
TRANSFORMATIONAL LEADERSHIP ON WORK PERFORMANCE IN THE PHARMACEUTICAL INDUSTRY IN MALAYSIA: AN OVERVIEW

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ABSTRACT

The pharmaceutical sector is characterized by dynamic and highly regulated industry, where effective leadership is critical for achieving business objectives and ensuring the well-being of employees. Furthermore, transformational leadership, a style known for inspiring and motivating followers to achieve their full potential, has gained prominence in the recent discourse on leadership effectiveness. The objective of this paper is to review the relevant literature on transformational leadership and the pharmaceutical industry in Malaysia, highlighting the key components and principles of transformational leadership and their potential applicability in a healthcare setting. A quantitative method is employed to achieve the objective of the study and by using secondary data from Scopus database between the year 1990-2023, the study found that the absence of recorded publications on transformational leadership within the Malaysian pharmaceutical industry underscores a significant research gap. Scholars should prioritize and dedicate efforts to investigate the leadership dynamics within this specific industry, contributing to the dearth of literature in this area. The study contributes to the existing body of knowledge in the field of transformational leadership on work performance in the pharmaceutical industry in Malaysia which will be helpful for the academicians to conduct further examinations on the pharmaceutical industry.

Keyword: Transformational Leadership, Work Performance, Pharmaceutical Industry, Malaysia.

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INTRODUCTION

Transformational leadership that goes beyond traditional managerial approaches, focusing on inspiring and motivating followers to reach their full potential and achieve remarkable results (Anderson, 2017). Leaders employing this style are characterized by charisma, a compelling vision for the future, and the ability to inspire and motivate others to contribute to a shared vision. They encourage creativity and innovation, intellectually stimulate their followers, and provide individualized consideration by addressing unique needs and concerns (Hughes et al., 2018). Transformational leaders empower their team members, fostering a sense of ownership and responsibility. This approach, introduced by James V. Downton and further developed by James MacGregor Burns and Bernard M. Bass, aims to create positive and lasting change in individuals and organizations, emphasizing a higher purpose and the development of each follower's capabilities.

Transformational leadership significantly influences work performance by fostering motivation, engagement, and a shared vision among team members (Chai et al., 2017). The inclusive and supportive environment created by transformational leaders enhances employee engagement, while the encouragement of creativity and innovation contributes to improved problem-solving and performance (Mahmood et al., 2019). The focus on individual development and mentorship helps

employees enhance their skills, and the promotion of a collective identity fosters higher levels of team performance (Chiu et al., 2016). Additionally, transformational leaders are effective in navigating change, promoting adaptability, and instilling a culture of continuous improvement, all of which contribute to positive work performance outcomes (Sinaga et al., 2018). Although the impact may vary across contexts, industries, and organizational cultures, transformational leadership remains a potent force in elevating individual and team achievements (Madi Odeh et al., 2023).

In the pharmaceutical industry, transformational leadership plays a crucial role in influencing and enhancing work performance (Unhalekka et al., 2022). The complex and dynamic nature of this industry, marked by rapid technological advancements and stringent regulatory requirements, demands leaders who can inspire and guide their teams effectively. Transformational leaders in the pharmaceutical sector often articulate a compelling vision that goes beyond financial goals, emphasizing the critical role their work plays in improving healthcare and saving lives (Begum et al., 2022). This visionary approach can instill a sense of purpose and motivation among employees, driving them to excel in their roles.

Furthermore, the encouragement of creativity and innovation is particularly relevant in pharmaceutical research and development (Castañer, 2016). Transformational leaders foster a culture where employees feel empowered to explore novel solutions, pushing the boundaries of scientific discovery (Guerrero et al., 2018). This can lead to advancements in drug development, more efficient processes, and a competitive edge in the industry (Sharma et al., 2021). The individualized consideration aspect of transformational leadership is valuable in an industry where specialized skills and knowledge are essential (Abelha et al., 2018). Leaders who invest in the professional growth of their team members, provide mentorship, and recognize their unique contributions contribute to a workforce that is not only skilled but also highly engaged and committed to the organization's mission (Li et al., 2019).

