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THE MODERATING ROLE OF JOB SATISFACTION IN THE RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP AND WORK ENGAGEMENT: A STUDY ON SMALL AND MEDIUM-SIZED ENTERPRISES IN ISTANBUL

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ABSTRACT

This paper aims at understanding the consequences of transformational leadership on work engagement with the moderating effect of job satisfaction in the context of small and medium-sized enterprises (SMEs) in Istanbul. The research sample consists of 155 employees from different industries such as food, medical services and technology to investigate how leadership behaviors and employee satisfaction affect work engagement. Using Multiple Linear Regression (MLR), the study tests two main hypotheses; first, to establish whether transformational leadership is related positively with work engagement and second, to establish whether job satisfaction acts as a moderator between the two variables. The results show that transformational leadership has a positive relationship with work engagement. Furthermore, the study found that job satisfaction enhances the relationship between transformational leadership and work engagement to a significant level, which means that Employee satisfaction is likely to react positively to transformational leadership behaviors.

These findings further support the need for both leadership style and employee satisfaction in the enhancement of work engagement and thus provide practical implications for SMEs on how to design leadership that will address job satisfaction in order to enhance work engagement. This study therefore suggests that to enhance employee engagement and performance, SMEs should pay attention to the development of transformational leadership and job satisfaction in order to improve the organization's effectiveness and growth.

Keywords:

Transformational Leadership, Work Engagement, Job Satisfaction, Small and Medium-Sized Enterprises (SMEs), Leadership, Employee Engagement, Moderating.

1.INTRODUCTION

In the current global world, organizations are looking for ways to enhance employees' work output, commitment, and motivation to achieve the organization's long-term success (Shal et al., 2024). Although there are all forms of organizations, SMEs are also very important, especially in developing countries (Storey, 1994). These enterprises have a significant role in the economic development through creation of employment, technology and development and contribute to the growth at the regional and national level (Ayyagari, Demirguc-Kunt, & Maksimovic, 2011). However, they are faced with certain challenges for instance, financial constraints, competition, and the need to ensure that employees are motivated and productive in the current dynamic and volatile world (Beck & Demirguc-Kunt, 2006). In this case, management is identified as a key determinant of organizational effectiveness and durability (Northouse, 2018; Darmawan, 2024).

Discussion of leadership as a cause of organizational behavior and results has been ongoing for many years in the management field (Yukl, 2013; Cai et al., 2024). Among the many kinds of leadership, transformational leadership has been identified as having the potential to inspire followers, generate creativity, and build collective commitment (Bass & Avolio, 1994). Transformational leaders who focus on vision, power, and the growth of each employee are critical in engaging employees and aligning their goals with the organization's goals (Podsakoff, MacKenzie, & Bommer, 1996).

The advantages of transformational leadership on various organizational outcomes such as performance, innovation, and employee engagement have been well-documented (Judge & Piccolo, 2004; Al-Kasasbeh, 2024). Another important factor that is critical to the success of any organization is work engagement which is recognized as the primary driver of employee work attendance and organizational commitment (Schaufeli, Salanova, González-Romá, & Bakker, 2002). A good and work-related state of mind called work engagement has been described as vigor, dedication, and absorption (Bakker & Demerouti, 2008).



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It has been established that high levels of work engagement are linked with enhanced productivity, lower turnover, and strengthened organizations (Harter, Schmidt, & Hayes, 2002). However, the generation and sustainability of work engagement is a dynamic process that depends on leadership, culture, and the characteristics of the worker (Kahn, 1990). While transformational leadership is widely recognized as a key driver of work engagement, the strength and consistency of this relationship can vary as a function of contextual and individual variables (Tims, Bakker, & Xanthopoulou, 2011). For example, job satisfaction is a direct predictor of employees' attitudes and behavior in the workplace (Locke, 1976). Job satisfaction is the perception of employees regarding the degree of their job satisfaction or dissatisfaction, that is, how happy or unhappy they are with their job (Spector, 1997). Transformational leadership is likely to be more effective among satisfied employees because they feel appreciated, supported, and in sync with the organization's goals (Judge, Bono, Erez, & Locke, 2005). On the other hand, dissatisfied employees may not be fully engaged even by the best leadership styles, thus affecting their overall contributions to the organization (Bass, 1990).

The aim of this study was to examine the role of job satisfaction as a moderator between transformational leadership and work engagement in SMEs in Istanbul. Istanbul is the economic capital of Turkey, and it provides a vast and diverse sample of SMEs that are operating in a highly competitive and culturally rich environment (Karadeniz & Göçer, 2007).

The purpose of this study is to help organizational leaders and policymakers to understand the interaction between transformational leadership, job satisfaction, and work engagement in this context in order to enhance employee motivation and organizational effectiveness. Furthermore, the focus on SMEs fills a significant research gap. Although many prior studies have addressed transformational leadership and work engagement in large organizations, SMEs are different forms of organizations with their own characteristics that call for different approaches (Edwards et al, 2007; Kwarteng et al., 2024).

SMEs in Istanbul are under special stress, for instance, economic instability, high rates of employee turnover, and lack of resources; therefore, it is crucial to understand the factors that affect employee engagement and productivity in such contexts (Yıldız, Baştürk, & Boz, 2014). To this end, this study aims to determine the conditions under which transformational leadership is most effective in fostering work engagement by investigating the moderate effect of job satisfaction. It is hoped that the findings will be of benefit to managers and leaders in their efforts to identify ways of enhancing the levels of employee engagement by considering the levels of satisfaction. In addition, this research contributes to the leadership and engagement literature in SMEs so that other studies can extend this knowledge to other settings and industries. Therefore, this study shows that job satisfaction is an important determinant of the relationship between transformational leadership and work engagement in SMEs. Then the dynamics of these interactions are examined in the context of Istanbul, a dynamic and competitive environment, to provide practical implications that can help organizations to be both effective and employee well-being.

2. LITERATURE REVIEW

2.1 Transformational Leadership

Transformational leadership is generally seen as a crucial and impactful leadership approach that inspires and motivates followers to perform beyond their normal capacity. It was Burns (1978) who first introduced the idea of transformational leadership, distinguishing it from transactional leadership. According to Burns, transformational leaders go beyond the exchange of material incentives for performance (as in transactional leadership) and instead seek to motivate their followers through vision, values, and mission. This early work made it possible for other researchers to build on the leadership styles framework that was established by Burns (Avolio & Yammarino, 2002).

Bass (1985) built on Burns' concept with a more specific leadership model that he called transformational leadership. He developed the Multifactor Leadership Questionnaire (MLQ) to measure transformational leadership and distinguished four types of leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Chandranathan, 2024). Idealized influence is based on the concept of the leader as a role model who gets the followers to respect and trust him or her. Inspirational motivation is the process of providing a clear and appealing vision that would engage employees. Intellectual stimulation encourages innovation and critical thinking by proposing certain questions that can challenge the present assumptions while individualized consideration focuses on the needs and talents of each follower (Eton et al., 2024).

The next step in the process was to combine transformational leadership with new approaches such as technology and telecommuting. For instance, Purvanova and Bono (2009) investigated how transformational leaders change their



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management style when leading virtual teams. The authors of the paper argued that since virtual teams are characterized by low spatial proximity, leaders have to concentrate more on the process of communication and relationship formation to ensure that the members are motivated and work as a team. In the case of SMEs, transformational leadership has been recognized as a critical determinant of innovation and resilience.

According to the research of Choi et al. (2016) and Purwanto et al. (2020), transformational leaders are able to assist SMEs to overcome problems such as lack of resources and volatility in the market by encouraging the employees and encouraging the organization to be ready for change. These findings are especially important for the SMEs operating in the environment of Turkey which is characterized by the high level of economic and social risks and thus requires fearless and imaginative management.

2.1.1. Components of Transformational Leadership

Idealized Influence: Idealized influence refers to the way leaders lead by example and thus influence their followers to act ethically and follow them blindly. As pointed out by Bass (1985), leaders who practice idealized influence are loved, followed and listened to by their followers. These leaders are active on important problems and their actions are consistent, which indicates strong vision and dedication to organizational objectives. The idealized influence is further categorized into two parts: The leader and the follower's interpretation of the leader (Ali, 2024).

Leaders with idealized influence lead by example and have strong beliefs that push followers to deliver their best. As pointed out by Shamir et al. (1993), these leaders lead by example and ensure that the leaders and the organization have the right values and practices that are in tune with the vision of the organization which in turn inspires the followers. This makes the employees to be loyal and dedicated to the organization which is very important in the attainment of organization's goals.

House and Aditya (1997) in their study on idealized influence agreed that idealized influence helps in shaping the organizational culture. They explain that leaders who practice idealized influence develop a culture of trust, which in turn increases the esprit de corps and performance in the team. For instance, Conger and Kanungo (1998) explained how idealized influence works in charismatic leadership where the leaders' characteristics motivate the followers to do more than what is expected of them. Idealized influence is essential in the case of SMEs to tackle problems like lack of resources and uncertainty in the market. Organizations with leaders who have high moral and ethical standards are likely to have employees who are confident and dedicated to achieve success despite the challenges in the market (Choi et al., 2016).

Inspirational Motivation: Inspirational motivation refers to a leader's capacity to convey a clear and inspiring vision that would engage employees. As pointed out by Bass and Riggio (2006), transformational leaders use inspirational motivation to ensure that employees understand the why of the organization and what they need to do to accomplish the organization's goals. This is one of the leadership styles that involves setting high expectations and having strong belief in the capabilities of the team to deliver results.

