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Competencies for Successful Middle Managers in Healthcare and Medical Education

Ahmed Al Ansari
Antioch University - PhD Program in Leadership and Change

COMPETENCIES FOR SUCCESSFUL MIDDLE MANAGERS IN HEALTHCARE AND MEDICAL EDUCATION

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Ahmed Al Ansari

ORCID Scholar No. 0000-0001-7229-2960

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This dissertation, by Ahmed Al Ansari, has
been approved by the committee members signed below
who recommend that it be accepted by the faculty of
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Dissertation Committee:

Elizabeth Holloway, PhD, Chairperson

Beth Mabry, PhD

Reginald Sequeira, PhD

ABSTRACT

COMPETENCIES FOR SUCCESSFUL MIDDLE MANAGERS
IN HEALTHCARE AND MEDICAL EDUCATION

Ahmed Al Ansari

Graduate School of Leadership & Change

Yellow Springs, OH

The Kingdom of Saudi Arabia (KSA) and Kingdom of Bahrain (KB) are currently in the process of rapid transformation of health care to a self-sustained autonomous system. Middle managers (MM) play a pivotal role in achieving this goal. The aim of this study is to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of MM in KSA and KB. Zhou's (2019) conceptual framework using a mixed method approach was followed. After procuring ethical clearance from concerned authorities and informed consent from all the participants (n = 27), semi-structured interviews were conducted across three groups: Top Management (TM), MM, and Lower Management (LM) for creation of items for the scale, which were later approved by five experts. Two hundred two participants from medical education (ME) and health care (HC) responded to the new scale. Cronbach's alpha and exploratory and confirmatory factor analysis were performed to confirm internal consistency and validity. The model fit was adequate with a good GFI (0.90), TLI (0.96), and RMSEA (0.06). Seven major themes emerged from thematic analysis, while a structural model with three inter-related constructs—"professionalism and problem solving," "team management and adaptation," and "time management and expertise" were recognized based on factor analysis. Both TM and LM identified the ability to motivate (70.8%) as comprising one of the most significant characteristics for MM. TM also indicated that concern and consideration of

subordinates (68.8%) was important. LM considered being active (71.6%) as important for MM. Interestingly, MM had scored these attributes lower, illustrating the different ways in which MM is perceived across the three levels of management. Importantly, MM acknowledged concern for employee well-being, relationship, communication, and being active as crucial competences, representing a mix of all competences identified by the three levels of management.

The "Leadership and Managerial Competency Scale for Middle Managers in Gulf Region (LMCS-MM Gulf Region)" developed under this study reflects what people in the three levels of management (lower, middle, and top) across ME and HC value in a (hypothetical) middle manager. This scale has several implications in selection, training, and appraisal of MM in ME and HC. This dissertation is available in open access at AURA (https://aura.antioch.edu) and OhioLINK ETD Center (https://etd.ohiolink.edu).

Keywords: leadership, managerial competency, medical education, health care, management, middle management, lower management, scale development, middle managers

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CHAPTER I: INTRODUCTION

Health Care Transformation in the Gulf Region

Globally, the healthcare sector is experiencing a significant transformation resulting in revolution of health care delivery. Reforms in the British National Health Service in the 1990s, transformation of the Dutch system between 1987 and 2006 (Tuohy, 2011), community glucose monitoring in Mexico, modernizing of Saudi Arabia's health system, the introduction of mobile-based health monitoring in India, and the Smart Nation initiative by Singapore are a few examples of transformations in health care (Healthcare-transformation, 2019). Similarly, the Gulf region is in need of rapid transformation in areas of communicable disease control, rising elderly population, socioeconomic reforms, liberal urbanization, and changes in lifestyle which reflect on health determinants of its population (Khogali, 2005). The Gulf region usually refers to a cultural area without precise borders. Several terminologies such as "Middle East," "Near East," "Middle East–North Africa (MENA)," "Southwest Asia," "Greater Middle East," "Levant," and "Arabian Peninsula" have been used to denote this region. This region is very heterogonous, and the health indicators vary significantly with infant mortality rate (IMR) ranging from 11 to 69 per 1000 live births per year and life expectancy ranging from 57 to 77 years (Khogali, 2005). The primary challenge facing the Gulf region is underperformance of the healthcare system, partly attributed to several factors like inadequate governance, incompetency of public-sector healthcare delivery, conflicting ideas, and lack of innovation in primary healthcare (Khogali, 2005).

For this study, the scope of the Gulf region is restricted to two countries, namely the Kingdom of Saudi Arabia and the Kingdom of Bahrain. Both countries are kingdoms with a monarchy form of administration. Healthcare in the Kingdom of Saudi Arabia and the Kingdom

of Bahrain is currently passing through the stage of transformation from a government system to a more self-sustained autonomous system (Albejaidi, 2010; Khogali, 2005). The magnitude and complexity of this healthcare transformation cannot be overstated. This ambitious goal requires leadership at all levels of management, especially middle management which is vital for effective planning and operative implementation (Raes et al., 2011).

This study proposes to engage in the preliminary research steps to design a scale that will identify the competencies needed by middle managers in healthcare in the Gulf region, specifically the Kingdoms of Bahrain and Saudi Arabia.

The Importance of Selecting Middle Managers

As healthcare organizations grapple to maximize resources and capabilities to achieve desired goals, the role of middle managers—"employees who are supervised by an organization's top managers and who supervise frontline employees," have emerged as a critical factor (Urquhart et al., 2018, p. 414). Middle managers play a key role in implementing healthcare innovation, particularly by addressing the informational gaps between senior management and frontline clinicians in four different ways: (a) diffusing information, (b) synthesizing information, (c) mediating between strategy and day-to-day activities, and (d) selling innovation implementation (Birken et al., 2012).

During the stage of rapid transformation of the healthcare systems of Gulf countries, it is important to implement an effective selection method for middle managers. The transition from governmental support in healthcare towards autonomous healthcare necessitates the use of a different selection approach for middle managers (Tinline & Cooper, 2016). It is important to stress that one of the primary responsibilities of middle managers is to interpret properly the strategy set by top-level management. Once they improve their understanding of this strategy,

middle managers will be able to act upon the specified strategic objectives. Thus, middle managers need to be able to explain their interpretation of particular policies and strategies (Sheikh et al., 2019). Providing relevant examples is an inseparable part of illustrating middle managers' competence in addressing complex situations in the workplace.

In the context of the Gulf region, which is at a stage of significant healthcare transformation, another important objective in the selection of middle managers is to ensure that they develop and implement a wide range of strategic activities. These managers need to determine the most appropriate way in which an initiative or management strategy should be executed (Tinline & Cooper, 2016). Despite the active involvement of senior managers in this process, middle managers are expected to engage staff and develop reasonable deadlines for meeting project objectives. Being responsive and flexible to the needs of team members is an essential quality that middle managers need to achieve the goals of the leadership.

Across the globe, the leadership roles in healthcare at all levels are delivered by both physicians and non-physician managers (Goodall, 2011). The Accreditation Council for Graduate Medical Education (ACGME) and Canada's CanMEDS physician competency framework mandate that all doctors should be competent to demonstrate the ability to work as a team member, leader, or manager of a healthcare team (Clyne et al., 2015). Accordingly, researchers have documented that healthcare systems typically encompass several leaders at the top and middle management from diverse professional groups, including physicians and non-physicians, whose behaviors are supported or limited by their cultural, political, or organizational contexts (Nzinga et al., 2018).

Hence, the selection method for middle managers in Gulf countries needs to be constantly updated to reflect the current needs of all stakeholders of healthcare systems. Therefore, it is

fundamental to revise the selection method by taking into consideration the ability of middle managers to supervise junior employees and allocate resources efficiently (Tinline & Cooper, 2016). An essential task of middle managers is to manage effectively junior employees by assigning them tasks and supervising them to evaluate different aspects of their performance. Thus, in selecting competent middle managers, it is crucial to have examples of how they have managed employees in the past (Meo et al., 2015) and how well they understand the factors to be considered while resourcing personnel to various projects.

Furthermore, an integral part of the new selection method for middle managers in the Gulf region should be the ability of these managers to motivate employees and encourage cooperation. It is the responsibility of middle managers to identify specific challenges and try their best to resolve them with the resources available (Kehoe, 1999). Employees can be effectively motivated with incentives, positive reinforcement, and by regularly providing them with honest and constructive feedback. Thus, middle managers are responsible for maintaining open lines of communication, which will help staff stay on task and carry out what is expected of them.

Middle managers also should be able to manage up and out throughout the organization. This means that the process of managing up is quite important for middle managers. In other words, they tend to be extensively involved in the daily functioning of the organization as they need to provide feedback to senior managers about the progress of different projects (Sheikh et al., 2019). At the same time, middle managers should be competent enough to propose creative solutions to emerging problems in the workplace, rather than being indecisive of how to react under particular circumstances. The ability of middle managers to resolve problems can additionally motivate junior employees to improve their performance over time.

Previous Method of Selection of Middle Managers in the Gulf Region

The previous method of selection of middle managers in the Gulf region was based on certain criteria. It was common to use numerous recruitment agencies simultaneously to expand the pool of candidates. The specificity of the selection method is described in the following manner: when the selection process is narrowed down, Human Resource (HR) directors are focused on reviewing the recommendations of the organization (Kehoe, 1999). In turn, HR directors make a shortlist of suitable candidates for middle management positions. The final stage of the selection process is identified as the interview in which individuals have an opportunity to share their insights about their strengths and weaknesses as managers (Tinline & Cooper, 2016). Although the self-assessment of candidates is taken into consideration, recommendations from former employers result in a more valid criterion for selecting the candidates.