Given the ever-evolving nature of healthcare and pharmaceuticals, transformational leaders are well-positioned to guide their teams through industry challenges and changes. Their ability to navigate regulatory shifts, market dynamics, and technological advancements ensures that the organization remains adaptable and resilient. This adaptability is crucial for maintaining high levels of work performance in an industry where staying at the forefront of scientific and technological developments is paramount (Harriott et al., 2023).

According to (Khan et al., 2018), in the Malaysian pharmaceutical industry, transformational leadership plays a vital role in shaping and enhancing work performance. Leaders who embrace a transformational approach inspire their teams by articulating a compelling vision that transcends mere financial objectives, emphasizing the industry's broader impact on healthcare in Malaysia. The emphasis on innovation and research excellence is crucial, as these leaders foster a culture that encourages creative solutions and advancements in drug development. Given the stringent regulatory standards, transformational leaders guide their teams to exceed compliance requirements, enhancing the company's reputation and contributing to sustained high performance. Additionally, by prioritizing talent development and providing individualized consideration, these leaders cultivate a skilled and motivated workforce. The adaptability inherent in transformational leadership is particularly valuable in navigating the dynamic landscape of global market trends, local healthcare needs, and technological advancements (Hanelt et al., 2021).

The research on transformational leadership in the pharmaceutical industry in Malaysia, particularly its applicability in healthcare, is closely aligned with Transformational Leadership Theory. This theory emphasizes leaders who inspire and motivate their followers to achieve common goals by focusing on intrinsic motivation, advancing collective identity, providing intellectual stimulation, and offering individualized consideration. Within the context of the pharmaceutical industry, understanding transformational leadership theory is crucial as it offers insights into how leaders can navigate challenges, foster innovation, and enhance organizational performance while prioritizing patient-centered care. By exploring the key components and principles of transformational leadership within Malaysia's pharmaceutical sector, researchers can gain a deeper understanding of how these concepts manifest in a unique cultural and regulatory environment, thus contributing to the advancement of leadership theory and practice in this context.

The objective of this study is to review the relevant literature on transformational leadership and the pharmaceutical industry in Malaysia, highlighting the key components and principles of transformational leadership and their potential applicability in a healthcare setting. Using secondary data from Scopus database the study will present a critical review of the literature and it will attempt to find the literature gap based on the data extracted from Scopus database. The finding of the study will provide a comprehensive overview of the transformational leadership on work performance within the context of the pharmaceutical industry in Malaysia and the study will also contribute to the existing body of knowledge in the field of transformational leadership on work performance in the pharmaceutical industry in Malaysia.

Research on transformational leadership within the pharmaceutical industry in Malaysia, particularly its application in healthcare, holds significant importance for several reasons. Firstly, by reviewing relevant literature, the research can identify effective leadership practices, potentially leading to improvements in leadership styles and strategies within the pharmaceutical sector. Secondly, understanding the key components and principles of transformational leadership can enhance organizational performance by advancing innovation, creativity, and commitment among employees. Thirdly, as the healthcare sector faces various challenges, including evolving patient needs and changing regulatory environments, transformational leadership principles can help leaders navigate these challenges effectively. Additionally, transformational leadership can directly impact patient care outcomes by promoting a culture of patient-centered care and enhancing patient experiences. Moreover, given the cultural context of Malaysia, tailoring leadership practices to this context is essential, making research specific to the region crucial. Furthermore, findings from the research can inform the design of leadership development programs within the pharmaceutical industry, contributing to the cultivation of effective leaders. Lastly, this research adds to the academic understanding of leadership theories and their practical applications in specific industries and contexts.

