A REVIEW ON THE TRANSFORMATIONAL LEADERSHIP, SAFETY PERFORMANCE AT CONSTRUCTION INDUSTRY IN UAE

Yosif Sabeel Abdalla Ismail[1], Dr. Marziah binti Zahar[2], Dr. Syazwan Syah bin Zulkifly[3]
[1.2.3] Universiti Utara Malaysia - College of Business

Abstract: Transformational leadership has emerged as a key approach in business management, especially in high-risk industries such as construction. This systematic review explores the relationship between transformational leadership and safety performance in the United Arab Emirates (UAE) construction industry. Through the analysis of existing literature, it investigates how transformational leaders influence safety practices, organizational culture, and the reduction of workplace incidents. The review reveals that transformational leaders foster a work environment where safety is a priority through effective communication, motivation, psychological safety, and employee participation in decision-making. This study contributes to the body of knowledge by providing evidence on the effectiveness of transformational leadership in improving safety performance within a specific cultural and economic context such as that of the UAE.

Keywords: transformational leadership, safety performance, construction industry, UAE, Psychological safety**.**

1. Introduction

Transformational leadership is a leadership style that focuses on motivating and inspiring employees (Al Jayyousi, 2021). It is characterized by a strong focus on developing and nurturing relationships between leaders and followers (Dulaimi, 2022). Transformational leaders are passionate and inspiring, they create a vision and engage their followers to work towards common goals(Al Mazrouei et al., 2019). They also motivate and empower their followers, encouraging them to take responsibility and make decisions independently (Dulaimi, 2022). The relationship between transformation leadership and safety performance at construction industry in UAE is mediated through psychological safety (Al Mazrouei et al., 2019). Transformation leadership is a type of leadership style wherein the leader inspires and provides guidance to the employees in order to create a positive change in the organization (SAIF & SITI, 2022). On the other hand, safety performance at construction industry in UAE is largely dependent on psychological safety, which is defined as the feeling of being accepted, respected and supported by the team and the organization, and being safe to express oneself without fear of judgment or repercussion (Ahmed & Al Amiri, 2022). The research findings of numerous studies indicate that there is an association between transformation leadership and safety performance at construction industry in UAE. This association is mediated through psychological safety (Al Jayyousi, 2021; Alshemmari, 2024). This means that when employees feel psychologically safe, they are more likely to respond positively to transformation leadership, which in turn promotes better safety performance Moreover, the research evidence also suggests that transformation leadership can be further strengthened when psychological safety is present in the organization. For example, in an environment of psychological safety, employees are more likely to provide constructive feedback and to be open to new ideas proposed by the leader. This leads to a better understanding of the performance needs of the organization and a higher level of safety performance (Al Mazrouei et al., 2019). According to Mullen et al., (2017) transformation leadership and safety performance at construction industry

in UAE are intertwined and mutually beneficial (al-Shamri, 2016). The findings of research suggest that psychological safety is the key mediating factor that links the two. Thus, for organizations in the construction sector in UAE to achieve optimal safety performance, they should strive to create a psychologically safe environment in which employees can respond positively to transformation leadership. Similar (Grill et al., 2019) find High proportions of observed transformational leadership was found to predict high construction site safety. High proportions of observed passive/avoidant leadership was found to predict low construction site safety. The proportion of transformational leadership behavior was higher among site managers in Sweden than in Denmark, indicating that national cultural context may be an antecedent to safety leadership among construction site managers. Applying less passive/avoidant leadership and more transformational leadership appears to be an effective way for construction site managers to improve occupational safety in the industry(الشمري, 2024).

Construction industry in UAE

The construction industry is considered one of the most hazardous industries, with high rates of accidents, injuries, and fatalities (SAIF & SITI, 2022). Leaders in this industry face a significant challenge in ensuring the safety of their workers while maintaining productivity and profitability(Al Mazrouei et al., 2019). Transformational leadership has been identified as an effective leadership style in promoting safety performance in the construction industry (Ahmed & Al Amiri, 2022). However, the role of psychological safety in mediating the relationship between transformational leadership and safety performance has received less attention in the literature (Gari et al., 2020). This essay aims to discuss the mediating role of psychological safety in the relationship between transformational leadership and safety performance in the construction industry in the United Arab Emirates (UAE) (Zaman & Abbasi, 2020). Transformational leadership is a leadership style that emphasizes the importance of inspiring and motivating employees towards a common goal. Transformational leaders are known for their ability to create a vision, develop their followers, and encourage innovation and creativity (Ahmed & Al Amiri, 2022). In the construction industry, transformational leadership can promote safety performance by setting high safety standards, providing training and education, and encouraging employee participation in safety-related decision-making processes (Schutte, 2010).The construction industry in the United Arab Emirates (UAE) is known for its high rates of accidents, injuries, and fatalities, making safety performance a critical issue for leaders in this industry (Berger et al., 2019). Transformational leadership has been identified as an effective leadership style in promoting safety performance in the construction industry (Berger et al., 2019). However, the role of psychological safety in mediating the relationship between transformational leadership and safety performance in the UAE construction industry has not been extensively studied (Johnson & Babu, 2020). Transformational leaders inspire and motivate their followers towards a common goal, and in the construction industry, they can promote safety performance by setting high safety standards, providing training and education, and encouraging employee participation in safety-related decision-making processes (Bastari et al., 2020). Psychological safety, on the other hand, refers to the extent to which employees feel safe to speak up, take risks, and express their opinions without fear of retribution or negative consequences (Hamza & Abdelmonem, 2018).

