadership processes and leaders' mental model, whereas earlier focused on the leadership outcomes (Griffith et al., 2018). Future-oriented charismatic leadership articulates a vision distinct from the present and past and focuses on positive results associated with goal achievement. Charismatic leaders are skilled in communication and engage mass followers based on shared goals (Hunter & Lovelace, 2020). Charismatic leaders motivate employees and mobilize their innovative power to pursue organizational vision (Sutardi et al., 2022). Moreover, influence their followers to engage in innovative work behavior through visionary initiatives, mentoring, and creating a conducive environment for innovation. Based on the above discussion, it is hypothesized that,

H_{1a}: Charismatic leadership is positively related to innovative work behavior

Role of Ideological Leadership in Innovative Work Behavior

Ideological leaders propagate specific values, use past experiences, and emphasize previously proven successful goals. Their vision is based on values derived from negative personal or historical events, and they also tend to rely on negative sentiments while communicating with followers (Griffith et al., 2018). Ideological leaders usually work in small groups of like-minded people and solve their problems by keeping past events in mind and their desire to return to the idealized past. These leaders have an internal ideology and select or ignore information incompatible with their ideology. Ideological leaders are good performers under crises; however, their past orientation limits their flexibility and results in rigid beliefs, which may be counterproductive for innovation. However, keeping the established positive relationship between ideological relationship and individual performance, it is hypothesized that,

H_{1b}: Ideological leadership is positively related to innovative work behavior

Role of Pragmatic Leadership in Innovative Work Behavior

Pragmatic leaders are present-focused, and the nature of the goal sought depends on the people and the existing situation. They use positive and negative experiences to reach a feasible solution to the current problem. They usually do not think about the past and the future rather, they are more concerned with the problem at hand. In contrast to charismatic and ideological leadership, pragmatic leaders rely on logical arguments rather than emotional appeal. Pragmatic leaders are more concerned with the present rather than relying on the future or focusing on the past. They are more concerned with the current problem and using existing resources to handle the situation. In contrast to charismatic, they are less likely to rely on a large group of people and develop well-connected and professional groups to solve the problem (Watts et al., 2019). Pragmatic leaders work efficiently in creative tasks and use rational arguments and realistic approaches to augment creativity. Pragmatic leaders are transactional and support incremental and radical innovation (Eni, 2022). Based on the above-stated literature review, it is hypothesized that;

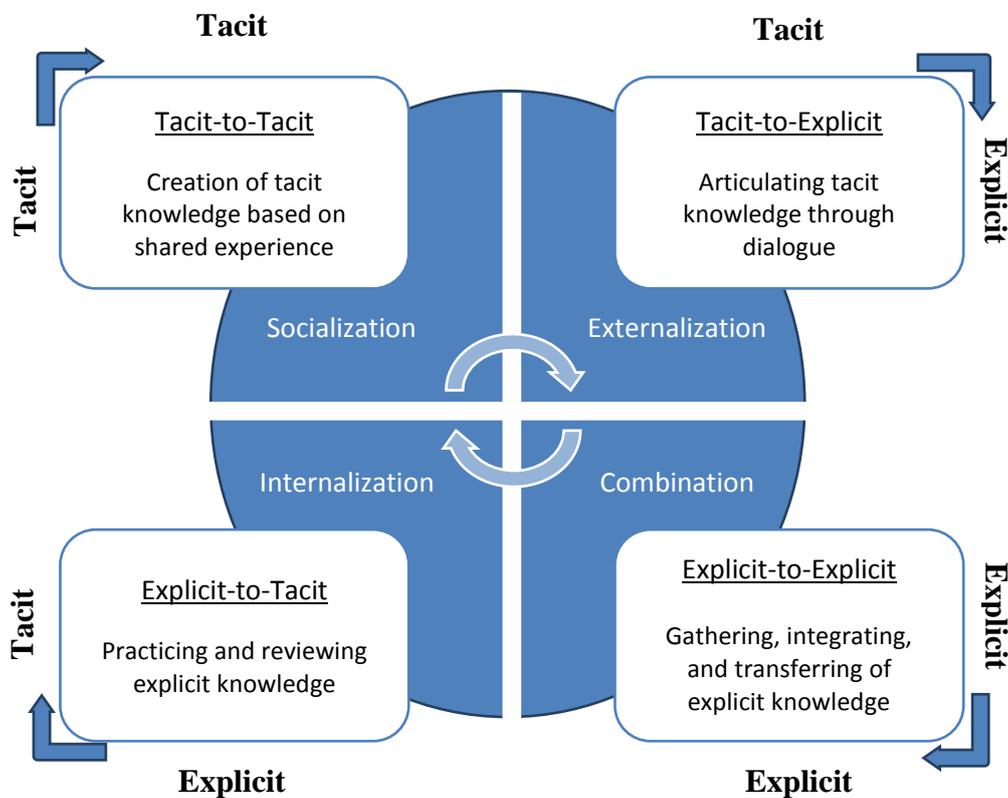
H_{1c}: Pragmatic leadership is positively related to employees' innovative work behavior

Dynamic Process of Knowledge Creation

'Why do some firms are more competitive than others?'. It is the central question to understand the role of knowledge in innovation. Previously, the firms were considered passive entities, which merely responded to the environment due to limited flexibility. However, in the late 20th century, the view of the firms shifted from passiveness and rigidity to activeness and flexibility. Globalization triggered immense competition, and organizational endeavours of survival and competitiveness have forced the leadership to view the firm as an entity of knowledge creation. Today's organizations are dynamic and actively interacting with the environment. Ikujiro Nonaka and Hirotaka Takeuchi introduced the SECI (Socialization, externalization, combination, and internalization) process of knowledge creation in their influential book Knowledge creating companies (Nonaka & Takeuchi, 1995).

SECI is the continuous interaction of tacit and explicit knowledge. Explicit knowledge is the one that is readily available in books, articles, newspapers, or any form of written material, so easy to share. In contrast, tacit knowledge resides in the human mind and organizational routine, which is challenging to impart (Duan et al., 2022). The knowledge creation theory is the dynamic interaction of explicit and tacit knowledge. The dynamic interaction of explicit and tacit knowledge assists in creating new knowledge through socialization, externalization, combination, and internalization.

Fig. SECI Model of knowledge creation



The Dynamic Theory of Knowledge Creation (DTKC) is equally effective in providing a solid base for creating explicit and tacit knowledge. Explicit knowledge is more helpful in exploitation, while tacit knowledge in the exploration of knowledge. Exploiting knowledge is the development of knowledge already known, while exploration is the hunt for new knowledge. DTKC is equally effective for exploiting and exploring existing knowledge; both are productive for innovation (Tomlins et al., 2021; Yoo et al., 2021).