METHOD

By employing the quantitative method, this study has used secondary data from 1990-2023 based on Scopus database to achieve the objective of this paper by conducting desktop research. Desktop research plays a crucial role in research endeavors due to its cost-effectiveness, time efficiency, and access to a wealth of existing knowledge. This method allows researchers to explore

a broad range of information from academic journals, books, reports, and online databases without the need for resource-intensive primary data collection (Helm et al., 2018). Its significance extends to supporting the exploratory phase of research, aiding in the formulation of research questions, and providing a comprehensive understanding of a given topic. Moreover, desktop research facilitates the cross-validation of findings from primary research, contributing to the overall reliability and validity of a study. Leveraging secondary data from the Scopus database holds immense significance for researchers across disciplines. Renowned for its credibility and reliability, Scopus provides a comprehensive global perspective through its inclusion of high-quality academic journals, conference proceedings, and patents (Baas et al., 2020). The database has a user-friendly interface and advanced search features, allowing for efficient retrieval of relevant articles and time-saving literature reviews. The interdisciplinary nature of Scopus enables scholars to explore connections between diverse fields, fostering a holistic understanding of research topics (Borrego et al., 2014). Ultimately, the use of secondary data from Scopus proves indispensable for researchers seeking reliable, current, and diverse scholarly information. Secondary data from the Scopus database is highly relevant for research on transformational leadership in the pharmaceutical industry in Malaysia. Scopus provides access to a vast collection of scholarly literature, including peer-reviewed journal articles relevant to transformational leadership, the pharmaceutical industry, and healthcare management. Researchers can utilize Scopus to conduct comprehensive literature reviews, identify seminal works, and analyze citation patterns to understand key concepts and research trends in leadership within the Malaysian context. Moreover, Scopus offers bibliometric and quantitative analysis tools, enabling researchers to assess publication trends, citation counts, and collaboration networks related to transformational leadership in the pharmaceutical sector.

RESULTS AND DISCUSSION

Transformational leadership exerts a profound influence on work performance by instilling inspiration and motivation in individuals, propelling them to achieve exceptional results. Characterized by visionary guidance and individualized support, transformational leaders cultivate heightened motivation and engagement among employees, translating into increased job satisfaction. By fostering a positive work environment and encouraging collaboration, these leaders contribute to improved team dynamics and cooperation. Intellectual stimulation promotes creativity and innovation, elevating individual and collective performance. The emphasis on continuous learning and skill development not only enhances individual capabilities but also nurtures future leaders within the organization. Transformational leaders facilitate adaptability and change management, creating a culture open to innovation and evolution. This leadership style has a positive impact on organizational culture, reducing turnover rates, and contributing to a work environment where employees feel valued, motivated, and supported in their personal and professional growth. Ultimately, transformational leadership shapes a high-performance culture that positively influences work performance across various dimensions of organizational functioning. Utilizing data extracted from the Scopus database spanning the temporal interval of 1990 to 2023, Figure 1 delineates the global trend in publications pertaining to transformational leadership's impact on work performance. In 1990, a mere two publications addressed this nexus, a figure that marginally augmented to seven by 1995. Subsequent years witnessed a steady escalation in scholarly

contributions, escalating to 18 publications in 2000 and further surging to 49 in 2005. A noteworthy augmentation occurred in 2010, wherein the volume of research expanded threefold from 49 to 121 publications. In 2015, a continued upward trajectory was observed, culminating in 184 publications. Subsequently, a marked acceleration in scholarly output was evident, with a surge to 282 publications observed during the timeframe spanning 2020 to 2023. Cumulatively, the amassed corpus of publications on the subject of transformational leadership's influence on work performance globally amounted to 663 between 1990 and 2023. This data highlights a discernible and sustained scholarly interest in exploring the interrelation between transformational leadership and work performance over the specified timeframe.