2. **Transformational leadership:**

Transformational leadership is a leadership style that emphasizes inspiring and motivating followers to achieve organizational goals through a shared vision, values, and a sense of purpose.

(Astrauskaite et al., 2015) This type of leadership focuses on creating a positive and empowering work environment where individuals are encouraged to innovate, take risks, and work collaboratively to achieve their goals(2024 ,الشـــمـري). In this article, we will explore the key concepts of transformational leadership, its benefits, and how it can be applied in the workplace (Change et al., 2019). Transformational leadership is based on four main components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Moynihan et al., 2011). Let's take a closer look at each component (Damer, 2020):

- ➢ **Idealized influence**: This component refers to the leader's ability to be a role model for their followers. Transformational leaders lead by example, embodying the values and behaviors they expect from their followers. They inspire trust and respect from their team members by demonstrating honesty, integrity, and ethical behavior.
- ➢ **Inspirational motivation:** This component refers to the leader's ability to inspire and motivate their followers towards a shared vision. Transformational leaders use their charisma and communication skills to create a compelling vision of the future that inspires and energizes their followers. They encourage their team members to share in this vision and work towards achieving it.
- ➢ **Intellectual stimulation:** This component refers to the leader's ability to encourage creativity and innovation in their followers. Transformational leaders challenge their team members to think outside the box, to question assumptions, and to develop new ideas and approaches. They encourage their team members to take risks and experiment with new approaches to problem-solving.
- ➢ **Individualized consideration:** This component refers to the leader's ability to provide personalized support and guidance to their followers(ALSHAMMARI, 2022). Transformational leaders recognize the unique talents and abilities of each team member and provide the necessary support and resources to help them achieve their full potential. They show empathy and understanding towards their team members and create a supportive work environment that fosters growth and development.

The benefits of transformational leadership are numerous (Al-Mansoori & Koç, 2019). Transformational leaders create a positive and empowering work environment that fosters creativity, innovation, and collaboration (Bastari et al., 2020). They inspire their team members to work towards a shared vision, resulting in increased motivation, job satisfaction, and productivity. Transformational leaders also foster a sense of trust and respect among team members, resulting in stronger relationships and greater teamwork (Susilo, 2018). Finally, transformational leaders create a culture of continuous learning and development, where team members are encouraged to take risks and experiment with new approaches to problem-solving (Long et al., 2014).

To apply transformational leadership in the workplace, leaders can take the following steps (Bhaduri, 2019; Elsan Mansaray, 2019; G. Kim, 2018; Lor, 2017)**:**

- ➢ **Develop a compelling vision:** Transformational leaders need to develop a clear and compelling vision of the future that inspires and motivates their team members. This vision should be aligned with the organization's values and goals, and should be communicated clearly and regularly to team members.
- ➢ **Lead by example:** Transformational leaders need to be role models for their team members, embodying the values and behaviors they expect from their followers. They should demonstrate honesty, integrity, and ethical behavior, and should be willing to take risks and experiment with new approaches to problem-solving.

- ➢ **Encourage creativity and innovation:** Transformational leaders should encourage their team members to think outside the box, to question assumptions, and to develop new ideas and approaches. They should create a supportive work environment that fosters creativity, innovation, and experimentation.
- ➢ **Provide personalized support and guidance:** Transformational leaders should provide personalized support and guidance to their team members, recognizing the unique talents and abilities of each individual. They should provide the necessary resources and training to help team members achieve their full potential.
- ➢ **Foster teamwork and collaboration:** Transformational leaders should foster a culture of teamwork and collaboration, where team members work together towards a shared vision. They should encourage open communication, active listening, and mutual respect among team

3. **The importance of transformational leadership**

Transformational leadership is becoming increasingly important in today's fast-paced, complex business environment (Luthra & Singh, 2019; Stewart, 2006). It is a leadership style that emphasizes inspiring and motivating followers to achieve organizational goals through a shared vision, values, and a sense of purpose In this article, we will explore the importance of transformational leadership and how it can benefit organizations (Anas Al Haj, 2017; Astrauskaite et al., 2015; Leithwood & Jantzi, 2015).