Role of CIP Leadership in Employee Knowledge Creation

Leadership roles contribute differently to employee motivation and willingness to share knowledge. CIP’s approach to leadership contains both transformational and transactional leadership roles, as charismatic and ideological are transformational, and pragmatic is transactional in nature (Eni, 2022; Eyal et al., 2020). Transformational leadership considers employees a valuable organizational resource and emphasizes the role of emotions and values in encouraging positive and creative employee behavior. Knowledge sharing, especially tacit knowledge, involves emotions and values to establish a strong relationship. Considering values makes the transformational leadership style more conducive to knowledge sharing. However, limited studies have been conducted to explain the relationship between transformational leadership and knowledge sharing, making it a more promising area that needs to be explored (Phong et al., 2018). Transformational leadership roles are considered productive for knowledge sharing due to presenting higher flexibility and more discretion to employees (Shafi et al., 2020). Considering above, positive relation of charismatic and ideological leadership with knowledge creation has been hypothesized.

- H_{2a}.** Charismatic leadership is positively related to employee knowledge creation.
- H_{2b}.** Ideological leadership is positively related to employee knowledge creation.

A transactional leader focuses on objective exchange in response to the worker’s performance and communicates clear objectives to employees by clearly stating rewards and punishments (Judge & Piccolo, 2004). Transactional leadership builds productive culture conducive to knowledge sharing (Eni, 2022; Udin et al., 2022a). Opposingly, based on less flexibility in the leadership approach, previous studies found that the transactional approach to leadership is negatively related to knowledge sharing (Hakkak et al., 2021; Rawung et al., 2015; Yang, 2007). Pragmatic leadership is a present-focused approach that considers negative and positive experiences to reach a viable solution. The current study hypothesizes a positive relationship between pragmatic leadership and employees’ knowledge creation based on the problem-solving approach.

H_{2c}. Pragmatic leadership is positively related to employee knowledge creation.

Mediation of Knowledge Creation Between CIP Leadership and Employees’ Innovative Work Behavior

The dynamic interaction of explicit and tacit knowledge creates new knowledge through socialization, externalization, combination, and internalization of knowledge. The dynamic process of knowledge creation is the hallmark of Nonaka’s Dynamic Theory of Knowledge Creation (See Fig-2.1). Leadership plays a significant role in motivating employees to share their knowledge, ultimately developing a conducive environment to augment employees’ innovation (Tian et al., 2018). The previous literature is on the consensus that knowledge management improves organizational innovation (Zhang et al., 2022), and knowledge-sharing behavior positively mediates transformational leadership and innovative work behavior. Knowledge sharing is an essential mediator between leadership and innovative work behavior as it generates a conducive environment of knowledge sharing, which ultimately augments employee innovation (Udin et al., 2022b). The present study is expected to contribute to the existing literature by examining the mediating role of knowledge creation between CIP leadership and employee IWB. The dynamic interaction of knowledge creation is expected to mediate positively between CIP leadership and innovation.

H_{3a}: Knowledge creation mediates between charismatic leadership and IWB.

H_{3b}: Knowledge creation mediates between ideological leadership and IWB.

H_{3c}: Knowledge creation mediates between pragmatic leadership and IWB.

Theoretical Framework

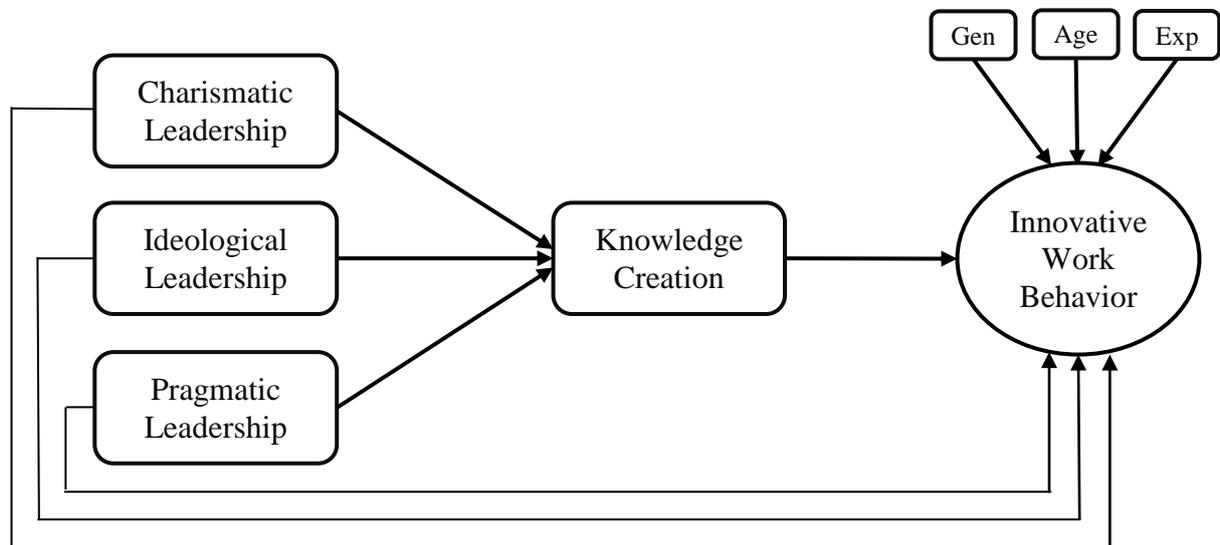


Fig. Role of CIP leadership in knowledge creation and employee’s innovative work behavior.

Methodology

The research question determines the research methodology. The qualitative method may best serve the cause in exploring a specific phenomenon, while the quantitative approach may be the best for understanding the relationship between variables (Creswell & Creswell, 2018). The current study intended to explain the conduciveness of outstanding leadership (Charismatic, ideological, and pragmatic) in employees’ knowledge creation and subsequent innovative work behavior; hence, a quantitative research approach may better serve the cause in explaining the relationship between the study’s variables.

Population and Sample

The population for the current study is the software developers working in IT companies registered at the Pakistan Software Export Board (PSEB). Software houses exist in all provinces, including federal areas of Pakistan. More than 4,000 IT companies are registered at PSEB, out of which 90% are located in four major cities; Lahore, Karachi, Islamabad, and Rawalpindi (PSEB, 2022). The appropriateness of sample size is essential while formulating research methodology. However, there is no rule of thumb for sample selection (Sekaran, 2011). PLS-SEM.10-times rule was followed to calculate the sample size (Hair, 2021). However, the sample was drawn more than the minimum requirement of PLS-SEM.

