

Servant Leadership and Employee Productivity among Private Cement Factory Workers in Sulaymaniyah

Haneen Fadhil Mohammad¹, Halimah Mohd Yusof^{2*}, Lavan
Talib¹, Mas Idayu Saidi²

¹Faculty of Business Management and Social Sciences, Qaiwan International University,

²School of Human Resource Development and Psychology, Universiti Teknologi Malaysia

*Corresponding Author Email: halimahmy@utm.my

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v15-i12/27179>

Published Date: 03 December 2025

Abstract

This study examines the relationship between servant leadership and employee productivity in private cement factories in Sulaymaniyah. A quantitative cross-sectional design was used, and data were collected from 134 full time factory workers through simple random sampling. The survey instrument measured four dimensions of servant leadership, namely affect, loyalty, contribution, and professional respect, and three dimensions of productivity, namely motivation, work environment, and work productivity. Descriptive analysis showed that servant leadership was practiced at a high level, while overall employee productivity was also high, particularly in task related performance. Pearson correlation analysis indicated a significant positive relationship between servant leadership and employee productivity ($r = 0.510$, $p < 0.01$). Regression results further showed that loyalty and professional respect significantly predicted productivity, whereas affect and contribution were not significant predictors. These findings highlight the importance of supportive, ethical, and people centred leadership in improving productivity within demanding industrial settings. The study concludes that servant leadership contributes to a more motivated workforce and creates favourable conditions for higher performance. Recommendations include leadership development programmes, improvements to the work environment, and strategies to strengthen trust and respectful communication in the workplace.

Keywords: Servant Leadership, Employee Productivity, Leadership Styles, Motivation, Manufacturing Industry

Introduction

Servant leadership emphasises serving employees, empowering them, and prioritising their growth. In labour intensive industries such as cement manufacturing, leadership plays a major role in shaping productivity and work conditions. This study examines the relationship between servant leadership and productivity among employees in private cement factories

in Sulaymaniyah. Workers in the private cement industry need a better understanding of how servant leadership relates to employee productivity. This study explores that connection by defining servant leadership both conceptually and operationally and demonstrating how it influences employee output. The research evaluates whether practicing servant leadership contributes to higher productivity in a manufacturing environment. Productivity issues faced by factory workers have received less attention in the literature compared to studies on leadership styles and their effects on employees (A. Manaf et al., 2019; A. Manaf et al., 2019). According to Eva, Robin, Sendjaya, Dierendonck, and Liden (2019), a leader initiates social interactions by regulating, directing, organising, or attempting to guide the efforts of others. Ineffective leadership styles in the workplace are directly linked to lower productivity. A leader motivates subordinates and helps them achieve organisational goals (Novialumi, 2021). To do so, leaders must understand employees' personalities, needs, and expectations. Many studies have shown that leadership influences how work processes unfold and how quality is maintained. Terry, as cited in Fahmi (2017), described leadership as the act of motivating individuals to work willingly toward shared goals.

Servant leadership, as described by Srimulyani (2013), is a management philosophy that prioritises supporting subordinates without neglecting organisational objectives. Productivity can be improved when organisations apply effective leadership strategies. Many studies have examined how businesses can strengthen productivity. Novialumi (2021) noted that servant leadership is reflected in flatter organisational structures where employees are valued for their contributions rather than hierarchy. Leaders focus on developing their subordinates rather than viewing them merely as workers. These practices can raise future productivity. Komarudin (2013) added that productivity involves a mindset that encourages continuous improvement in work processes and outcomes. For this to occur, employees must constantly seek ways to enhance efficiency.

Leadership is closely tied to productivity. Workplace productivity determines how much an employee accomplishes within a given period and influences organisational performance. Servant leadership contributes to this by focusing on helping employees grow and succeed. Greenleaf introduced the concept in 1970 and defined servant leadership as a style where leaders serve and support subordinates to help them reach their highest potential. Interest in servant leadership has grown, and many studies have examined its effect on employee productivity. However, most research focuses on service or government sectors rather than manufacturing.

Serving others and equipping them with necessary resources are core features of servant leadership (Aij et al., 2017). Leaders who practice this approach create an environment where employees feel respected and valued, which increases morale and productivity. Numerous studies have shown that servant leadership has positive organisational effects. For instance, Alafeshat and Aboud (2019) found that servant leadership strengthens business outcomes, while Adiguzel, Ozcinar, and Karadal (2020) noted that it enhances employee satisfaction and reduces rule violation. These findings indicate that servant leadership can improve employee behaviour, commitment, motivation, and performance. Insights from such research can help organisations design strategies to improve productivity in the private sector.

Workplaces today face challenges related to working conditions and management practices. Factory environments often involve low wages, high temperatures, long working hours, loud noise, and poor air quality (Robertson, Brown, and Dehejia, 2016). In Iraq, low productivity is a major concern. Many workers are dedicated to their jobs, yet they feel undervalued by their supervisors. Productivity problems often arise when organisations do not meet employees' needs or expectations.

Employee morale and performance decline when leadership practices are weak or authoritarian (Mason and Brown, 2013). Organisations with rigid command-based leadership styles often experience low morale and low productivity. In contrast, servant leadership has been shown to increase productivity because it emphasises relationships, ethics, emotional intelligence, and spiritual well-being (de Leede and Heuver, 2016; Anderson and Sun, 2017). This leadership style is becoming more common among workers today (Gandolfi and Stone, 2018; Yahaya and Ebrahim, 2016). Servant leadership promotes relationship-building, ethical guidance, emotional intelligence, and a sense of purpose (Noruzy et al., 2013; Donate and de Pablo, 2015; Seijts et al., 2015). These characteristics help employees reach their full potential.

Leadership strongly shapes organisational success because it guides behaviour, influences motivation, and encourages performance (Demirtas and Akdogan, 2015; Hickman and Silva, 2018; Tucker and Lam, 2014). The suitability of a leadership style depends on organisational culture and employee needs (Sadeghi and Pihie, 2012; Iqbal et al., 2015). Servant leadership enhances productivity by promoting responsibility and involvement. It supports relationship-building and creates a safe and respectful environment (Shafie et al., 2013). It also encourages teamwork by giving employees a sense of ownership in organisational success.

Studies have shown that servant leadership improves decision making, morale, and performance while reducing turnover. It is also linked to higher productivity (Dubrin, 2022). Leadership that cultivates respect and appreciation further enhances morale (Sofijanov and Zabijakin-Chatleska, 2013). Traditional command-based leadership provides structure but limits innovation, reduces trust, and weakens motivation (Farrell, 2017). Employees are more productive when leaders communicate effectively, listen actively, and invest in employee development. Organisations should regularly review leadership practices and gather employee feedback (Humphrey, 2013). Continuous improvement in leadership is necessary for long-term success (Wakabi, 2016). Servant leadership is not widely implemented in many workplaces. In Sulaymaniyah, many factories lack the conditions needed to support servant leadership. This affects productivity because employees do not feel supported or fairly treated. As a result, productivity declines.