Figure 1. Number of publications on transformational leadership on work performance from 1990-2023

The presented results indicate a discernible and progressive scholarly interest in the relationship between transformational leadership and work performance over the evaluated temporal span of 1990 to 2023. The initial dearth of publications in 1990, with only two addressing this intersection, suggests a nascent exploration of the topic. The subsequent incremental increase in publications by 1995 and the steady escalation in the following years reflect a growing scholarly attention to the subject. The substantial rise in publications in 2010, reaching 121, signifies a noteworthy surge in research activity, potentially indicating an increased recognition of the significance of transformational leadership in influencing work performance. The continued upward trajectory culminating in 663 publications by 2023 underscores the sustained and expanding interest in this research domain globally. The temporal evolution of scholarly output delineated in Figure 1 suggests a maturation of the field, reflecting its prominence and relevance in academic discourse over the specified timeframe.

Transformational leadership in the pharmaceutical industry encompasses a dynamic approach to inspiring and guiding teams toward heightened performance and innovation. Leaders in this sector prioritize a patient-centric ethos, urging teams to align their research and development efforts with genuine patient needs. Emphasizing cross-functional collaboration, they break down silos within organizations, fostering open communication and cooperation between various functional areas. Given the industry's stringent regulatory environment, transformational leaders guide their teams in adapting to evolving regulations, promoting a culture of adaptability and compliance. Ethical leadership is paramount, guiding teams to uphold rigorous ethical standards in research,

clinical trials, and marketing practices. With a global perspective, these leaders navigate international markets and regulatory frameworks. They invest in employee development, recognizing the importance of a skilled and motivated workforce. Embracing a culture of continuous quality improvement, transformational leaders ensure that their organizations maintain the highest standards in research, manufacturing, and distribution processes. Moreover, they acknowledge the significance of corporate social responsibility, guiding pharmaceutical companies to engage responsibly with communities and contribute positively to society. Overall, transformational leadership in the pharmaceutical industry is integral to driving innovation, navigating complexities, and positively impacting both the industry and the broader community.

Utilizing data retrieved from the Scopus database spanning the temporal interval of 1990 to 2023, Figure 2 delineates the global trajectory of publications pertaining to Transformational Leadership in the Pharmaceutical Industry. Notably, during the initial decade from 1990 to 2000, there were no recorded publications on this specific intersection within the examined database. Subsequently, a discernible albeit modest increase was observed, with the number of publications reaching three in 2005. This upward trend was, however, attenuated, as evidenced by a decline to a singular publication in 2010. A subsequent resurgence occurred in 2015, with the number of publications ascending to five. This trend was sustained between 2020 and 2023, with a consistent total of five publications during this latter period. Cumulatively, the amassed corpus of publications pertaining to Transformational Leadership in the Pharmaceutical Industry globally amounted to 14 from 1990 to 2023. This data illustrates the evolving scholarly interest in this specific intersection, indicating a nascent but discernible trajectory of research contributions over the delineated timeframe.

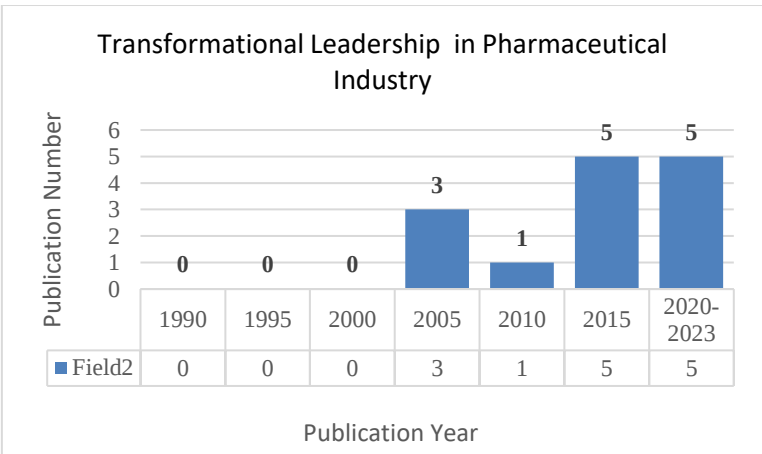


Figure 2. Number of publications on transformational leadership in pharmaceutical industry from 1990-2023