From the perspective of the criteria used for the selection of middle managers in the Gulf region, significant attention is paid to the ability of managers to delegate work and supervise their direct reports. Managers frequently report the challenge of overseeing others and monitoring their work (Kehoe, 1999). However, this challenge may not be properly identified during a selection process that relies primarily on interviewing the candidate. As mentioned, the selection method for middle managers should be persistently updated considering the evolving role of middle management in the dynamic context of healthcare in the Gulf region (Meo et al., 2015). It is expected that a new selection approach would be more agile and flexible in the sense of corresponding to the needs of middle managers in today's healthcare workforce.

Due to the fact that there were no structured guidelines comprising of certain criteria as a foundation to be used for middle managers in the Gulf region, HR directors primarily considered

recommendations given for the candidate. This approach is a reflection of the collectivistic culture that is dominant in most Gulf countries; greater trust is manifested toward candidates recommended by certain authorities or important figures (Sheikh et al., 2019). The cultural aspect incorporated into the selection process implies that conforming to specific social and group beliefs and norms was preferred over candidates' merits for middle management positions. Yet as the healthcare sector in Gulf countries is in a stage of rapid transformation, managers must be chosen based on their management skills due to increased need for greater flexibility, transparency, and innovation in organization structures and leadership (Tinline & Cooper, 2016). This study hopes to contribute to the selection process for a successful healthcare middle manager by developing a competency scale that can be administered to potential candidates. It is first, however, critical to examine the characteristics and state of healthcare systems and medical education in the Gulf region as a foundation for examining the competencies that may be required.

Healthcare and Medical Education in the Gulf Region

At present, the Gulf region is experiencing a substantial demand for healthcare services due to the persistent population growth and high incidence of non-communicable diseases (NCDs). The extensive population growth in the Gulf region has been attributed to the influx of expatriates in the respective countries of Saudi Arabia, Kuwait, Bahrain, Oman, United Arab Emirates, and Qatar (Meo et al., 2015). These conditions have resulted in the need to develop effective strategies to address the healthcare needs of this population. In this context, new approaches are needed to improve the overall status of health care in the region. Primary health services have been emphasized as a critical support in the management of NCDs. They also prioritize access to extended medical care (Sheikh et al., 2019).

To develop and reinforce the functions of health care in the region to handle these population changes, experts in the field have recognized the need to increase human resource capacity and establish evidence-based guidelines for treatment procedures. Some of the strategies that have been introduced are aligned to the Eastern Mediterranean Approaches to NCDs and the Gulf plan for appropriate medical education of NCDs (Meo et al., 2015). The development of effective educational programs about healthy lifestyles have been discussed. It is believed that such programs can help citizens of Gulf countries to modify and improve their lifestyles in terms of diet, exercise, and mental health (Sheikh et al., 2019). At the same time, more social initiatives should be introduced in the Gulf region, implying the transition toward continuity of care. It is apparent that the utmost objectives of patient-centered care can be attained with the introduction of proper medical education in the region. The kingdoms of Bahrain and Saudi Arabia are facing similar challenges in the healthcare sector, and therefore focus more on preventive services through encouraging community partnership.

Impact of Cultural Orientation in Kingdom of Saudi Arabia and Kingdom of Bahrain

Culture plays a crucial role in the medical profession; beliefs, values, and local norms affect the healthcare system in different ways. Cultural practices and religion also influence the results of changes and available leadership. Factors such as religion may affect medical professionals and patients equally, begging the need for detailed analyses of such details. A traditionalistic mindset might hold predispositions that are not conducive to an efficient healthcare system. These may include the non-acceptance of female doctors or beliefs that keep people from medication or diagnosis.

Health care ideas vary across different communities. Therefore, the cultural perceptions of local people should be considered before introducing changes into their healthcare system

(Napier et al., 2014). On the other hand, the current rise of technical advancement has reduced the influence of cultural diversity in healthcare settings. However, because the effect of culture still exists, it is still important to consider culture when introducing healthcare changes.

Kingdom of Saudi Arabia

In the context of Saudi Arabia, there has been a substantial transition towards modernized healthcare services. Healthcare personnel in this country are mostly recruited from neighboring Arab countries as well as the Indian subcontinent (Al Asmri et al., 2019). At a later stage, in line with the specifications made in Saudi Arabia's government-sponsored development plan, Saudi Arabia citizens were provided with scholarship opportunities to study medicine abroad. This was mainly done to equip healthcare practitioners with the knowledge and skills needed to deliver high-quality patient care (Almutairi & Moussa, 2014). Since the curriculum design in Saudi Arabia's medical schools and universities has been considered traditional and outdated, medical specializations abroad have emerged as a relevant solution to enhance human resource capacity in the healthcare field.

Despite the ongoing reforms being made in Saudi Arabia's healthcare and medical education, it is apparent that the pace of such reforms is rather slow. This is because similar change efforts are solely focused on the specific content of the medical curricula, without taking into consideration the need to develop appropriate skills and standards for healthcare (Meo et al., 2015). Moreover, Saudi Arabia's higher education institutions encounter the challenge of ensuring and maintaining quality (Almutairi & Moussa, 2014). Medical educators in this country require the development of an independent medical education professional body, which can play an important role in governing healthcare and medical colleges.

Kingdom of Bahrain

In relation to the development of healthcare and medical education in Bahrain, it should be noted that this country is recognized as maintaining an advanced status in its healthcare sector. This means that healthcare and medical education have received substantial attention in Bahrain, as the Ministry of Health (MoH) emphasizes the delivery of high-quality healthcare services through the adoption of the latest health information technology systems (Ministry of Health, 2020). The introduction of effective service systems is in line with the government's strategy to ensure optimal efficiency and safety in both the public and private sectors of health care.

It has been observed that Bahrain trains an increased number of students for medical professions, which illustrates the need to deliver fully optimized health care services to the population. Similar to other Gulf countries such as Saudi Arabia and the United Arab Emirates, Bahrain's medical system has persistently relied on foreign health care personnel to meet the needs of continuously increasing population (Meo et al., 2015). Yet the landscape of medical education has been gradually changing in Bahrain, illustrating the need to develop local staff at all levels of the country's healthcare system (Ministry of Health, 2020). The need for continuing medical education has been properly integrated into Bahrain's vision for health care.

Current Type of Health Care in Gulf Region

As noted, the information on selecting people as middle managers in the healthcare sector in the Gulf region is rather insufficient. This is due to the fact that the issue of middle management has not been considered crucial to achieving important objectives related to the development of healthcare and medical education in the region (Al Asmri et al., 2019). The selection of middle managers is mostly emphasized in other sectors of the economy, illustrating

the competitive dimensions of the issue. However, the need to modernize the healthcare system of the Gulf region has helped reconsider their strategic priorities and developed a more uniform approach to address capacity building in healthcare and medical education from the perspective of middle management.

The current type of health care in the Gulf region depends on substantial governmental support. Having government-funded healthcare systems implies that these countries have been focused on the development of sufficient control and regulatory mechanisms to maintain high quality in their health care and medical education (Meo et al., 2015). Since health care in Saudi Arabia has been essentially funded by the government, the respective sector has a low level of private insurance related to the provision of healthcare services (Sheikh et al., 2019). There are only a few specialized institutes in Saudi Arabia that explore different issues pertaining to medical research and education.

The Ministry of Health (MoH) of Saudi Arabia has served the role of the primary governmental coordinator of healthcare and medical education in the country. This implies that the governmental institution has a quite broad scope of regulatory powers. Yet a major challenge facing the healthcare system of Saudi Arabia is described as the composition of its health force (Meo et al., 2015). Continuity in the delivery of healthcare services has become a substantial problem due to the fact that foreign nationals tend to remain for a certain period in the country. In this context, it should be noted that a significant transformation is happening from governmental support to autonomous healthcare, as the latter is self-directed or self-sustained financially (Almutairi & Moussa, 2014). This means that such an autonomous healthcare system is more focused on improving the quality of healthcare services delivered to the population.

Similar to Saudi Arabia, Bahrain also emphasizes the introduction of autonomous, value-based healthcare and medical education. The government of Bahrain considers the healthcare sector as fundamental to the country's transition towards a service-oriented economy. It has been illustrated that Bahrain has been extensively investing in healthcare infrastructure in order to improve both inpatient and outpatient services (Sheikh et al., 2019). The 2019–2022 Government Action Plan of Bahrain indicates the importance of restructuring the country's health care system by making it more autonomous, self-directed, and flexible (Ministry of Health, 2020).

An important factor that supports the transformation of healthcare in Saudi Arabia and Bahrain is described as substantial collaboration and partnership. This means that the respective Gulf countries respond to the current demand to reform nursing practice and medical education by implementing strict standards of quality (Sheikh et al., 2019). As a result, Saudi Arabia and Bahrain have established a solid basis for the adoption of a collaborative approach to reform their healthcare systems and medical education.

Gulf countries are currently moving from theory to strategy in the process of rapid transformation of their healthcare systems. In this way, Saudi Arabia and Bahrain have been able to develop and reinforce new models of care based on quality. At the same time, these countries have considered the importance to improve the competencies of middle managers in the context of medical education (Almutairi & Moussa, 2014). This illustrates the need to ensure a more flexible and innovative approach to ensuring high-quality, value-based patient care (Sheikh et al., 2019). Even though government development is important in the healthcare sector, it is equally important to pay attention to workforce development which is possible through enhancing the structures of private and third sector participation.