Sampling Techniques

The ideal condition of data collection necessitates the collection of responses from every member of the population; however, it would be impractical, time-consuming, and costly in large populations. The appropriate sampling technique may reduce the gap in the characteristics of the sample drawn from the overall population. In the current study, the exact number of software developers working in the PSEB registered IT companies is unknown, so the purposive sampling method for data collection is followed. The sampling technique corresponds to previous studies conducted in the IT sector (Pham et al., 2020; Reslan et al., 2021).

Data Collection

The data collection comprised two stages, and responses on predictor and criterion variables were temporarily separated to avoid self-response bias associated with the single data source. Official permission was sought from PSEB for data collection from registered IT companies. During data collection, an online questionnaire through google forms was forwarded to software developers working in IT companies registered at Pakistan Software Board (PSEB). The request was forwarded to only those knowledge workers directly involved in software development. Ethical and legal issues like credentials' security were considered during data collection. IT companies were approached through an online questionnaire in the google form, and 362 responses were received from 133 IT companies located in four major cities: Karachi, Lahore, Islamabad, and Rawalpindi. During the first stage, respondents provided information on demographics, gender, age, experience, and independent variables; charismatic, ideological, and pragmatic leadership. In the second stage, software experts provided their responses on mediating variables; knowledge creation and dependent variable, and innovative work behavior.

Measures

The study's questionnaire was comprised of two sections; the first included questions related to the respondents' demographic attributes. The second contained a closed-ended questionnaire (7-point Likert scale, 1= Almost Never to 7= Almost Always) for measurement of research variables. The Section-I of the questionnaire was used to collect data regarding demographic attributes of the respondents like; gender, age, experience, and the name of the IT company. The second section contains information related to the research's variables. The study's dependent variable, Employees' IWB, was measured using a nine-item scale from Janssen (2000) having a Cronbach's $\alpha = 0.95$. Charismatic, ideological, and pragmatic leadership styles (CIP) are the independent variables of the present study. The Lovelace (2017) scale was used to measure leadership roles with a thirty-six-item scale (twelve items each for Charismatic, Ideological, and Pragmatic), with Cronbach's $\alpha = 0.90$. The mediating variable, Knowledge creation, was measured using twenty items scale of Nonaka, Toyama, and Konno (2000), having a Cronbach's $\alpha = 0.87$.

Control Variable

Control variables are crucial to prevent because of their confounding effects on the study. The confounding variables are the third variable the researchers need to understand as the lack of awareness of control variables may lead to incorrect analysis. Employee gender, age, and experience are frequently controlled during research in innovation studies (Hammond et al., 2011; Tierney & Farmer, 2004). Literature depicts that female leaders are more inclined to participative leadership and less inclined to autocratic leadership roles (Moura et al., 2018). The Increase in employee experience results in a more extraordinary ability to generate innovative ideas. The rationale behind controlling these variables is their reflection on task domain knowledge.

Data Analysis

The primary objective of the current study is to understand the role of charismatic, ideological, and pragmatic leadership in augmenting employees’ IWB with the mediation of employee knowledge creation. The study results are reported and chronologically discussed, starting from the respondent’s profile, the description of statistics, reliability and validity measures, and analysis of the main effect through structural equation modeling.

Respondent’s Profile and Descriptive Statistics

The data was collected from 362 software developers working in 113 IT companies located in four cities: Lahore, Karachi, Islamabad, and Rawalpindi. Most of the respondents are male (84%), and most of them are young, with a mean age of 29 years and an average experience of 06 years.

Cronbach’s alpha depicted internal consistency among the items. The Cronbach’s alpha of charismatic leadership ($\alpha =0.929$), ideological leadership ($\alpha =0.940$), pragmatic leadership ($\alpha =0.945$), knowledge creation ($\alpha =0.942$), and innovative work behavior ($\alpha =0.938$) shown that the items of research scale are internally consistent. We found skewness and kurtosis within the range of -2 and +2, which shows the normality of the data, and the value for Cronbach’s alpha is above 0.70, which shows the instrument’s reliability.

Structural Equation Modeling

The PLS Equation Modelling version SmartPLS v. 3.3.9 software has been used for estimating the measurement and structural models. The SmartPLS could evaluate path models even with small sample sizes, also capable of handling non-normal data, and manage complex models efficiently. The SmartPLS provides outputs in the shape of variable path coefficients, items’ outer loadings, residuals, R Square, correlation, reliability, validity measures, VIF as collinearity statistics and specific indirect effects, effect size, and the model’s predictive relevance.

Measurement Model

The present study has five latent variables, all with reflective measurements (charismatic leadership, ideological leadership, pragmatic leadership, knowledge creation, and innovative work behavior). The loading threshold of 0.708 represents that the construct explains more than 50 % of the indicator’s variance (Hair et al., 2017). All loadings of the reflective construct were found above the threshold of 0.70 except one item from ideological leadership and four items from employees’ knowledge creation. The composite reliability of charismatic leadership (0.939), ideological leadership (0.949), pragmatic leadership (0.952), knowledge creation (0.948), and innovative work behavior (0.948) depicted that all the study constructs are highly reliable in their internal consistency. The convergent validity is based on AVE, and in the present study, the values of AVE are charismatic leadership (0.560), ideological leadership (0.628), pragmatic leadership (0.624), knowledge creation (0.535), and innovative work behavior (0.669) are well above the minimum required level of 0.50 (Hair et al., 2017), indicating convergent validity for all the variables. The HTMT, items’ cross loading and Fornell Larker criterion were checked to determine the discriminant validity. The HTMT values were significant and smaller than one. Conforming to the Fornell-Larcker, the square root of the AVE of each construct was found greater than the variable’s highest correlation with other study variables in the model. Conforming to the HTMT, items’ cross-loading, and Fornell Larker criterion, the discriminant validity was proved (Hair et al., 2017).

Table 2: Reflective measurement model summary results and HTMT

Latent Variable	Composite Reliability	AVE	Convergent validity	Heterotrait-Monotrait Ratio (HTMT)				
				CL	IL	PL	IWB	KC
CL	0.939	0.560	Yes					
IL	0.949	0.628	Yes	0.766				
PL	0.952	0.624	Yes	0.590	0.651			
KC	0.948	0.535	Yes	0.701	0.642	0.696		
IWB	0.948	0.669	Yes	0.554	0.562	0.575	0.724	

Note: CL= Charismatic leadership, IL= Ideological, PL=Pragmatic Leadership, KC= Knowledge creation, and IWB= Innovative work behavior

Structural Model

The current study used a sample size of 362 for empirical PLS-SEM analysis. The structural model was checked for collinearity problems before interpreting the results. Collinearity assessment requires the tolerance value of each predictor should be higher than 0.20, and VIF should be lower than 05

(Hair et al., 2017). The study complies with the required tolerance criterion, and VIF is free from collinearity issues. The results of tolerance and VIF are tabulated below.