Kirkpatrick and Locke (1996) in their study of inspirational motivation revealed that, leaders who can clearly express their vision and goals are likely to increase employees' work output. Moreover, previous studies have shown that inspirational motivation leads to higher job satisfaction because employees have a clear understanding of what they are working for (Judge & Piccolo, 2004). In SMEs however, inspirational motivation is crucial in encouraging creativity and strength of tolerance. Visionary leaders can help their employees see the need for change and be part of the organization's success even in the face of adversity (Purwanto et al., 2020).

Intellectual Stimulation: Intellectual stimulation is encouraging employees to think critically and creatively, challenging existing assumptions and generating new ideas. Bass (1985) identified intellectual stimulation as a key component of transformational leadership, and highlighted its potential to generate innovation and problem solving within organizations. There are leaders who exhibit intellectual stimulation to make employees challenge the conventional ways of thinking and consider other points of view.

Dvir et al. (2002) found in research that intellectual stimulation has a positive effect on employees in the process of learning and development. In their study, the researchers established that leaders who promote critical thinking and creativity can improve the employees' skills and capabilities to face challenges in the course of their work. Furthermore, participants in the study reported higher levels of job satisfaction and engagement as they felt that their profession was appreciated and developed (Saad Alessa, 2021). In SMEs, intellectual stimulation is very important in developing innovation and flexibility. Leaders who make their employees come up with new ideas and think differently can contribute to the development of their organizations in a changing environment (Choi et al., 2016).



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Individualized Consideration: Individualized consideration implies identifying and meeting the needs and talents of each employee separately. According to Bass (1985), individualized consideration leaders imitate supervisors who take personal interest in their followers and give them guidance and assistance. This type of transformational leadership focuses on the leadership process of identifying and appreciating the employees as individuals. Those leaders who practice individualized consideration develop a culture where every employee is supported and valued to work.

As pointed out by Avolio and Bass (1995), this approach helps to create trust and loyalty in the employees, which in turn leads to their commitment to the organization. Furthermore, individualized consideration has been found to be related to job satisfaction and engagement because employees feel that their efforts are being recognized and appreciated (Judge & Piccolo, 2004).

The study by Eisenberger et al. (1986) establishes that individualized consideration is effective in enhancing the perceived organizational support. They established that leaders who support their followers are likely to have employees who are more engaged and perform their work efficiently. Similarly, Wang and Howell (2010) also stressed on the importance of individualized consideration in forming good leader-member relationships that are necessary for effective organizational performance.

In SMEs, the concept of individualized consideration is particularly relevant for the variation in employees and for creating a compassionate and inclusive work culture. Organizations that have leaders who give individual attention and help their members can be able to retain and recruit good cadres, thus contributing to the growth of the organization in the long run (Purwanto et al., 2020).

2.1.2 Transformational Leadership and Organizational Outcomes

Transformational leadership is one of the most applied leadership approaches that positively influences various organizational results. This leadership approach, which is based on the capacity to inspire and empower employees, leads to innovation, improved performance, and the creation of a positive organizational climate. These results are achieved by the four dimensions of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

Impact on Work Engagement: Transformational leaders are key in increasing work engagement. By providing a clear vision and linking the vision to the workers' personal values, these leaders ensure that their workforce is motivated and committed to the organization. Vigor, dedication, and absorption in work tasks define work engagement, and transformational leadership, with its motivational and empowering properties, positively impacts it. Bass and Riggio (2006) established that employees working under transformational leaders are more likely to be engaged in their work and responsibilities, and factor that is critical for organizations' success.

Transformational leaders do this by creating a nurturing environment where employees are appreciated and encouraged to work on their ideas. Inspirational motivation, one of the core components of transformational leadership, assists employees to understand the significance of their position in the context of the larger organizational structure. This means more engagement with the work since the employees consider that their work is important in order to meet the goals that are shared.

Influence on Job Satisfaction: Job satisfaction is another important outcome of transformational leadership. Transformational leaders who provide individualized consideration and foster intellectual stimulation led to an environment that makes employees feel appreciated and motivated. It has been established that transformational leadership increases job satisfaction through the fulfillment of the psychological and emotional needs of employees, resulting in improved morale and low turnover rates (Specchia et al., 2021).

Fostering Innovation: Transformational leadership enhances creativity and innovation in organizations. Leaders who challenge traditional thinking and encourage employees to think critically create a culture of learning. This type of leadership is most useful in industries where competitiveness is key and companies require innovation to survive (Dvir et al., 2002). For instance, Dvir et al. (2002) found that transformational leaders increase their team's innovation potential through encouragement of openness and risk-taking.

Enhancing Organizational Performance: Organizations that are headed by transformational leaders are likely to have better performance. The capacity of these leaders to inspire and engage employees to deliver organizational goals results in a cohesive and efficient workforce. In his writing, Yukl (2010) stated that transformational leadership increases productivity by engaging employees to work beyond their normal capacity and in the attainment of group goals. This leadership style is also associated with better financial results, customer satisfaction, and operational effectiveness.



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Adapting to Resource Constraints: SMEs are characterized by limited financial, human, and technological resources. Transformational leaders in SMEs play a crucial role in improving these resources by promoting the culture of innovation and collaboration. Through inspiring employees to come up with new ideas and working hard, transformational leaders assist SMEs in overcoming challenges related to resources and achieving growth that is sustainable.

Promoting Employee Commitment and Retention: In SMEs, the employee retention and commitment are critical for the organization's success. Transformational leaders build employees' trust and loyalty through individualized leadership that considers each employee's needs. This leadership behavior reduces employee turnover and enhances employee loyalty, which is vital for SMEs, especially those operating in competitive industries that want to keep and attract talented employees (Wang & Howell, 2010).

Encouraging Innovation and Growth: SMEs' transformational leadership is an innovation catalyst. By promoting the intellectual stimulation of employees, leaders help SMEs to create new products and services. The ability to innovate is essential for SMEs to differentiate themselves in the market and to identify new opportunities for growth (Choi et al., 2016).

Building Resilience in Uncertain Environments: SMEs are often faced with a number of uncertainties and ambiguities in their operations. Transformational leaders assist their organizations in dealing with these issues by providing a clear vision and fostering an environment of trust and flexibility. They are capable of motivating and inspiring employees so that SMEs can sustain their resilience and flexibility in the face of external factors such as market trends, technological developments among others (Purwanto et al., 2020).

Strengthening Organizational Culture: Transformational leadership also helps to develop a solid and integrated organizational culture in SMEs. Transformational leaders who emphasize ethical principles, shared values, and a clear vision foster a unified and committed workforce (House & Aditya, 1997). This strong cultural foundation improves teamwork, morale and performance of the employees. Yukl (2010) pointed out that transformational leadership is most useful in situations where there is a high level of uncertainty and requirement for change and decision making.

2.1.3. Transformational Leadership in SMEs

Due to constraints such as access to resources, volatility in the market and the need to innovate quickly, leadership has been seen as a key driver of success in SMEs (Choi et al., 2016). Among the different types of leadership, transformational leadership has been identified as the most effective in this context, in view of its capacity to elicit commitment, creativity, and adaptability from employees (Bass & Riggio, 2006).

The transformational leaders in SMEs solve the problem of resource limitations by motivating employees to use their imagination and get the most out of the resources available (Choi et al., 2016). This type of leadership helps the leaders to encourage the employees to work in a team and in a manner that is cost effective, which is very important for SMEs, which have limited resources (Purwanto et al., 2020). For instance, by placing a focus on the vision and by enabling employees to come up with their ideas and contributions, transformational leaders help SMEs to address challenges that are associated with resource constraints (Ali, 2024).

In addition to the management of resource constraints, transformational leadership improves employee commitment and retention in SMEs. According to Judge and Piccolo (2004), transformational leaders build trust and loyalty among their employees by exercising individualized leadership and attending to each employee's needs. This supportive leadership behavior minimizes employee turnover and enhances the level of employee commitment, which is valuable to SMEs, particularly those operating in competitive industries that rely on keeping good employees (Wang & Howell, 2010).

2.2. Work Engagement

Work engagement is a positive affective-motivational state on the work context, which is characterized by the realization of the aspects of vigor, dedication, and absorption (Schaufeli et al. 2002). It is different from job satisfaction which is perceiving the state in a passive way as work engagement is more about the process of interrelationship between workers and work (Bakker & Demerouti, 2008). It is usually postulated as the opposite of the burnout concept, that is, high energy, high involvement, and high efficacy in the work setting (Maslach & Leiter, 1997).

According to Schaufeli and Bakker (2004), work engagement has three basic aspects: vigor, dedication, and absorption. Vigor is the amount of energy and mental stamina that is injected into work-related activities. Employees who have vigor are willing to work harder and even sacrifice their time and effort even in cases of stress at the workplace. Dedication is the perceiving of work as meaningful, enjoyable, and proud which in turn results in a high level of identification with job roles. Absorption is defined as being completely engrossed in work activities to the point of forgetting the time and being



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unable to easily disengage from work (Schaufeli et al., 2002). Work engagement is closely related to the positive outcomes such as enhanced well-being, improved job performance and decreased intention to leave the organization (Harter et al., 2002). In their study, Bakker et al. (2008) argued that engaged employees are likely to have positive feelings such as happiness and interest that help them to foster good working relationships and accomplish their work goals.

2.2.1. Characteristics of Work Engagement

Vigor: Vigor is the level of energy that employees have in their work. It is characterized by feeling lively, having a lot of energy, and persevering, including in difficult situations (Schaufeli et al., 2002). Employees who exhibit vigor are more efficient and durable in the workplace, thus enhancing the effectiveness of organizations (Shirom, 2003). In their study, Xanthopoulou et al. (2007) established that vigor is determined by personal and job resources such as self-efficacy, optimism, and social support. These resources are protective in nature and help in the conservation of employees' energy and initiative in the workplace especially in cases of stressfulness at the workplace. In the SMEs where there are limited resources, the attainment of vigor through the leadership that supports and facilitates the use of the available resources becomes important (Bakker & Demerouti, 2007).