Literature Review

Servant Leadership

Servant leadership is a people centred leadership style that prioritises the growth, well-being, and development of followers. Greenleaf first described a servant leader as someone who chooses to serve first, and then leads by enabling others to achieve their potential. Modern scholars have refined this definition by highlighting core dimensions such as emotional healing, humility, stewardship, empowerment, authenticity, and interpersonal support (Eva et al., 2019). Liden et al. identified key dimensions that include empowerment, standing back,

forgiveness, accountability, and courage. In this study, the servant leadership dimensions examined were affect, loyalty, contribution, and professional respect, which reflect the interpersonal foundation of supportive leadership.

Servant leadership is distinct from traditional models because it focuses on serving the needs of employees rather than gaining power or authority. Leaders demonstrate empathy, fairness, and respect, promote shared decision making, and enable followers to develop professionally and personally. These qualities make servant leadership especially relevant in labour intensive settings where physical and psychological support are essential. Servant leadership is grounded in the belief that leaders should prioritise the needs of their followers and support their development. Although often discussed alongside the Leader Member Exchange (LMX) perspective, servant leadership extends beyond the exchange between leaders and subordinates. LMX theory explains how positive relationships between leaders and followers can improve morale and performance (Chaudhry, Cao, Liden, and Vidhyarthi, 2021). Servant leadership, however, focuses more deeply on serving others and creating conditions that allow employees to grow.

A servant leader places the needs of team members before personal ambition (Lumpkin et al., 2018). Leaders are expected to understand the strengths and weaknesses of their followers and guide them without being authoritarian. According to Veliu et al. (2017), an effective leader influences followers and helps them stay aligned with organisational goals. Servant leadership supports this by encouraging empathy, humility, and a genuine concern for people (Jit et al., 2017). Leaders who practise this style build trust, offer emotional support, and create an environment where employees feel valued.

Research shows that servant leadership strengthens relationships between leaders and employees, increases feelings of respect, and facilitates open communication (Kiker et al., 2019). When employees believe their leader cares about their well being, they experience higher morale and a stronger sense of meaning in their work. This leads to greater satisfaction (Tischler et al., 2016) and reduces turnover intentions. Ethical conduct is also emphasised in servant leadership, where leaders ensure that organisational actions reflect shared values (Jaramillo et al., 2015). Overall, servant leadership fosters a healthy, ethical, and productive work environment that benefits both employees and the organisation.

Employee Productivity

Employee productivity refers to the amount of output produced relative to the time and resources spent. Although often measured at national levels using labour statistics (Pabilonia et al., 2019), workplace productivity is shaped by many factors. These include employees' skills, the availability of suitable equipment, motivation, and working conditions. Maliki (2021) explains that productivity improves when organisations provide proper tools, clear processes, and supportive environments.

Employee productivity in manufacturing is generally defined as the ability to produce goods efficiently, consistently, and with minimal waste. In industrial contexts, productivity is influenced by the interaction of human, environmental, and organisational factors. Basit, Hermina, and Al Kautsar (2018) proposed a productivity model consisting of three components: (a) Motivation, that is the internal drive that influences an employee's

willingness to exert effort; (b) Work environment, physical and social conditions that shape performance, including safety, equipment, noise, shift patterns, and organisational climate; (c) Work productivity that is actual output in terms of task completion, accuracy, quality, and speed.

Manufacturing environments, especially cement production, involve demanding physical tasks, exposure to dust and heat, and rigid operational routines. Productivity is therefore dependent not only on skill but also on psychological support, motivation, workplace safety, and relationship quality with supervisors. Research shows that poor working conditions and weak management practices reduce morale and productivity, whereas supportive leadership and safe environments enhance performance (Prayag et al., 2020; Chang et al., 2019).

Leadership also plays a major role. Employees perform better when they feel appreciated, supported, and trusted. Servant leadership helps foster such conditions by making employees feel safe, valued, and encouraged (Tzenios, 2019). Recognition, encouragement, and opportunities for professional growth further strengthen productivity (Kaydos, 2020). Workers are more productive when they see a clear purpose, understand expectations, and are given autonomy to make decisions.

Basit et al (2018) proposed a model that highlights the influence of internal and external factors. Internal factors include motivation, commitment, and personal drive. External factors include teamwork, the working environment, and organisational support. Studies show that job satisfaction and positive work settings are critical to maximising productivity (Werdhiastutie, Suhariadi, and Partiw, 2020).

The work environment includes both physical and social aspects. Physically, factors such as temperature, lighting, space, and noise affect performance (Prayag, Gannon, Muskat, and Taheri, 2020). Socially, employees are more productive when they feel respected and supported by colleagues and supervisors (Agarwal, Brooks, and Greenberg, 2020). Organisational culture also influences productivity. Workers who understand and believe in the organisation's purpose tend to be more engaged and effective (Chang, Graff Zivin, Gross, and Neidell, 2019).

Relationship between Servant Leadership and Employee Productivity

A substantial and growing body of evidence shows that servant leadership contributes meaningfully to improved employee productivity. Servant leaders emphasise service, ethical conduct, empathy, and personal growth, which create a work climate that supports higher levels of individual and team performance. By prioritising people, servant leaders foster collaboration and a sense of mutual responsibility. These elements help employees stay committed to their work and perform with greater consistency and quality. Khan, Arshad, Raoof, and Farooq (2022) found that servant leadership significantly improved employee outcomes, indicating that this leadership style can strengthen both behavioural and performance-related indicators within the organisation. also identified servant leadership as a key foundation for organisational success because of its influence on trust, reducing stress, ethical behaviour, adaptability and positive workplace relationships (Eva et al., 2019; Naseem, 2025; Pleno, 2025). Servant leaderships has been found to have an impact on performance (Nguyen, 2025).

Empirical findings across various sectors highlight the same pattern. Brohi et al. (2018) reported that servant leadership enhances employees' attitudes, emotional states, and work behaviours. These improvements increase employees' willingness to exert discretionary effort in their roles. Sihombing et al. (2018) further emphasised that servant leadership strengthens organisational culture by promoting fairness, shared values, and a supportive work climate. By influencing culture and reward systems, servant leadership creates an environment where good performance is recognised and reinforced. This style also contributes to improvements in service quality, as shown by Wang, Xu, and Liu (2018), who demonstrated that servant leadership encourages employees to deliver better customer service. These findings show that the positive effects of servant leadership extend beyond internal employee outcomes and influence the organisation's external performance. Servant leadership also has an impact on career development as well as employees' innovative behaviour and psychological empowerment (Afrianty, 2025; Xu & Wu, 2025).

Servant leadership promotes initiative, ownership, and accountability among employees. When employees feel supported and trusted, they are more likely to take responsibility for their tasks and suggest new ideas that enhance performance. Neubert et al. (2016) found that servant leadership increases job satisfaction and builds trust between leaders and followers, which contributes to a climate where creativity and teamwork are encouraged. Such environments allow employees to share knowledge, support one another, and solve operational problems more effectively. These conditions naturally strengthen productivity because employees feel valued, respected, and engaged in meaningful work. Servant leadership also reduces fear of making mistakes, which encourages employees to experiment with better ways of doing their tasks.