Table 3: Collinearity Assessment (Innovative Work Behavior: Dependent Variable)

Constructs	VIF	Tolerance
Charismatic Leadership	3.343	0.299
Ideological Leadership	2.962	0.338
Pragmatic Leadership	2.888	0.346
Knowledge Creation	2.226	0.449

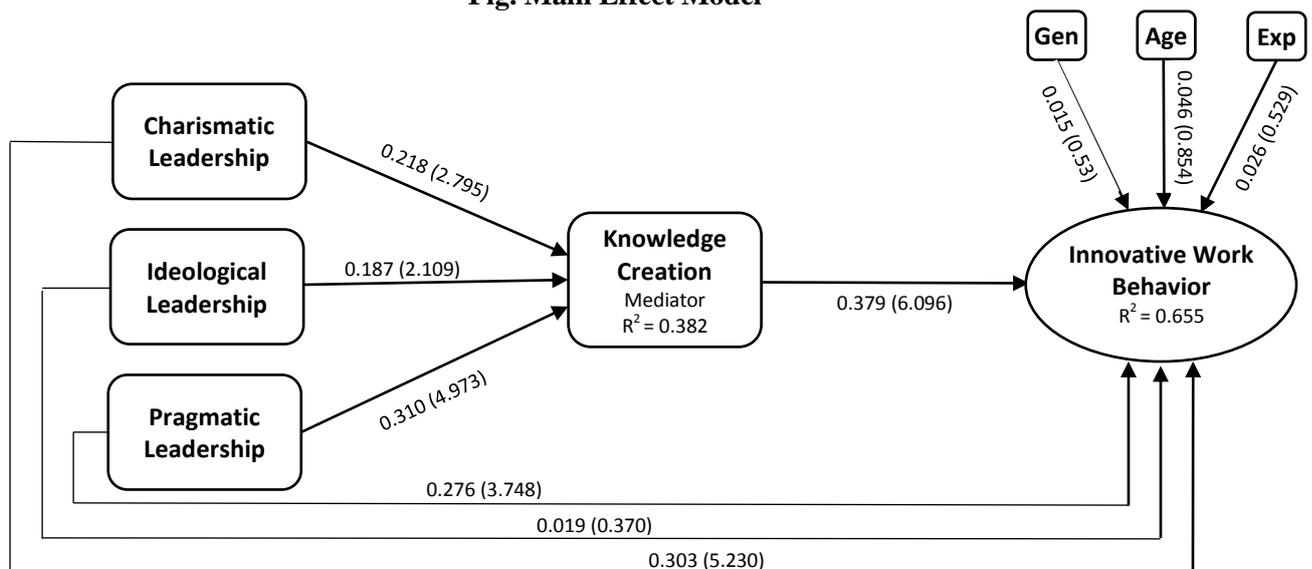
Table 3 represented that VIF and Tolerance values conform well to the required criterion; therefore, collinearity is not an issue for the present study. Moreover, no unequal scatter was observed, depicting that heteroscedasticity is not the issue of the present study. The data for predictor and criterion variable was collected in two different periods to avoid the common method variance; moreover, Harman’s single factor test presented an unrotated single factor < 50% on all indicators, depicting the present study is free from common method variance bias (Podsakoff et al., 2003).

Main Effect Model

The path coefficients depicted the relationships among the constructs, and results were analyzed through coefficients, t-value, and p-value. The path coefficient value of 0.10 or above is usually considered significant, and below is the other way around (Hair et al., 2017). The results depicted a positive relationship between charismatic leadership and innovative work behavior ($\beta=0.303$, p value < 0.001), hence accepting H_1 . However, the relationship between Ideological leadership and innovative work behavior was found insignificant ($\beta=0.019$, p value = 0.711), so current research hasn’t found any support to reject the null hypothesis that Ideological leadership does not affect innovative work behavior. Moreover, the relationship between Pragmatic leadership and innovative work behavior was significantly positive ($\beta=0.276$, p value < 0.001) hence accepting H_3 .

While explaining the role of charismatic, ideological, and pragmatic leadership in employees’ knowledge creation; CL and KC ($\beta=0.218$, p value < 0.005), IL and KC ($\beta=0.187$ p value < 0.035), and PL and KC ($\beta=0.310$, p value < 0.001) the results provided support for the acceptance of hypothesis H_3 , H_4 , and H_5 . The coefficient of determination R^2 value evaluates the structural model. The R^2 value represents the amount of variance in the dependent variable explained by the independent variables. The R^2 values 0.75, 0.50, and 0.25 have been classified respectively as substantial, moderate, and weak (Hair et al., 2017). The present study’s model is moderate, as the R^2 values are 0.655 and 0.382 for innovative work behavior and knowledge creation, respectively. Moreover, control variables, gender, age, and experience, are found insignificant, depicting that employees’ IWB does not change with the difference in employee age, gender, and experience.

Fig. Main Effect Model



Note- t-value is in parenthesis. Gen= Gender, Exp= Experience.

Mediating Effect Model

The present study presented another novelty by explaining the mediating effect of employee knowledge creation between charismatic, ideological, and charismatic leadership styles and employees' IWB. The direct relationships between CL and KC ($\beta=0.218, p\text{-value} < 0.005$), IL and KC ($\beta=0.187, p\text{-value} < 0.035$), PL and KC ($\beta=0.310, p\text{-value} < 0.001$) were significant. The direct and significant relationship between KC and employees' IWB ($\beta=0.379, p\text{-value} < 0.001$) supported mediation analysis. Indirect effects for mediation analysis were examined through bootstrapping with 362 bootstrap cases. The bootstrap sample, 1000 was used to check the significance of indirect results. The indirect effects presented that employee knowledge creation significantly mediates the relationship between CL and employees' IWB ($\beta = 0.083, p\text{-value} < 0.010$), IL and employees' IWB ($\beta = 0.071, p\text{-value} < 0.042$) and PL and employees' IWB ($\beta = 0.117, P\text{ value} < 0.001$).