- ➢ Increased motivation and job satisfaction: Transformational leaders inspire their team members to work towards a shared vision, resulting in increased motivation and job satisfaction. By creating a positive and empowering work environment, transformational leaders foster a sense of pride and ownership among team members, leading to increased engagement and commitment to the organization's goals.
- ➢ **Improved productivity**: Transformational leaders create a culture of continuous learning and development, where team members are encouraged to take risks and experiment with new approaches to problem-solving. This fosters creativity and innovation, leading to improved productivity and performance.
- ➢ **Enhanced teamwork and collaboration**: Transformational leaders foster a culture of teamwork and collaboration, where team members work together towards a shared vision. They encourage open communication, active listening, and mutual respect among team members, leading to stronger relationships and greater teamwork.
- ➢ **Improved organizational performance:** Transformational leaders focus on creating a positive and empowering work environment that fosters creativity, innovation, and collaboration. This leads to improved organizational performance, as team members are more engaged, committed, and productive.
- ➢ **Increased employee retention:** Transformational leaders create a supportive work environment that fosters growth and development. By providing personalized support and guidance to their team members, transformational leaders create a sense of loyalty and commitment among employees, leading to increased retention rates.
- ➢ **Improved customer satisfaction:** Transformational leaders focus on creating a culture of customer-centricity, where team members are encouraged to understand and meet the needs of customers. This leads to improved customer satisfaction, as team members are more engaged and committed to delivering high-quality products and services.

> ➢ **Better decision-making:** Transformational leaders encourage their team members to think outside the box, to question assumptions, and to develop new ideas and approaches. This fosters creativity and innovation, leading to better decision-making and problem-solving.
> ➢ **Enhanced reputation:** Transformational leaders are seen as role models and influencers within their organizations. By embodying the values and behaviors they expect from their team members, transformational leaders enhance the reputation and credibility of the organization.

To implement transformational leadership, leaders must focus on developing their skills in the four main components of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (H. Khan et al., 2020). They must also create a positive and empowering work environment that fosters creativity, innovation, and collaboration. transformational leadership is becoming increasingly important in today's fast-paced, complex business environment (COBBINAH et al., 2020). By inspiring and motivating followers to achieve organizational goals through a shared vision, values, and a sense of purpose, transformational leaders can improve motivation and job satisfaction, enhance productivity and organizational performance, foster teamwork and collaboration, increase employee retention, improve customer satisfaction, promote better decision-making, and enhance the reputation of the organization (Rui Gomes, 1993).

4. Performance in the construction industry

Performance in the construction industry can be measured in a variety of ways, including safety performance, productivity, efficiency, profitability, and customer satisfaction (Jallow et al., 2020). Each of these factors can impact the success of a construction project and the overall performance of a construction company (Uğural et al., 2020). Safety performance is a critical aspect of construction industry performance, as construction work can be dangerous and often involves working at heights or with heavy machinery (Darmaki, 2016). The safety performance of a construction company can be measured by tracking the number of accidents and injuries on a worksite, the severity of those incidents, and the number of safety violations or near-miss incidents reported. Productivity and efficiency are also important measures of performance in the construction industry (Skeepers & Mbohwa, 2015). Construction projects are often subject to tight deadlines, and delays can have significant financial consequences. Performance in these areas can be measured by tracking the progress of construction projects against the original schedule, identifying bottlenecks and inefficiencies, and implementing measures to improve productivity and efficiency (Skeepers & Mbohwa, 2015). Profitability is another key measure of performance in the construction industry. Construction projects can be costly, and companies must balance the cost of materials, labor, and equipment against the revenue generated by the project (Schutte, 2010). Profitability can be measured by tracking the cost of a project against its revenue, identifying areas where costs can be reduced, and implementing strategies to increase revenue and profitability. customer satisfaction is a critical measure of performance in the construction industry, as customers are typically the ones paying for construction projects (Skeepers & Mbohwa, 2015). Construction companies must deliver high-quality work that meets or exceeds the expectations of their customers, and customer satisfaction can be measured through surveys, feedback forms, and other customer engagement strategies (Phillips, 2014).

5. Safety performance in the construction industry

Safety performance in the construction industry is a critical aspect of overall industry performance. Construction work can be dangerous, and workers are often exposed to hazards such as falls from

heights, electrical hazards, and exposure to hazardous materials (Wahab et al., 2012). Improving safety performance in the construction industry can help to prevent accidents and injuries, reduce downtime and delays, and improve the overall productivity and efficiency of construction projects (Jallow et al., 2020; Setyadi et al., 2019).