In manufacturing settings, the role of servant leadership becomes especially important due to the demanding nature of the work. Factory employees often experience heavy workloads, strict routines, and physical strain. When leaders are emotionally supportive, attentive to workers' needs, and willing to address concerns, employees feel more secure and motivated. Servant leadership helps reduce the negative effects of routine pressure by providing emotional support and promoting fairness in decision making. Employees who feel fairly treated develop a stronger sense of loyalty and reciprocity, and this increases their willingness to put extra effort into their tasks. A sense of belonging, respect, and shared purpose draws employees closer to organisational goals. As a result, productivity improves not only through task performance but also through better teamwork, reduced absenteeism, and lower turnover intentions.

Recent empirical research conducted between 2020 and 2024 provides strong evidence for the positive influence of servant leadership on workplace performance. Studies in industrial and manufacturing contexts consistently show that supportive leadership practices improve motivation, engagement, and productivity. Agarwal, Brooks, and Greenberg (2020) demonstrated that intrinsic motivation and a positive work culture significantly enhance productivity in industrial settings. This is supported by Canavesi and Minelli (2021), who found that servant leadership strengthens employee engagement while reducing burnout, suggesting that employees respond positively to leaders who prioritise their well-being. Research in manufacturing environments adds further support. Hermina, Basit, and Al Kautsar (2018) reported that improved working conditions increased productivity, while Purnomo and

Fatimah (2021) showed that strong motivation and workplace support directly contribute to higher performance. Servant leadership itself has been linked to better engagement and commitment, with Su et al. (2020) noting that supportive leadership behaviours foster stronger employee involvement. Additional evidence comes from Costa et al. (2023), who found that high trust environments commonly associated with servant leadership generate stronger performance outcomes. Pizzolitto et al. (2022) also concluded that servant leadership encourages autonomy and responsibility, which improves productivity. Furthermore, Chen et al. (2022) showed that servant leadership reduces toxic emotions in the workplace, thereby enhancing performance, while Ahmad et al. (2023) linked fair and reciprocal leadership exchanges with stronger work behaviours. Together, these studies reinforce that servant leadership is a consistent and powerful predictor of productivity across various sectors, including manufacturing, and its relevance continues to grow within contemporary organisational research.

This study is anchored in Social Exchange Theory, which explains workplace relationships as reciprocal exchanges between leaders and employees. The theory proposes that individuals respond positively when they perceive fairness, respect, and genuine care from others. In organisational settings, leaders who provide support, guidance, and meaningful consideration create high quality exchange relationships. Servant leadership aligns closely with this process because it emphasises empathy, integrity, and concern for employee well-being. When leaders invest in the development and welfare of their followers, employees interpret these behaviours as valuable exchanges and reciprocate through loyalty, commitment, and responsible work behaviour.

Based on this theoretical perspective, servant leadership is expected to influence productivity by fostering supportive, respectful, and trust-based interactions. Positive exchanges increase motivation, strengthen work attitudes, and encourage employees to contribute more actively to organisational goals. This is especially important in demanding industrial environments, such as cement manufacturing, where psychological support helps workers manage physical strain and pressure. When employees feel valued and protected, they are more willing to exert extra effort and maintain high performance. Therefore, Social Exchange Theory provides a strong foundation for explaining how servant leadership enhances productivity, as the reciprocal cycle of support and obligation leads to improved motivation, better work behaviour, and higher output. The conceptual framework for this study is shown as figure 1 below.

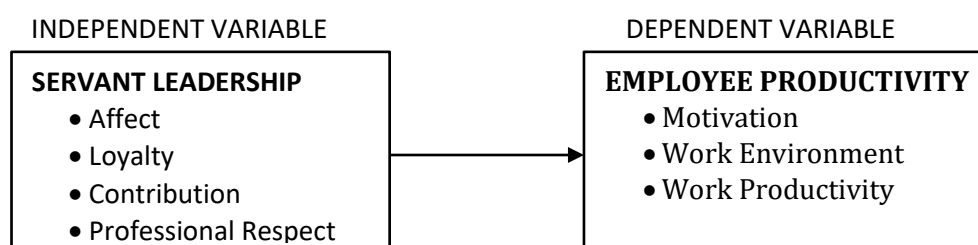


Figure 1. Conceptual Framework Linking Servant Leadership and Employee Productivity Based on Social Exchange Theory.

Overall, the literature suggests that servant leadership is a strong predictor of employee productivity, especially in industries that depend heavily on workforce commitment and consistent performance. By shaping attitudes, strengthening relationships, and fostering a supportive climate, servant leadership helps employees reach their full potential and contributes to sustainable organisational productivity. Based on the literature reviewed, the following hypotheses are proposed:

H₁: There is a significant relationship between servant leadership and employee productivity.

Methodology

A quantitative research design was adopted using a cross-sectional approach. Data were collected using a structured questionnaire consisting of three sections. The first section captured demographic information such as gender, age, ethnicity, marital status, work experience, and current job position. The second section measured servant leadership and was adapted from Erdogan and Bauer (2014), based on the Leader Member Exchange model. This section consisted of 12 items covering four dimensions, namely affect, loyalty, professional respect, and contribution. The third section assessed employee productivity and was adapted from the validated instrument developed by Basit, Hermina, and Al Kautsar (2018), which includes three dimensions relevant to manufacturing settings: work environment, motivation, and work productivity. A total of 30 items were used for this construct.

Simple random sampling was applied to ensure that every employee in the participating factories had an equal chance of being selected. This method was appropriate because the population was accessible, and the workers had similar job characteristics, which reduced sampling bias. A total of 150 questionnaires were distributed in person, and 134 usable responses were obtained, which met the minimum requirement for statistical analysis in correlation and regression studies. All items were measured using a five point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Instrument reliability was assessed using Cronbach's alpha for each construct. The productivity scale showed excellent internal consistency with a Cronbach's alpha of 0.923. The servant leadership dimensions also showed acceptable reliability, with values exceeding the recommended threshold of 0.70, indicating that the measurement items were stable and consistent.

Before conducting correlation and regression analyses, statistical assumptions were examined. Normality was assessed using skewness and kurtosis values, which fell within the acceptable range of ± 2 , indicating that the data distribution was suitable for parametric analysis. The assumptions for Pearson's correlation, including linearity, normality, and interval level measurement, were met. Therefore, Pearson's correlation analysis was used to examine the relationship between servant leadership and employee productivity. Descriptive statistics, reliability coefficients, and all inferential analyses were conducted using SPSS version 16.