Table 4: The mediating effects of knowledge creation (IV= charismatic leadership, ideological leadership, and pragmatic leadership)

Observation Path	Path Coefficient's	T-Values	Hypothesis	VAF
CL→ IWB	0.303	5.230***	H _{1a} (accepted)	0.215 (22%)
CL→ KC	0.218	2.795**	H _{2a} (accepted)	
CL→ KC→ IWB	0.083	2.566**	H _{3a} (accepted)	
IL→ IWB	0.019	0.370	H _{1b} (Rejected)	0.789 (79%)
IL→ KC	0.187	2.109*	H _{2b} (accepted)	
IL→ KC→ IWB	0.071	2.039*	H _{3a} (accepted)	
PL→ IWB	0.276	3.748***	H _{1c} (accepted)	0.298 (30%)
PL→ KC	0.310	4.973***	H _{2c} (accepted)	
PL→ KC→ IWB	0.117	3.406***	H _{3a} (accepted)	

Note: CL= Charismatic leadership, IL= Ideological leadership PL= Pragmatic leadership, KC= Knowledge creation, IWB= Innovative Work Behavior.

*p< .05, **p< .01, ***p<001

Discussions

The present explanatory research served well to understand the effect of charismatic, ideological, and pragmatic leadership in supporting employees to create new knowledge and to enhance their innovative work behavior. The leadership literature has shifted from conventional roles to those more advantageous to twenty-first-century organizations (Watts et al., 2019). In such pursuit, the unique combination of the Charismatic, Ideological, and Pragmatic (CIP) leadership proposes a variety of leadership styles capable of handling shortcomings of each other and also developing into a practical approach to leadership (Crayne & Medeiros, 2021). The research data for the study was collected from software developers working in IT companies registered at PSEB. The study's findings have provided some important insights for IT companies to understand how outstanding leadership roles, charismatic, ideological, and pragmatic, contribute to creating knowledge and subsequently augmenting innovative work behavior.

Findings

The present research outcomes helped to substantiate and contradict what was already known about the study constructs and their relationships. Moreover, some new and important findings have been drawn, previously not covered in the literature.

Research question 1. What is the effect of CIP leadership on employees' innovative work behavior?

The future-oriented charismatic leaders formulate broad goals and support creativity (Lee et al., 2021), while present-focused pragmatic leaders use rational appeals to solve in-hand problems (Lovelace et al., 2019). The results depict that charismatic and pragmatic leadership augment employee IWB. Pragmatic leaders are transactional and previous literature has presented inconsistent findings. Studies conducted by Udin et al. (2022b) and Ather (2021) found an insignificant relationship between transactional leadership and innovative work behavior. However, Partlow (2016), Hussain et al. (2017) Crayne & Medeiros (2021) found a positive relationship between transactional leadership and employee innovation. The present study presents that all transactional leadership roles are not counterproductive for innovation and pragmatic leadership has a positive relationship with employees' IWB. Ideological leaders are transformational in nature and propagate specific values, use previous experiences, and focus on formerly recognized successful goals. Ideological leaders typically work in small groups and solve problems considering past events. The present study hypothesized a positive relationship between ideological leadership and innovative work

behavior; however, the results depict an insignificant relationship. It may be due to past-focused ideological leadership ignoring the present and future concerns.

Research question 2. What is the effect of CIP leadership on employees' knowledge creation?

Charismatic leadership brings flexibility to the organization and inspires followers to accomplish broad goals, while ideological leaders accomplish goals by motivating people to follow shared beliefs. Charismatic and ideological leadership styles are transformational, and previous literature presented the positive effect of transformational leadership on knowledge creation (Afsar et al., 2017; Scuotto et al., 2022; Yoo et al., 2021). The present study has found a positive relationship between charismatic and ideological leadership and employees creating knowledge, consistent with the previous literature. Moreover, the pragmatic leadership style is known for its problem-focused approach and influences individuals with relevant knowledge to solve the in-hand problem. Consistent with the previous literature, the present study found pragmatic leadership positively related to employees' knowledge sharing (Udin et al., 2022b).

Research question 3. What is the relationship between knowledge creation and innovative work behavior?

Knowledge creation is the major determinant of innovation. Previous studies have explained that the creation of new knowledge is the precursor of innovation and the dynamic interaction of tacit and explicit knowledge fosters innovation (Perez-luno et al., 2019; Radaelli et al., 2014). The results demonstrated that knowledge creation has a significant and positive relationship with the employees' IWB. Innovation is crucial for the IT industry to compete and grow, so organizations should promote knowledge-sharing culture to augment innovation in software developers.

Research question 4. Does knowledge creation mediate the effects of CIP leadership on employees' IWB?

The present study has novelty in establishing theoretically and empirically mediating links of knowledge creation between the CIP leadership and employees' IWB. The present study is possibly the first to explain the mediation of employees' knowledge creation between CIP leadership and employees' IWB. The results present that knowledge creation partially mediates between charismatic and pragmatic leadership and employees' IWB and fully mediates between ideological leadership and employees' IWB. According to the previous literature on leadership, the present study has novelty in explaining the mediation of knowledge creation between CIP leadership and employees' innovative behavior.

Theoretical Contributions

The study presented various contributions to the CIP approach to leadership and Dynamic Theory of Knowledge Creation (DTKC). First, the CIP approach to leadership argues that a single style may not be productive in every situation. The findings contribute to the theory by presenting that both transformational and transactional approaches to leadership may be effective for innovation depending upon the adaption of context-specific leadership styles. Charismatic is transformational, and pragmatic is the transactional leadership style, and both are productive for employees' IWB. However, ideological is the transformational style but is found insignificant. The findings present theoretical contributions to the leadership literature that understanding of context is essential, and leaders should adopt a specific style conducive to the situation.

Second, by explaining the role of CIP leadership in knowledge creation by depicting that all three leadership styles, charismatic, ideological, and pragmatic, positively contribute to knowledge creation. Third, dynamic interaction of explicit and tacit knowledge in the dynamic process of knowledge creation positively augments employee IWB. Fourth, the present study contributes to the DTKC by presenting the indirect effects of CIP leadership on employees' IWB through the dynamic process of knowledge creation. The mediation of knowledge creation is so important that if leadership creates a conducive environment for knowledge creation, such environment is so helpful that mediation of knowledge creation can convert the insignificant role of ideological leadership and innovative work behavior into a significantly positive relationship.

Practical Implication

Software developers working in IT companies registered under Pakistan Software Export Board (PSEB) are the population of the present study. The study results presented some important practical implications. Previously, transformational leadership was considered more effective, while transactional leadership was believed to be counterproductive for innovation. However, this previous

discourse on transformational and transactional leadership's contribution to innovation is no more effective in contemporary organizations. Out of three CIP leadership roles, charismatic and ideological are transformational, and pragmatic is transactional in nature. According to the present study, charismatic leadership positively impacts employees' IWB; however, the relationship between ideological leadership and innovative work behavior is insignificant. The insignificant of ideological leadership to innovative work behavior presents essential insight to the leadership, that not all transformational roles are productive for innovation. Moreover, a significantly positive relationship between pragmatic leadership and innovative work behavior presents that not every role of transactional leadership is counterproductive for innovation.