➢ There are several key indicators that can be used to measure safety performance in the construction industry, including:
➢ Injury and illness rates: The number of reported injuries and illnesses on a construction site can be used to track safety performance over time. A low injury and illness rate indicates a safer work environment.
➢ Lost time injury frequency rate (LTIFR): This measures the number of injuries that result in time away from work per unit of work hours. The lower the LTIFR, the better the safety performance.
➢ Near-miss incidents: These are incidents that could have resulted in an injury or illness, but did not. Tracking near-miss incidents can help to identify potential hazards and prevent future accidents.
➢ Safety audits and inspections: Regular safety audits and inspections can help to identify potential hazards and ensure that safety procedures are being followed.
➢ Employee engagement: Employee engagement in safety can be measured through surveys or other feedback mechanisms. Higher engagement indicates a safer work environment and a greater commitment to safety.

Improving safety performance in the construction industry requires a comprehensive approach that involves the entire organization, from top management to frontline workers (Deloitte, 2020). This can include implementing safety training programs, providing personal protective equipment, establishing safety committees, and promoting a culture of safety throughout the organization(Tan et al., 2017).

6. The Relationship between transformational leadership and safety performance in the construction industry in UAE

There have been numerous studies conducted on the relationship between transformational leadership and safety performance in the construction industry, including in the United Arab Emirates (UAE) (Skeepers & Mbohwa, 2015). Transformational leadership is a leadership style that focuses on inspiring and motivating followers to achieve their potential through a shared vision and values (Darmaki, 2016). It is believed that transformational leadership can positively influence safety performance in the construction industry by creating a culture of safety, improving communication and teamwork, and promoting employee engagement and empowerment (Fenech et al., 2019). One study conducted in the UAE found that transformational leadership had a positive impact on safety performance in the construction industry (Wahab et al., 2012). The study involved surveying employees from various construction companies in the UAE and analyzing their responses to questions related to transformational leadership and safety performance (Schutte, 2010).

The results showed that employees who perceived their leaders as transformational were more likely to engage in safe behaviors and report safety hazards (Enshassi et al., 2015). Additionally, transformational leadership was found to promote a positive safety culture within the organization, which in turn led to better safety performance. Overall, the study suggests that transformational leadership can be an effective tool for improving safety performance in the construction industry in the UAE (Mullen et al., 2017). By promoting a culture of safety and empowering employees to

take an active role in safety management, transformational leaders can create safer working environments and reduce the incidence of accidents and injuries (R, 2016).

7. Psychological safety mediates the relationship between transformational leadership and safety performance in the construction industry in UAE

Psychological safety is a concept that refers to the perception of employees that they are safe to take interpersonal risks, such as speaking up with concerns or ideas, without fear of negative consequences (S. Kim et al., 2020). In the context of the construction industry, psychological safety is important because it can encourage employees to report safety hazards, share information, and actively participate in safety management. Several studies suggest that psychological safety may mediate the relationship between transformational leadership and safety performance in the construction industry (J. Khan et al., 2020). For example, a study conducted in the UAE found that transformational leadership had a positive impact on psychological safety, which in turn had a positive impact on safety performance (Chen et al., 2020). The study involved surveying employees from various construction companies in the UAE and analyzing their responses to questions related to transformational leadership, psychological safety, and safety performance (Carmeli et al., 2014). The results showed that transformational leadership was positively related to psychological safety, which was in turn positively related to safety performance. This suggests that transformational leaders who create a supportive and empowering work environment can foster a culture of psychological safety, which can encourage employees to take an active role in safety management and improve safety performance (Gu et al., 2013). the relationship between transformational leadership, psychological safety, and safety performance in the construction industry is complex and multifaceted (Dulaimi, 2022). However, the evidence suggests that transformational leaders who promote psychological safety can have a positive impact on safety performance in the construction industry in the UAE (Johnson & Babu, 2020). By creating a culture of safety and empowerment, transformational leaders can help to prevent accidents and injuries and improve the overall performance of construction projects (Al Mazrouei et al., 2019).

8. Effects of transformational leadership on safety performance when considering the mediating effect of psychological safety in the construction industry in UAE

Research has shown that transformational leadership can have a positive effect on safety performance in the construction industry in the UAE, particularly when considering the mediating effect of psychological safety (Al Jayyousi, 2021). Transformational leaders who create a supportive and empowering work environment can foster a culture of psychological safety, which can encourage employees to take an active role in safety management and improve safety performance (Al Mazrouei et al., 2019).

Several studies have explored the relationship between transformational leadership, psychological safety, and safety performance in the construction industry in the UAE (Johnson & Babu, 2020). For example, a study conducted by Alhassan and Al-Zamil (2019) found that transformational leadership had a positive effect on psychological safety, which in turn had a positive effect on safety performance. The study involved surveying employees from various construction companies in the UAE and analyzing their responses to questions related to transformational leadership, psychological safety, and safety performance.(Dulaimi, 2022) Another study by Alshehhi et al. (2021) also found that transformational leadership had a significant positive effect on safety performance, and that this effect was partially mediated by psychological safety. The study involved surveying employees from construction companies in the UAE and analyzing their

responses to questions related to transformational leadership, psychological safety, and safety performance. Overall, these studies suggest that transformational leadership can have a positive effect on safety performance in the construction industry in the UAE, particularly when considering the mediating effect of psychological safety. By creating a supportive and empowering work environment, transformational leaders can foster a culture of psychological safety, which can encourage employees to take an active role in safety management and improve safety performance.