Results

Demographic Characteristics

The demographic analysis shows that the majority of respondents were male employees ($n = 116$, 86.6 percent). Most respondents fell within the age range of 30 to 34 years old ($n = 44$, 32.8 percent). The largest ethnic group was Kurdish, representing 59.7 percent of the sample

(n = 80). In terms of marital status, 96 respondents (71.6 percent) were married. More than half of the workers had more than five years of experience working in cement factories (n = 77, 57.5 percent). The highest proportion of respondents held a bachelor's degree (n = 49, 36.6 percent). All respondents were full-time factory workers. Overall, the demographic profile suggests that the workforce is predominantly male, experienced in factory operations, and generally educated at the bachelor's level.

Level of Servant Leadership

The descriptive findings for servant leadership among the employees is shown in Table 1. Overall, the cement workers reported a high level of servant leadership (M = 3.73). All four dimensions recorded high mean scores: affect (M = 3.75), loyalty (M = 3.69), contribution (M = 3.75), and professional respect (M = 3.73). The highest score was for affect, indicating that employees perceived their leaders as caring, supportive, and willing to help them grow. Loyalty recorded the lowest mean score among the four dimensions, although it still fell within the high level category. This suggests that loyalty exists but should be strengthened further within the factories.

Table 1

Level of Servant Leadership

Variables	Mean	SD	Level
Affect	3.75	0.91	High
Loyalty	3.69	0.99	High
Contribution Subscale	3.75	0.94	High
Professional Respect	3.73	0.96	High

Mean value guide: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00

Level of Employee Productivity

The descriptive statistics for employee productivity are presented in Table 3. The findings show that the overall productivity level among cement workers was high (M = 3.76). However, individual dimensions varied. Motivation (M = 3.55) and work environment (M = 3.68) were at moderate levels, while work productivity (M = 4.05) recorded a high level. These results indicate that although workers are highly productive in terms of task completion, improvements in motivation and working conditions may further strengthen productivity.

Table 3

Level of Employee Productivity

Variables	Mean	SD	Level
Motivation	3.55	0.62	Moderate
Work Environment	3.68	0.57	Moderate
Work Productivity	4.05	0.57	High
Total			

Mean value guide: Low = 1.00–2.33; Moderate = 2.34–3.67; High = 3.68–5.00

Link between Servant Leadership and Employee Productivity

The correlation analysis examined the relationship between the four dimensions of servant leadership and the three dimensions of employee productivity. Table 4 shows the detailed outcomes. The results indicate that servant leadership had a positive and statistically

significant relationship with overall productivity ($r = 0.510$, $p < 0.01$). This supports the proposed hypothesis that higher servant leadership is associated with higher employee productivity.

These results highlight that loyalty and professional respect consistently showed strong positive relationships with all productivity dimensions. This suggests that employees work better when leaders show respect, trust, and strong interpersonal connection.

Table 4

Correlation between Servant Leadership and Employee Productivity

Servant Leadership Dimensions	Motivation	Work Environment	Work Productivity	Overall Productivity
Affect	$r = 0.424^{**}$, $p = 0.000$	$r = 0.154$, $p = 0.076$	$r = 0.217^{*}$, $p = 0.012$	-
Loyalty	$r = 0.406^{**}$, $p = 0.000$	$r = 0.184^{*}$, $p = 0.033$	$r = 0.309^{**}$, $p = 0.000$	-
Contribution Subscale	$r = 0.208^{*}$, $p = 0.016$	$r = 0.062$, $p = 0.474$	$r = 0.247^{**}$, $p = 0.000$	-
Professional Respect	$r = 0.411^{**}$, $p = 0.000$	$r = 0.315^{**}$, $p = 0.000$	$r = 0.392^{**}$, $p = 0.000$	-
Overall Servant Leadership Score	-	-	-	$r = 0.510^{**}$, $p = 0.000$

The detailed analysis by dimension shows several significant relationships. Motivation demonstrated significant positive correlations with affect ($r = 0.424$, $p = 0.000$), loyalty ($r = 0.406$, $p = 0.000$), contribution ($r = 0.208$, $p = 0.016$), and professional respect ($r = 0.411$, $p = 0.000$). For the work environment dimension, significant relationships were found with loyalty ($r = 0.184$, $p = 0.033$) and professional respect ($r = 0.315$, $p = 0.000$), while no significant correlation was observed with affect or contribution. Work productivity also showed significant positive correlations with affect ($r = 0.217$, $p = 0.012$), loyalty ($r = 0.309$, $p = 0.000$), contribution ($r = 0.247$, $p = 0.000$), and professional respect ($r = 0.392$, $p = 0.000$). Overall, these results indicate that the dimensions of servant leadership, particularly loyalty and professional respect, are consistently associated with higher levels of motivation and productivity among cement workers.

Regression Analysis

A regression analysis was conducted to determine which dimensions of servant leadership significantly predict employee productivity. Table 5 shows the findings. The overall model was significant, $F(4,129) = 13.544$, $p < 0.01$, with $R^2 = 0.296$. This means servant leadership explained 29.6 percent of the variance in productivity. These findings support the hypothesis that loyalty and professional respect positively influence productivity. However, affect and contribution did not significantly predict productivity, suggesting that emotional support alone is not enough to drive performance unless supported by loyalty and respect.

Table 5

Regression Analysis Predicting Employee Productivity

Variables	β	t	Sig.
Affect	0.030	0.525	0.600
Loyalty	0.111	2.121	0.036*
Contribution Subscale	0.036	0.716	0.475
Professional Respect	0.213	3.716	0.000**

$R = 0.544$, $R^2 = 0.296$, $F = 13.544$ (* $p < 0.05$, ** $p < 0.01$)

The regression analysis identified two significant predictors of employee productivity. Loyalty emerged as a significant predictor, with results showing that higher levels of loyalty were associated with increased productivity ($\beta = 0.111$, $t = 2.121$, $p = 0.036$). Professional respect was the strongest predictor in the model, indicating that employees who feel respected by their leaders tend to demonstrate higher productivity ($\beta = 0.213$, $t = 3.716$, $p = 0.000$). In contrast, affect did not significantly predict productivity ($\beta = 0.030$, $p = 0.600$), suggesting that emotional support alone does not directly influence performance. Similarly, the contribution dimension did not show a significant relationship with productivity ($\beta = 0.036$, $p = 0.475$). These results highlight that loyalty and professional respect play the most meaningful roles in explaining variations in employee productivity among cement workers.

Discussion

Level of Servant Leadership

The findings show that servant leadership is practiced at a high level in the private cement factories. All four dimensions, namely affect, loyalty, contribution, and professional respect, recorded high mean scores. This demonstrates that leaders in these factories are generally supportive, respectful, and committed to prioritising the needs of their workers. The increasing prevalence of servant leadership aligns with global trends. Mazzetti and Schaufeli (2022) reported that organisations have begun shifting away from traditional hierarchical models towards leadership approaches that emphasise empathy, fairness, and empowerment. Servant leadership has gained attention because it enhances employee loyalty, intrinsic motivation, and performance. Employees today expect leaders to acknowledge their ideas, respect their well-being, and create an environment where their contributions are valued.