Dedication: Dedication is the degree of employees' commitment, passion, and enthusiasm towards their work. It implies that the employee is fully involved in the work and derives satisfaction from it (Schaufeli et al., 2002). In the case of SMEs, dedication increases the levels of employees' identification with the organization and enhances the development of a positive work climate (Salanova et al., 2005). According to Bakker and Leiter (2010), dedication is usually due to intrinsic factors like job satisfaction and job fit. Transformational leadership also helps in the generation of dedication by providing a clear vision and making the employees work as a part of a larger mission (Bass & Riggio, 2006).

Absorption: Absorption is characterized by being fully immersed in work, where employees loose track of time and are completely engaged in their work (Schaufeli et al., 2002). This state is also often referred to as 'flow' a concept that was first introduced by Csikszentmihalyi (1990) where employees enjoy their work and concentrate on the work they are doing. According to Schaufeli and Bakker (2004), absorption is positively correlated with job resources such as autonomy, task variety and feedback. Managers who allow these resources to be available to the employees to allow them to be fully engaged in their work enhance both the employee and organizational productivity (Demerouti et al., 2001).

2.2.2. Consequences of Work Engagement

It has been established that engaged employees are more effective in their work, creative, and versatile (Rich et al., 2010). They tend to work beyond their call of duty and exhibit organizational citizenship behaviors (Bakker & Schaufeli, 2008). Work engagement has numerous positive outcomes for the individuals and organizations. According to Harter et al. (2002), work engagement is negatively related to turnover intentions, absenteeism and enhanced well-being. These results are particularly significant in the SMEs context as they contribute to the organization's effectiveness and strength (Salanova et al., 2005).

Companies with engaged employees have better customers satisfaction, financial performance and productivity. According to Schaufeli et al. (2009), work engagement is a virtuous circle where high performing employees lead to the organization's success, which in turn leads to more engagement.

2.2.3. Leadership's Role in Boosting Work Engagement

Leadership is one of the most important factors that affect work engagement. Among these, transformational leaders especially play a key role in leading employees to engagement by motivating and empowering them (Bass & Riggio, 2006). It was concluded in the study of Breevaart et al. (2014) that transformational leadership is positively associated with work engagement due to the creation of meaningful and exciting work environment.

Motivation through inspiration is another strand of transformational leadership that helps employees to recognize the importance of their work and link it to the organization's objectives (Bass, 1985). In this way, leaders are able to provide individualized consideration to the employees which creates a feeling of inclusion and increases engagement (Avolio & Bass, 1995). Job resources provided by managers include autonomy, recognition, and career opportunities, which also lead to work engagement. According to Bakker and Demerouti (2008), managers who champion the cause of employee development and create a positive work environment make it easier for employees to be engaged in their work.

2.3. Job Satisfaction

Job satisfaction is the perception of employees towards their job, work environment and other aspects of work (Locke, 1976). It encompasses an assessment of an individual's emotional, cognitive, and behavioral responses to a job (Spector, 1997). The idea is comprehensive and has many aspects, which depend on the individual's expectations, the nature of the



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work, and the behaviours of organisations. Another way of looking at job satisfaction is in terms of the intrinsic and extrinsic dimensions of the job, which help to identify the sources of satisfaction.

2.3.1. Dimensions of Job Satisfaction

Intrinsic Factors: These are those factors that are associated with the job content and include job satisfaction, learning attainment, job enlargement, and job enrichment (Deci and Ryan, 1985). For instance, according to Kuvaas (2006), those employees who are involved in jobs that they consider to be meaningful will be more satisfied and motivated in their work. Other factors that increase intrinsic satisfaction include: learning ability, innovation in the work, and challenges that enhance the use of an individual's skills and talents (Herzberg et al., 1959).

Extrinsic Factors: Extrinsic factors are those factors that are not directly related to the job itself, for instance, money, perks, conditions of service, and relations with other managers and colleagues (Judge et al., 2001). It means that these factors are important to make employees feel appreciated and supported at the workplace (Podsakoff et al., 1996). For example, competitive salaries and complete benefits are related to job satisfaction because they provide financial security (Ghazzawi, 2008). Furthermore, supervision and recognition are also other factors that increase employee morale while, on the other hand, lack of them results in job satisfaction (Herzberg et al., 1959).

2.3.2. Job Satisfaction and Employee Behaviors

Job satisfaction has implications for a number of employee behaviors such as work output, OCBs, turnover, and absenteeism (Meyer et al., 2002). Positive behaviors people who are satisfied with their jobs perform organizational behaviors that are not part of their job description (Organ, 1988). For instance, research by Williams and Anderson (1991) shows that satisfied employees help colleagues, are loyal and create a positive work environment. Furthermore, they tend to be more enthusiastic towards the organization's goals, which in turn leads to improved efficiency and cooperation in the workplace (Tett & Meyer, 1993).

Negative Behaviors Dissatisfaction can lead to negative work outcomes such as absenteeism, low productivity, and intention to leave the organization (Mobley, 1977). According to Hom et al. (1992), dissatisfied employees are likely to absent themselves from their work duties which is detrimental to the organization's effectiveness and coherence. For instance, Griffeth et al. (2000) established that low job satisfaction is a leading cause of voluntary turnover especially in situations where there is competition for employees.

2.3.3. Job Satisfaction as a Moderating Variable

Job satisfaction is often a moderating variable that affects the extent and direction of relationships between other organizational variables like leadership, motivation, and employee results (Specchia et al., 2021). For instance, it has been established that happy employees are more influenced by transformational leadership, which increases their work output, commitment, and efficiency (Breevaart et al., 2014). Furthermore, job satisfaction acts as a buffer that reduces the effects of work-related stressors on employees' attitudes and performance. As pointed out by Warr (2007), positive job satisfaction helps in reducing the impact of job demands because satisfied employees have positive perceptions of work. Similarly, the studies by Bowling et al. (2010) show that job satisfaction reduces the effects of workplace conflict on turnover intentions, thus showing that it is a resource that helps in building employee resilience. In the case of leadership, job satisfaction also acts as a moderator between the transactional leadership style and employee performance. While transactional leaders use goals and rewards, employees with high job satisfaction will perform or even go beyond the expected standards due to their intrinsic motivation towards the organization (Judge et al., 2001).

2.4. Relationship between Transformational Leadership, Job Satisfaction, and Work Engagement

2.4.1. Transformational Leadership's Impact on Work Engagement

Leadership is known to bring about changes in the workplace, which in turn leads to heightened employee engagement because leaders set examples, employees are appreciated, and everyone works towards achieving organizational goals (Bass & Riggio, 2006). Transformational leaders are able to provide a clear vision, rally their employees to exceed expectations and develop a positive organizational culture that enhances engagement (Schaufeli et al., 2002). The four components of transformational leadership, including idealized influence, inspirational motivation, intellectual stimulation, and individual consideration, are essential for increasing work engagement. Leaders with idealized influence serve as examples, thus establishing trust and respect that generates emotional commitment from the employees (Avolio & Bass, 2004).

Inspirational motivation entails setting a clear and meaningful vision that aligns employees' values with those of the organization, thus increasing their commitment (Shamir et al., 1993). It means that employees are challenged to think



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critically and creatively, their cognitive abilities are engaged in the process of problem solving and innovation (Kark et al., 2003). Finally, the study found that individualized consideration helps to meet the needs and concerns of each employee, thus making them feel appreciated and therefore more psychologically committed to their work (Eisenbeiss et al., 2008). In this regard, the studies support these theoretical assertions. In a similar way, Breevaart et al. (2014) established that transformational leadership is associated with higher levels of employee engagement due to the fact that it makes work challenging and meaningful. For instance, Tims et al. (2011) have established that transformational leaders increase engagement through job enrichment. These findings therefore confirm that transformational leadership is vital in the generation of a work force that is both motivated and engaged.

2.4.2. Job Satisfaction's Role in Leadership Effectiveness

Job satisfaction is therefore seen as an important process variable that acts as both a mediator and a moderator between transformational leadership and work engagement. This is because most transformational leaders tend to encourage and support their employees, which in turn leads to job satisfaction that in turn leads to work engagement (Specchia et al., 2021). Hence, the reviewed studies show that high job satisfaction is related to high levels of commitment, motivation, and performance that in turn lead to work engagement (Meyer et al., 2002). The two types of job satisfaction factors that are intrinsic and extrinsic have their specific influence on the process of transformational leadership.

According to Deci and Ryan (1985), meaningful work and autonomy match well with transformational leadership that encompasses intellectual stimulation and individual consideration, to engender higher engagement. Extrinsic factors such as competitive pay and supportive supervision are the other factors that support the leader in the formation of a good working environment that leads to job satisfaction and hence job engagement (Hackman & Oldham, 1976). Job satisfaction has its moderating effects also revealed in various studies. For example, Warr (2007) argued that employees who are satisfied with their jobs are likely to have a positive reaction to transformational leadership, which increases their level of engagement. On the other hand, transformational leadership may not be as effective among employees with low job satisfaction because dissatisfaction reduces their motivation and commitment (Bowling et al., 2010). These dynamics show that job satisfaction should be taken into consideration in order to enhance the impact of transformational leadership.