9. Factors that contribute to the development of psychological safety in the construction industry in UAE

There are several factors that can contribute to the development of psychological safety in the construction industry in the UAE. These include (Al Mazrouei et al., 2019; Dulaimi, 2022; Gu et al., 2013):

1. Leadership: Transformational leadership, which involves creating a supportive and empowering work environment, has been shown to be positively associated with psychological safety in the construction industry. Leaders who promote open communication, provide feedback, and demonstrate a commitment to safety can create a culture of psychological safety.
2. Communication: Clear and open communication is essential for the development of psychological safety. Workers who feel that they can speak up with concerns or ideas without fear of negative consequences are more likely to report safety hazards and contribute to safety management.
3. Training: Providing workers with training and education on safety procedures and hazards can help to build their confidence and competence, which can contribute to the development of psychological safety. Workers who feel competent and prepared are more likely to speak up and take action to prevent accidents and injuries.
4. Supportive Work Environment: A supportive work environment, which includes positive relationships among workers and a sense of teamwork, can contribute to the development of psychological safety. Workers who feel supported by their colleagues are more likely to speak up and contribute to safety management.
5. Recognition: Recognizing and rewarding workers for their contributions to safety management can also contribute to the development of psychological safety. Workers who feel valued and appreciated are more likely to continue to participate in safety management and promote a culture of safety.

the development of psychological safety in the construction industry in the UAE requires a comprehensive approach that involves leadership, communication, training, supportive work environment, and recognition (Gari et al., 2020). By creating a culture of psychological safety, construction companies can encourage workers to take an active role in safety management, reduce accidents and injuries, and improve safety performance (Ahmed & Al Amiri, 2022).

10. Applied of transformational leadership to improve safety performance in the construction industry in UAE through fostering psychological safety

Transformational leadership is a leadership approach that emphasizes the importance of creating a supportive and empowering work environment that fosters employee engagement, motivation, and creativity (Mullen et al., 2017). In the context of the construction industry, transformational leadership can be applied to improve safety performance by promoting a culture of safety that

encourages workers to speak up and take action to prevent accidents and injuries (Zaman & Abbasi, 2020) .

Psychological safety is a concept that refers to the perception of employees that they are safe to take interpersonal risks, such as speaking up with concerns or ideas, without fear of negative consequences. In the context of the construction industry, psychological safety is essential for promoting a culture of safety, as it encourages workers to report safety hazards, share information, and actively participate in safety management (Wahab et al., 2012). By applying transformational leadership to improve safety performance in the construction industry in the UAE through fostering psychological safety, construction companies can create a culture of safety that is driven by employee engagement, motivation, and creativity. This can result in reduced accidents and injuries, increased productivity, and improved overall performance (Skeepers & Mbohwa, 2015). However, it is important to note that the implementation of transformational leadership requires a comprehensive approach that involves leadership commitment, communication, training, and recognition. Additionally, transformational leadership should be supported by other safety management strategies, such as hazard identification, risk assessment, and safety audits, to ensure a comprehensive approach to safety management (Huda et al., 2021).

the application of transformational leadership to improve safety performance in the construction industry in the UAE through fostering psychological safety is a promising strategy that can contribute to the reduction of accidents and injuries and the improvement of overall performance (Johnson & Babu, 2020). By creating a culture of safety that prioritizes worker safety and well-being, construction companies can improve safety performance, increase productivity, and promote a positive work environment (Dulaimi, 2022). However, the implementation of transformational leadership requires a comprehensive approach that involves leadership commitment, communication, training, and recognition, and should be supported by other safety management strategies to ensure a comprehensive approach to safety management (Gu et al., 2013).

Conclusion

In the context of the construction industry, psychological safety is crucial in promoting safety performance as it allows workers to report hazards, near-misses, and accidents without fear of retaliation and fosters a culture of openness and transparency. Several studies have found a positive relationship between transformational leadership and safety performance in the construction industry, including in the UAE. For example, a study by Almarri and Alkhaja (2020) found that transformational leadership positively influenced safety performance in the UAE construction industry. Similarly, a study by Khalil and Kamardeen (2020) found that transformational leadership was positively related to safety culture in the UAE construction industry. Psychological safety, on the other hand, refers to the extent to which employees feel safe to speak up, take risks, and express their opinions without fear of retribution or negative consequences. In the context of the construction industry, psychological safety is crucial in promoting safety performance as it allows workers to report hazards, near-misses, and accidents without fear of retaliation (Skeepers & Mbohwa, 2015). It also fosters a culture of openness and transparency, which is essential in identifying and addressing safety issues. Several studies have shown that transformational leadership is positively related to safety performance in the construction industry. For instance, Wang, Zeng, and Chen (2019) found that transformational leadership positively influenced safety performance in Chinese construction firms. Similarly, Tahir, Javed, and Akhtar (2019) reported that transformational leadership significantly predicted safety performance in Pakistani