Tessema et al. (2022) noted that contemporary workplaces, especially after “The Great Resignation,” demand leadership styles that are people centred. Employees prefer leaders who listen, show empathy, and create a psychologically safe space. Servant leadership fits this expectation by encouraging open communication and creating opportunities for individuals to develop. Workers are more willing to engage and participate in decision making when they feel heard and respected. Furthermore, trust plays an essential role in strengthening servant leadership. Research by Costa et al. (2023) reported that sectors with higher trust levels show higher performance outcomes. When leaders act ethically and prioritise followers’ needs, trust increases, which enhances workplace satisfaction. Scurtu et al. (2023) also highlighted that industries that require innovation and problem solving, including the cement industry, tend to benefit from servant leadership because it encourages employees to explore new ideas without fear of criticism. This leadership style creates a

climate where creativity and initiative are supported, which is essential in competitive industrial environments.

Level of Employee Productivity

The findings indicate that employee productivity is high, particularly in the dimension of task-related work productivity. Motivation and work environment scored moderate levels, showing room for improvement despite strong overall performance.

Work productivity is central to organisational success. Without strong work productivity, efficiency cannot be fully achieved. However, productivity is not solely driven by performance outcome; it is influenced by internal and external factors. Motivation is an internal factor that determines the commitment and enthusiasm of employees. Niati, Siregar, and Prayoga (2021) stressed that productivity is essential for both personal fulfilment and organisational goals. High motivation encourages employees to exert greater effort and results in improved performance.

The work environment also plays a significant role. Factors such as safety, lighting, workload, and interpersonal relationships shape how employees perceive their jobs. Jumady and Lilla (2021) found that productivity improves when both personal and organisational needs are addressed. In addition, Hairo and Martono (2019) emphasised that the work environment includes physical, social, and cultural elements that influence behaviour and performance. A supportive environment encourages employees to focus, collaborate, and work more efficiently.

Intrinsic motivation is another key determinant. Tzenios (2019) observed that employees are more productive when they feel inspired, valued, and recognised. When leaders appreciate workers' efforts, employees tend to commit more strongly to their tasks. Hafeez et al. (2019) noted that a positive work environment increases satisfaction and engagement, which directly enhances productivity.

The Link between Servant Leadership and Employee Productivity

The findings show a significant positive relationship between servant leadership and employee productivity, indicating that leadership behaviour plays an important role in shaping performance among cement workers. Employees working under leaders who demonstrate empathy, fairness, respect, and integrity showed higher levels of motivation, commitment, and output. This relationship aligns closely with Social Exchange Theory, which proposes that positive treatment from leaders generates reciprocal positive responses from employees. When employees feel supported, valued, and respected, they willingly return these exchanges by increasing their effort, cooperation, and performance.

The positive influence of servant leadership on productivity is also consistent with earlier research. Studies by Al Khajeh (2018), Asrar-ul-Haq and Kuchinke (2018), and Maliki (2021) confirmed that leadership styles centred on empowerment and follower development yield stronger organisational outcomes than directive or authoritarian approaches. In this study, the mean scores for motivation and work environment were closely aligned, suggesting that both factors shape how employees approach their daily tasks. Servant leaders reinforce intrinsic motivation by recognising contributions, addressing concerns, and involving

employees in discussions. When workers feel appreciated and see their role as meaningful, they develop a stronger sense of purpose and persistence in meeting performance expectations.

The work environment is particularly critical in industrial settings such as cement manufacturing, where employees face physical demands, high temperatures, noise, dust, and repetitive strain. Leadership behaviour can either buffer or intensify these challenges. Servant leaders help reduce stress by creating a psychologically safe climate, ensuring that workers have access to proper equipment, and responding fairly to workplace issues. Research by Tzenios (2019), Hafeez et al. (2019), Agarwal et al. (2020), Hermina et al. (2018), Purnomo and Fatimah (2021), and Chang et al. (2019) all support the view that supportive leadership and improved working conditions contribute significantly to both satisfaction and productivity. This reinforces the idea that leadership is not merely administrative but a central factor in enabling workers to function effectively under demanding circumstances.

The study also highlighted which dimensions of servant leadership are most influential. Loyalty and professional respect significantly predicted productivity, whereas affect and contribution did not. This suggests that emotional warmth alone is insufficient unless it is accompanied by professionalism, reliability, and consistent fairness. Employees may appreciate leaders who are kind, but what improves performance is the perception that leaders are trustworthy, credible, and respectful. This aligns with Social Exchange Theory, which emphasises that employees reciprocate most strongly when exchanges are grounded in fairness, integrity, and reliability rather than emotional support alone.

Another important finding relates to the moderate levels of motivation and work environment. Despite servant leadership being high, these two dimensions did not rise to the same level, suggesting that structural constraints may limit the full potential of leadership. Factors such as workload pressure, limited resources, physical strain, and safety concerns may restrict workers' ability to fully benefit from supportive leadership. Servant leadership can strengthen motivation, but organisational policies, safety measures, and resource allocation must work together to create a fully supportive environment.

Beyond productivity, servant leadership influences several other positive work outcomes. Studies by Pizzolitto et al. (2022), Tajasom et al. (2019), Getha-Taylor (2018), Alshaar (2022), and Alsoud et al. (2021) have shown that servant leadership strengthens job satisfaction, autonomy, and commitment. Engagement is another area where servant leadership shows a strong effect. Canavesi and Minelli (2021), Su et al. (2020), and Wu and Lee (2020) found that employees under supportive leaders display higher levels of engagement, knowledge sharing, and psychological resourcefulness. Servant leadership also reduces negative emotions in the workplace. According to Chen et al. (2022), toxic emotions reduce motivation and performance, and leadership that promotes trust and fairness helps mitigate these effects. This again reflects the principles of Social Exchange Theory: when employees perceive exchanges as fair and supportive, they reciprocate with stronger performance, commitment, and cooperation (Ahmad et al., 2023; Saleem et al., 2020).

Overall, the study confirms that servant leadership is positively associated with productivity in private cement factories. As the workforce evolves and younger generations prioritise

empowerment, collaboration, and respect, leadership styles that emphasise these elements will become increasingly necessary. Although servant leadership practices are present, they have not yet reached their full potential across the factories studied. Strengthening these practices could further enhance productivity, improve organisational culture, and support long term competitiveness in the manufacturing sector.

Limitations of the Study

This study has several limitations that should be considered when interpreting the findings. First, the use of a cross-sectional design restricts the ability to establish causal relationships between servant leadership and employee productivity. Second, the study relied on self reported data, which may be affected by response bias or social desirability, especially when evaluating leadership behaviours. Third, the sample was drawn from private cement factories in Sulaymaniyah only, which limits the generalisability of the results to other industries or regions. Fourth, the sample size, although adequate, was relatively small and covered only two factories, which may not capture wider organisational differences. Finally, the study focused on a limited range of variables. Other factors such as job satisfaction, organisational culture, safety conditions, and workload were not examined, even though these may also influence productivity. Future studies could address these limitations by including larger samples, multiple industries, longitudinal designs, and mixed methods approaches.