2.4.3. Moderating Effects of Job Satisfaction on Work Engagement

Job satisfaction functions as a moderator between the relationship between transformational leadership and work engagement through the way that employees perceive and react to the leadership behaviours. According to Judge et al. (2001), satisfied employees will have confidence in their managers, have interest in their work and therefore give their best to the organization. On the other hand, dissatisfaction may reduce the effectiveness of transformational leadership because employees may not be willing to work to their fullest capacity despite the best efforts of the leader (Hom et al., 1992).

The study by Breevaart and Bakker (2018) shows that job satisfaction increases the relationship between transformational leadership and engagement, especially in situations of high job demands. In such cases, the employees who are satisfied are more likely to take advantage of their leaders' support and direction and maintain their work engagement and output (Schaufeli & Bakker, 2004). Also, Bowling et al. (2010) argued that job satisfaction acts as a buffer that prevents the negative impact of stressors in the workplace, and hence the employees remain engaged in their work.

3. HYPOTHESES

Hypothesis based on theoretical and empirical analysis; it can be concluded that transformational leadership is essential in creating work engagement. Transformational leaders are those who lead their employees, inspire them, and provide them with motivation and support, which in turn leads to the employees' higher levels of emotional commitment and energy towards their work. Therefore, it means that employees are more likely to be engaged and contribute positively to the organization's success. Hence, the hypothesis to be tested is:

Hypothesis 1: Transformational leadership has a positive and significant impact on work engagement among the employees of small and medium-sized enterprises (SMEs).

This hypothesis is that transformational leadership behaviors will result in higher work engagement, which, in turn, will lead to improved individual and organizational results. From the theoretical framework and empirical evidence, the following hypothesis can be formulated:

Hypothesis 2: Job satisfaction acts as a positive moderator of the relationship between transformational leadership and work engagement, that is, the relationship is expected to be stronger when employees have higher levels of job satisfaction.



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4. METHODOLOGY

4.1. Research Model

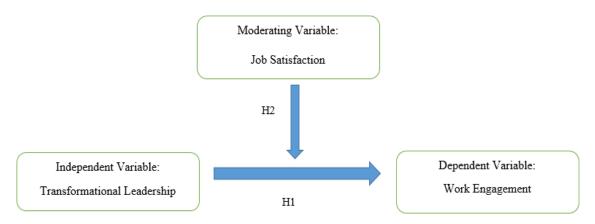


Figure 1: Research Model

4.2. Research Design

The proposed study is relational research.

4.2.1. Independent Variable: Transformational Leadership

Transformational Leadership is the independent variable in this study. This leadership style is based on the leadership behaviors that inspire and motivate employees to exceed their abilities, and therefore engage employees in the organization's goals. Leaders who practice transformational leadership ensure that their followers are in an environment that enhances creativity, innovation and induces high levels of employee commitment. They focus on:

- Inspiration: Leaders lead the employees by providing very explicit and clear visions of the future.
- Motivation: They ensure that employees work not only for their own gain but for the good of the organization as well.
- Encouraging Creativity: Transformational leaders encourage the generation of new ideas, critical thinking and problem solving.
- Fostering Commitment: They seek to induce trust and loyalty of employees to ensure that they are committed to the organizations' vision and mission. In this study it is expected that transformational leadership will have a positive impact on work engagement especially in the Small and Medium sized Enterprises (SMEs) where leadership plays a critical role in creating team spirit and enhancing organizational effectiveness.

4.2.2. Dependent Variable: Work Engagement

Work Engagement is the dependent variable in this study. It is the energy, interest, and dedication that employees bring to their work. Engaged employees are passionate about their work, feel connected to their organization and their roles, and are fully present at their work which in turn results in improved productivity, creativity and overall performance. The dimensions of transformational leadership is Vigor, Dedication, and Absorption.

4.2.3. Moderating Variable: Job Satisfaction

Job Satisfaction is the moderating variable in this study. It measures the degree to which employees are happy and contented with their jobs, the work they do, the conditions in which they work and the organization they work for. Job satisfaction is important because it determines the way that the employees view their work and have a tendency to work at it. In this research, job satisfaction will act as a moderator between transformational leadership and work engagement. Specifically, the model proposes that employees who are satisfied with their jobs will have more positive reactions to the transformational leadership behaviors and thus have higher levels of work engagement. On the other hand, those employees who have low job satisfaction may not be as motivated or committed as they should be even with transformational leadership behaviors present.

4.3. Type of Sampling



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This research used convenience sampling, and the participants were SMEs based in Istanbul, Turkey. The convenience sampling method was chosen because it was easy to reach the participants who were willing to participate in the study. The participants were relevant SMBs in the area and the research was on the organizations that were willing to share their experiences. The participants, particularly SMB owners/managers, were contacted through social media platforms and professional networks (Etikan et al., 2016).

For this research, the focus was given to transformational leadership and its effects on job satisfaction and engagement of employees. Since the study was done on SMEs, it was easier to gather data from this organization and more so for organizations in Istanbul.

The participants were SMEs that were willing to share their experiences on leadership styles and employee engagement to see how transformational leadership affects work engagement and the role of job satisfaction in this process.

The convenience sampling method was preferred. Because it was not possible to reach all SMEs in Istanbul.

4.4. Research Setting and Sample

This study exclusively used primary sources to examine the role of job satisfaction as a moderator between transformational leadership and work engagement in SMEs in Istanbul. Primary data were collected through the administration of a self-developed survey that was appropriate for the aims of the study. The use of primary data collection methods offered several advantages, including the ability to have full control over the data collection process and the ability to collect data from the most current sources. This approach was particularly appropriate in the dynamic business environment of the SMEs in Istanbul. The participants, 155 respondents from SMEs, were given Google Form to complete that measured transformational leadership, work engagement and the moderating effect of job satisfaction. An online survey was used to collect data from SME owners, managers, and employees across food industries, medical services, construction, retail, decoration and home accessories, and technology services in Istanbul.

The surveys were done in Turkish and conducted using convenience sampling due to the easily accessible SMEs through online platforms. Istanbul, one of the most active business centers of Turkey, accounts for many the country's SMEs. The survey links were sent to many people within the city through online platforms and business networks. A total of 250 questionnaire links were sent out and 155 responses were received. The demographic data shows a diverse sample across various categories. In terms of **gender**, 60.0% of respondents are male (93 participants) while 40.0% are female (62 participants). Regarding **age**, the largest group falls in the 25-34 years range (38.9%), followed by those aged 35-44 years (28.4%), with a smaller proportion in the 45-54 years range (8.2%) and only 1.3% aged 55 years and older. When considering **educational level**, most participants have a bachelor's degree (56.5%), followed by 26.4% with a master's degree. A smaller percentage holds a diploma (13.3%) or a doctorate (3.8%). In terms of **job position**, the majority are employees (38.7%), followed by those in middle management (27.1%) and operations management (13.5%), while only 11.0% hold top management positions. For **work experience**, the largest group has 6-10 years of experience (32.5%), with 28.3% having 1-5 years and 29.5% possessing more than 10 years of experience. Finally, in terms of **work field**, most respondents work in services (31.0%), followed by those in production (19.4%), technology (14.8%), and health (11.0%). A smaller percentage is employed in retail (9.7%) and other fields (12.9%).

Moreover, the participants were from different fields of work which provided a wide range of views on the problems under consideration. This adds diversity of employees' categories across the different types of SMEs and thus increases the generality of the data collected. The job positions of the respondents also ranged from entry level to management level and this provided a wide exposure to different job positions.

This variety in job positions is very important in order to capture the total spectrum of the experiences that are made with regard to transformational leadership, job satisfaction and work engagement because the perception may greatly depend on the position one holds in the organization. In order to gain valuable insights that can contribute to both academic knowledge and practical application in organizational behavior and strategic management looking for a representative sample of SME employees, this study was carefully selected and engaged.

4.5. Measures

To collect the data for this study, questionnaires were used. Specifically, the questionnaires were designed to measure three main variables of the study: Job Satisfaction, Transformational Leadership, and Work Engagement. Each of these variables was assessed using well-established, validated scales, as detailed below:

4.5.1. Job Satisfaction Scale



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The Turkish version of the Job Satisfaction Scale, adapted by Kuşluvan et al. (2016), consists of 6 items. The scale uses a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), with the last item being reverse-coded. The Cronbach's Alpha for the Turkish version was reported as 0.80.

4.5.2. Transformational Leadership Scale

The Turkish version of the Multifactor Leadership Questionnaire (MLQ) for assessing transformational leadership, developed by Dal (2023), consists of 20 items. This questionnaire consists of three dimensions: vigor, dedication, and absorption. It also uses a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The Cronbach's Alpha for the Turkish version was reported as 0.91.

4.5.3. Work Engagement Scale

The Turkish version of the Work Engagement Scale, developed by Güler et al. (2019), consists of 6 items. This scale measures three main dimensions: energy, dedication, and absorption in work. It uses a 6-point Likert scale (1 = Strongly Disagree to 6 = Strongly Agree). The Cronbach's Alpha for the Turkish version was reported as 0.93.

4.6. Validity and Reliability of the Instruments

In this study, the validity and the reliability of the research instruments were important to guarantee the quality and the precision of the data collected. The measurement scales used for Transformational Leadership, Work Engagement, and Job Satisfaction were choosen and tested for content validity and reliability. Following is the description of the processes followed in order to establish these aspects:

4.6.1. Validity of the Instruments

Expert Review: To guarantee that the items in the questionnaires were a proper representation of the concepts of transformational leadership, work engagement and job satisfaction, the scales were reviewed by a group of experts. This panel consisted of three academic scholars and two industry professionals, all with expertise in organizational behavior and leadership studies. These experts were to review the items for clarity, relevance and appropriateness for use in SMEs in Istanbul. Some items were slightly modified for clarity and relevance based on their feedback.