The strategic goals of both Saudi Arabia and Bahrain are to develop skilled and competent health care professionals and to enhance the delivery of high-quality health care services and medical education. Both countries have realized that attaining such objectives is only possible through a rapid transformation of their healthcare systems (Meo et al., 2015).

Health Care Transformation (HCT) as Large–System Transformation (LST)

Healthcare organizations are very complex in nature and comprise of number of Complex Adaptive Systems (CAS; Corrigan, 2005). Therefore, Health Care Transformation (HCT) can be regarded as a type of Large-System Transformation (LST) that can be defined as:

interventions aimed at coordinated, system wide change affecting multiple organizations and care providers, with the goal of significant improvements in the efficiency of health care delivery, the quality of patient care, and population-level patient outcomes (Best et al., 2012, p. 422).

The healthcare sector should continuously change and adapt based on the ever-changing demographics and the epidemiological variables. However, it is stated that "only 40% of innovative initiatives in healthcare sector successfully navigate from the stage of adoption to stage of sustained implementation*"* (Côté-Boileau et al., 2019, p. 1). This may be partly attributed to continuously changing healthcare settings in addition to vast institutionalization of health care systems (McDermott et al., 2013).

It is impossible to promote an innovation by decree (Denis et al., 1996). Therefore, existing literature focuses on three fundamental processes namely, "Spread, Sustainability and Scale-up (also referred to as 3S), which might act as dynamic levers to accelerate healthcare transformation" (Côté-Boileau et al., 2019, p. 1). The process of LST depends on numerous components, namely: (a) clearly stated mission, vision, and plan that are shared by everyone

across all levels of the organization (Harrison & Kimani, 2009), (b) culture of the organization (Miller, 2005), (c) human resources (Harrison & Kimani 2009), (d) political climate and governmental initiatives (Lukas et al., 2007), (e) degree of the system's integration, and (f) consistency of funding over time (Best et al., 2012).

According to Tuohy (2018), there are different strategic models to achieve LST in the healthcare sector, namely: the *Big-bang* model (large scale, rapid pace), which attempts to modify the power balance and fundamental rules of the game in one comprehensive sweep; *Blueprint model* (large scale, gradual pace) aiming at larger scale of change but with consensus on overall framework; *Mosaic model* (small scale, rapid pace) attempting to make many interconnected adjustments with consensus on overall framework and finally, *Incremental model* (small scale, gradual pace) focused at making small adjustments over time without an overall framework.

Role of Leadership in HCT

Modern institutions are faced with the challenge of achieving success within a highly dynamic environment that is characterized by changing human needs and expectations, rapid changes in technology, as well as intensive competition among firms and institutions (Chen et al., 2008). These same forces drive a change in workforce characteristics such that new sets of skills and capacities are required from various workers. As health care organizations grapple to maximize resources and capabilities to achieve desired goals, the role of middle managers—"employees who are supervised by an organization's top managers and who supervise frontline employees"—has emerged as a critical factor (Urquhart et al., 2018, p. 414).

Leaders in modern healthcare and medical educational institutions face numerous challenges that can undermine the success of the institution if not properly managed (Çitaku et

al., 2012). Such challenges include heightened taxpayers' sensitivity towards inefficient leadership in academia, perceived lack of accountability within higher education, commercialization of the central purpose of universities and medical schools, and heightened expectations for advancement in teaching and learning (Schwartz & Pogge, 2000). According to Çitaku et al. (2012), medical school leaders are also faced with concerns such as meeting or maintaining accreditation standards, securing research support, assuring adequacy in the curriculum, and maintaining financial stability. Boateng (2012) noted that there were important existing and emerging challenges in health care related to the vast changes occurring in human expectations and needs.

These concerns are supported by research evidence. Al Kuwaiti and Al Muhanna (2018) found that major challenges experienced by healthcare leadership, with respect to clinical research and medical education, include inadequacy of resources for executing research programs, compliance with all regulatory and professional requirements, and integration of education into hospital operations. In relation to challenges associated with adequate curriculum, Varkey et al. (2009) explored the perception of the administrators, faculty physicians, and students concerning the competencies and knowledge essential in undergraduate leadership curriculum. This study found that the qualities perceived as being essential for leaders were creativity, humility, confidence, and emotional intelligence while the necessary skills required were communication and teamwork. The students saw themselves as competent in time management, conflict resolution, and communication while reporting lack of competence or minimal knowledge of investment principles, writing proposals, over all clinical care, billing, and coding, which are fundamental aspects of the modern healthcare environment. In addition,

both students and faculty agreed that the most effective way of teaching leadership skills was through experiential training.

Role of Medical Education in HCT

Research indicates that managerial competencies are also needed by physician leaders, and there is limited research regarding the development programs designed for clinical and nonclinical health care middle managers (Whaley et al., 2018). Curricular inadequacy is apparent in the preparation of medical students to face the inevitable interface with these aspects of the environment upon entry into the workforce (Al Kuwaiti & Al Muhanna, 2018; Varkey et al., 2009). They also need to understand the business, legal, and economic aspects of the healthcare sector (Al Kuwaiti & Al Muhanna, 2018; Varkey et al., 2009). Leaders in medical education face the challenge of multiplicity of roles as they are called to be visionaries for medical education, assessment experts, budget analysts, community builders, instructional and curriculum leaders, public relations experts, facility managers, overseers of policy, contractual, and legal mandates, as well as administrators for special programs (Çitaku et al., 2012).

Most scholars are of the opinion that leaders should develop both management and leadership competencies in order to effectively address the challenges in the modern organization (Clements, 2013; Kotterman, 2006). This view is also applicable to medical education and the healthcare sector. Building on findings from a literature review on what is acknowledged about attitudes, knowledge, and skills of medical students concerning management and leadership; physicians should develop management and leadership competencies in order to facilitate effective planning, provision, and revolution of patient services. These concerns also underscore the importance of the roles and competencies of middle managers in healthcare organizations as

members of the managerial team and thus, the custodians of goal achievement and organizational efficiency (Capowski, 1994; Clements, 2013; Northouse, 2013).

Role of Middle Managers in HCT

Large organizations usually struggle to overcome the resistance for change because, very often, they fail to engage the middle level management, usually represented by middle managers. To achieve the desired outcomes, the vital step is to create a positive and supportive environment through distributed leadership, which is favorable to harness the skills and competencies of all the individuals in the healthcare system. The vision and goals of the top management in the healthcare sector should be in alignment with middle managers to facilitate sharing of resources and bridge intraorganizational gaps (Lukas et al., 2007). These managers are instrumental in providing a culture of improvement with specific focus on organizational framework and evidence-based decision-making (Hartmann et al., 2017). Hence, there is a need to focus on capacity building of middle managers, especially during transformation in the healthcare sector. The strategic positioning of middle management / middle managers in hospitals and medical colleges is shown in the Figures 1.1 and 1.2 respectively.

Figure 1.1

Strategic Positioning of Middle Management / Middle Managers in Hospitals

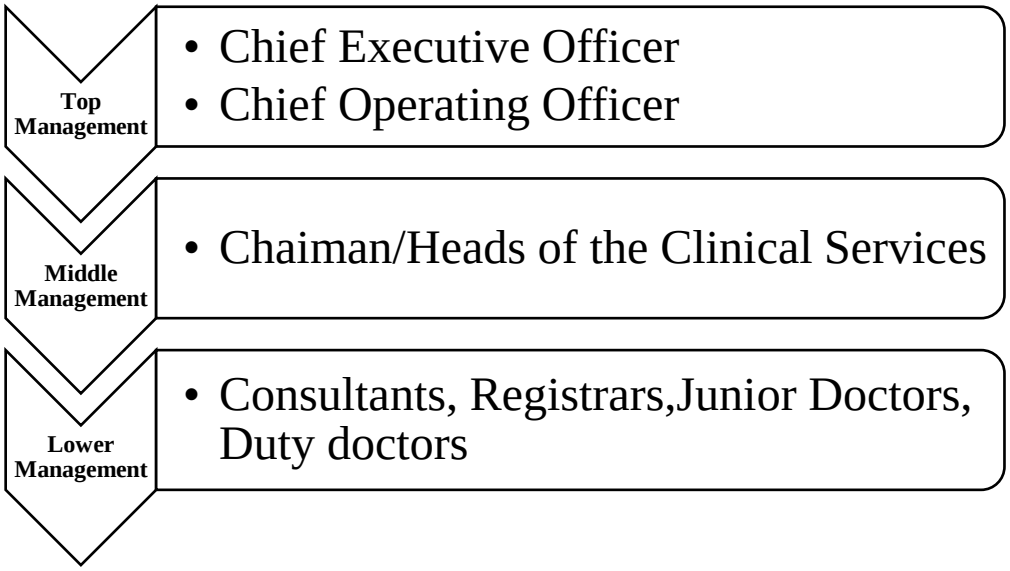
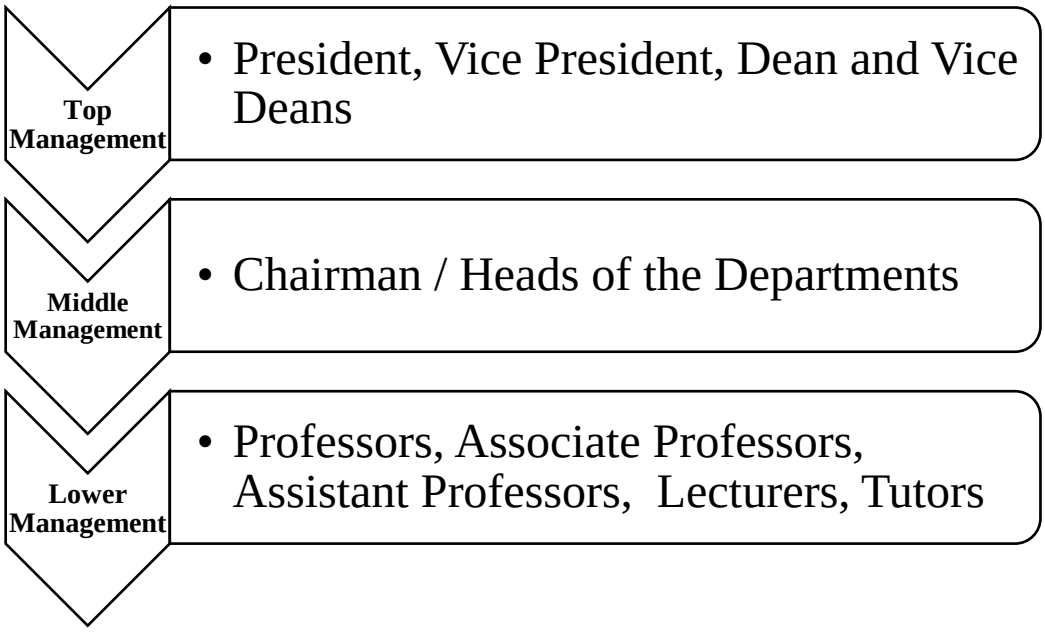