Recommendations

Based on the findings, several practical steps can be taken to strengthen servant leadership and improve productivity in private cement factories in Sulaymaniyah. Organisations should prioritise leadership development programmes that build empathy, ethical conduct, communication skills, and people centred leadership. Since loyalty and professional respect were the strongest predictors of productivity, leadership training should focus on trust building, fairness, and respectful supervisor–employee relationships. Factories should also strengthen communication systems by having regular feedback sessions, open door practices, and opportunities for employees to voice concerns. These mechanisms may improve commitment and motivation. Improvements to the work environment are also necessary. Although overall productivity was high, moderate scores for motivation and work environment suggest that some employees experience physical strain or feel limited by working conditions. Providing safer and more comfortable workplaces, reducing unnecessary physical load, and ensuring access to proper equipment may help sustain long term performance. Recognition systems such as monthly appreciation, public acknowledgement, or career development opportunities can further reinforce positive behaviour and improve morale. Future research should broaden the scope by comparing public and private factories, using longitudinal designs to track changes over time, and examining mediating variables such as job satisfaction or organisational culture. These enhancements will offer a clearer understanding of how servant leadership influences productivity across different industrial settings.

Contribution of the Study

This study contributes new knowledge to servant leadership research in several ways. It provides empirical evidence from the cement manufacturing sector, a context that is often overlooked in leadership studies. By focusing on private factories in Sulaymaniyah, the study extends existing literature beyond service industries and demonstrates that servant

leadership is also relevant in physically demanding, high pressure environments. The study also clarifies which dimensions of servant leadership most strongly influence productivity. Loyalty and professional respect emerged as significant predictors, while affect and contribution did not. This distinction adds nuance to leadership theory by showing that credibility, fairness, and trust carry more weight in driving performance than emotional support alone. The study further contributes by linking servant leadership with multiple facets of productivity, including motivation, work environment, and task performance, offering a more complete understanding of how leadership shapes employee attitudes and behaviour. In addition, the study provides valuable insights from a non Western setting where cultural expectations and workplace norms differ from those often examined in leadership research. This expands the international relevance of servant leadership theory and supports cross cultural comparisons. Taken together, these contributions highlight the importance of people centred leadership in industrial operations. For manufacturing environments that rely heavily on physical labour and consistent output, servant leadership offers a practical pathway to strengthening efficiency, supporting worker well-being, and sustaining organisational performance.

Conclusion

This study examined the level of servant leadership, the level of employee productivity, and the relationship between the two among cement workers in private factories in Sulaymaniyah. The findings show that servant leadership is practiced at a high level, indicating that leaders in these factories demonstrate empathy, respect, and a willingness to support employees' growth. Employee productivity was also high, particularly in the dimension of work productivity, although motivation and work environment were moderate. The study confirmed that servant leadership has a significant positive relationship with employee productivity. Leadership behaviours that promote loyalty and professional respect were the strongest predictors of productivity. These findings reinforce the importance of people centred leadership in industrial settings, where work can be physically demanding and routine driven. When employees feel valued and respected, they are more motivated to contribute, take initiative, and maintain consistent performance. Overall, the results highlight that servant leadership is a relevant and effective leadership approach in the cement industry. Organisations that adopt this style can strengthen trust, improve motivation, and enhance productivity. Strengthening leadership practices and improving the work environment will help private factories sustain performance and support long term organisational development.

References

- Abdul Manaf, A.M., Tengku Mohd Azzman. T.S.A., & Idid. S.A. (2019). Relationship between individual well-being, working environment and job satisfaction among factory workers in Malaysia. *Intellectual Discourse*, 27(1), 221–243.
- Adiguzel, Z., Ozcinar, M. F., & Karadal, H. (2020). Does servant leadership moderate the link between strategic human resource management on rule-breaking and job satisfaction? *European Research on Management and Business Economics*, 26(2), 103–110. <https://doi.org/10.1016/j.iedeen.2020.04.002>
- Afrianty, T. W. (2025). Linking servant leadership and career development to employee voice behaviour at state polytechnics in Indonesia. *Cogent Business & Management*, 12(1), Article 2460628. <https://doi.org/10.1080/23311975.2025.2460628>
- Agarwal, P., Brooks, K., & Greenberg, J. (2020). Motivating industrial employees: The role of workplace culture and leader support. *Journal of Organizational Psychology*, 20(2), 15–28.
- Ahmad, R., Nawaz, M. R., Ishaq, M. I., Khan, M. M., & Ashraf, H. A. (2023). Social Exchange Theory: Systematic Review and Future Directions. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1015921>
- Al Khajeh, E. H. (2018). Impact of leadership styles on organizational performance. *Journal of Human Resources Management Research*, 1–10. <https://doi.org/10.5171/2018.687849>
- Alafeshat, R., & Aboud, F. (2019). Servant leadership impact on organizational performance: The mediating role of employee engagement. *International Journal of Human Resource Studies*, 9(3), 85-100. <https://ideas.repec.org/a/mth/ijhr88/v9y2019i3p85-100.html>
- AlDhaheri, H., Hilmi, M. F., Abudaqa, A., Alzahmi, R. A., & Ahmed, G. (2023). The relationship between HRM practices, innovation, and employee productivity in UAE public sector: a structural equation modelling approach. *International Journal of Process Management and Benchmarking*, 13(2), 157-176.
- Al-maliki, S. (2021). The Management Scouting Behaviors of Employees in Oil & Gas Companies in Iraq-Thesis. The Management Scouting Behaviors of Employees in Oil & Gas Companies in Iraq-Thesis (January 31, 2021). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4117580
- Alshaar, A. (2022). Impact of leadership styles on job satisfaction: A case study. *International Journal of Academic Research in Business and Social Sciences*, 12(7). <https://doi.org/10.6007/ijarbss/v12-i7/13980>
- Alsoud, M., Maaitah, T., & Almaaitah, D. A. (2021). The role of leadership styles on staffs job satisfaction in public ... https://www.researchgate.net/profile/DirarAlmaaitah/publication/349320057_The_Role_Of_Leadership_Styles_On_Staffs_Job_Satisfaction_In_Public_Organizations/links/602a9cd94585158939a92e4e/The-Role-OfLeadership-Styles-On-Staffs-Job-Satisfaction-In-PublicOrganizations.pdf?origin=publication_detail
- Asrar-ul-Haq, M., & Kuchinke, K. P. (2018). Impact of leadership styles on employees' attitude towards their leader and performance: Empirical evidence from Pakistani banks. *Future Business Journal*, 2(1), 54–64. <https://doi.org/10.1016/j.fbj.2016.05.002>
- Basit, A. A., Hermina, T., & Al Kautsar, M. (2018). The Influence of Internal Motivation and Work Environment on Employee Productivity. *KnE Social Sciences*. <https://www.knepublishing.com/index.php/KnESocial/article/view/3424>
- Bin, A. S., & Shmailan, A. (2015). The relationship between job satisfaction, job performance and employee engagement: An explorative study. *Issues in Business Management and*

