

# Dissertation chapters sample

## **CHAPTER FIVE – DISCUSSION**



## **5.1 Introduction**

The key purpose of this chapter is to interpret and describe the importance of the study findings in the light of the existing theories and concepts of leadership styles and their impact on innovation culture and patient safety culture. The findings of the study are used in this chapter to discuss emerging concepts and insights that can be adopted to improve leadership styles and hence innovation and patient safety cultures in health care system. The discussion allows exploration of the underlying meanings of these study findings and its possible implications on theory and practices. It also provides insights for possible improvements, which can be made for further development and improvement of leadership styles of management in the healthcare facilities of the United Arab Emirates. These include implications on the policy making for better leadership styles that facilitate innovation culture and patient safety culture. The chapter also draws from the research findings to explain the study limitations and the need for future research in this context.

## **5.2 Discussion of Major Findings**

The cross-validation and comparison between self-assessment and employee assessment data revealed that self-assessment provided somewhat higher predictive power of all the three leadership styles on innovation culture and patient safety culture than employee assessment data. Although both manager and employee data were consistent in terms of the direction of the impact of leadership styles on innovation and patient safety culture, the results also revealed that data sets differ in terms of strength of effects revealing differences in evaluation between oneself versus others. This finding is consistent with insights from literature that leaders tend to see themselves more capable in terms of their ability to influence the firm culture (i.e., innovation and patient safety cultures in the case of this dissertation) than their actual capacity is because of a self-serving bias (Wieseke et al. 2011). According to Latkin et al. (2016), self-serving bias among leaders is motivated by the need to retain social desirability and self-righteousness. Thus, leaders tend to inflate ratings of their leadership behaviour more than their subordinates would do. Employees evaluate their superior's actual leadership behaviour based on what they see and visualize (Wieseke et al., 2011). In contrast, managers tend to see themselves as more motivating and convincing and inspiring than they are which is the reason why leaders' self-perception (so called identity) differs from perceptions by others (so called image). Therefore, interestingly, there is, partially, an identity-image gap leading to differences in evaluation of leadership impact on innovation and patient safety cultures between self-assessment and employee assessment.

Years of operation and size of the hospital in many instances are among the key drivers of the adopted leadership style and its impact on the innovation culture and patient safety culture. According to Parmelli et al. (2011), explosive experience in innovation and patient safety in healthcare sector is most of the times attained after several years of services. The size and age of hospitals determined the level of knowledge, relationship, and adoption of innovation culture and patient safety culture, which is alluded to experience in the healthcare sector among older hospitals (Parmelli et al., 2011). According Giancotti et al. (2017), bigger hospitals have bigger economies of scale due to considerable more resources, which facilitate their efficient management. Therefore, they have distinct departments. Due to the smaller size, Shaam Hospital D combines different departments under single management to utilize the available human resources in the management of its activities.

### **5.3.1 The Dominant Types of Leadership Styles in the Health Care System**

The first three hypotheses of the study were tested to investigate the dominant leadership styles in the health care system of the United Arab Emirates. The data from the employees' sample showed that collaborative leadership was the most dominant followed by transformational and transactional in the UAE health care system respectively. One of the reasons linked to the dominance of the collaborative leadership style is its promotion of shared responsibilities among managers and subordinate employees (Lawrence, 2017) towards implementing organizational policies, practices, and culture. The interdependence of managers and employees through shared responsibility leads to mutual respect and understanding, effective coordination, and motivation to perform. This means the managers and employees share the same vision and values, which is essential in supporting safety, trust, and commitment in achieving innovation and patient safety cultures (Rabinowitz, 2011). Collaborative leadership allows for the combination of both talents, skills, and strengths (Telford, 2010), which is essential in devising and adopting better practices for innovation and patient safety to improve healthcare outcomes. This explains why collaborative leadership style scored highest among the respondents despite the fact that in practice, most core health management functions are transactional.

A further insight reveals that all three leadership styles studied are actually commonly used in the healthcare contexts of the study. However, the finding revealed that the hospital with the highest score for transformational leadership also has the highest score for transactional leadership is surprising.