The presented results reveal a distinctive pattern in the scholarly interest regarding Transformational Leadership in the Pharmaceutical Industry over the period from 1990 to 2023. Notably, the absence of recorded publications during the initial decade from 1990 to 2000 suggests a paucity of research attention to this specific intersection within the examined database. Subsequent to this period, there is an observable and modest increase in scholarly contributions, with the number of publications rising to three in 2005. However, this upward trajectory experiences attenuation, as indicated by a decline to a singular publication in 2010. A noteworthy resurgence is

observed in 2015, marked by an increase to five publications, a trend that is sustained between 2020 and 2023, with a consistent total of five publications during this latter period. The cumulative count of 14 publications from 1990 to 2023 suggests a nascent yet discernible trajectory of research contributions, highlighting an evolving scholarly interest in the exploration of Transformational Leadership within the specific context of the pharmaceutical industry. This pattern indicates a potential emerging awareness and recognition of the relevance of transformational leadership principles within the pharmaceutical sector over the examined timeframe.

Transformational leadership in Malaysia epitomizes a leadership style attuned to the nation's rich cultural diversity and dynamic socio-economic landscape. Leaders in this context prioritize cultural sensitivity, recognizing and respecting the multicultural fabric of Malaysian society. Emphasizing adaptability to change, they guide their teams through rapid transformations in the economic and technological spheres. Visionary leadership is a hallmark, as leaders articulate compelling visions aligned with team values and aspirations. Ethical leadership is paramount, reflecting the importance of moral considerations in Malaysian society. Leaders invest in the development of their workforce, providing training and mentorship to nurture individual skills and contribute to organizational success. Fostering a collaborative work culture, transformational leaders break down silos and encourage open communication. Recognizing the significance of corporate social responsibility, they lead their organizations in contributing positively to the community. Innovation and technology adoption are actively encouraged, promoting a culture of creativity and continuous improvement. Inclusive leadership values diverse perspectives, creating an environment where every team member feels heard and valued. Emotional intelligence is a key attribute, contributing to effective communication and conflict resolution. Overall, transformational leadership in Malaysia integrates cultural awareness, adaptability, and ethical conduct to inspire organizational success and individual well-being.

Drawing on data gleaned from the Scopus database spanning the temporal scope of 1990 to 2023, Figure 3 delineates the quantitative evolution of scholarly publications on transformational leadership within the Malaysian context. Notably, during the formative decade from 1990 to 2000, there were no recorded publications germane to this specific focus within the corpus of analyzed literature. Subsequently, a discernible augmentation is observed, with the number of publications escalating to six in 2005, signifying a nascent scholarly interest in the subject. This upward trajectory experiences substantial growth in 2010, culminating in 44 publications, indicative of an expanding research landscape. A sustained progression is evident in 2015, with a further increase to 58 publications, suggesting an enduring scholarly focus. This ascending trend is substantiated in the most recent timeframe from 2020 to 2023, wherein the number of publications on transformational leadership in Malaysia attains 64. Cumulatively, the aggregated corpus of publications pertaining to this subject within the specified timeframe amounts to 172 globally. This empirical evidence underscores a discernible scholarly trajectory and growing research interest in the dynamics of transformational leadership specifically within the Malaysian context over the delineated temporal span.

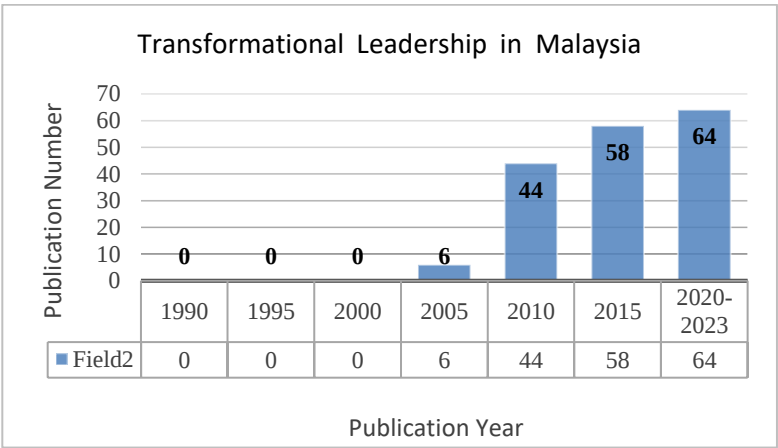


Figure 3. Number of publications on transformational leadership in Malaysia from 1990-2023