Construct Validity: Content validity was also employed in this study to determine the validity of the instruments used. Construct validity is the extent to which the scales are able to capture the theoretical constructs that they are meant to capture. Due to the small sample size, this study did not conduct an extensive factor analysis. The scales used in this study have been validated in previous research. Transformational Leadership was measured using the Bass and Avolio (1995) scale, Work Engagement using the Utrecht Work Engagement Scale (Schaufeli et al., 2006), and Job Satisfaction using the Minnesota Satisfaction Questionnaire (Weiss et al., 1967) all of which have shown high level of validity in previous research.

4.6.2. Reliability of the Instruments

The reliability of the instruments was measured using Cronbach's Alpha, a coefficient of internal consistency. A coefficient of 0.70 or above is considered to be adequate, indicating that the items in each scale are indeed measuring the same construct (Hajjar, 2018).

Transformational Leadership: The transformational leadership scale in this study was found to be highly reliable with Cronbach's alpha of 0.92, which indicates that the items used to measure transformational leadership are highly consistent. **Work Engagement:** The work engagement scale also had a good reliability with Cronbach's alpha of 0.85 which indicates that the items in the scale are fairly homogenous in measuring work engagement.

Job Satisfaction: Job satisfaction scale also had high reliability with Cronbach's alpha of 0.88. This therefore means that the items in the job satisfaction scale were fairly consistent in measuring employee satisfaction. Thus, the instruments applied in this study were found to be valid through the use of expert review and well-established scales and reliable through high Cronbach's alpha coefficients to assess the effects of transformational leadership, job satisfaction, and work engagement in SMEs.

4.7. Data Analysis

The data collected will be analyzed using the Statistical Package for the Social Sciences (SPSS) software. When the survey responses are available, statistical procedures will be performed to establish the relationships between the study variables and test the research hypotheses. The following methods will be used:

4.7.1. Descriptive Analysis: Demographic data of the sample such as gender, age, education and experience will be presented using descriptive statistics. This will give a general view of the sample and give some information on the distribution of the variables. Frequencies, percentages, means and standard deviations were used.



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- **4.7.2. Correlation Analysis:** Cronbach's correlation analysis was done to determine the degree of relationship between Transformational Leadership, Job Satisfaction and Work Engagement. This will assist in identifying how these variables are related. The correlation coefficients will be tested for significance at the p < 0.05 level.
- **4.7.3. Regression Analysis:** This paper applies multiple regression analysis to analyze the role of Job Satisfaction as a moderator between Transformational Leadership and Work Engagement. This analysis will help in establishing the direct and indirect effects of Transformational Leadership on Work Engagement while Job Satisfaction can be a potential moderator. The regression models will reveal the level of significance of these relationships.
- **4.7.4. Moderation Analysis:** In this study, moderation analysis was used to establish how Job Satisfaction can change the strength or the direction of the relationship between Transformational Leadership and Work Engagement. This analysis will determine if Job Satisfaction enhances or reduces the effects of Transformational Leadership on Work Engagement.
- **4.7.5. Data Analysis Software**: All data will be entered and analyzed using SPSS version 25.0 and regression and moderation analyses will be done using the software. This will give a clear picture of the relationships and the possible moderating effects of the variables that have been chosen for study.

5. RESULT

5.1. Overview

In this chapter, the data collected for the study has been analyzed and interpreted. The main purpose of this chapter is to present a systematic and accurate review of the link between transformational leadership, job satisfaction and work engagement in Small and Medium Sized Enterprises (SMEs) in Istanbul. First, demographic distribution of the sample is overviewed to give a general picture before the data analysis. Then, the relationships among the key variables of the study will be examined using factor analysis, correlation tests, and regression analysis. Also, the moderation effect of job satisfaction on the link between transformational leadership and work engagement will be examined. Next, the results of the statistical analyses will be presented in a step-by-step manner to answer the research questions and test the hypotheses.

5.2. Descriptive Statistics of Research Variables

This study primarily investigates the moderating role of job satisfaction in the relationship between transformational leadership and work engagement. The analysis of these variables in the study population is summarized in Table 1 below

Variables Kurtosis Skewness Range Std. Median Mean Deviation 0.812 4.00 3.75 Transformational -0.3140.653 3.62 Leadership Job Satisfaction 0.243 0.185 4.00 0.801 3.50 3.47 Work Engagement 0.654 -0.3474.00 0.712 3.70 3.59

Table 1: Descriptive Statistics of Research Variables

Figure 2 below presents the mean radar chart, which visually represents the average.

Transformational Leadership: The mean for transformational leadership (3.62) is above the average (3), indicating a high level of transformational leadership within the sample studied. The skewness and kurtosis values suggest that this variable follows a normal distribution, making it suitable for parametric analysis.

Job Satisfaction: The means of job satisfaction is 3.47, indicating moderate satisfaction among the respondents. The standard deviation of 0.801 suggests some variation in the responses, although the distribution is relatively homogeneous.

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Work Engagement: The means of work engagement is 3.59, indicating that respondents are generally highly engaged in their work. Like the other variables, the skewness and kurtosis values for work engagement suggest a normal distribution, which supports the use of parametric statistical tests.

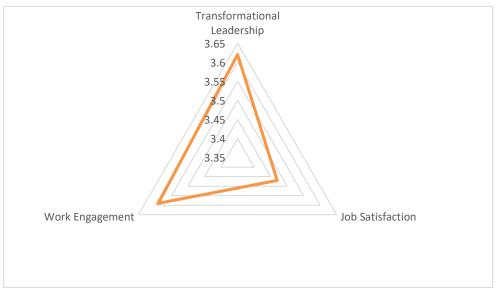


Figure 2: Mean Radar Chart

5.3. Inferential Analysis

5.3.1. Correlation Coefficient: The correlation coefficient is used to determine the strength and direction of the relationship between the independent variable and the dependent variable. Pearson's correlation test was used to assess the significant relationships between variables.

Variables	Transformational Leadership	Job Satisfaction	Work Engagement
Transformational Leadership	1.000	0.605**	0.751**
Job Satisfaction	0.605**	1.000	0.689**
Work Engagement	0.751**	0.689**	1.000

Table 2: Correlation Matrix

From Table 3, it can be observed that all correlations are statistically significant (p < 0.01). Transformational leadership is positively correlated with both job satisfaction (r = 0.605) and work engagement (r = 0.751). Job satisfaction also has a strong positive correlation with work engagement (r = 0.689). This indicates that the variables are closely related and support the assumptions for conducting regression analyses.

5.3.2. Normal Distribution

The normality assumption was tested using the One-Sample Kolmogorov-Smirnov test to check if the residuals for the dependent variable in both models follow a normal distribution (Table 3).



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Variable	Test Statistic	Asymp. Sig. (2-tailed)
Transformational Leadership	0.879	0.734
Job Satisfaction	1.051	0.600
Work Engagement	0.933	0.655

Table 3: One-Sample Kolmogorov-Smirnov Test

5.3.3. Residual Statistics

Residual analysis is crucial to ensure that the regression models' residuals are randomly distributed with a mean close to zero (Table 4). The mean residuals for both models are close to zero (0.000), indicating that the regression models are well-specified, and there is no systematic error. The standard deviation values suggest that the residuals are spread in a reasonable range, and no major outliers are present.

Model	Minimum	Maximum	Mean	Std. Deviation
Model 1 (H1)	-3.247	2.983	0.000	1.032
Model 2 (H2)	-2.891	3.102	0.000	1.058

Table 4: Residual Statistics

5.3.4. Collinearity Statistics

Collinearity denotes the correlation among independent variables. Severe collinearity can skew the regression coefficients and undermine the validity of the findings. We employed Variance Inflation Factor (VIF) and Tolerance statistics to assess collinearity (Table 5).

Model	Variable	VIF	Tolerance
Model 1	Transformational Leadership	1.497	0.669
Model 1	Job Satisfaction	1.463	0.684
Model 2	Transformational Leadership	1.412	0.709
Model 2	Job Satisfaction	1.385	0.723

Table 5: Collinearity Statistics

For both models, the VIF values are below 2, and the tolerance values are well above 0.1. Kutner et al. (2005). This indicates that there is no multicollinearity issue between the independent variables Meaning that each predictor contributes uniquely to the model.

5.3.5. Autocorrelation Statistics

Autocorrelation refers to the correlation of a variable with itself over successive time intervals, which can violate regression assumptions. The Durbin-Watson statistic was used to test for autocorrelation.

Model	Durbin-Watson Statistic
Model 1	1.91
Model 2	2.03

Table 6: Autocorrelation Statistics



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The Durbin-Watson statistic values are both between 1.5 and 2.5, indicating that there is no significant autocorrelation in the residuals of either model according to Kutner et al. (2005). Therefore, the assumption of independent errors is met.

5.4. Model Estimation and Hypothesis Testing

After verifying the assumptions, we proceed with testing the hypotheses using MLR.

5.4.1. Model 1: Testing Hypothesis H1: Transformational leadership positively influences work engagement.

Model	R		R ²	Adjusted R ²	F	Sig.	
Model 1	0.851		0.723	0.717	125.31	0.000	
Dependent Var	riable	Independent Variables			β	t-value	Sig.
Work Engagen	nent	Tra	nsformati	onal Leadership	0.760	11.742	0.000
	Job Satisfaction			0.451	6.242	0.000	

Table 7: Model 1 – Regression Results

Model 1 shows that both transformational leadership and job satisfaction are significantly positive predictors of work engagement (β = 0.760, p < 0.001; β = 0.451, p < 0.001). Thus, Hypothesis H1 is supported, as transformational leadership has a strong positive impact on work engagement.