While exploring the benefits and limitations of using transactional leadership style in healthcare settings, Richard (2020) suggests that the style is useful in meeting short-terms goals and completion of activities, but it should be combined with other leadership styles for maximum effectiveness in the long run. Thus, combining transactional and transformational leadership styles in the studied hospitals was meant to ensure daily operations of the hospitals while implementing transformative policies to address emerging and future challenges.

The ANOVA test with post hoc analysis of the manager's original job and the mean score on their leadership style showed no meaningful difference in transformational leadership scores among doctors, nurses, and administrators. Although not the dominant leadership styles in this study context, the literature reviewed showed that transformational leadership is a suitable leadership style when changes for continuous improvement of innovation and patient safety culture must be made (Meuser et al., 2016; Sfantou et al., 2017; Afzal et al., 2016), which is why leaders from different professional backgrounds find this style equally suitable for change, improvement, and development into the future. In the UAE, the healthcare sector has undergone tremendous changes in its innovation and patient safety culture to improve effectiveness (Abuhejleh et al., 2016). According to Sfantou et al. (2017), regional health services continue to reform their roles and objectives to achieve socio-economic improvement. Cope and Murray (2017) revealed that leaders from different departments equally implement transformational leadership to support other leadership styles such as collaborative style to realize innovation culture, while Niphadkar and Kuhil (2017) assert that transformational leadership is fitting in healthcare management. Although collaborative leadership is dominant, implementing it together with transformational leadership in the study contexts

The results also revealed that managers among physicians had the highest mean transactional score compared to other groups and the difference is highly significant statistically. This can be explained by the very meaning of transactional leadership and its influence on the roles of a physician. According to Orchard et al. (2017), doctors are specialists in the healthcare systems as compared to nurses and administrators and their roles are strictly guided by certain rules to achieve specific patient outcomes. Thus, physician managers tend to favor transactional leadership because it focuses on completing specific tasks to achieve specific objectives successfully. Although there is no significant difference of collaborative mean scores and transactional scores, doctors score the highest in collaborative leadership style.

Doctors often rely on the medical information from other departments to make informed healthcare decisions and services (Orchard et al., 2017). This may influence them to prefer collaborative leadership style because of the interdependence and coordination among different employees and departments to achieve specific goals (Lawrence, 2017; Njenga, 2018; Chen et al., 2007; and Atchison et al., 2001). Doctor Managers scored higher on collaborative leadership style compared to nurse managers and administration managers because they might believe that combining it with transactional leadership as Richards (2020) suggests would lead to better outcomes which again explains the non-significant difference between transactional and collaborative leadership among doctors.

### 5.3.2 The impact of leadership styles on innovation culture

The results for the four hospitals clearly show that adopting the right leadership style matters for effectively shaping the innovation culture practices among employees and managers. Strikingly, the results show that only collaborative leadership style significantly contributes to enhancing innovation culture while the effects of transformational leadership and transactional leadership styles are insignificant. Collaborative leadership style plays a key role in shaping the innovation culture in UAE hospitals (El Amouri and O'Neill, 2015) which aligns well with the adoption of collaborative leadership as the dominant style in the examined hospitals. The adoption of collaborative leadership in healthcare systems brings different employees on board to assist in developing innovative policies and processes together. Almaskari and Marni (2020) suggest the adoption of collaborative leadership in the UAE healthcare for fostering employees to learn how to make decisions based on problems they address, and improve their problem-solving skills so that they can help in implementing required changes in hospitals.

Collaborative leadership facilitates understanding of different cultures, which promotes an integrated and interdependent innovative culture that accommodates diverse employees in the healthcare sector (Manion 2005). Collaborative leadership allows for the development of innovative practices that are fit for culturally diverse employees working in the same environment (O'Léary et al. 2009). As a result, employees in the UAE healthcare sector are likely to prefer collaborative leadership style over transformational and transactional leadership styles (Almaskari and Marni, 2020) as in the UAE local and foreign healthcare professionals often work in the same departments within a healthcare organisation.