The presented findings in Figure 3 elucidate the evolution of scholarly publications on transformational leadership within the Malaysian context, spanning the temporal continuum from 1990 to 2023. Noteworthy is the absence of recorded publications during the inaugural decade from 1990 to 2000, indicating a nascent stage in the exploration of transformational leadership within the Malaysian scholarly landscape. Subsequently, a discernible surge is observed, with six publications in 2005, marking the initiation of a scholarly interest in this subject. This interest gains considerable momentum in 2010, culminating in 44 publications, emblematic of a burgeoning research landscape and a heightened academic focus. The upward trajectory sustains its momentum in 2015, with a further increase to 58 publications, signifying a continued and robust scholarly engagement with the dynamics of transformational leadership in Malaysia. This ascending trend persists in the most recent timeframe from 2020 to 2023, with 64 publications, portraying a sustained and enduring scholarly focus. The cumulative total of 172 publications globally within the specified timeframe underscores the discernible trajectory and the burgeoning research interest in the dynamics of transformational leadership, specifically within the Malaysian context. This empirical evidence reflects an evolving scholarly landscape and a growing acknowledgment of the significance of transformational leadership within the Malaysian academic discourse.

Transformational leadership on work performance in Malaysia embodies a leadership paradigm tailored to the cultural and organizational dynamics of the country. Leaders adopting this style prioritize cultural sensitivity and inclusivity, adapting their practices to the diverse cultural landscape. They articulate a compelling vision for the future, instilling a sense of purpose and direction to motivate teams. Continuous learning and development are integral, with leaders investing in training and mentorship. Adaptability and effective change management are emphasized to navigate Malaysia's dynamic business landscape. Interpersonal communication is paramount, fostering transparency and collaboration. Empowering employees and recognizing individual contributions are key tenets, cultivating commitment and ownership. Ethical leadership is upheld, guiding teams to make morally sound decisions. Stimulating innovation and creativity, leaders encourage employees to contribute novel ideas. Collaboration is promoted through a teamwork-oriented culture, and leaders provide constructive feedback for continuous improvement. In essence, transformational leadership in Malaysia seeks to create a work

environment that nurtures innovation, collaboration, and individual growth, ultimately enhancing overall work performance in the Malaysian context.

Utilizing data extracted from the Scopus database spanning the temporal interval of 1990 to 2023, Figure 4 provides an analysis of scholarly publications concerning transformational leadership's impact on work performance in the Malaysian context. Intriguingly, during the formative period from 1990 to 2005, no publications were recorded on this specific intersection within the corpus of analyzed literature. Subsequent to this period, there is a discernible but limited augmentation, with the number of publications attaining 2 in 2010 and a sustained replication of this count in 2015. Notably, a decrement is observed in the most recent timeframe from 2020 to 2023, with only 1 publication during this interval. Cumulatively, the aggregated corpus of publications pertaining to transformational leadership on work performance in Malaysia from 1990 to 2023 totals 5 globally. This empirical evidence underscores a nascent yet circumscribed scholarly engagement with the interplay of transformational leadership and work performance within the Malaysian context, reflective of a modest research trajectory over the delineated temporal span.