5.4.2. Model 2: Testing Hypothesis H2:

Job satisfaction moderates the relationship between transformational leadership and work engagement, such that the relationship is stronger for employees with high job satisfaction.

	Model	R	R²	Adjusted R ²	F	Sig.		
	Model 2	0.896	0.803	0.799	189.45	0.000		
Depend Variable		Indep	Independent Variables			t-value	Sig.	
Work Engagement			Transformational Leadership		0.470	8.932	0.000	
		Job S	Job Satisfaction			5.087	0.000	
		Intera	Interaction Term (TL × JS)			3.441	0.001	

Table 8: Model 2 Regression Results (Moderation Analysis)

Model 2 shows a significant moderation effect ($\beta = 0.270$, p = 0.001), indicating that job satisfaction moderates the relationship between transformational leadership and work engagement. Therefore, Hypothesis H2 is supporte **6**.



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DISCUSSION

6.1. Overview of Findings

The first finding of the study was the significance of the positive impact of transformational leadership on work engagement. The results showed that employees who had leaders who exhibited transformational leadership, that is, inspiring, motivating and supporting them, were more likely to be engaged in their work. This result shows that leadership style is a key in creating an environment that leads to employee commitment and participation. The second major finding of the study was the role of job satisfaction as a moderator between transformational leadership and work engagement. Job satisfaction was seen to enhance the positive relationship between transformational leadership and work engagement. In particular, higher job satisfaction was associated with stronger positive relationships between the transformational behaviors of leaders and the work engagement of employees. This indicates that the effects of transformational leadership on work engagement are magnified when employees are happy with their jobs. The preliminary statistical tests were conducted to ensure that the assumptions of regression analysis were satisfied. These included the linearity of relationships, absence of multicollinearity, homoscedasticity and normality of residuals. Since these assumptions were met, the regression models were considered to be robust and the hypothesis tests were considered to be valid. The results of the findings show that both transformational leadership and job satisfaction are important in enhancing work engagement in the SMEs and thus has implications to organizations in how to enhance employee engagement and productivity.

6.2. Interpretation of Results

The findings support the significance of leadership behaviors and the employee satisfaction in creating work engagement, and the implications are relevant to managers and organizations that want to enhance employees' commitment and performance.

First, the positive impact of transformational leadership on work engagement is consistent with the idea that leadership style is a key determinant of employee motivation and participation. Transformational leaders are those who inspire their followers to exceed their self-interest for the good of the organization. The results of this study show that transformational leaders in SMEs can effectively result in higher levels of employee engagement, which is important for the success of these organizations. Engaged employees are more likely to be motivated, productive, and committed to organizational goals. This finding is in consonance with previous research that has established transformational leadership as effective in influencing employee outcomes such as job satisfaction and organizational commitment (Bass, 1999; Avolio & Bass, 2004).

The second key finding of the study is the moderating effect of job satisfaction, which means that the positive effects of transformational leadership on work engagement are more pronounced when employees have high job satisfaction. This means that leadership may not be enough to enhance engagement if employees are not also satisfied with other aspects of their work such as the job, pay, working conditions, and career opportunities. Job satisfaction therefore serves as a booster of the positive association between transformational leadership and work engagement. For example, those who are satisfied with their jobs may well react positively to leadership processes such as individualized consideration and intellectual stimulation.

All the assumptions of linearity of relationships, no multicollinearity, homoscedasticity, and normal distribution of residuals are satisfied, which are convenient for analysis and interpretation of the findings. The significance levels of the coefficients also support the idea that transformational leadership and job satisfaction are both important predictors of work engagement in SMEs. In conclusion, the results of this study clearly show that transformational leadership is a key driver of work engagement, and that job satisfaction increases this effect. To enhance employee engagement, SMEs should focus on promoting transformational leadership behaviors and make sure that employees are content with their jobs. This can result in a more engaged workforce that is important for enhancing performance, job satisfaction, and ultimately the long-term success of the organization.

6.3. Implications

The results of this study hold significant significance for both theory and practice, particularly concerning SMEs in Istanbul. The findings indicate that transformational leadership and job satisfaction are essential for enhancing work engagement, which is vital for organizational effectiveness. These findings yield various recommendations for SMEs, organizational leaders, and future researchers. Practical Considerations for SMEs and Organizational Leaders: The research holds significant implications for managers and business leaders, especially in SMEs where resources are typically constrained, and the work environment is frequently more informal than in bigger enterprises.



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Since the positive effects of transformational leadership on work engagement were established, leaders should work on displaying transformational behaviors. These include providing intellectual stimulation, offering individualized consideration, and encouraging employees to engage their personal agendas to the organizational objectives. Training programs that are aimed at improving leadership behaviors may be a cost-efficient way of enhancing engagement and other organizational outcomes.

Furthermore, the results of the present study indicate that the moderating role of job satisfaction such that transformational leadership alone may not be enough to enhance work engagement if employees are not satisfied with their jobs. Therefore, leaders should not only concentrate on leadership behaviors but also seek to enhance job satisfaction with respect to areas such as money, career, work-life balance, and general workplace atmosphere. It is recommended that organizations should ensure that they carry out regular employee surveys to determine the level of employee satisfaction and where there is a need for improvement. SMEs, which depend on a small number of people, can especially benefit from creating a culture of employees who are valued and supported. This culture can help to overcome the challenges of limited resources by encouraging a more engaged and motivated workforce, which is vital for enhancing productivity, retaining employees and creativity.

6.4. Limitations

However, this study is not without its limitations that should be acknowledged. These limitations suggest further work and indicate directions for future research. Sample Size and Composition: A limitation of this study is that the sample size of 155 respondents for SMEs is relatively small. Although the sample size is sufficient for conducting statistical analyses, it may not be representative of the entire population of SMEs in Istanbul or other regions. The participants include Turkish companies, with diversity of the sample but may have cultural biases since leadership styles and employee engagement depend on culture.

It is possible that future research could benefit from a bigger and more diverse sample that would include SMEs from different regions or industries to increase the generalization of the results. Cross-Sectional Design: This study used a cross-sectional design, which means that all data were collected at one point in time. Although this approach is useful for examining relationships between variables, it does not enable the examination of causality or the short- and long-term impact of transformational leadership and job satisfaction on work engagement. It would be more appropriate to use a longitudinal design to capture the dynamics of leadership behaviors and employee engagement over time.

Future work could include a longitudinal design to monitor changes in leadership styles and employee attitudes and evaluate how these changes affect work engagement.

Self-Reported Data: Another limitation is that the study is based on self-reported data which is prone to common method bias. The respondents may have been influenced by social desirability or personal perceptions in their response to leadership behaviors, job satisfaction, and work engagement. However, this limitation is common in organizational research, and future studies could use multi-source data, supervisor ratings, or objective measures of work engagement to minimize bias and give a more accurate description of the relationships between variables.

Job Satisfaction as the Sole Moderator: Job satisfaction was found to be a significant moderator in this study, but other potential moderators were not examined. It can be assumed that other variables, such as organizational culture, trust in leadership, or the work environment, can also play an important role in the relationship between transformational leadership and work engagement.

Future research should attempt to examine the moderating effects of additional variables in order to offer a more complete picture of the processes that enhance or diminish work engagement in SMEs. Sector-Specific Context: The study was conducted on SMEs in Istanbul, which may limit the transfer of the results to other regions or countries. Variation in organizational structures, cultural norms, and employee expectations is possible across regions and industries. Therefore, the results may not be generalizable to SMEs in other cultural or economic contexts. It is recommended that this research should be replicated in other areas or sectors to confirm the findings and explore how contextual factors affect the leadership-job satisfaction-engagement relationship.

6.5. Future Research Direction

1. Longitudinal Studies to Assess Causality:

This study has a major limitation in that it is cross-sectional in its design, which prevents the establishment of causal relationships between transformational leadership, job satisfaction, and work engagement. As a solution, future research could use a longitudinal design where the same people or organizations are followed up for a longer period of time. This



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approach would enable the researchers to monitor changes in leadership behaviors or job satisfaction as determinants of work engagement and establish causality. It would also be feasible to determine the sequence of events in tracking these variables across different stages to find out how the leadership style or job satisfaction affects the sustainability of employee engagement.

2. Broader and More Diverse Samples:

The study was conducted on SMEs in Istanbul and the results may not be generalizable to other SMEs in other areas or countries. In future work it would be possible to enlarge the scope by selecting SMEs from various areas or countries to see if the results are similar in different cultural and economic environments. A more diverse sample would also enable the study to take into account industry related factors that may affect leadership behavior, job satisfaction and work engagement and hence increase the generality of the findings.

3. Multi-Source Data Collection:

To reduce the threat posed by the use of self-reported data in this study, it is recommended that in future studies, multiple data sources should be employed. For instance, transformational leadership and work engagement could be assessed by supervisors, peers, or the employees' direct reports, while work engagement could be assessed through actual work performance. This approach would not only reduce common method bias but also give a more holistic view of the organizational processes at work. A combination of quantitative data from surveys and qualitative data from interviews or focus groups could give a richer description of how leadership processes and job satisfaction affect work engagement.

4. Exploration of Additional Moderators and Mediators:

Job satisfaction was identified as a moderate variable between transformational leadership and work engagement in this study, but other factors may also be relevant. Future research should try to find out more about other moderators, for instance, organizational trust, communication effectiveness, or the work environment to see how they interact with transformational leadership and job satisfaction. Furthermore, other mediating variables, including employee motivation or commitment, could be examined to understand the processes by which transformational leadership affects work engagement.