Based on the results for innovation culture dimensions, different hospitals adopt these dimensions differently given the significant mean differences. The two new ABOH A and Shaam Hospital D, recorded the highest mean scores for the knowledge and relationship dimensions of innovation culture. In hospitals that are yet to grow to their full capacity, knowledge in innovation paired with a dominant collaborative leadership is effective in devising innovative strategies, policies, and processes to stimulate their development and growth (DeWitt 2016). IBHOHOGH B has the lowest mean scores in both knowledge and relationship dimensions followed by Saqr Hospital C. Since they are the largest and the oldest hospitals, the age of the leaders and years of experience in leadership may influence their willingness and capability to absorb new knowledge and relationship skills in the emerging and hence highly dynamic healthcare environment (Wise and Valliere, 2014). As a result, they tend to use the conventional means without or with limited new knowledge or strategies to improve relationships and interdependence among key employees. This is opposed to new hospitals that tend to create new knowledge, strategies, and policies to gain competitive advantage (Trinh, 2020). Despite the insignificant “stand-alone” effect of the transactional leadership style on innovation culture, it has to be noted that it might be capable in encouraging innovation culture if combined with other leadership styles (Richards, 2020). Transactional leadership has been shown to be successful in guiding and motivating people to execute their assigned duties expertly, thereby reducing the degree of error (Asiri et al., 2016; Fletcher et al. 2019; and Meuser et al., 2016).

### 5.3.3 The Impact of Leadership Styles on Patient Safety Culture

The results on the impact of the three different leadership styles on patient safety culture also indicates that not all leadership styles contribute to shaping patient safety culture. Among the three leadership styles, only transformational leadership had a statistically significant contribution to patient safety culture which however is lower compared to the impact on innovation culture. The results are in line with Sfantou et al. (2017)’s claim that transformational leadership leads to the development of an organizational culture that provides high quality healthcare. Furthermore, the results confirm Asif et al.’s (2019) suggestion that transformational leadership helps to improve the operational environment leading to improved patient safety. The results are also consistent with Niphadkar and Kuhil (2017) who found significant impact of transformational leadership on the effectiveness of patient safety culture. Efficiency in providing patient safety during and after healthcare delivery is a significant determinant of effective healthcare services.



The regression model also reveals that tenure in the current leadership position influences patient safety culture. The results shows that the number of years that one took in the leadership position determines the dominance and influence of their leadership style for realizing patient safety culture as perceived among employees.

The relatively weak impact of leadership on patient safety culture among the four hospitals is also reflected in the statistically insignificant differences in mean scores for seven out of the eight dimensions of patient safety culture. The only dimension that exhibits a significant difference between ABOH A and IBHOHOGH B was the frequency of reporting events. It is important to recall that ABOH A is the newest and smallest while IBHOHOGH B is the oldest and largest among the four. Considering the difference in size and number of patients they deal with on a daily basis, their mode of reporting must differ because of differences in dynamics, scope, and numbers of patients who need health care services. A culture of event reporting entails shared values, principles, and beliefs (Anderson et al., 2013), which are often instilled from the beginning. That is why transformational leadership tends to create the culture of reporting events to improve patient safety for small healthcare facilities such as ABOH A. Vifladt et al. (2013) elucidate strict conditions of reporting systems that must be implemented from the onset, especially for the new small-sized hospitals, to achieve effective incident reporting and a patient safety culture that realigns with patient needs. The lower mean of the number of reported events can be linked to lower non-punitive responses to patient safety issues in the four hospitals compared to other patient safety culture dimensions. According to Boyle and Mervyn (2019), lower non-punitive response means employees are not encouraged well to practice patient safety in the organization.

The results revealed that transactional leadership does not support patient safety culture in the healthcare sector. The reason behind this observation can be understood from Meuser et al. (2016)'s perspective emphasizing that under transactional leadership, people may act to avoid redress. Therefore, the presumption is that transactional leaders would want their followers to execute delegated activities and work by the establishment of enticement and punishment systems to accomplish their tasks correctly and hence help in achieving organizational objectives. According to Northouse (2016), the ever-changing and dynamic global systems create a stiff competitive environment that cannot be overcome if the healthcare sector implements a strict traditional framework and structure of operations under transactional leadership.

## **5.2 Limitations of the Study**

This study has comprehensively covered leadership styles and their impact on innovation culture and patient safety culture in UAE healthcare facilities by following a quantitative research strategy adopting inferential statistical analysis of the data collected from employees and managers of different departments in four healthcare facilities. However, the research has limitations and challenges that may be considered in the future study studies of the same or related topic.