Figure 1.2

Strategic Positioning of Middle Management / Middle Managers in Medical Colleges



Rationale for the Study

The development of proper healthcare and medical education in the Gulf region, particularly Saudi Arabia and Bahrain, has been emphasized as a significant strategic goal. In this context, it has become important to recognize the role of middle managers in improving healthcare and medical education in the respective countries (Sheikh et al., 2019). Since the efforts of middle managers in those countries have not been adequately considered, this study aims at providing a thorough understanding of how middle managers can redirect medical education and healthcare systems towards the delivery of high-quality, patient-centered, and safe care at all times (Meo et al., 2015). The lack of scholarship on middle managers in healthcare and medical education in the Gulf region emerges as the main reason to conduct the current study. In this way, the gaps existing in this domain can be clearly illustrated to provide effective strategies of how to improve the competencies of middle managers in healthcare and medical education in the Gulf region.

There is insignificant information on leadership and management competencies for middle managers in the healthcare sector in Gulf countries. Thus, the present study is structured to address this gap by exploring the transition toward modernized healthcare and medical education in these countries (Ministry of Health, 2020). There are different implications of leadership and management needed to transform the healthcare system of Gulf countries. Some of the most important dimensions of leadership in healthcare and medical education refer to social responsibility, innovation, and self-management (Almutairi & Moussa, 2014). In this way, the focus maintained in the current study is upon the need for capacity building in terms of leadership and management competencies for middle managers.

Evidence from practice and the literature has established that healthcare organizations need to improve both the leadership and managerial competencies of their employees to improve organizational efficiency to fulfill their vision. Accordingly, the purpose of this study is to explore the leadership and managerial competencies needed for successful middle managers and identify the desired competencies for middle managers in medical education and healthcare context in the Gulf region, especially in the Kingdom of Saudi Arabia and Kingdom of Bahrain.

It is also documented that there is deficiency of skilled "Human Resource" professionals in a majority of the Gulf countries, and hence, middle managers in this region often resort to "trial and error" methods to meet their objectives (Abdalla, 2015). Middle managers need to possess different set of leadership and managerial competencies to cope with this transformation in the healthcare sector. Most of the studies have focused on middle managers in stable organizations but not in organizations undergoing transformation. Birken et al. (2012) noted that further research is needed to define the specific skills for middle managers in such organizations, and there exists a gap between evidence of effective care and its translation into practice, which may be attributed to poor implementation of healthcare innovation. Therefore, it is justified to conduct this study to identify the leadership and managerial competencies required for successful middle managers during transformation of the healthcare sector.

Overview of Research Design

Middle managers play a fundamental role in healthcare and therefore, identifying the leadership and managerial competencies for middle managers is important for recruitment as well as training. The purpose of the current study is to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia).

The study utilized a mixed method approach that incorporates descriptive qualitative research to inform a quantitative examination of the research phenomenon. Due to the complexity and breadth of the research questions, the study was divided into two phases with a qualitative to quantitative design. The scientific basis of using a mixed methods approach is that the combination of both quantitative and qualitative methods may possibly augment answering the research question than either of the methods by itself (Creswell & Clark, 2017). Research on application of mixed methods has shown that it can be expanded and adapted to many areas, including scale development (Creswell & Clark, 2017).

Scale development is defined as a process of creating a valid and reliable measure of a construct, used for assessing an attribute of interest (Tay & Jebb, 2017). In the recent past, many researchers have supported the idea of utilizing mixed methods in development of a new scale (Collins et al., 2006; Creswell & Clark, 2017; Greene et al., 1989). Mixed methods help to evaluate the appropriateness and utility of the newly developed scales (Collins et al., 2006).

For the purpose of scale development, many authors have followed a sequential mixed design comprising of a qualitative phase for defining the construct, a development stage for item generation and revision, followed by quantitative phase for testing the instrument (Collins et al., 2006; Creswell & Clark, 2017; Greene et al., 1989). In the present study, the conceptual framework recommended by Zhou (2019) for scale development using mixed methods study is followed.

Research Questions

This study seeks to address the lack of scholarship on middle managers in medical education and the healthcare sector in the Gulf region. To achieve the research goals outlined above, the study seeks to answer the following questions. Each research question will be

explored in the context of the Gulf region, specifically, the Kingdom of Bahrain and Kingdom of Saudi Arabia.

RQ1. What are the main competencies (leadership and management, respectively) identified by the top leaders (CEO / Dean / Vice Dean) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ2. What are the main competencies (leadership and management, respectively) identified by the middle managers (Head of the Clinical Departments in a hospital setting, Head of Departments in a college setting) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ3. What are the main competencies (leadership and management, respectively) identified by the employees (working under middle managers) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

Significance

Based on the competencies identified by above three groups, the key outcome of this study is to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia). Use of the survey will have several positive implications for the healthcare system in the Gulf region. At the personal development level, the survey would facilitate professional development for middle managers as it would help them identify areas where they need to improve upon their competencies. Healthcare institutions can plan effective development

programs for their middle managers based on findings from the survey. The survey can also be used as a strategic tool for organizational transformation and growth; standardized or periodic administration of the survey will help healthcare and medical education institutions track their portfolio of middle management competences and plan for specific competencies they need in order to achieve their corporate goals.

Positionality

Professional Background

The primary challenge facing Kingdom of Bahrain is transformation of the healthcare system, partly aimed at innovation in primary healthcare and privatization / autonomization of healthcare delivery (Khogali, 2005). The middle managers are instrumental in driving this change with specific focus on organizational framework and evidence-based decision-making (Hartmann et al., 2017). The need for capacity building of middle managers in Kingdom of Bahrain during transformation of the healthcare system motivated me to gather information about leadership and managerial competencies, which middle managers should possess, to cope with this critical transformation in the healthcare sector. Competent managers could help improve service quality, patient satisfaction, and productivity. In this study, my aim is to discover knowledge, insights, lessons, and answers to questions that will help significantly improve the Bahraini healthcare system.

My motivation is to be impactful, flexible, and positive. I am inspired to develop a feasible and valid scale for measuring the competencies for middle managers who act as catalysts and promote positive transformation of the healthcare system in the Kingdom of Bahrain. I want to facilitate provision of top-quality, cost-effective services to people in the Kingdom of Bahrain through capacity building of managers, using lessons learned during my research. I am the Head

of the Department of Medical Education and also a member of the Supreme Council of Health. I lead a larger workforce of healthcare workers belonging to all government hospitals in Bahrain. I also coordinate with several epidemiologists and statisticians for predicting the number of COVID-19 cases based on specific mathematical models. I developed a checklist to help the Supreme Council of Health make the decision of "opening" or "closing" of various sectors during the COVID-19 pandemic based on a scoring system, which was an innovative way to do so.

Ethical Awareness

Research ethics is governed by certain guiding principles, namely, Honesty (trustworthiness); Objectivity (impartiality); Integrity (truthfulness); Carefulness (watchfulness); Openness (frankness); Respect for Intellectual Property; Confidentiality (privacy); Publication accountability; Responsible mentoring; Approval of fellow researchers; Social Responsibility; Neutrality; Competency; Lawfulness; Care for animals; and Human Subjects Protection (Resnik, 2015).