Secondly, all three CIP leadership styles have been found to be positively related to knowledge creation. The present-focused pragmatic leadership is at the top, and future-focused charismatic and past-focused ideological leadership are at the second and third, respectively. The present findings contribute to the practice by illustrating that all three CIP leadership styles, whether transactional or transformational, are favourable in creating a conducive environment for knowledge creation. The third practical implication is related to the conduciveness of the organizational environment. The more competent IT companies' leadership in creating a favourable environment for employee knowledge creation, then all three CIP leadership styles will cause higher employees' IWB. Furthermore, knowledge creation is so valuable for innovation that it can change the insignificant relationship of ideological leadership to employee IWB into a significant positive relationship.

Limitation and Future Research Directions

The limitations of the present study are expected to open new avenues for future research. The present study has followed single source data collection; however, in the future, the multilevel study can also be conducted by collecting responses from followers and leaders. The multilevel study may increase the generalization of findings. Second, the present model has been tested in the context of software development teams. However, the model can be applied in industries and domains other than business as leadership performs differently in different contexts. Charismatic leadership is more effective in politics, ideological in religion, and pragmatic in business organizations (Hunter & Lovelace, 2020). Third, the present study has adopted knowledge creation as a single construct. However, the effect of CIP styles of leadership can be explored in different dimensions of knowledge creation, like socialization, externalization, combination, and internalization. (For a detailed explanation of the dynamic interaction of explicit and tacit knowledge, refer to section 2.7). Fourth, the relationship between knowledge creation and employee innovative work behavior has been explained; however, future studies can explore how four different modes of knowledge creation can contribute to the three stages of employee IWB; idea generation, promotion, and realization. Fifth, the present study has followed non-probability sampling, limiting the generalization of findings. However, future research can explore the possibility of conducting probability sampling. In Pakistan, the IT industry is growing rapidly, and the government has devised a framework to document the economy. The possibility of conducting probability sampling may be explored for better generalization of findings.

Conclusion

The present study intends to address the dichotomy of what leadership approach is more effective in augmenting employee innovation. Previously, research on leadership is mainly limited to transformational and transactional approaches. However, the present study has explained CIP leadership styles' contribution to employee knowledge creation and their innovative work behavior. The research findings have demonstrated that no single approach or leadership style fits all. However, the context-specific CIP leadership approach may serve the best. The results suggest that leadership should be flexible in adopting different leadership styles according to the context and specific requirements of the domain.

According to the findings, charismatic and ideological leadership augment employee IWB; however, ideological leadership style was found insignificant. The present study has novelty in explaining the effect of CIP leadership on employee knowledge creation. The study has found a significant positive relationship between charismatic, ideological, and pragmatic leadership and employee knowledge creation. The research contributes by explaining the mediating role of knowledge creation between CIP leadership and employees' IWB. The more CIP leadership is capable of creating a conducive environment for knowledge creation, the higher the innovative work behavior will be, and this mediation is effective for all three CIP leadership styles.

Pakistan's economy is in recession due to energy crises, security problems, unstable politics, and inconsistent policies. However, besides all the difficulties, Pakistan's IT industry is growing rapidly, as the industry has registered 18.85 percent growth and is the highest growth in the region. The present research is expected to contribute to the IT industry by suggesting charismatic and pragmatic leadership styles are more conducive to employees' IWB. Moreover, all three CIP leadership styles effectively augment employees' knowledge creation and their subsequent innovative work behavior. The IT industry is growing exponentially in many Asian countries and has spurred enormous competition. In pursuit of competitiveness, more studies are required locally in Pakistan and internationally to make the industry environment more conducive to innovation.

References

- Afsar, B., Badir, Y. F., Saeed, B. Bin, & Hafeez, S. (2017). Transformational and transactional leadership and employee's entrepreneurial behavior in knowledge-intensive industries. *The International Journal of Human Resource Management*, 28(2), 307–332. <https://doi.org/10.1080/09585192.2016.1244893>
- Ahsan, Q., Abdullah, M. I., Chughtai, M. A., & Hafeez, H. (2022). The impact of project managers' transformational leadership on work crafting: explaining a moderating role of environmental dynamism in software project teams. *Middle East Journal of Management*, 9(1), 1–22. <https://doi.org/https://doi.org/10.1504/MEJM.2022.119354>
- Alblooshi, M., Shamsuzzaman, M., & Haridy, S. (2020). The relationship between leadership styles and organizational innovation: A systematic literature review and narrative synthesis. *European Journal of Innovation Management*, 24(2), 338–370. <https://doi.org/10.1108/EJIM-11-2019-0339>
- Ali, M., Raza, B., Ali, W., & Imtaiz, N. (2020). Linking Managerial Coaching With Employees' Innovative Work Behaviors Through Affective Supervisory Commitment: Evidence From Pakistan. *International Review of Management and Marketing*, 10(4), 11–16. <https://doi.org/10.32479/irmm.9715>
- Antonakis, J., Bastardo, N., Jacquart, P., & Shamir, B. (2016). Charisma: An Ill-Defined and Ill-Measured Gift. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 293–319. <https://doi.org/10.1146/annurev-orgpsych-041015-062305>
- Ather, T. (2021). Effect of Knowledge Management Practices and Leadership Styles of Heads of Departments on University Teachers' Performance. *Bulletin of Education & Research*, 43(159), 181–200. <https://files.eric.ed.gov/fulltext/EJ1320817.pdf>
- Bhatti, S. H., Kiyani, S. K., Dust, S. B., & Zakariya, R. (2021). The impact of ethical leadership on project success: the mediating role of trust and knowledge sharing. *International Journal of Managing Projects in Business*, 14(4), 982–998. <https://doi.org/10.1108/IJMPB-05-2020-0159>
- Bock, G. W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological factors, and organizational climate. *MIS Quarterly*, 29(1), 87–111. <https://doi.org/10.2307/25148669>
- Cai, W. (2021). *Workaholism: "The Dark Side of Transformational Leadership"*. (Issue March) [University of Technology Sydney Faculty of Management, UTS Business School]. <https://opus.lib.uts.edu.au/bitstream/10453/153524/2/02whole.pdf>
- Crayne, M. P., & Medeiros, K. E. (2021). Making Sense of Crisis: Charismatic, Ideological, and Pragmatic Leadership in Response to COVID-19. *American Psychologist*, 76(3), 462–474. <https://doi.org/10.1037/amp0000715>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (Fifth). SAGE Publications, Inc; Fifth edition. <https://us.sagepub.com/en-us/nam/research-design/book255675>
- Duan, Y., Yang, M., Huang, L., Chin, T., Fiano, F., de Nuccio, E., & Zhou, L. (2022). Unveiling the impacts of explicit vs. tacit knowledge hiding on innovation quality: The moderating role of knowledge flow within a firm. *Journal of Business Research*, 139(October 2021), 1489–1500. <https://doi.org/10.1016/j.jbusres.2021.10.068>
- Eni, L. N. (2022). Mediating Role of Knowledge Sharing in the Nexus among Human Capital, IT Capability, Transactional Leadership and Innovation Performance: Empirical Evidence from Bangladeshi Telecommunication Sector. *International Journal of Science and Business*, 9(1), 1–17. <https://doi.org/10.5281/zenodo.6053322>