- Economics, 4(1), 1-8. Block, P. (2016). The empowered manager: Positive political skills at work. John Wiley & Sons.
- Brohi, N. A., Jantan, A. H., Qureshi, M. A., Bin Jaffar, A. R., Bin Ali, J., & Bin Ab Hamid, K. (2018). The impact of Servant leadership on employees' attitudinal and behavioural outcomes. *Cogent Business & Management*, 5(1), 1542652. <https://doi.org/10.1080/23311975.2018.1542652>
- Canavesi, A., & Minelli, E. (2021). Servant leadership and employee engagement: A qualitative study. *Employee Responsibilities and Rights Journal*, 34(4), 413–435. <https://doi.org/10.1007/s10672-021-09389-9>
- Chang, T. Y., Graff Zivin, J., Gross, T., & Neidell, M. (2019). The effect of pollution on worker productivity: evidence from call center workers in China. *American Economic Journal: Applied Economics*, 11(1), 151-72.
- Chaudhry, A., Cao, X., Liden, R. C., Point, S., & Vidyarthi, P. R. (2021). A meta-review of servant leadership: Construct, correlates, and the process. *Journal of Comparative International Management*, 24(2), 59-99.
- Costa, J., Pádua, M., & Moreira, A. C. (2023). Leadership styles and innovation management: What is the role of human capital? *Administrative Sciences*, 13(2), 47. <https://doi.org/10.3390/admsci13020047>
- Ćulibrk, J., DeliĆ, M., Mitrović, S., & Ćulibrk, D. (2018). Job satisfaction, organizational commitment, and job involvement: The mediating role of job involvement. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.00132>
- Demirtas, O., & Akdogan, A. A. (2015). The effect of ethical leadership behaviour on ethical climate, turnover intention, and affective commitment. *Journal of Business Ethics*, 130(1), 59-67. <https://doi.org/10.1007/s10551-014-2196-6>
- Donate, M. J., & de Pablo, J. D. S. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of business research*, 68(2), 360-370.
- Dubrin A. J. (2022). Leadership: Research findings, practice, and skills. Cengage Learning.
- Erdogan, B., & Bauer, T. N. (2014). Leader-member exchange (LMX) theory: The relational approach to leadership.
- Eva, N., Robin, M., Sendjaya, S., Van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The leadership quarterly*, 30(1), 111-132. <https://doi.org/10.1016/j.leaqua.2018.07.004>
- Farrell, M. (2017). Leadership reflections: Leadership skills for knowledge management. *Journal of Library Administration*, 57(6), 674–682. <https://doi.org/10.1080/01930826.2017.1340768>
- Gandolfi, F., & Stone, S. (2018). Leadership, leadership styles, and servant leadership. *Journal of Management Research*, 18(4), 261-269. https://www.researchgate.net/profile/Franco-Gandolfi/publication/340940468_Leadership_Leadership_Styles_and_Servant_Leadership/links/5ea6a029a6fdccd79457ffa9/Leadership-Leadership-Styles-and-ServantLeadership.pdf
- Getha-Taylor, H. (2018). Leadership across hierarchical levels. *Global Encyclopedia of Public Administration, Public Policy, and Governance*, 3587–3591. https://doi.org/10.1007/978-3-319-20928-9_2208
- Hafeez, I., Yingjun, Z., Hafeez, S., Mansoor, R., & Rehman, K. U. (2019). Impact of workplace environment on employee performance: mediating role of employee health. *Business*,

- Management and Economics Engineering, 17(2), 173– 193.
<https://www.ceeol.com/search/article-detail?id=857638>
- Hairo, A. M., & Martono, S. (2019). The Effect of Environment, Training, Motivation, and Satisfaction on Work Productivity. *Management Analysis Journal*, 8(1), 50-57.
- Humphrey, R. H. (2013). *Effective leadership: Theory, cases, and applications*. SAGE Publications.
- Jaramillo, F., Bande, B., & Varela, J. (2015). Servant leadership and ethics: A dyadic examination of supervisor behaviors and salesperson perceptions. *Journal of Personal Selling & Sales Management*, 35(2), 108-124.
<https://doi.org/10.1080/08853134.2015.1010539>
- Jit, R., Sharma, C. S., & Kawatra, M. (2017). Healing a broken spirit: Role of servant leadership. *Vikalpa*, 42(2), 80-94. <https://doi.org/10.1177/0256090917703754>
- Jumady, E., & Lilla, L. (2021). Antecedent and Consequence the Human Resources Management Factors on Civil Servant Performance. *Golden Ratio of Human Resource Management*, 1(2), 104-116.
- Khan, F., Arshad, M., Raoof, R., & Farooq, O. (2022). Servant leadership and employees' performance: organization and information structure perspective. *The Service Industries Journal*, pp. 1–19. <https://doi.org/10.1080/02642069.2022.2086976>
- Kiker, D. S., Callahan, J. S., & Kiker, M. B. (2019). Exploring the boundaries of servant leadership: A meta-analysis of servant leadership's main and moderating effects on behavioral and affective outcomes. *Journal of Managerial Issues*, 31(2), 172-197.
<https://www.jstor.org/stable/45176614>
- Leede, J., & Heuver, P. (2016). New ways of working and leadership: an empirical study in the service industry. In *New ways of working practices*. Emerald Group Publishing Limited.
<https://doi.org/10.1108/S1877-636120160000016004>
- Liang, M., Xin, Z., Yan, D. X., & Jianxiang, F. (2020). How to improve employee satisfaction and efficiency through different enterprise social media use. *Journal of Enterprise Information Management*, 34(3), 922–947. <https://doi.org/10.1108/jeim-10-2019-0321>
- Lumpkin, A., & Achen, R. M. (2018). Explicating the synergies of self-determination theory, ethical leadership, servant leadership, and emotional intelligence. *Journal of Leadership Studies*, 12(1), 6–20. <https://doi.org/10.1002/jls.21554>
- Mason, C., & Brown, R. (2013). Creating a good public policy to support high-growth firms. *Small business economics*, 40(2), 211–225. <https://doi.org/10.1007/s11187-011-9369-9>
- Mazarei, E., Hoshyar, M., & Nourbakhsh, P. (2013). The relationships between servant leadership style and organizational commitment. *Archives of Applied Science Research*, 5(1), 312-317
- Mazzetti, G., & Schaufeli, W. B. (2022). The impact of engaging leadership on employee engagement and Team Effectiveness: A longitudinal, multi-level study on the mediating role of personal- and Team Resources. *PLOS ONE*, 17(6).
<https://doi.org/10.1371/journal.pone.0269433>
- McCarthy-Jones, S. (2019). The autonomous mind: The right to freedom of thought in the twentyfirst century. *Frontiers in Artificial Intelligence*, 2.
<https://doi.org/10.3389/frai.2019.00019>
- Naseem, W. (2025). Alleviating workplace stress: the role of servant leadership in private educational institutions. *Cogent Business & Management*, 12(1), Article 2451131.
<https://doi.org/10.1080/23311975.2025.2451131>