In addition to the above principles, healthcare systems often lay down a strict ethical code of conduct to be followed by medical professionals and other healthcare personnel. Such rules ensure that the patients' needs are met, their dignity and consent are upheld, and quality health care attention is given to them at all times (Marmot, 2002). There are four vital principles that form the basis of ethics in healthcare research, namely: autonomy, non-maleficence, beneficence, and justice. All researchers are obliged to follow certain procedures such as: (a) obtaining informed consent from all the study participants; (b) ensuring "no risk" or "minimal risk" to the participants; (c) safeguarding anonymity; (d) protecting confidentiality; (e) avoiding dishonest practices; and (f) providing participants with the right to withdraw from

research during any stage. These ethical considerations direct medical professionals to adhere to professional codes that emphasize their obligations to respect, protect, and defend the fundamental rights of their study participants. In Bahrain, the National Health Regulatory Authority (NHRA) provides ethical guidelines for doctors to engage in a safe decision-making process. These guidelines include core professional values such as integrity, compassion, competence, and accountability. Every professional should expect his/her colleagues to follow these ethical rules. Moreover, the public should also expect professionals to follow the code of conduct as well.

Apart from being a doctor, I also shoulder several administrative responsibilities as the Head of the Department of Medical Education and also as a member of the Supreme Council of Health. Hence, I am fully aware of all these codes of conduct and ethical guidelines related to general research and medical research, and I followed all of them in this study. I conducted all interviews after obtaining a detailed informed consent, and the interviews were held in a mutually accepted place which was convenient for the participant in order to protect his/her identity and to overcome potential reticence. All study participants were provided with the full transcript of the interview for their reference and corroboration and were free to withdraw from the study at any point of time.

CHAPTER II: LITERATURE REVIEW

Introduction

Changing environmental contexts and societal needs have created complexities in the roles and functions of middle managers in medical education and healthcare services. Furthermore, overlaps in the competencies of leaders and managers justifies an examination of these roles, both as unique constructs and, as particularly relevant to this study, as a function in middle management. A comprehensive review of the current literature on leadership in health care and medical education is therefore, necessary to build a theoretical and empirical foundation to support this study's investigation of the competencies for success of middle managers in healthcare. From this review, the compilation of leader and manager characteristics, skills, functions, and/or competencies will form the groundwork for Phase 1 of the proposed study. The chapter is organized into six key parts: competency (competent and competence); conceptualization of leadership (definition, theories, efficient leadership); the function of middle managers (role, competencies); leadership in medical education and healthcare (including competencies, challenges, cross-cultural contexts); middle management focusing on medical education and healthcare sector; and a framework for leadership competencies.

Competency, Competent, and Competence

I begin with a definition of competence as the identification of competencies for middle managers is the central driver of this study. The term "competence" is derived from the Latin verb "*competere*" which implies the meaning, "to be suitable" (Nordhaug, 1993). Competency is defined as "The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served" (Medical Council of India, 2018, p. 37). National

Center for Healthcare Leadership (NCHL) defines competency as “Any characteristic of a person that differentiates outstanding from typical performance in a given job, role, organization or culture” (NCHL, 2006, p. 2).

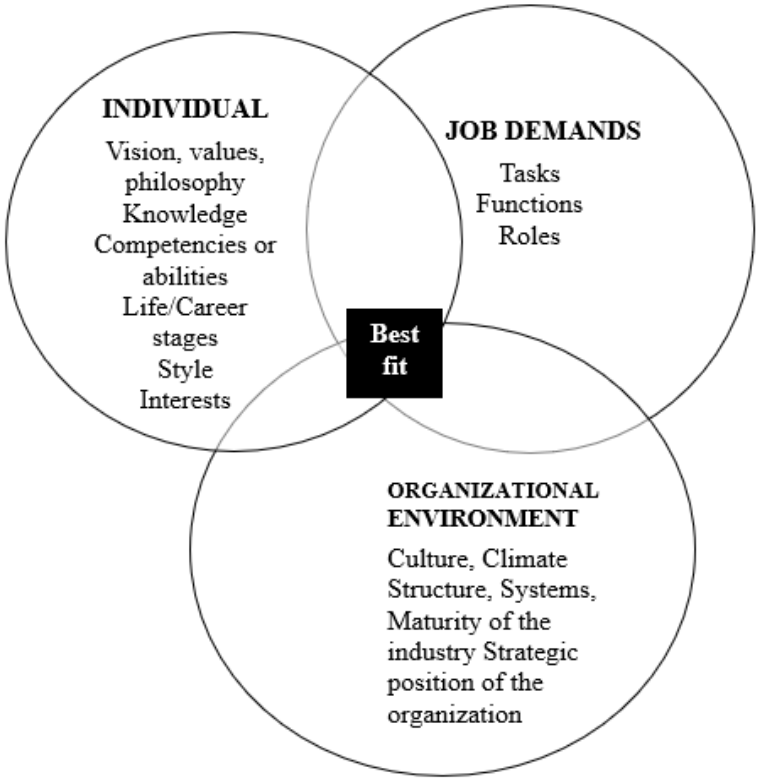
The person “who possess the competency / sufficient skill or knowledge to perform a task appropriately meeting the necessary standard” is called competent and the word “competence” is used as a noun to denote “a state of successful attainment of single or more competencies” (Business Dictionary, 2009; Oxford Dictionary, n.d.). In this study, we shall focus on leadership and managerial competencies that are necessary to enable middle managers to be successful in performing their roles in healthcare and medical education.

Determinants of Competency

Boyatzis (2008) described three important factors, “Personal characteristics, job demands and organizational environment,” which predicted the attainment of competency, as shown in the Figure 2.1. The optimal interaction of variables related to these three factors, namely, a person’s capability, morals, vision, personal philosophy, familiarity, career stage, interests, roles, responsibilities, duties, job culture, climate of the organization, economic, political, societal, ecological, and spiritual environment of the organization lead to maximum performance outcomes (Boyatzis, 2008).

Figure 2.1

Factors Influencing Job Performance: Best Fit



Note. From "Competencies in the 21st century," by R. E. Boyatzis, 2008, *Journal of Management Development*, *27*(1), p. 7 (https://doi.org/10.1108/02621710810840730). © Emerald Publishing Limited all rights reserved. Used with permission.

Competencies of each employee are considered crucial for successful performance of any organization. A competent employee will ensure that he/she completes all the job requirements, focus on increasing the productivity, concentrate to maintain compliance with regulation guidelines, minimize the errors at work and expand the quality of job output (June et al., 2013).

Types of Competency

There are many forms of competencies, namely: Core competency (specific to the sector), Functional Competency, Professional Competency, Technical Competency, Clinical Competency, Leadership Competency, Emotional Competency, Social Competency, Cognitive Competency, Management Competency, and so on (Boyatzis, 2008). Leadership competency, as one of these areas named by Boyatzis (2008), is fundamental for success of any organization and is of particular interest to this study in relation to middle managers. To build a scale that identifies characteristics and competencies of middle managers in healthcare, I begin with the concept and definition of leadership and then examine prominent and widely referenced leadership theories. The theories are briefly reviewed, and the underlying premise of each theory is summarized in Table 2.1. This overview of leadership establishes the foundation for the examination of leadership characteristics and competencies that are claimed in the literature.

Conceptualization of Leadership

It has been documented that leadership enables groups of animals or individuals to acquire the ability to work collectively in coordination with each other (King et al., 2009). Across several social species, leadership has engendered the coordination and cooperation among group members, as well impacting the dynamics and hierarchy of social structures (Couzin, 2006). Leadership permeates through all aspects of social activities, and it can emerge as an “active” or “passive” phenomenon based on the circumstances (Dyer et al., 2008). Humans follow different leadership models ranging from autocratic to democracy (Van Vugt, 2009).

Even in modern times, humans remain heavily dependent on spiritual, political, religious, or military leaders for their survival. Hence, 60% to 75% of failure and loss in the business sector of the United States of America has been attributed to faulty leadership and

incompetent management (King et al., 2009). Therefore, “leadership” has been recognized as one of the most important traits in the field of social science and systematic examination of numerous unexplored domains of leadership may reveal new insights into the understanding of “when” and “why” leadership prospers or fails. This process is imperative for framing policies for recruitment and training in any organization (Mesoudi, 2008). Having understood the significance of leadership, let us explore the definition, theories, and traits of efficient leadership.

Definition of Leadership

Numerous scholars have tried to define the meaning of leadership. However, there is a strong consensus regarding the ambiguity in how leadership is defined and therefore, a lack of consensus on its conceptualization (Hilliard, 2010; Rosch & Kusel, 2010). For instance, a common outlook on leadership is an influence process in which an individual influences a group towards reaching a given goal (Northouse, 2013). Analyzing this definition, Rosch and Kusel (2010) noted that while this concept of leadership is adequate, the definition is somewhat vague because of its emphasis on influence, as influence can happen in many, and at times contentious, ways such as coercion, force, or unethical means. Scholars have adopted varying strategies to distill a framing for leadership that is based on the diverse philosophical, psychological, managerial, and other perspectives on the issue.

For instance, exploring common themes behind the multiplicity of definitions proffered by leadership experts, business writers, consultants, researchers, and academicians, Summerfield (2014) sought to come up with a simple definition of leadership that is based on commonly identified elements across these diverse perspectives. He identified three key themes across leadership definitions: democratic, collegial, and enhancement components. The democratic component, common to most definitions of leadership, is encapsulated in the idea that leaders

work towards attaining a shared objective, either jointly conceived or jointly agreed upon. The collegial component pertains to the idea that leaders influence rather than dictate, following a unifying and respectful approach. The enhancement component conveys the notion that the results of leadership constitute an improved current state. Based on these observations, Summerfield (2014) concluded that the enhancement component of leadership was arguably the most pertinent. The fundamental role of the leader is to improve the vision, mission, performance, and project-based goals of an organization based on the scientific, financial, legal, emotional, intellectual, spiritual, and ethical contexts. He proposed a simple definition, "the core function of leadership is to 'make things better.' As mentioned, leadership is usually best conceived and administered democratically and collegially, but ultimately—at the core—the job of the leader is to make things better" (Summerfield, 2014, p. 252).