- Erhan, T., Uzunbacak, H. H., & Aydin, E. (2022). From conventional to digital leadership: exploring digitalization of leadership and innovative work behavior. *Management Research Review, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/MRR-05-2021-0338>
- Eyal, O., Schwartz, T. R., & Berkovich, I. (2020). Ideological leadership in public schools. *Journal of Educational Administration, 58*(3), 303–320. <https://doi.org/10.1108/JEA-08-2019-0131>
- Figueiredo, J. A. L., Chimenti, P., Cavazotte, F., & Abelha, D. (2022). A Decade of Research on Leadership and its Effects on Creativity-Innovation: A Systematic and Narrative Literature Review. *Revista Brasileira de Gestao de Negocios, 24*(1), 66–91. <https://doi.org/10.7819/rbgn.v24i1.4151>
- Fragouli, E. (2018). The dark-side of charisma and charismatic leadership. *The Business and Management Review, 9*(4), 298–307.
- Gorgens-Ekermans, G., & Roux, C. (2021). Revisiting the emotional intelligence and transformational leadership debate: (how) does emotional intelligence matter to effective leadership? *SA Journal of Human Resource Management, 19*(January), 1–13. <https://doi.org/10.4102/sajhrm.v19i0.1279>
- Griffith, J. A., Gibson, C., Medeiros, K., MacDougall, A., Hardy, J., & Mumford, M. D. (2018). Are You Thinking What I'm Thinking?: The Influence of Leader Style, Distance, and Leader-Follower Mental Model Congruence on Creative Performance. *Journal of Leadership and Organizational Studies, 25*(2), 153–170. <https://doi.org/10.1177/1548051817750537>
- Grobben, E. (2022). *Effective line manager behaviours that stimulate innovative work behaviour of employees in the three different phases of IWB: idea generation, idea promotion and idea realization at knowledge intensive service- oriented organizations*. [University of Twente]. <https://purl.utwente.nl/essays/89413>
- Hair, J. (2021). Next-generation prediction metrics for composite-based PLS-SEM. *Industrial Management and Data Systems, 121*(1), 5–11. <https://doi.org/10.1108/IMDS-08-2020-0505>
- Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (Second Edi, Vol. 38, Issue 2). SAGE Publications, Inc. <https://doi.org/10.1080/1743727x.2015.1005806>
- Hakkak, M., Nawaser, K., Vafaei-Zadeh, A., & Hanifah, H. (2021). Determination of Optimal Leadership Styles Through Knowledge Management: A Case from the Automotive Industry. *International Journal of Innovation and Technology Management, 18*(4). <https://doi.org/10.1142/S0219877021500127>
- Hammond, M. M., Neff, N. L., Mac, F., Farr, J. L., Schwall, A., & Zhao, X. (2011). Predictors of individual-level innovation at work: A meta-analysis. *Psychology of Aesthetics Creativity and the Arts, March 2014*. <https://doi.org/10.1037/a0018556>
- Higgs, C. (2021). *CIP leadership and evaluation: the influence on causal transmission* [University of Oklanoma]. <https://hdl.handle.net/11244/329579>
- Hunter, S. T., & Lovelace, J. B. (2020). Extending the charismatic, ideological, and pragmatic approach to leadership: Multiple pathways to success. In *Routledge*. Routledge. <https://doi.org/10.4324/9781351017152>
- Hussain, S. T., Abbas, J., Lei, S., Haider, M. J., & Akram, T. (2017). Transactional leadership and organizational creativity: Examining the mediating role of knowledge sharing behavior. *Cogent Business & Management, 4*(1), 1–11. <https://doi.org/10.1080/23311975.2017.1361663>
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology, 73*(3), 287–302. <https://doi.org/10.1348/096317900167038>
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology, 89*(5), 755–768. <https://doi.org/10.1037/0021-9010.89.5.755>
- Latif, K. F., Nazeer, A., Shahzad, F., Ullah, M., Imranullah, M., & Sahibzada, U. F. (2020). Impact of entrepreneurial leadership on project success: mediating role of knowledge management processes. *Leadership and Organization Development Journal, 41*(2), 237–256. <https://doi.org/10.1108/LODJ-07-2019-0323>
- Lee, S., Kim, K., & Cho, Y. (2021). The Effects of Charismatic Leader Behavior on Group Performance and Group Innovation Behavior: An Investigation of a Mediating Effect of Followers' Voluntary Acceptance of their Leader. *Journal of Industrial Convergence, 19*(3),