### **5.4.1 Limitation of Research Scope**

This study was limited to the healthcare system context specifically for the United Arab Emirates' Ministry of Health and Prevention. Moreover, within the healthcare system, the study only surveyed four hospitals in one shared demographic area, which might limit its ability to reflect on the impact of leadership style on innovation and patient safety cultures nationally. The four hospitals may not effectively represent all hospitals and healthcare facilities in the UAE.

### **5.4.2 Limitation of Methodology**

The study was based on a quantitative research design, which involved the collection of numerical data and analysis of the data using statistical techniques to make general inferences regarding the impact of leadership on innovation culture and patient safety culture without considering qualitative approaches or mixed-method research design. The data collected was also limited by the sample size of participants who were surveyed. The limited data size may lead to constraint reliability of the results obtained from the statistical analysis.

### **5.4.3 Limitation of Data Access**

Being individual research, there were limited resources used to collect the data for the study purposes, which is why using the results to make general inferences for the UAE's entire healthcare system must be done cautiously.

### **5.4.4 Limitation of Data Collection due to COVID-19**

The COVID-19 pandemic is a world problem that restricts movement and social interactions among people. This limited physical interaction between researcher and respondents, leading to the use of a digital survey, might have compromised data collection as verbal explanation to participants about filling the questionnaire were not possible. Furthermore, managers and employees are struggling to treat COVID-19 patients and this might have affected the time they took to complete the questionnaire and the entire process of data collection.

#### 5.4.5 Limitation of Number of Leadership Styles Studied

From a theoretical perspective, there are 13 leadership styles that are proposed in the literature in different settings; depending on the circumstances they may lead to better results for innovation and patient safety culture. However, this study focused on three leadership styles which are the most established and most prevalent in literature. Other leadership styles such as autocratic, bureaucratic, coaching, democratic, laissez-faire, emergent, pacesetter, servant, strategic and visionary leadership styles have not been investigated. Although these leadership styles have been adopted in practice, some could be similar to the healthcare systems like the one invested in this study. Therefore, it might be unfitting to give an absolute conclusion that collaborative and transformational leadership styles are more effective and therefore most suitable in improving innovation and patient safety cultures. It can therefore be concluded that many different leadership styles are required in different settings, or at different phases in the same setting according to the contingency theory.



## **6 CONCLUSIONS AND RECOMMENDATIONS**

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## **6.1 Conclusions**

The primary objective of this study was to investigate the impact of leadership style on innovation culture and patient safety culture. Data collected from four hospitals under the MoHaP was used to conduct analysis using regression models and ANOVA tests with post hoc analysis. The results showed that collaborative leadership style had a significant impact on innovation culture adopted in the hospitals. This led to the conclusion that collaborative leadership encourages innovative culture because of instilling interdependence among employees, shared responsibility, and mutual respect, which motivates people from diverse cultures to combine their skills, talents, and strengths in achieving the innovation goals of those healthcare facilities. Looking at the innovation culture dimensions, the results revealed that knowledge and relationships were significantly higher in new hospitals than in old hospitals. This was related to the age and experience of collaborative leaders that are key determinants for facilitating the model of shared responsibility, interdependence, and mutual respect that motivate employees to be innovative.

The study also revealed that transformational leadership had a meaningful impact on patient safety culture. Transformational leadership initiates changes through creative ideas to shape the future success and growth of young healthcare facilities in terms of patient safety culture. On the other hand, transactional leadership tends to promote a symbiotic relationship between managers and workers under the chain of command structure, which many studies believe impairs creativity, innovation, and the ability to develop new ideas (Richards, 2020; Northouse, 2016). Thus, policymakers might develop policies and legal frameworks that promote the use of collaborative, transformational and transactional leadership styles in hospitals within UAE's MoHaP to encourage effective completion of tasks under the influence of interdependence, shared vision and values, and development of new ideas for growth of the healthcare system.

## **6.1 Implications**

### **6.2.1 Implications for Theory**

Theories of leadership styles provide explanations on the reasons why certain people rise to leadership positions. These theories focus on the key characters and behaviours that are befitting for a given leadership style and therefore can be adopted to increase leadership capacity based on the principles of specific leadership styles (WGU, 2020).