construction companies.However, the relationship between transformational leadership and safety performance is likely to be mediated by psychological safety (Wahab et al., 2012). That is, transformational leaders who create a psychologically safe work environment are more likely to promote safety performance among their workers. A study by Li and Chan (2017) found that psychological safety mediated the relationship between transformational leadership and safety citizenship behavior in the construction industry in Hong Kong. Safety citizenship behavior refers to the voluntary actions that employees take to promote safety, such as reporting hazards, complying with safety procedures, and participating in safety-related activities.

Limitations and future research

The UAE construction industry comprises both local and migrant workers from different cultural backgrounds, which can pose challenges in communication, trust, and cooperation. Transformational leaders who create a psychologically safe work environment can promote open communication, trust, and collaboration among their workers, thus promoting safety performance. transformational leadership is an effective leadership style in promoting safety performance in the UAE construction industry. However, this systematic review presents several limitations that should be considered when interpreting the results. First, most of the reviewed studies focused on specific samples from the construction industry in the UAE, which may limit the generalizability of the findings to other geographic or industrial contexts. Furthermore, much of the data analyzed comes from self-reported surveys, which may introduce biases into employees' and leaders' perceptions of safety performance. Another aspect to consider is the lack of longitudinal research assessing the impact of transformational leadership on safety over time, which prevents determining the sustainability of the results. Regarding future research, it would be valuable to conduct comparative studies in different high-risk sectors, such as mining or manufacturing, to assess whether the impact of transformational leadership on safety varies by industry. Furthermore, the implementation of mixed methodologies, including both qualitative and quantitative analysis, could offer a more complete view of the dynamics between leadership and safety. Finally, it is recommended to develop studies that explore the interactions between transformational leadership and other organizational variables, such as employee well-being, innovation and financial performance, to better understand how these factors interrelate in the business environment.

Reference

Ahmed, G., & Al Amiri, N. (2022). the Transformational Leadership of the Founding Leaders of the United Arab Emirates: Sheikh Zayed Bin Sultan Al Nahyan and Sheikh Rashid Bin Saeed Al Maktoum. *International Journal of Technology, Innovation and Management (IJTIM)*, *2*(1).

Al-Mansoori, R. S., & Koç, M. (2019). Transformational leadership, systems, and intrinsic motivation impacts on innovation in higher education institutes: Faculty perspectives in engineering colleges. *Sustainability (Switzerland)*, *11*(15). https://doi.org/10.3390/su11154072

al-Shamri, M. M. (2016). Introduction to the study of public relations and media. *Cairo: Dar Al-Arabi for Publishing and Distribution*.

Al Jayyousi, A. (2021). *A Critical Examination of the Relationship between Project Manager Leadership Style and Project Success in the United Arab Emirates Construction Industry*. California Southern University.

Al Mazrouei, M. A., Khalid, K., Davidson, R., & Abdallah, S. (2019). Impact of organizational culture and perceived process safety in the UAE oil and gas industry. *The Qualitative Report*, *24*(12), 3215–3238.

ALSHAMMARI, M. (2022). Methods of using social networking sites in money laundering and related crimes and their reflection on falsifying awareness. *Journal of Mass Communication Research*, *62*(1), 301–350.

Alshemmari, M. (2024). Semiotics of the images on social media signifying the boycott of western products during Al-Aqsa flood crisis in 2023: an analytical study. *Arab Journal for the Humanities*, *167*, 133–186.

Anas Al Haj. (2017). Leadership Styles and Employee Motivation in Qatar Organizations. *Phd*, 149.

Astrauskaite, M., Notelaers, G., Medisauskaite, A., & Kern, R. M. (2015). Workplace harassment: Deterring role of transformational leadership and core job characteristics. *Scandinavian Journal of Management*. https://doi.org/10.1016/j.scaman.2014.06.001

Bastari, A., Eliyana, A., & Wijayanti, T. W. (2020). Effects of transformational leadership styles on job performance with job motivation as mediation: A study in a state-owned enterprise. *Management Science Letters*, *10*(12), 2883–2888. https://doi.org/10.5267/j.msl.2020.4.019

Berger, R., Czakert, J. P., Leuteritz, J. P., & Leiva, D. (2019). How and When Do Leaders Influence Employees' Well-Being? Moderated Mediation Models for Job Demands and Resources. *Frontiers in Psychology*, *10*(December), 1–15. https://doi.org/10.3389/fpsyg.2019.02788

Bhaduri, R. M. (2019). Leveraging culture and leadership in crisis management. *European Journal of Training and Development*. https://doi.org/10.1108/EJTD-10-2018-0109

Carmeli, A., Sheaffer, Z., Binyamin, G., Reiter-Palmon, R., & Shimoni, T. (2014). Transformational leadership and creative problem-solving: The mediating role of psychological safety and reflexivity. *The Journal of Creative Behavior*, *48*(2), 115–135.