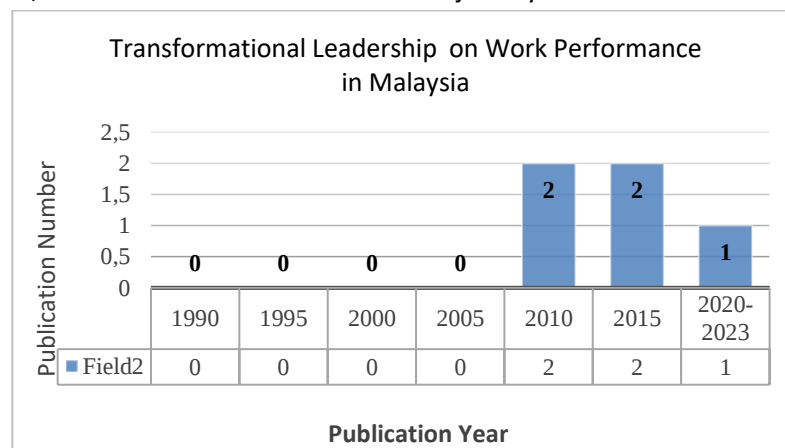


Figure 4. Number of publications on transformational leadership on work performance in Malaysia from 1990-2023

The presented findings, derived from an analysis of scholarly publications on the impact of transformational leadership on work performance in Malaysia using the Scopus database from 1990 to 2023 (Figure 4), reveal an evolving but restrained trajectory of research within this specific intersection. Notably, the absence of recorded publications during the formative period from 1990 to 2005 suggests a lack of scholarly attention to the relationship between transformational leadership and work performance within the Malaysian context during this initial stage. Subsequent to this period, there is a discernible but limited increase in scholarly contributions, with the number of publications reaching 2 in 2010 and maintaining this count in 2015. However, a notable decrement is observed in the most recent timeframe from 2020 to 2023, where only 1 publication is recorded. Cumulatively, the aggregated corpus of 5 publications globally from 1990 to 2023 underscores a nascent yet circumscribed scholarly engagement with the interplay of transformational leadership and work performance within Malaysia. This empirical evidence suggests a modest research trajectory in this domain, indicating a potential area for expanded scholarly exploration and investigation in subsequent periods.

Transformational leadership in the pharmaceutical industry in Malaysia epitomizes a leadership style dedicated to inspiring and propelling individuals within the sector toward elevated performance and innovation. Leaders in this context prioritize a patient-centric approach, aligning research and development endeavors with the healthcare needs of the Malaysian population. Encouraging a culture of collaboration and cross-functional integration, they break down silos and foster cooperation across diverse functions. Ethical conduct and adherence to stringent quality standards are paramount, ensuring the safety and efficacy of pharmaceutical products. Possessing a global perspective, transformational leaders navigate international markets and regulatory frameworks. Investment in employee development, risk management, and adaptability are integral components, fostering a workforce capable of navigating the inherent uncertainties in drug development. Furthermore, these leaders actively engage in corporate social responsibility, contributing positively to the community and promoting sustainable business practices. Embracing a culture of continuous improvement and efficiency, transformational leadership in the Malaysian pharmaceutical industry serves as a catalyst for addressing healthcare challenges and advancing medical solutions within the dynamic and evolving landscape of the nation.

Utilizing data extracted from the Scopus database spanning the temporal interval of 1990 to 2023, Table 1 provides a quantitative analysis of scholarly publications addressing transformational leadership within the pharmaceutical industry in Malaysia. Notably, the tabulated results reveal a conspicuous absence of recorded publications on this specific intersection within the defined timeframe, indicative of a dearth of scholarly contributions to the discourse on transformational leadership within the Malaysian pharmaceutical sector over the delineated temporal span. This empirical evidence underscores the need for further scholarly attention and exploration in this domain, highlighting a notable gap in the extant literature pertaining to the intersection of transformational leadership and the pharmaceutical industry in the Malaysian context.