- Neubert, M. J., Hunter, E. M., & Tolentino, R. C. (2016). A servant leader and their stakeholders: When does organizational structure enhance a leader's influence? *The Leadership Quarterly*, 27(6), 896-910. <https://doi.org/10.1016/j.leaqua.2016.05.005>
- Nguyen, H. H. (2025). How servant leadership fosters organisational performance: The mediating role of empowerment and trust. *SAGE Open*, 15(2), 1–16. <https://doi.org/10.1177/21582440251365790>
- Niati, D. R., Siregar, Z. M. E., & Prayoga, Y. (2021). The effect of training on work performance and career development: the role of motivation as intervening variable. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 2385-2393.
- Novialumi, A. (2021). The Effect of Servant Leadership on the Work Productivity of PT. Fastrata Buana Bekasi. *International Journal of Education, Information Technology, and Others*, 4(1), 143-147. <https://doi.org/10.5281/zenodo.4718105>
- Pabilonia, S. W., Jadoo, M. W., Khandrika, B., Price, J., & Mildemberger, J. D. (2019). BLS publishes experimental state-level labor productivity measures. *Monthly Labor Review*, 1-25. <https://www.jstor.org/stable/26743917>
- Pizzolitto, E., Verna, I., & Venditti, M. (2022). Authoritarian leadership styles and performance: A systematic literature review and research agenda. *Management Review Quarterly*, 73(2), 841–871. <https://doi.org/10.1007/s11301-022-00263-y>
- Pleno, A. B. (2025). Servant leadership and its impact on organisational commitment and effective management practices for sustainable performance. *International Journal on Culture, History and Religion*, 7(SI2), 171-190. <https://doi.org/10.63931/ijchr.v7iSI2.154>
- Prayag, G., Gannon, M. J., Muskat, B., & Taheri, B. (2020). A serious leisure perspective of culinary tourism co-creation: The influence of prior knowledge, physical environment and service quality. *International Journal of Contemporary Hospitality Management*, 32(7), 2453-2472.
- Purnomo, D., & Fatimah, S. (2021). The Effect Of Work Motivation And The Work Environment On Work Productivity In The Polytechnic Of Lp3i Jakarta Kampus Kramat Raya. *Jurnal Inovasi Penelitian*, 1(10), 2105-2112.
- Robertson, R., Brown, D., & Dehejia, R. (2016). Working Conditions and Factory Survival: Evidence from Better Factories Cambodia. Discussion Paper No. 10026, Germany: Institute for the Study of Labor. Retrieved from <http://ftp.iza.org/dp10026.pdf>.
- Saleem, F., Zhang, Y. Z., Gopinath, C., & Adeel, A. (2020). Impact of servant leadership on performance: The mediating role of affective and cognitive trust. *SAGE Open*, 10(1), 215824401990056. <https://doi.org/10.1177/2158244019900562>
- Scurtu, D. A., Kovacs, E., Senila, L., Levei, E. A., Simedru, D., Filip, X., ... & David, L. (2023). Use of Vine Shoot Waste for Manufacturing Innovative Reinforced Cement Composites. *Applied Sciences*, 13(1), 134.
- Sihombing, S., Astuti, E. S., Al Musadieq, M., Hamied, D., & Rahardjo, K. (2018). The effect of Servant leadership on rewards, organizational culture and its implication for employee's performance. *International Journal of Law and Management*. <https://www.emerald.com/insight/content/doi/10.1108/IJLMA12-2016-0174/full/html>
- Sofijanovska, E., & Zabijakin-Chatleska, V. (2013). Employee involvement and organizational performance: Evidence from the manufacturing sector in the Republic of Macedonia. <https://eprints.ugd.edu.mk/id/eprint/8225>

- Srimulyani, V.A., Rustiyaningsih, S., & Kurniawati, D. (2013). Dampak integrative leadership dan employee engagement terhadap perilaku extra-role. *Jurnal manajemen teknologi*, 1(15), 36- 50.
- Su, W., Lyu, B., Chen, H., & Zhang, Y. (2020). How does servant leadership influence employees' service innovative behavior? The roles of intrinsic motivation and identification with the leader. *Baltic Journal of Management*, 15(4), 571–586. <https://doi.org/10.1108/bjm-09-2019-0335>
- Tajasom, A., Hung, D. K., Nikbin, D., & Hyun, S. S. (2019). The role of transformational leadership in innovation performance of Malaysian SMEs. *Asian Journal of Technology Innovation*, 23(2), 172–188. <https://doi.org/10.1080/19761597.2015.1074513>
- Tessema, M. T., Tesfom, G., Faircloth, M. A., Tesfagiorgis, M., & Teckle, P. (2022). The “great resignation”: Causes, consequences, and creative HR management strategies. *Journal of Human Resource and Sustainability Studies*, 10(01), 161–178. <https://doi.org/10.4236/jhrss.2022.101011>
- Tischler, L., Giambatista, R., McKeage, R., & McCormick, D. (2016). Servant leadership and its relationships with core self-evaluation and job satisfaction. *The Journal of ValuesBased Leadership*, 9(1), 8. <https://scholar.valpo.edu/cgi/viewcontent.cgi?article=1148&context=jvbl>
- Tzenios, N. (2019). The Impact of Health Literacy on Employee Productivity: An Empirical Investigation. *Empirical Quests for Management Essences*, 3(1), 21-33.
- Velieu, L., Manxhari, M., Demiri, V., & Jahaj, L. (2017). THE INFLUENCE OF LEADERSHIP STYLES ON EMPLOYEE'S PERFORMANCE. *Management* (16487974), 31(2). <https://www.cceol.com/search/article-detail?id=583133>
- Wakabi, B. M. (2016). Leadership style and staff retention in organizations. *International Journal of Science and Research*, 5(1), 412-416.
- Wang, Z., Xu, H., & Liu, Y. (2018). Servant leadership as a driver of employee service performance: Test of a trickle-down model and its boundary conditions. *Human Relations*, 71(9), 1179-1203. <https://doi.org/10.1177/0018726717738320>
- Wu, W.-L., & Lee, Y.-C. (2020). Do work engagement and transformational leadership facilitate knowledge sharing? A perspective of conservation of resources theory. *International 135 Journal of Environmental Research and Public Health*, 17(7), 2615. <https://doi.org/10.3390/ijerph17072615>
- Xu, B., and Wu, Hengyue (2025). The effect of servant leadership on employees' innovative behaviour: Psychological empowerment as a mediator and core self-evaluation as a moderator. *Scientific Reports*, 15, Article 19471. <https://doi.org/10.1038/s41598-025-19471-z>
- Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment: A literature review. *Journal of Management Development*, 35(2), 190–216. <https://doi.org/10.1108/JMD-01-2015-0004>
- Zhang, Y., Zheng, Y., Zhang, L., Xu, S., Liu, X., & Chen, W. (2021). A meta-analytic review of the consequences of servant leadership: The moderating roles of cultural factors. *Asia Pacific Journal of Management*, 38, 371-400.