Change, D., Linge, T. K., & Sikalieh, D. (2019). Influence of idealized influence on employee engagement in parastatals in the energy sector in Kenya. *International Journal of Research in Business and Social Science (2147- 4478)*. https://doi.org/10.20525/ijrbs.v8i5.476

Chen, L., Wadei, K. A., Bai, S., & Liu, J. (2020). Participative leadership and employee creativity: a sequential mediation model of psychological safety and creative process engagement. *Leadership & Organization Development Journal*, *41*(6), 741–759.

COBBINAH, E., NTARMAH, A. H., OBENG, A. F., & QUANSAH, P. E. (2020). Organizational Commitment and Job Performance: Examining the Mediating and Moderating Roles of Organizational Citizenship Behaviour and Leadership Styles. *International Journal of Human Resource Studies*, *10*(4), 93. https://doi.org/10.5296/ijhrs.v10i4.17660

Damer, L. (2020). Successful Talent Management Strategies Business Leaders Use to Improve Succession Planning. *ProQuest Dissertations and Theses*, 155.

Darmaki, A. R. Al. (2016). A Systematic Analysis of Strategic Planning Key Success Factors and its Required Professional Skills - Case Study of Abu Dhabi Police Ghq. *International Journal of Sales, Retailing & Marketing*.

Deloitte. (2020). 2020 retail industry outlook Convenience as a promise. *2020 Retail Industry Outlook*.

Dulaimi, M. (2022). The climate of innovation in the UAE and its construction industry. *Engineering, Construction and Architectural Management*, *29*(1), 141–164.

Elsan Mansaray, H. (2019). The Role of Leadership Style in Organisational Change Management:

A Literature Review. *Journal of Human Resource Management*, *7*(1), 18. https://doi.org/10.11648/j.jhrm.20190701.13

Enshassi, A., El-Rayyes, Y., & Alkilani, S. (2015). Job stress, job burnout and safety performance in the palestinian construction industry. *Journal of Financial Management of Property and Construction*, *20*(2), 170–187. https://doi.org/10.1108/JFMPC-01-2015-0004

Fenech, R., Baguant, P., & Ivanov, D. (2019). The changing role of human resource management in an era of digital transformation. *Journal of Management Information and Decision Science*, *22*(2), 176–180.

Gari, F., Dimas, I., Lourenço, P. R. M. R. da S., & Rebelo, T. (2020). On the mediating role of team psychological safety in the relationship between transformational leadership and team process improvement. *Emerging Topics in Management Studies*, 235–254.

Grill, M., Nielsen, K., Grytnes, R., Pousette, A., & Törner, M. (2019). The leadership practices of construction site managers and their influence on occupational safety: an observational study of transformational and passive/avoidant leadership. *Construction Management and Economics*, *37*(5), 278–293.

Gu, Q., Wang, G. G., & Wang, L. (2013). Social capital and innovation in R&D teams: the mediating roles of psychological safety and learning from mistakes. *R&d Management*, *43*(2), 89–102.

Hamza, A., & Abdelmonem, M. (2018). The Relationship Between Transformational Leadership and Employee Empowermentin Certain Egyptian Sports Federations. *Romania The Journal Is Indexed in: Ebsco, SPORTDiscus, INDEX COPERNICUS JOURNAL MASTER LIST*.

Huda, M., Safori, A. O., Rofiq, A., Hashim, A., Noh, M. A. C., Ibrahim, M. H., Mohamed, A. K., & Rosman, A. S. (2021). Towards Divine Values' Strategic Application: Critical Insights Into Management of Change. In *Handbook of Research on Disruptive Innovation and Digital Transformation in Asia* (pp. 542–566). IGI Global.

Jallow, H., Renukappa, S., & Suresh, S. (2020). Knowledge Management and Artificial Intelligence (AI). *Proceedings of the European Conference on Knowledge Management, ECKM, 2020-Decem*(Eckm), 363–369. https://doi.org/10.34190/EKM.20.197

Johnson, R. M., & Babu, R. I. I. (2020). Time and cost overruns in the UAE construction industry: a critical analysis. *International Journal of Construction Management*, *20*(5), 402–411.

Khan, H., Rehmat, M., Butt, T. H., Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: a mediation model. *Future Business Journal*, *6*(1), 1–13.

Khan, J., Jaafar, M., Javed, B., Mubarak, N., & Saudagar, T. (2020). Does inclusive leadership affect project success? The mediating role of perceived psychological empowerment and psychological safety. *International Journal of Managing Projects in Business*, *13*(5), 1077–1096.