Winston and Patterson (2006) on the other hand, proffered an integrative definition of the concept of leadership based on an analysis of data from 160 scholarly sources on the topic of leadership. This integrative definition claims that leaders are involved in the selection, equipping, training, and influencing of followers, with the followers themselves possessing a collection of diverse skills, talents, and abilities. Leaders focus their followers' attention on the organization's objectives and missions, causing followers to be committed towards achieving the goals.

Discussing leadership development in educational and health care contexts, Hilliard (2010) described leaders as individuals who are capable of inspiring and directing others' actions towards an identified short-term, intermediate, or long-term goal. Styhre and Sundgren (2005) emphasized that adequate leadership relies on the capacity of the individual to effectively respond to change and to proactively manage change. Change invariably involves innovative

solutions and, in their view, leaders must encourage creativity in their employees through their creative leadership behavior. This argument includes a strong capacity for creativity as one of the prerequisites for adequacy in leadership. In summary, definitions of leadership have included the ability to make things better in terms of achieving the vision, mission, and goals through creativity, training, motivating, influencing, inspiring, and directing others while proactively adapting to changes.

Leadership Theories

The study of leadership has evolved progressively from a focus on individual qualities, standpoints, and contingency theories, to modern approaches to leadership. Although the early theories on leadership that focused on the traits that leaders possess are obsolete now, some scholars still attempt to describe how leadership traits influence followers to adopt different organizational roles and responsibilities while others focus on the broad competencies and skills associated with leadership (Linville & Bates, 2017). A fundamental difference between skills-based approaches to leadership and the traits-based methodology is that competencies and skills can be learned while traits cannot be learned or acquired (Hernandez et al., 2011). Reflecting upon the importance of both competencies, and to some extent, inherent individual qualities, most models of leadership tend to focus on three central constructs: leadership as a process or association; leadership as a mixture of qualities or personal characteristics; and/or leadership as certain actions [or competencies] (Lacerda, 2015). A brief description of the historical development of leadership theories provides a context for the scholarly trends and contributions of the 21st century.

Great Man Theory/Trait Theory

The early theories of leadership were theories such as the Great Man, or its variant, the Trait theory. Great Man theory focused on identifying the attributes of renowned leaders of the time such as a sense of confidence, personality, drive, resourcefulness, and ambition. Similar to the Great Man theory, the Traits theory hypothesized that people inherit certain abilities or traits, which enable them to become successful leaders. According to this theory, effective leaders have certain individual traits that lead to successful leadership (Offermann & Coats, 2018). This theory suggests that leaders are born and not made, since such traits are part of the individual's natural constitution.

Behavioral Theory

Studies on leadership evolved from the trait theories to the behavioral theories. Contrary to the early trait theories, the behavioral theories of leadership are founded on the notion that successful leaders are made, not born. These theories emphasize the activities of leaders rather than their personal qualities or standpoints (Hernandez et al., 2011). At the core, behavioral leadership theories suggest that people can acquire the necessary competencies and skills to become successful leaders through processes such as training, comprehension, self-awareness, and observation (Hernandez et al., 2011). Common styles of leadership discussed under the context of behavioral theories include leadership styles such as autocratic and democratic leadership (Offermann & Coats, 2018). In tandem with the differing leadership behaviors under each leadership style, it has been suggested that employees operate and perform differently under these types of leadership (Offermann & Coats, 2018).

Participative Leadership Theory

While behavioral theories focus on the characteristics of a leader, the theory of participative leadership advocates the utilization of employee inputs as a means of achieving optimal leadership. This approach to leadership promotes collaboration and employee involvement in decision-making processes. Such involvement in turn creates a sense of ownership among employees and deepens their commitment to the organization (Pollard & Wild, 2014). Supporting this observation, Hernandez et al. (2011) also noted that employees are more committed to carry out activities where they are involved in the decision-making process. Scholars similarly assert that senior management who implement participative leadership [rather than making all strategic decisions themselves without soliciting inputs from other members of the organization], tend to achieve greater integration within the organization, thus enhancing effectiveness, efficiency, and long-term productivity (Hernandez et al., 2011).

Contingency Theory

Successful leadership depends on a wide range of factors, particularly leadership style, specific qualities of followers, and situational characteristics. The contingency theory of leadership emphasizes a focus on environmental variables based on the premise that such external influences determine the most appropriate leadership approach to be adopted (Offermann & Coats, 2018; Xu, 2017). This leadership approach emphasizes the fit between leaders' qualities and the requirements of particular situations. Finding such balance is crucial to leadership actions that properly addresses the needs and expectations of stakeholders (Gill et al., 2018).

Situational Theory

This theory of leadership places emphasis on the interpretation of situations, suggesting that leaders tend to select the most optimal course of action based on situational aspects (Emmerling et al., 2015). In other words, the leader may adopt different styles of leadership based on their understanding of what will effectively address a given situation and meet organizational goals. For instance, in a situation where group members are expected to be treated equally based on their skills and experience, utilizing a democratic style of leadership might appear reasonable. Gill et al. (2018), however, noted that the best course of action to be undertaken by leaders depends on diverse situational factors and all relevant factors should be adequately considered prior to making a decision. Other prevailing theoretical approaches to leadership include theories such as servant leadership, ethical leadership, as well as the highly popular transactional and transformational theories (Hernandez et al., 2011; Jeon et al., 2018).

Transactional or Management Theory

This leadership implies a focus on the role of supervision and organization of tasks by the leader (Antonakis & House, 2014). The transactional leader focuses on ensuring that employees are strictly on goal attainment, group performance is thoroughly assessed, and performance indicators are strictly applied in decision-making. Reward and punishment are used to motivate team members to perform better or to discourage them from inappropriate behavior in the workplace (Antonakis & House, 2014). This approach to leadership is mostly effective in organizations with a substantial number of skilled and experienced employees.

Transformational Theory

As the name implies, the transformational theory of leadership describes an approach to leadership where organizational transformations are critical outcomes. The transformational

leader is able to influence the followers to high levels of engagement and morality. The leader inspires trust and loyalty from employees such that greater motivation, efficiency, and morality occurs in both leaders and followers (Antonakis & House, 2014). This style of leadership is commonly described as being characterized by certain attributes: consideration for the well-being of workers and the ability to inspire and serve as a role model for employees, charisma, and a well-defined vision (Antonakis & House, 2014; Gill et al., 2018). Transformational leadership is often described as being effective in the modern-day organization as the transformational leader is able to instigate as well as manage transformations in the organization effectively (Antonakis & House, 2014; Gill et al., 2018).

Servant Leadership Theory

This theory advocates that leaders are mostly driven to serve others and place the welfare of employees first. Leaders' principles and values are properly recognized as an inseparable part of this leadership style (Rachmawati & Lantu, 2014). Demonstrating a genuine concern to followers is among the top priorities of servant leaders. Such leaders also believe in the capacity of their followers and help them achieve their full potential (Rachmawati & Lantu, 2014). Some of the core characteristics shared by servant leaders include empathy, listening skills, vision, awareness, commitment, and trust (Gill et al., 2018).

Skills Theory

Even though there are inherited leadership traits that indicate or support leadership acumen, it is believed that individuals can acquire a wide range of skills. Accordingly, the Skills theory of leadership advocates that effective leadership depends on learned knowledge and acquired skills. This apparently requires sufficient opportunities for practice such that individuals have an opportunity to experiment with different styles of leading and gain requisite skills for

diverse kinds of situations (Leroy et al., 2018). Thus, investing substantial resources in leadership training and development would help leaders enhance their skills and capacities over time (Hernandez et al., 2011).

Table 2.1 shows the list of leadership theories and their basis. These theories provide a strong rationale for the identification of the characteristics and skills for the purpose of this dissertation.

Table 2.1

List of Leadership Theories and Their Basis

Name of the theory	Basis of the theory	Key reference
Great man theory/trait theory	Leaders are born and not made, since such traits are part of the individual's natural constitution.	Offermann & Coats, 2018
Behavioral theory	Successful leaders are made, not born, people can acquire the necessary competencies.	Hernandez et al., 2011
Participative leadership theory	Advocates the utilization of employee inputs.	Pollard & Wild, 2014
Contingency theory	Environmental variables determine the most appropriate leadership approach.	Gill et al., 2018; Offermann & Coats, 2018; Xu, 2017
Situational theory	Leader may adopt different styles to address a given situation.	Emmerling et al., 2015
Transactional or management theory	Focus on the role of supervision and organization of tasks.	Antonakis & House, 2014
Transformational theory	Organizational transformations are critical outcomes.	Antonakis & House, 2014; Gill et al., 2018
Servant leadership theory	Leaders are mostly driven to serve others and place the welfare of employees first.	Rachmawati & Lantu, 2014.
Skills theory	Effective leadership depends on learned knowledge and acquired skills.	Leroy et al., 2018

Summary of Leadership

To summarize, the leadership styles have evolved over a period of time, as evident through a series of leadership theories such as inborn, behavioral, participative, contingency,

situational, transactional, transformational, servant, and skill-based leadership. These theories facilitate our understanding of skills and qualities of leadership. Irrespective of the theory, the leadership quality that is indispensable for the success of an organization is the ability of the leader to operate efficiently.