5. Sector-Specific Studies:

Since this study was conducted on SMEs in Istanbul, future work should examine how the link between transformational leadership, job satisfaction, and work engagement differs across industries. For example, sectors like technology, manufacturing, and healthcare may pose certain characteristics which are different from other industries and may influence how leadership is received by employees. It is important to know the sector specificities in order to develop appropriate leadership approaches and engagement strategies for the particular sector challenges.

6. Examination of Other Leadership Styles:

This study examined the effects of transformational leadership; future work should investigate the effects of other kinds of leadership, such as transactional leadership, authentic leadership, or servant leadership, on work engagement. It would be useful to understand how various types of leadership impact employee engagement and to compare how job satisfaction acts as a moderator of these relationships similar to that of transformational leadership. This could give a more holistic view of the leadership factors that lead to engagement in SMEs.

7. Impact of Organizational Culture:

Another significant area that remains underexplored in future research is the effect of organizational culture on the leadership-employee engagement relationship. Organizational culture can change the perception and behavior of employees, which in turn may change their perception of the leadership, which may in turn change their work engagement. It would be useful to know how transformational leadership works with different types of organizational cultures, say collectivist or individualist cultures, and hence how the leadership practices should be modified to fit the organizational culture.

8. Impact of Technology and Remote Work:

As digital transformation and remote work continue to define the work environment, it will be important for future research to examine how transformational leadership affects work engagement in virtual or hybrid settings. Job satisfaction in such contexts may be different from those of the conventional office culture, and managing leadership to ensure employee engagement in a remote team may require a different approach. Understanding these dynamics could provide practical implications for SMEs navigating the evolving nature of work.

9. Cross-National Comparisons:



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Finally, future research could examine cross-national differences in how transformational leadership and job satisfaction impact work engagement. Leadership practices and employee attitudes may vary significantly across cultures, and exploring these variations could provide deeper insights into the role of cultural factors in leadership effectiveness and employee engagement. Cross-cultural studies could also examine whether the moderating role of job satisfaction holds in different countries or if alternative factors contribute to work engagement.

7. CONCLUSION

This research examined the relationships among transformational leadership, job satisfaction, and work engagement among SMEs in Istanbul. The findings demonstrated compelling evidence that transformational leadership favorably affects job engagement, affirming that leaders who inspire, encourage, and support their colleagues markedly increase their commitment and passion in the workplace. Employees who view their leaders as transformational are more inclined to be emotionally and cognitively engaged in their positions, resulting in enhanced job performance and overall organizational success. This discovery corresponds with prior studies that highlight the significance of leadership behaviors in fostering employee engagement, especially inside SMEs, where intimate leader-employee contacts are prevalent.

Moreover, the study revealed that job satisfaction moderates the relationship between transformational leadership and work engagement, suggesting that the effects of leadership on work engagement are stronger for those who are more satisfied with their jobs. This highlights the importance of not only fostering transformational leadership but also creating a work environment where employees are satisfied with their roles, compensation, and development opportunities. Organizations that focus on enhancing both leadership quality and employee satisfaction are more likely to see sustained improvements in work engagement, which is critical for long-term success. These findings offer practical insights for SMEs, encouraging them to invest in leadership development and improve job satisfaction to maximize employee engagement and overall productivity.

8. REFRENCES

- 1) AGARWAL, R., & SELEN, W. (2009). Strategic renewal of organizations. Organization Science, 20(2), 281-293.
- 2) ALI, B. (2024). What we know about transformational leadership in tourism and hospitality: a systematic review and future agenda. The Service Industries Journal, 44(1-2), 105-147.
- 3) AL-KASASBEH, O. (2024). Exploring the Nexus between Leadership Styles, Employee Engagement, and Organizational Performance a Multidimensional Review. HISTORICAL: Journal of History and Social Sciences, 3(2), 154-168.
- 4) AVOLIO, B. J., & BASS, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. The Leadership Quarterly, 6(2), 199–218.
- 5) BAKKER, A. B., & DEMEROUTI, E. (2008). Towards a model of work engagement. Career Development International, 13(3), 209–223. https://doi.org/10.1108/13620430810870476
- 6) BAKKER, A. B., SCHAUFELI, W. B., LEITER, M. P., & TARIS, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. Work & Stress, 22(3), 187–200. https://doi.org/10.1080/02678370802393649
- 7) BASS, B. M. (1999). Two decades of research and development in transformational leadership. European Journal of Work and Organizational Psychology, 8(1), 9–32. https://doi.org/10.1080/135943299398410
- 8) BONO, J. E., & JUDGE, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. Academy of Management Journal, 46(5), 554–571.
- 9) BOWLING, N. A., BEEHR, T. A., WAGNER, S. H., & LIBKUMAN, T. M. (2010). Adaptation-level theory, opponent process theory, and dispositions: An integrated approach to the stability of job satisfaction. Journal of Applied Psychology, 95(5), 839–853.
- 10) BOWLING, N. A., ESCHLEMAN, K. J., & WANG, Q. (2010). A meta-analytic examination of the influence of job satisfaction on subjective well-being. Journal of Occupational and Organizational Psychology, 83(3), 915-934. https://doi.org/10.1348/096317909X481906
- 11) BREEVAART, K., & BAKKER, A. B. (2018). Daily transformational leadership and daily employee engagement. Journal of Occupational Health Psychology, 23(3), 301-313. https://doi.org/10.1037/ocp0000076
- 12) BREEVAART, K., BAKKER, A. B., DEMEROUTI, E., & DERKS, D. (2014). Who takes the lead? A multi-source diary study on leadership, work engagement, and job performance. Journal of Organizational Behavior, 35(3), 309–328.

JETRM

International Journal of Engineering Technology Research & Management Published By:

- 13) BREEVAART, K., BAKKER, A. B., DEMEROUTI, E., & HETLAND, J. (2014). Daily predictions of employee engagement: The role of leadership and self-efficacy. Journal of Vocational Behavior, 84(1), 1-10. https://doi.org/10.1016/j.jvb.2013.10.003
- 14) BREEVAART, K., BAKKER, A. B., HETLAND, J., DEMEROUTI, E., OLSEN, O. K., & ESPEVIK, R. (2014). Daily transactional and transformational leadership and daily employee engagement. Journal of Occupational and Organizational Psychology, 87(1), 138–157. https://doi.org/10.1111/joop.12041
- 15) CAI, Y., WANG, H., SCHUH, S. C., LI, J., & ZHENG, W. (2024). Toward Understanding Employees' Responses to Leaders' Unethical Pro-organizational Behavior: An Outcome Favorability Perspective. Journal of Business Ethics, 192(1), 79-95.
- 16) CHANDRANATHAN, P. (2024). Entrepreneurial leadership and transformational leadership: a historical-comparative conceptual analysis. Journal of management history.
- 17) CHOI, S. B., KIM, K., ULLAH, S. M. E., & KANG, S. W. (2016). How transformational leadership facilitates innovative behavior of Korean workers: Examining mediating and moderating processes. Personnel Review, 45(3), 459–479.
- 18) CHOI, S. B., TRAN, T. B. H., & KANG, S. W. (2016). Inclusive leadership and employee well-being: The mediating role of person-job fit. Journal of Happiness Studies, 18(6), 1877–1901.
- 19) CHOI, S. B., TRAN, T. B. T., & LUU, T. M. (2016). The effects of transformational leadership on employees' innovative behavior in small and medium-sized enterprises in Vietnam. Asia Pacific Journal of Innovation and Entrepreneurship, 10(2), 206-221. https://doi.org/10.1108/APJIE-04-2016-044
- 20) DAL, O. (2023). İŞLETMELERDE DÖNÜŞÜMSEL LİDERLİK TARZININ FİNANSAL PERFORMANS ÜZERİNDEKİ ETKİSİNDE ÇALIŞAN MOTİVASYONU VE ÇALIŞAN BAĞLILIĞININ ARACI ROLÜ. İstanbul Ticaret Üniversitesi Dış Ticaret Dergisi, 1(4), 27-50. https://doi.org/10.62101/iticudisticaretdergisi.1335542
- 21) DARMAWAN, D. (2024). Distribution of Six Major Factors Enhancing Organizational Effectiveness. Journal of Distribution Science, 22(4), 47-58.
- 22) DEMEROUTI, E., BAKKER, A. B., NACHREINER, F., & SCHAUFELI, W. B. (2001). The job demands-resources model of burnout. Journal of Applied Psychology, 86(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499
- 23) DVIR, T., EDEN, D., AVOLIO, B. J., & SHAMIR, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. Academy of Management Journal, 45(4), 735–744.
- 24) EATON, L., BRIDGMAN, T., & CUMMINGS, S. (2024). Advancing the democratization of work: A new intellectual history of transformational leadership theory. Leadership, 20(3), 125-143.
- 25) EISENBEISS, S. A., VAN KNIPPENBERG, D., & BOERNER, S. (2008). Transformational leadership and team innovation: Integrating team climate principles. The Leadership Quarterly, 19(3), 207-219. https://doi.org/10.1016/j.leaqua.2008.01.002
- 26) EISENBERGER, R., HUNTINGTON, R., HUTCHISON, S., & SOWA, D. (1986). Perceived organizational support. Journal of Applied Psychology, 71(3), 500–507.
- 27) ETIKAN, I., MUSA, S. A., & ALKASSIM, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11
- 28) GARG, P., & RASTOGI, R. (2006). New model of job design: Motivating employees' performance. Journal of Management Development, 25(6), 572-587. https://doi.org/10.1108/02621710610670137
- 29) GHAZZAWI, I. (2008). Job satisfaction among information technology professionals in the U.S.: An empirical study. Journal of American Academy of Business, 13(1), 1–15.
- 30) GRIFFETH, R. W., HOM, P. W., & GAERTNER, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. Journal of Management, 26(3), 463–488
- 31) GÜLER, K., EREN, A., & ŞAHİN, İ. (2019). The Turkish version of the Work Engagement Scale. International Journal of Organizational Behavior, 17(4), 345-362.
- 32) HACKMAN, J. R., & OLDHAM, G. R. (1976). Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 16(2), 250–279.
- 33) HAJJAR, S. T. (2018). Statistical analysis: Internal-consistency reliability and construct validity. International Journal of Quantitative and Qualitative Research Methods, 6(1), 27-38.