**Table 1. Number of publications on Transformational Leadership
in Pharmaceutical industry in Malaysia from 1990-2023.**

Transformational Leadership in Pharmaceutical Industry in Malaysia	
Publication year	Publication Number
1990	0
1995	0
2000	0
2005	0
2010	0
2015	0
2020-2023	0

The presented findings in Table 1, derived from an analysis of scholarly publications on transformational leadership within the pharmaceutical industry in Malaysia using the Scopus database from 1990 to 2023, indicate a notable absence of recorded publications within this specific intersection during the specified timeframe. This result suggests that, according to the available data, there has been limited or no academic research or scholarly discourse on the topic of transformational leadership within the context of the pharmaceutical industry in Malaysia. The absence of publications highlights a gap in the existing literature and points to an area where further research and scholarly attention may be warranted. Researchers and academics may find this result valuable as it underscores the need for exploration and investigation into the

dynamics of transformational leadership within the Malaysian pharmaceutical sector, potentially opening avenues for future research and contributing to the knowledge base in this specific domain.

CONCLUSION

In conclusion, the comprehensive analysis of scholarly publications on transformational leadership and its impact on work performance, both globally and within specific contexts, provides valuable insights into the evolving research landscape over the period of 1990 to 2023. Figure 1 illustrates a remarkable and sustained scholarly interest in exploring the interrelation between transformational leadership and work performance globally. The progressive increase in publications, culminating in a substantial surge from 2020 to 2023, signifies the growing significance of this research domain on a global scale. Turning attention to the pharmaceutical industry, Figure 2 highlights a discernible but fluctuating trajectory in scholarly contributions, indicating an evolving scholarly interest in understanding transformational leadership within this sector. In the Malaysian context, Figure 3 demonstrates a noteworthy progression in scholarly publications on transformational leadership, suggesting an increased focus on this leadership style within the Malaysian landscape. However, the results presented in Figure 4 reveal a limited scholarly engagement with the interplay of transformational leadership and work performance in the Malaysian context, indicating a nascent research trajectory within this specific intersection. Table 1 underscores a significant gap in the literature, emphasizing the absence of recorded publications on transformational leadership within the Malaysian pharmaceutical industry. This empirical evidence collectively underscores the need for intensified scholarly attention and further exploration in the domain of transformational leadership, particularly within the Malaysian context and the pharmaceutical industry, to advance our understanding and contribute to the existing body of knowledge in these specific areas. The absence of recorded publications on transformational leadership in the Malaysian pharmaceutical industry emphasizes a critical research need. Recommendations include continued global contributions, nuanced studies in the pharmaceutical sector, in-depth investigations in Malaysia, and prioritized research efforts in the pharmaceutical industry to enrich the existing body of knowledge. Lastly, the absence of recorded publications on transformational leadership within the Malaysian pharmaceutical industry, as indicated by Table 1, underscores a significant research gap. Scholars are recommended to prioritize and dedicate efforts to investigate the leadership dynamics within this specific industry, contributing to the dearth of literature in this area. Based on the research findings the recommendations are; firstly, there's a need to explore prevalent leadership styles within Malaysian pharmaceutical companies, particularly their adoption of transformational leadership principles. Additionally, studies should investigate the direct impact of transformational leadership on organizational performance metrics, contextual factors shaping leadership effectiveness, and its indirect effects on employee well-being and patient outcomes. Furthermore, research should evaluate the effectiveness of leadership development programs tailored to the industry's unique needs and compare leadership practices across different sectors within the Malaysian healthcare system. Future research in the field of transformational leadership in the pharmaceutical industry in Malaysia, scholars should prioritize investigating the practical implications of transformational leadership for organizational performance, employee well-being, and patient outcomes within Malaysian pharmaceutical companies. Additionally, longitudinal

studies could be conducted to explore the long-term effects of transformational leadership interventions on business objectives and employee engagement in this dynamic and highly regulated industry. Qualitative research methods such as interviews and case studies could complement quantitative analyses, providing a understanding of the contextual factors influencing the effectiveness of transformational leadership practices. Furthermore, comparative studies across different regions or sectors within the Malaysian healthcare system could shed light on the generalizability of findings and inform evidence-based leadership development programs tailored to the unique needs of the pharmaceutical industry.

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