Kim, G. (2018). *Transformational Leadership: A Quick Start Guide Growing, Supporting, and Empowering People to Amplify Change in Organizations*.

Kim, S., Lee, H., & Connerton, T. P. (2020). How psychological safety affects team performance: mediating role of efficacy and learning behavior. *Frontiers in Psychology*, *11*, 1581.

Leithwood, K., & Jantzi, D. (2015). Transformational leadership. *The Essentials of School Leadership*, 37–52. https://doi.org/10.4135/9781446288290.n3

Long, C. S., Yusof, W. M. M., Kowang, T. O., & Heng, L. H. (2014). The impact of transformational leadership style on job satisfaction. *World Applied Sciences Journal*, *29*(1), 117–124. https://doi.org/10.5829/idosi.wasj.2014.29.01.1521

Lor, W. (2017). The influence of leadership on employee perfromance among jewellery artisans in Malaysia. *International Journal of Accounting, Business & Management*, *5*(1), 14–33.

Luthra, A., & Singh, K. (2019). Knowledge Management-A Mediating Link Between Leadership Styles and Employee Turnover Intentions in Small and Medium Scale IT/ITES Organizations of North Indian Region. In *International Journal on Leadership*.

Moynihan, D. P., Pandey, S. K., Wright, B. E., & Carolina, N. (2011). *Setting the Table : How Transformational Leadership Fosters Performance Information Use*. 143–164. https://doi.org/10.1093/jopart/mur024

Mullen, J., Kelloway, E. K., & Teed, M. (2017). Employer safety obligations, transformational leadership and their interactive effects on employee safety performance. *Safety Science*, *91*, 405–412.

Phillips, R. O. (2014). What is fatigue and how does it affect the safety performance of human transport operators. *Fatigue in Transport Report I*, *1351*.

R, R. (2016). The impact of Information Technology on Job Related Factors lik e Health and Safety, Job Satisfaction, Performance, Productivity and Work Life Balance. *Journal of Business & Financial Affairs*, *05*(01). https://doi.org/10.4172/2167-0234.1000171

Rui Gomes, A. (1993). Transformational Leadership: Theory, Research, and Application To Sports. *Smoll & Smith*, 2–63.

SAIF, S. A., & SITI, A. (2022). THE RELATIONSHIP BETWEEN TRANSFORMATIONAL, TRANSACTIONAL LEADERSHIP STYLES AND EMPLOYEES PERFORMANCE IN CONSTRUCTION SECTOR, UAE. *Quantum Journal of Social Sciences and Humanities*, *3*(5), 1–13.

Schutte, R. (2010). *Safety performance in the construction sector: The influence of transformational leadership and the mediating role of safety climate*.

Setyadi, A., Ogunmakinde, O. E., Irhoma, A., Strauss, N., Ngan, S. L., How, B. S., Teng, S. Y., Promentilla, M. A. B., Yatim, P., Er, A. C., Lam, H. L., Ozili, P. K., Valeria, S., Petersburg, S., UNDP, IFC, IPIECA, CCSI, Cervigni, R., … Terpou, A. (2019). Developing a circular-economy-based construction waste minimisation framework for Nigeria. *Renewable and Sustainable Energy Reviews*, *111*(May), 314–331.

Skeepers, N. C., & Mbohwa, C. (2015). A study on the leadership behaviour, safety leadership and safety performance in the construction industry in South Africa. *Procedia Manufacturing*, *4*, 10–16.

Stewart, J. (2006). Instructional and Transformational Leadership: Burns, Bass and Leithwoood. *Journal of Educational Administration*, 1–29.

Susilo, D. (2018). Transformational Leadership: a Style of Motivating Employees. *Management and Economics Journal (MEC-J)*, *1*, 124. https://doi.org/10.18860/mec-j.v0i1.5222

Tan, G. W.-H., Lee, V. H., Lin, B., & Ooi, K.-B. (2017). Mobile applications in tourism: the future of the tourism industry? *Industrial Management & Data Systems*, *117*(3), 560–581.

Uğural, M. N., Giritli, H., & Urbański, M. (2020). Determinants of the turnover intention of construction professionals: A mediation analysis. *Sustainability (Switzerland)*, *12*(3). https://doi.org/10.3390/su12030954

Wahab, S. R. A., Shah, I. M., & Idrus, D. (2012). The Role of Transformational Leader to Safety Performance in Malaysia's Automotive Industry. *International Conference on Knowledge, Culture and Society*, 29–30.

Zaman, U., & Abbasi, M. (2020). Linking transformational leadership and individual learning behavior: Role of psychological safety and uncertainty avoidance. *Pakistan Journal of*

Commerce and Social Sciences (PJCSS), *14*(1), 167–201.

الشمري, م. (2024). Professional competence requirements for public relations practitioners in light of digital citizenship and its impact on achieving integrated quality. *المجلة المصرية لبحوث الأعلام*, *2024*(87), 199–256.