- 13–26. <https://doi.org/https://doi.org/10.22678/JIC.2021.19.3.013>
- Li, H., Sajjad, N., Wang, Q., Ali, A. M., Khaqan, Z., & Amina, S. (2019). Influence of transformational leadership on employees' innovative work behavior in sustainable organizations: test of mediation and moderation processes. *Sustainability*, *11*(6), 1594. <https://doi.org/10.3390/su11061594>
- Lovelace, J. B., Neely, B. H., Allen, J. B., & Hunter, S. T. (2019). Röth- 2019. *Leadership Quarterly*, *30*(1), 96–110. <https://doi.org/10.1016/j.leaqua.2018.08.001>
- Moura, G. R. de, Leicht, C., Leite, A. C., Crisp, R. J., & Gołowska, M. A. (2018). Leadership diversity: effects of counterstereotypical thinking on the support for women leaders under uncertainty. *Journal of Social Issues*, *74*(1), 294–306.
- Mumford, M. D. (2006). *Pathways to outstanding leadership: A comparative analysis of charismatic, ideological, and pragmatic leaders* (First). Lawrence Erlbaum Associates Publishers.
- Mumford, M. D., & Strange, J. M. (2013). Vision and Mental Models: The Case of Charismatic and Ideological Leadership. In Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition. *Monographs in Leadership and Management*, *5*, 125–158. <https://doi.org/10.1108/s1479-357120130000005013>
- Nonaka, I., & Takeuchi, H. (1995). The knowledge-creating company: How Japanese companies create the dynamics of innovation. In *Oxford university press*.
- Nonaka, I., Toyama, R., & Konno, N. (2000). SECI, Ba and Leadership: A Unified Model of Dynamic Knowledge Creation. *Long Range Planning*, *33*(1), 5–34. [https://doi.org/10.1016/S0024-6301\(99\)00115-6](https://doi.org/10.1016/S0024-6301(99)00115-6)
- Onhon, O. (2019). The relationship between organizational climate for innovation and employees' innovative work behavior: ICT sector in Turkey. *Vezetéstudomány-Budapest Management Review*, *50*(11), 53–64. <https://doi.org/10.14267/VEZTUD.2019.11.04>
- Partlow, P. J. (2016). *Charismatic, ideological, and pragmatic leaders' impact on creative performance: person-supervisor, supervisor-goal, and person-goal fit* (Issue June) [The University of Oklahoma]. <https://hdl.handle.net/11244/34606>
- Perez-luno, A., Alegre, J., & Valle-cabrera, R. (2019). The role of tacit knowledge in connecting knowledge exchange and combination with innovation. *Technology Analysis & Strategic Management*, *31*(2), 186–198. <https://doi.org/10.1080/09537325.2018.1492712>
- Pham, Q. T., Pham-Nguyen, A. V., Misra, S., & Damaševičius, R. (2020). Increasing innovative working behaviour of information technology employees in Vietnam by knowledge management approach. *Computers*, *9*(3), 1–12. <https://doi.org/10.3390/computers9030061>
- Phong, L. B., Hui, L., & Son, T. T. (2018). How leadership and trust in leaders foster employees' behavior toward knowledge sharing. *Social Behavior and Personality: An International Journal*, *46*(5), 705–720. <https://doi.org/https://doi.org/10.2224/sbp.6711>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, *88*(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- PSEB. (2022). *Company Directory*. https://pseb.org.pk/app/company_directory.php
- Radaelli, G., Lettieri, E., Mura, M., & Spiller, N. (2014). Knowledge sharing and innovative work behaviour in healthcare: A micro-level investigation of direct and indirect effects. *Creativity and Innovation Management*, *23*(4), 400–414. <https://doi.org/https://doi.org/10.1111/caim.12084>
- Rawung, F. H., Wuryaningrat, N. F., & Elvinita, L. E. (2015). The influence of transformational and transactional leadership on knowledge sharing: An empirical study on small and medium businesses in Indonesia. *Asian Academy of Management Journal*, *20*(1), 123–145.
- Reslan, F. Y. B., Garanti, Z., & Emeagwali, O. L. (2021). The effect of servant leadership on innovative work behavior and employee knowledge sharing in the Latvian ICT sector. *Baltic Journal of Management*, *16*(5), 729–744. <https://doi.org/10.1108/BJM-09-2020-0321>
- Scuotto, V., Nespoli, C., Tran, P. T., & Cappiello, G. (2022). An alternative way to predict knowledge hiding: The lens of transformational leadership. *Journal of Business Research*, *140*(November 2021), 76–84. <https://doi.org/10.1016/j.jbusres.2021.11.045>
- Sekaran, U. (2011). *Research Methods for Business* (Vol. 65, Issue 3). Hoboken, NJ: John Wiley & Sons. <https://doi.org/10.1017/CBO9781107415324.004>
- Shafi, M., Zoya, Lei, Z., Song, X., & Sarker, M. N. I. (2020). The effects of transformational

- leadership on employee creativity: Moderating role of intrinsic motivation. *Asia Pacific Management Review*, 25(3), 166–176. <https://doi.org/10.1016/j.apmr.2019.12.002>
- Sutardi, D., Nuryanti, Y., Ferdiyatomoko, D., Kumoro, C., Mariyanah, S., & Agistiawati, E. (2022). Innovative Work Behavior: A Strong Combination of Leadership, Learning, and Climate. *International Journal of Social and Management Studies*, 3(1), 290–301. <https://www.ijosmas.org/index.php/ijosmas/article/view/114>
- Tian, M., Deng, P., Zhang, Y., & Salmador, M. P. (2018). How does culture influence innovation? A systematic literature review. *Management Decision*, 56(5), 1088–1107. <https://doi.org/10.1108/MD-05-2017-0462>
- Tierney, P., & Farmer, S. M. (2004). The Pygmalion Process and Employee Creativity. *Journal of Management*, 30(3), 413–432. <https://doi.org/10.1016/j.jm.2002.12.001>
- Tomlins, R., Sukumar, A., Rao, M., & Pandya, K. (2021). Radical Innovation Process in Sustainable Development and Knowledge Management: Toyota Prius Case Study. *In IOP Conference Series: Earth and Environmental Science*, 628(1). <https://doi.org/10.1088/1755-1315/628/1/012036>
- Udin, U., Dananjoyo, R., & Isalman, I. (2022a). The Effect of Transactional Leadership on Innovative Work Behavior: Testing the Role of Knowledge Sharing and Work Engagement as Mediation Variables. *International Journal of Sustainable Development and Planning*, 17(3), 727–736. <https://doi.org/10.18280/ijstdp.170303>
- Udin, U., Dananjoyo, R., & Isalman, I. (2022b). Transactional Leadership and Innovative Work Behavior: Testing the Mediation Role of Knowledge Sharing in Distribution Market. *Journal of Distribution Science*, 1(20), 41–53. <http://dx.doi.org/10.15722/jds.20.01.202201.41>
- Watts, L. L., Steele, L. M., & Mumford, M. D. (2019). Making sense of pragmatic and charismatic leadership stories: Effects on vision formation. *Leadership Quarterly*, 30(2), 243–259. <https://doi.org/10.1016/j.leaqua.2018.09.003>
- Yang, J.-T. (2007). Knowledge sharing: Investigating appropriate leadership roles and collaborative culture. *Tourism Management*, 28(2), 530–543. <https://doi.org/10.1016/j.tourman.2006.08.006>
- Yoo, S., Jeong, S., Song, J. H., & Bae, S. (2021). Transformational leadership and knowledge creation practices in Korean and US schools: knowledge assets as mediators. *Knowledge Management Research and Practice*, 19(2), 263–275. <https://doi.org/10.1080/14778238.2020.1767519>
- Zhang, Y., Xi, W., & Xu, F. Z. (2022). Determinants of employee innovation: an open innovation perspective. *Journal of Hospitality Marketing & Management*, 31(1), 97–124. <https://doi.org/10.1080/19368623.2021.1934933>
- Zhu, J., Song, L. J., Zhu, L., & Johnson, R. E. (2019). Visualizing the landscape and evolution of leadership research. *Leadership Quarterly*, 30(2), 215–232. <https://doi.org/10.1016/j.leaqua.2018.06.003>