JETRM

International Journal of Engineering Technology Research & Management Published By:

- 34) HARTER, J. K., SCHMIDT, F. L., & HAYES, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. Journal of Applied Psychology, 87(2), 268–279. https://doi.org/10.1037/0021-9010.87.2.268
- 35) HOM, P. W., CARANIKAS-WALKER, F., PRUSSIA, G. E., & GRIFFETH, R. W. (1992). A meta-analytical structural equations analysis of a model of employee turnover. Journal of Applied Psychology, 77(6), 890–909.
- 36) HOUSE, R. J., & ADITYA, R. N. (1997). The social scientific study of leadership: Quo vadis? Journal of Management, 23(3), 409–473.
- 37) 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.
- 38) JUDGE, T. A., BONO, J. E., EREZ, A., & LOCKE, E. A. (2001). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. Journal of Applied Psychology, 86(2), 230–242.
- 39) JUDGE, T. A., THORESEN, C. J., BONO, J. E., & PATTON, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. Psychological Bulletin, 127(3), 376–407. https://doi.org/10.1037/0033-2909.127.3.376
- 40) KAHN, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33(4), 692–724. https://doi.org/10.2307/256287
- 41) KARK, R., SHAMIR, B., & CHEN, G. (2003). The two faces of transformational leadership: Empowerment and dependency. Journal of Applied Psychology, 88(2), 246-255. https://doi.org/10.1037/0021-9010.88.2.246
- 42) KIRKPATRICK, S. A., & LOCKE, E. A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. Journal of Applied Psychology, 81(1), 36–51.
- 43) KUŞLUVAN, S., KUŞLUVAN, Z., İLHAN, İ., & BUYRUK, L. (2016). The Turkish adaptation of the Job Satisfaction Scale. Journal of Management Research, 13(2), 178-192.
- 44) KUVAAS, B. (2006). Work performance, affective commitment, and work motivation: The roles of pay administration and intrinsic motivation. Human Resource Management, 45(3), 365–376.
- 45) KWARTENG, S., FRIMPONG, S. O., ASARE, R., & WIREDU, T. J. N. (2024). Effect of employee recognition, employee engagement on their productivity: the role of transformational leadership style at Ghana health service. Current Psychology, 43(6), 5502-5513.
- 46) MEYER, J. P., ALLEN, N. J., & SMITH, C. A. (2002). Commitment to organizations and occupations: Extension and test of the three-component model. Journal of Applied Psychology, 87(6), 292-302. https://doi.org/10.1037/0021-9010.87.6.292
- 47) MEYER, J. P., STANLEY, D. J., HERSCOVITCH, L., & TOPOLNYTSKY, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. Journal of Vocational Behavior, 61(1), 20–52.
- 48) MISHRA, K., AGRAWAL, S., SHRESTHA, S., ADHIKARI, S. R., & KUMAR, A. D. (2024). Transformative Leadership in Nepalese Institutions: A Comprehensive Review. International Journal of Current Research and Modern Education (IJCRME), 9(2).
- 49) MOBLEY, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. Journal of Applied Psychology, 62(2), 237–240.
- 50) PODSAKOFF, P. M., MACKENZIE, S. B., & BOMMER, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. Journal of Management, 22(2), 259-298. https://doi.org/10.1177/014920639602200205
- 51) PODSAKOFF, P. M., MACKENZIE, S. B., MOORMAN, R. H., & FETTER, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. Leadership Quarterly, 1(2), 107-142. https://doi.org/10.1016/1048-9843(90)90009-7
- 52) PODSAKOFF, P. M., MACKENZIE, S. B., PAINE, J. B., & BACHRACH, D. G. (1996). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. Journal of Management, 26(3), 513–563.
- 53) PURVANOVA, R. K., & BONO, J. E. (2009). Transformational leadership in context: Face-to-face and virtual teams. The Leadership Quarterly, 20(3), 343–357.

IJETRM

International Journal of Engineering Technology Research & Management Published By:

- 54) PURWANTO, A., ASBARI, M., FAHLEVI, M., & CAHYONO, Y. (2020). The impacts of leadership and culture on work performance in service companies. Journal of Research in Business, Economics, and Education, 2(1), 131–143.
- 55) PURWANTO, A., ASBARI, M., FAHLEVI, M., & MUFID, A. (2020). Impact of transformational and transactional leadership style on employee performance in the pharmaceutical industry sector. Journal of Research in Business, Economics, and Education, 2(6), 121–129.
- 56) PURWANTO, A., ASBARI, M., FAHLEVI, M., & PURBA, J. T. (2020). The impacts of leadership and innovation on performance of small and medium enterprises. Management Science Letters, 10(6), 1225–1232.
- 57) PURWANTO, E., RACHMAWATI, A., & MULYANA, A. (2020). The effect of transformational leadership on employee performance in small and medium enterprises. Journal of Economics, Business, and Accountancy Ventura, 23(2), 193-205. https://doi.org/10.24912/jebav.v23i2.648
- 58) RICH, B. L., LEPINE, J. A., & CRAWFORD, E. R. (2010). Job engagement: Antecedents and effects on job performance. Academy of Management Journal, 53(3), 617–635. https://doi.org/10.5465/amj.2010.51468988
- 59) SAAD ALEESA, G. (2021). The dimensions of transformational leadership and its organizational effects in public universities in Saudi Arabia: A systematic review. Frontiers in psychology, 12, 682092.
- 60) SALANOVA, M., AGUT, S., & PEIRÓ, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. Journal of Applied Psychology, 90(6), 1217–1227. https://doi.org/10.1037/0021-9010.90.6.1217
- 61) SCHAUFELI, W. B., & BAKKER, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. Journal of Organizational Behavior, 25(3), 293–315. https://doi.org/10.1002/job.248
- 62) SCHAUFELI, W. B., BAKKER, A. B., & SALANOVA, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. Educational and Psychological Measurement, 66(4), 701–716. https://doi.org/10.1177/0013164405282471
- 63) SCHAUFELI, W. B., SALANOVA, M., GONZÁLEZ-ROMÁ, V., & BAKKER, A. B. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. Journal of Happiness Studies, 3(1), 71–92. https://doi.org/10.1023/A:1015630930326
- 64) SCHAUFELI, W. B., TARIS, T. W., & BAKKER, A. B. (2009). Dr. Jekyll or Mr. Hyde: On the differences between work engagement and workaholism. In R. J. Burke & C. L. Cooper (Eds.), The Long Work Hours Culture: Causes, Consequences and Choices (pp. 193–217). Emerald Group Publishing.
- 65) SHAL, T., GHAMRAWI, N., & NACCACHE, H. (2024). Leadership styles and AI acceptance in academic libraries in higher education. The Journal of Academic Librarianship, 50(2), 102849.
- 66) SHAMIR, B., HOUSE, R. J., & ARTHUR, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. Organization Science, 4(4), 577-594. https://doi.org/10.1287/orsc.4.4.577
- 67) SHIROM, A. (2003). Feeling vigorous at work? The construct of vigor and the study of positive affect in organizations. In D. Ganster & P. L. Perrewe (Eds.), Research in Organizational Stress and Well-being (Vol. 3, pp. 135–164). Emerald Group Publishing.
- 68) MISHRA, K., AGRAWAL, S., SHRESTHA, S., ADHIKARI, S. R., & KUMAR, A. D. (2024). Leadership styles and nurses' job satisfaction. Results of a systematic review. International journal of environmental research and public health, 18(4), 1552.
- 69) TAHERDOOST, H. (2016). Sampling methods in research methodology; How to choose a sampling technique for research. International Journal of Academic Research in Management, 5(2), 18-27.
- 70) TETT, R. P., & MEYER, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. Personnel Psychology, 46(2), 259–293.
- 71) TIMS, M., BAKKER, A. B., & XANTHOPOULOU, D. (2011). Do transformational leaders enhance their followers' daily work engagement? Leadership Quarterly, 22(1), 121-131. https://doi.org/10.1016/j.leaqua.2010.12.011
- 72) ILA-VÁZQUEZ, G., CASTRO-CASAL, C., GARCÍA-CHAS, R., & ÁLVAREZ-PÉREZ, D. (2024). How transformational leadership shapes employee task performance? A sequential mediation model. Leadership & Organization Development Journal.
- 73) WANG, H., & HOWELL, J. M. (2010). Exploring the dual-level effects of transformational leadership on followers. Journal of Applied Psychology, 95(6), 1134–1144.

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International Journal of Engineering Technology Research & Management Published By:

- 74) WILLIAMS, L. J., & ANDERSON, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. Journal of Management, 17(3), 601–617.
- 75) XANTHOPOULOU, D., BAKKER, A. B., DEMEROUTI, E., & SCHAUFELI, W. B. (2007). The role of personal resources in the job demands-resources model. International Journal of Stress Management, 14(2), 121–141. https://doi.org/10.1037/1072-5245.14.2.121