Some of the top traits that are recommended for good leaders are strong ethics and high moral standards, great self-organizational skills, efficient and continuous learning habit, ability to nurture growth of employees, fostering connect and the sense of belonging for all subordinates.

The analysis of the data shows a trend in which collaborative leadership style tends to have a greater influence on the innovative culture within the healthcare system while transformational leadership tends to have a significant impact on the patient safety culture. However, transactional leadership style revealed insignificant influence on both innovation culture and patient safety culture. These results have theoretical implications when dealing with the theories of leadership. The reason why collaborative leadership has a strong influence on innovation culture can be linked to its aspects of shared vision and values through shared responsibility, mutual respect, and interdependence of the employees (Atchison et al. 2001). Innovation in organizations, including healthcare organizations, is achievable when each worker is given the opportunity to contribute irrespective of their rank in the organization. As demonstrated by Telford (2010), these features allow for the accumulation of skills and strength leading to the development of new ideas in the organization that lead to innovative culture. The concept of shared vision and values is the main reason why organizations adopt collaborative leadership. It motivates employees because it makes them feel a sense of belonging in the organization through their contributions.

Transformational leadership style had a significant influence on the patient safety culture and was adopted more in new and small-sized hospitals than old and large ones. From a theoretical perspective, transformational leadership tends to encourage, inspire and motivate employees to create change that will help the organization to grow and shape its future success. This explains why young and new organizations adopt transformational leadership skills more strongly to create changes through new ideas to shape their competitiveness among the established organizations in the industry (Nanjundeswaraswamy and Swamy, 2014). The same pattern is witnessed in this study whereby ABOH A, which is the newest and the smallest among the four hospitals, scores highest in adopting transformational leadership.

Transactional leadership, however, did not have a significant influence on both innovation culture and patient safety culture in the healthcare system of the UAE. The results are an indication that leaders in the UAE healthcare system do not prefer transactional leadership style.

From theoretical perspective, transactional leaders give their followers what they want in exchange for services, which according to Meuser et al. (2016) means followers will only work to avoid redress rather than working to achieve the common goal. It does not encourage self-motivation of employees, because of a structured system that operates through instructions and monitoring of employees as they do their tasks (Meuser et al. 2016). Thus, what matters is whether the employees follow the instruction of the leaders rather than being creative or using personal skills to deal with emerging issues, especially those related to patient safety, while on duty. Although transactional leadership does not support innovation culture or patient safety culture, Fletcher et al. (2019) support it by arguing that it has also been successful in guiding and motivating people to execute their assigned duties professionally and hence reducing the level of error.

### 6.2.2 Implications for Practice

Leadership style plays a crucial practical role in realizing the key goals of an organization and assist in creating specific cultures of operations that will shape the future success and growth of an organization (Chen et al. 2012). Therefore, the style of leadership adopted in an organization such as hospitals must be well-articulated to ensure they will spearhead operations of those health care facilities in the right direction. Based on this study, collaborative leadership is valuable for hospitals that focus on developing strong background of innovation culture. Due to shared vision and value as well as a shared responsibility, mutual respect, and interdependence, all employees are encouraged to contribute based on their skills and strength towards achieving the organizational goals (Eisenbeib and Boerner, 2010). The collaborative leadership approach brings in new concepts and ideas that can be adopted by leaders to create innovative culture of health care delivery. In contrast, for creating changes in the patient safety practices to improve patient care outcomes, managers should adopt collaborative leadership skills while transformational leadership skills should be adopted to improve innovative ideas (Ulrich, 2017).

However, transactional leadership should not be encouraged because the reciprocal leader-follower relationship could lead to a symbiotic kind of engagement that might attract employees who only complete their tasks to achieve the desired economic incentives and to avoid punishment by leaders but lack intrinsic motivation (Meuser et al., 2016). Furthermore, since transactional leadership mainly focuses on rewards and punishments based on the outcome of the task completed, Mkheimer (2018) suggests it would make employees hesitant to report errors that because they fear it might implicate them, leading to reduced patient safety culture.

This might be detrimental in managing patient safety in a hospital. It also impairs the creativity of healthcare workers because the chain of commands inspires them to do what they are told rather than doing the right thing at the right time.