Efficient leadership is a necessity today as it enables organizations to address existing and emerging challenges effectively. For instance, through efficient leadership, an organization can proactively adapt to the important changes taking place within their internal and external environments (Boateng, 2012). A study by Chen et al. (2008) approached the issue from the perspective of the complex environments in which organizations and their leaders operate. Since modern era organizations have to respond effectively to rapid and dynamic changes in their environments, success requires that their leaders have the capabilities for the behavioral complexity that would allow them to lead their organizations through such dynamic operational contexts. According to these scholars, efficient leaders have the capability to simultaneously adopt diversified and at times competing leadership behaviors, whereby their efficiency results from such behavioral complexity. The value of efficient leadership then lies in the higher chances of success they have in helping their organizations chart the changing environments. Considering that today's environments are characterized by rapid changes in aspects such as technology, information, human resources, and competition, especially in light of the globalizing world, efficient leadership is invaluable in ensuring success for today's organizations.

The value of efficient leadership can also be observed in terms of its effects on followers in the organization. Kaminskas et al. (2011) claimed that efficient leadership created conditions in which it is possible to increase employee satisfaction, improve the common moral climate, as well as heighten organizational efficiency and productivity. These scholars further noted that

efficient leadership promotes effective communication as efficient leaders are adept at fostering mutual trust, respect, and commitment within the organization. Such useful interchanges are crucial for the achievement of organizational goals, underscoring why efficient leadership is crucial at all levels of the organization.

Boateng (2012) found a close association between ethical inclinations and efficient leadership, with adherence to ethical values and transparency in the organizational structure being crucial factors behind success. The close relationship between ethics and efficiency in leadership further underscores the importance of efficient leadership. In terms of how efficient leadership can be attained, Boateng (2012) stated that it can be attained through the development of relevant policies, appropriate goals, and leadership development programs that provide distinct opportunities to individuals to enhance their leadership potential (Boateng, 2012). To recapitulate, change management, behavioral complexity, employee satisfaction, increased productivity, mutual trust, respect, ethics, and commitment are described as pillars of efficient leadership.

How these leadership theories and conceptualizations of competency and efficiency might contribute to middle managers' accomplishment of organization vision, mission, goals, and objectives is explained in the following paragraphs.

Middle Management

To appreciate the unique role of middle management in medical education and healthcare systems, I will begin with a review of literature that addresses middle management in general. Middle management is located in the middle of hierarchical managerial system(s), between top-level and the lowest level (Taylor, 2007). The chief executive officers, presidents,

vice-presidents, and directors are examples of top management whereas department heads, head of clinical services, general managers, and branch managers represent middle management ("Types of Management," n.d.). Even though the top management is responsible for deciding the process, developing the strategy, and determining the expected outcomes, it is the middle management which adopts and executes the plan in to practice (Geraghty, 2017).

As the business environment evolved from the 20th century, old, dysfunctional truths have been abandoned and innovations proposed, tested, modified, and adopted, suggesting that the overall success of any organization depends on the versatility and flexibility of the middle management (Miller et al., 2004). Middle management is of great importance in translating the ideas into everyday operations and ensuring effective communication flow across different functional areas (Alamsjah, 2011; Salih & Doll, 2013).

In brief, it is the middle management that is accountable for implementing the strategy through expertise and professionalism (Browne et al., 2014; Glaser et al., 2015; Huy, 2011; Raes et al., 2011). Even though middle management plays a dynamic part in the realization of goals of an organization, they are also capable of weakening the quality of the outcomes, intentionally delaying the outcomes, and even disrupting the plans of the top management (Balogun & Johnson, 2005; Mantere, 2008; Wooldridge et al., 2008). In essence, middle managers play a critical role in the organization's realization of initiatives and goal attainment.

Role of Middle Managers

The primary role of middle managers is to implement the decisions of top management and report back to top management. At the same time, they are authorized to manage the organizational units headed by them and are responsible for the results of such units. Their roles include directing personnel, administering resources, operations control, and solving complex

issues in organizations. They perform their tasks in cooperation with the lowest level managers as well as topmost leaders; this is the reason “middle managers” are sometimes referred to as “strategic managers” (Hinterhuber & Popp, 1992; Taylor, 2007).

Middle managers have the responsibility to set goals that are consistent with the general goals of top management, to prepare strategies for subunits in accordance with such goals, and to implement the strategies. They are responsible for harmonizing and connecting groups, departments, and divisions within the organization. They are also responsible for planning and deploying resources in such a way that the organization can achieve its goals. Another responsibility of middle managers is related to monitoring and management of the performance of subunits and individual managers who submit reports to them (Roth, 2016).

Similar to evolution of business and management in general, the role of middle managers in organizations have evolved across the last few decades (Floyd & Wooldridge, 1992; Hornsby et al., 2009; Kuratko et. al, 2005; Wooldridge & Floyd, 1990). The function of the modern-day manager is affected by developments like new communication technologies, reduction in the number of employees, use of technologies such as robots, non-traditional organizational structures, and so on (Kareska, 2016).

With time, the numbers of middle managers have decreased and their position devalued. As a result, their position in the organization has been questioned by some scholars; they have suggested that middle managers do not have a positive future (Stoker, 2006). Further, others have suggested that they will become redundant or unnecessary (Haneberg, 2005; McDermott & Stock, 1999; Yukl, 2008). This perspective may have some merit for organizations that are not large enough to require the hierarchical managerial system. However, in opposition to this perspective, many authors are more optimistic in their perspectives on the role of the middle

managers (Roth, 2016). They have purported that the evolution in the business and technological environment mark the start of a new role for middle level employees (Wooldridge et al., 2008). For instance, Yang et al. (2010) explored the association between leadership capabilities of managers and the performance of frontline employees across three organizations in China. Thirty middle managers, 98 frontline supervisors, and 491 frontline employees participated in this study. The researchers were able to identify two pathways through which the managers were able to influence the frontline employees. The primary pathway was shown to have a direct effect on the employees, bypassing the effect of frontline supervisors (the bypass effect). The other pathway was a cascading influence of leadership behaviors on first-line supervisors, which in turn enhanced employees' performance (the cascading effect). Other studies have also revealed that middle managers with critical sets of skills are well positioned to lead and manage change processes (Dopson & Stewart, 1990; Huy, 2001; Johansson & Svensson, 2017).

Positive perspectives on middle management, as described earlier, have paved the way for top management and research scholars to view "middle managers" as "change agents" of the firm, capable of making noble and courageous efforts to change the performance of employees from regular and routine work agenda to think creatively and advocate innovative ideas or suggestions to achieve more success (Johansson & Svensson, 2017; Kuyvenhoven & Buss, 2011). In order to play such a diversified and dynamic role, it is reasonable to assume that middle managers should possess both leadership skills and operational competencies.

Competencies of Successful Middle Managers

David McClelland (1973) was one of the first researchers to propose competency as the most crucial predictor of performance. Since then, numerous studies have documented the association between the competencies of managers with their job performance (Jena & Sahoo,

2014; Lakshminarayanan et al., 2016; Shang & Yu, 2013). The following section deals with a comprehensive list of competencies, suggested by scholars, for successful middle managers.

Leadership Skills for Middle Managers

We have already discussed the definition and theories of leadership in the previous section. It is desirable to recollect that an efficient leadership can lead an organization to proactively adapt to important changes taking place within their internal and external environments (Boateng, 2012). Effective leadership skills are necessary for middle managers to be able to create conditions where there is effective teamwork, improvement in operational results, and useful flow of information (Boateng, 2012; Johansson & Svensson, 2017; McAlearney & Butler, 2008; Northouse, 2013). A range of leadership skills are necessary for managerial success, depending on the type of organization. For instance, research by Hassanzadeh et al. (2015) have uncovered that leadership at a global level requires a different set of skills compared to the skill set needed to lead a local organization. This is because global leadership involves unique challenges such as management of multi-ethnic/multi-cultural groups, multi-ethnic ways of doing business, and customization problems imposed by new environments with new values and various stressors (Brownwell, 2006). There are different styles of leadership, to suit different situations.

Transformational Leadership Skills

In terms of leadership styles, a number of studies emphasize the connection between transformational leadership and managerial behavior, in general, and middle management, in particular (Ratiu et al., 2017). As stated earlier under leadership theories, the transformational style of leadership is often associated with managerial effectiveness during organizational change and during complex change (Antonakis & House, 2014; Carter et al., 2012; Gill et al.,

2018). Transformational leadership is often used to describe leaders who motivate employees to think creatively about processes, procedures, knowledge, and decision-making (Judge & Piccolo, 2004). Such leaders communicate a well-articulated vision, create a sense of belonging, and encourage employees to adjust positively to changes. One of the processes that characterize employee transformation under this form of leadership is coaching.

Ratiu et al. (2017) noted that managerial coaching is an effective leadership practice that facilitates the learning for employees for the purpose of improving their performance. Analyzing a cognitive-behavioral coaching program for mid-level managers, the authors drew similarities between managerial coaching behaviors and transformational leadership behaviors. This study also found that the effectiveness of managerial behavior was higher after they completed the coaching program, thus highlighting the importance of education/training in building leadership skills for managers.

Learning-Oriented Leadership Skills

Managers who adopt a learning-oriented style are found to be more competent and effective in their work (Doos et al., 2015). Within the domain of middle management, learning-oriented leadership and at-work learning (or work-integrated learning) have important implications for both managers and their followers as managers need to be focused on constant improvement. Through learning-oriented leadership, middle managers learn the consequences of own managerial performance and use that learning to improve on their performance, whether in terms of technical aspects or managing subordinates (Doos et al., 2015).