Although not studied in the context of this dissertation, agile leadership might also be aligned with innovation and safety culture in health care as it addresses emerging challenges that must be accepted and adopted as part of improvement of services (Crotty et al., 2019). The agile principles focus on individuals and interactions rather than processes and tools, working software instead of comprehensive documentation, customer collaboration rather than contract negotiation, and responding to change instead of following traditional plans (Crotty et al., 2019). Hence, when combining collaborative leadership and transformational leadership with these four principles, it could be even more effective in developing innovation and patient safety in healthcare sector with.

Good leaders tend to possess a combination of various leadership attributes, including but not limited to creativity, motivation, vision, and empathy. However, the most successful leaders are able to adapt to the needs of different situations, employing their diverse set of leadership skills in order to achieve organizational goals. Furthermore, ability of the leaders to understand different types of leadership styles can make them better leaders in managing both diverse context and dealing with emerging challenges that are inevitable in the modern technology driven environment (Richards, 2020; Kristensen et al., 2016). Different leadership styles produce different results, and that is why certain people are suited to specific styles of leadership. Leaders need diverse skills drawn from different leadership styles to be able to deal with multifaceted environments.

### 6.2.3 Implications for Policy Makers

The results of this study may inspire policymakers to develop new policies that will improve innovation culture and patient safety culture in the healthcare system of the United Arab Emirates. At a first glance, it might be appealing for policymakers to encourage transactional leadership as it is a task-oriented leadership style that uses rewards to motivate followers to achieve the organizational goals (Ledlow and Coppola, 2014). Consequently, adopting it could positively influence the satisfaction levels of employees as a motivational factor. Transactional leadership style is effective where haste decisions are necessary, especially during medical crises such as the current Covid-19 pandemic (Warraich et al., 2020).

However, as a major drawback, transactional leadership style may have negative effects on patient outcomes due to hasty decisions because of possible reinforcement of task-based behaviours among healthcare professional rather than provision of holistic care services to patients (Murray et al., 2018). The nature of the leader-follower relationship associated with transactional leadership style is undesirable in the ever-changing socioeconomic dynamics of the world and stiff competition (Northouse, 2016).

Thus, if policymakers favor transactional leadership, they should consider by combining with those leadership styles that are potent in fostering innovation and patient safety, namely collaborative and transformational leadership styles. Promoting these leadership skills through policy and legislative framework in the UAE will encourage innovative development of skills and technology needed to improve healthcare services and patient safety outcomes in the country. Policies should trigger coordinated engagement and interdependence of departments within the ministries and within hospitals to work towards delivering superior health services. In addition, all healthcare facilities need to make comprehensive assessments in both managers' self-perception and employee perceptions of their managers, and determine which leadership styles are dominant in terms of their impact on innovation and patients safety cultures (Warraich et al., 2020; Richards, 2020). Such assessment will help each healthcare facility to understand how managers help in achieving innovation culture and patient safety culture and therefore, this will lead to the improvement of the overall health care system.

### **6.3 Recommendations for Future Research**

Subject to the limitations identified above, this study makes the following key recommendations for future research in this field to complement the results of this dissertation.

First, the scope of future studies in this context must be enlarged. In this regard, future studies should draw larger samples from different hospitals across the UAE rather than focusing on few hospitals. That scope will lead to the collection of large data whose analysis can be sufficiently used to make general inferences for policymakers to improve innovation and patient safety culture in the healthcare sector.

Second, future studies should use a mixed-methods approach including both qualitative and quantitative methods in data collection and analysis.

The mixed-methods approach was adopted to many study designs such as randomized studies or observation studies, which give the research room to collect more textual and numerical data for comprehensive analysis using both qualitative and quantitative methods and interpretation of the results.

Third, future studies should consider conducting both physical and digital surveys when the impact of the COVID-19 pandemic on social interactions reduces. Important are studies of outcomes of leadership practices such as evaluation of MOHAP innovation labs to achieve a data triangulation approach. This will allow for the collection of data from health facilities that can be reached physically and those that cannot be reached within the study timeframe through the digital survey. The approach will lead to the collection of large data from many different healthcare facilities, thus improving its reliability and hence the credibility of the analysis results.



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