Cultural Competence

Emphasizing cultural knowledge as a required competence for success, Kowske and Anthony (2007) stated that the targeted knowledge regarding culture has been found to have a

positive impact on manager's job performance. Cultural competence enables the manager to be able to effectively manage a workforce that is comprised of individuals from multiple cultural and ethnic groups as well as to adapt to ways of doing business in new cultures and environments (Brownwell, 2006).

Emotional Intelligence

Goleman's (1995) theory of emotional intelligence identifies this competence as a decisive factor in successful leadership. The scholar noted that while different situations within organizations require different types of leaders and leadership, the most effective leaders are characterized by a high level of emotional intelligence. Mayer et al. (2004) defined emotional intelligence as "the ability to (a) perceive emotions, (b) use emotions to facilitate thought, (c) understand emotions, and (d) manage emotions, to promote emotional and intellectual growth" (p. 200). According to these authors, emotional intelligence represents the emotional and social skill-set that influences the way individuals perceive and express themselves, facilitate and maintain social relationships, use emotional information in effective ways, and cope with challenges. To achieve maximum productivity, the leader must have a good understanding of human nature (Tognazzo et al., 2017) and emotional intelligence therefore, enables the middle manager to manage his own emotions and that of subordinates effectively, as well as manage relationships with subordinates in a way that is positive for all parties and leads to success in the organization. The relationship between emotional intelligence and performance has been established in the literature. A study by Tognazzo et al. (2017) found a connection between emotional intelligence behavioral competencies (especially when task and relationship oriented) and organization performance. Similarly, Goleman (1995) sought to explore how emotional

intelligence in the leader manifested in the workplace and found a positive relationship between emotional intelligence and performance.

Technical, Human, and Conceptual Skills

Based on an observational study of employees in the workplace, Katz (1974) suggested three types of personal skills that can be found in an effective leader: technical, human, and conceptual. Technical skills (specialization/ area of competency) comprise of knowledge and skills related to a particular type of work or activity. Technical skills are not a necessary prerequisite for top-level leaders, such as company director, president of the board, or senior managers; they are more relevant for subordinates (Katz, 1974).

Human skills refer to the knowledge and ability to work with people and relate to competency in communication and relationship building. Leaders with human skills are able to promote cooperation in the team, create an atmosphere of trust and psychological security, as well as demonstrate sensitivity and concern for the needs and welfare of subordinates. This characteristic is referred as relational leadership. Leaders with high-level human skills, including emotional intelligence, contribute strongly to the success of the organization (Katz, 1974).

Conceptual skills imply the ability to work on ideas and concepts. A leader who possesses conceptual skills is able to verbalize the goals of the organization, handle abstract and hypothetical statements easily, as well as create vision and strategic plans for the organization (Katz, 1974). Where a leader does not have conceptual skills, the workers may not be motivated to work. Since a leader must be a role model to subordinates, having strong conceptual skills will help the leader stimulate subordinates intellectually, morally, and otherwise, and increase the profitability of the organization.

Katz (1974) also argued that these skills (technical, human, and conceptual) are largely different from the traits or quality of the leader. Leaders can master skills, whereas the traits represent who they really are. Lau et al. (1980) added that skills related to four factors, namely, executive leadership, managerial leadership, supervisory leadership, and basic leadership, are inevitable for a leader. Later, Mumford et al. (2000) advanced Katz's model and proposed a new model called the "capability model" with five domains. Mumford advocated that these leadership capabilities can be developed, over time, through appropriate education and adequate experience.

In 2007, Northouse also agreed with this empirical approach to skills-based competency. However, Northouse (2007) argued that the scope of the skills approach appears to encompass areas beyond the limits of leadership, making it appear less precise. He continued to contend that skills had weaker predictive value of leadership performance.

Problem-Solving Skills

These skills are critical for the successful middle managers. Mumford et al. (2000) defined problem-solving skills as the creative ability of the leader to solve new, vague, unusual, or poorly defined problems within the organization. This skill implies the ability to recognize a problem, collect information about the problem, observe the problem in a new way, and create work plans for problem-solving. This skill enables leaders to apply possible solutions to unique problems within the organizations they manage (Mumford et al., 2000).

Social Judgment Skills

Social judgment skill implies knowledge of people and social systems. This skill allows leaders to work together with others to implement change and deliver solutions for unique problems in the organization. Conceptually, the social judgment skill aligns with Katz's (1974) early work on the role of humanistic skills in management. In contrast to Katz's work, Mumford

et al. (2000) saw this skill as comprising of discernment, social insight, flexible behavior, and social performance. Possessing good social skills was also proven by other researchers to be associated with superior social support, whereas lower levels of social competence was shown to break family and other contacts (Brotheridge et al., 2008; Perez et al., 2007; Philippot et al., 2003).

Knowledge

Lastly, knowledge is a vital tool in the middle manager's portfolio. Knowing involves the accumulation of information as well as the possession of a mental framework in which information is organized. Knowledge is inseparably linked to every other competency. Knowledge is also specifically linked to the application of problem-solving skills in organizations; it directly influences the ability of leader to perceive complex organizational problems and try to solve them (Mumford et al., 2000). Table 2.2 shows the list of recommended competencies for middle managers.

Table 2.2

List of Recommended Competencies for Middle Managers

Recommended competencies for middle managers	Key references
Technical, human, and conceptual skills.	Katz, 1974
Executive leadership, managerial leadership, supervisory leadership, and basic leadership.	Lau et al., 1980
Emotional intelligence.	Goleman, 1995
Capability model with diverse domains including knowledge and problem-solving skills.	Mumford et al., 2000
Cultural competence.	Brownwell, 2006
	Kowske & Anthony, 2007
Social judgment skills.	Philippot et al., 2003
	Perez et al., 2007 Brotheridge et al., 2008
Fundamental knowledge, Core skills, Strategic Management, Personal skills, Social skills, Interpersonal skills, Innovative skills.	Oleksyn, 2006
Avoidance of prejudice, bias, and conflict.	Waddington, 2007
	Betancourt & Renfrew, 2011
Team management, Effective communication, Human skills, Emotional intelligence, Competency to deal with diversity-related issues such as gender, religion, family, and race.	Betancourt & Renfrew, 2011
	Birken et al., 2012
	Greilich et al., 2018
Learning-oriented leadership.	Doos et al., 2015
Analytical competency, Self-management, Management of relationships, Self-awareness, Management of goals, Management of actions, Social awareness skills.	Lakshminarayanan et al., 2016
Leadership skills.	Johansson & Svensson, 2017
Intellectual stimulation, Individualized consideration.	Moon et al., 2019

In summary, middle managers play diverse roles as negotiator, coordinator, director of personnel, manager of resources, problem solver, performance monitor, communicator, and change agent. To portray these dynamic roles, they need to possess a set of closely related

competencies including leadership, emotional intelligence, cultural competence, technical skill, human skill, conceptual skill, social judgment, and knowledge. Through these roles and competencies, middle managers help the organization move forward. The leadership and managerial competencies required in the field of healthcare and medical education also require additional competencies unique to the sector.

Leadership in Healthcare and Medical Education

The importance of efficient leadership at all levels of the organization has been documented in the context of healthcare organizations and medical education. Kaminskas et al. (2011) noted that efficient leadership is central to improvements in quality and efficiency in health care institutions, and that there is need for effective and reliable leaders who are able to make well-informed decisions. Supporting the potential for efficient leadership to positively impact on performance in the practice arena, McAlearney and Butler (2008) established that efficient leadership is necessary in the practice arena as organizations seek to improve quality and efficiency in health care, improve management of human resources, achieve turnover and cost reductions, as well as fulfill specific strategic priorities.

Focusing on the need for decentralization to address the cycle of disempowerment of marginalized groups and improve accountability in medical education, Pushpanadham (2006) noted that efficient leadership is necessary to address these problems. He further stated that modern healthcare education necessitates community participation, collegiality, and organizational and pedagogical flexibility. Such a scenario demonstrates the need for transition towards decentralization of management in the educational context, a directional shift that significantly depends on efficient leadership.

Supporting this view, McAlearney and Butler (2008) also noted that one of the ways through which strategic priorities and improvement in operational results can be obtained in the healthcare sector is through leveraging leadership development. Summarizing the benefits of effective leadership in the healthcare professions, Kaminskas et al. (2011) stated that efficient leadership is crucial for maximizing organization-wide opportunities for improvement, such as fostering transparency and cross-communication, encouraging innovations, and expanding awareness of pertinent clinical and administrative issues. Based on these benefits, they concluded that it is important to adopt strategic preparedness in developing the leadership potentials of future medical professionals (Kaminskas et al., 2011).

Physician Leaders

Physicians are often perceived as leaders in the health care field and this assumption is based on their high-status role in the profession as well as their educational preparation (Pesut & Thompson, 2018). Effective leadership skills can be learned with sufficient practice and dedication to the principles of integrity, flexibility, teamwork, and empathy. Such skills are critical for successful leadership while immersed in the clinical setting as a practitioner. Further, as Nightingale et al. (2018) pointed out, leadership development opportunities for physicians are a vital pathway to increase physicians' leading effectiveness. For instance, proper training on how to lead their teams effectively, is an important precondition for success in the field, and this aspect is emphasized in medical education. Medicine, as a whole, has also become more interdisciplinary in nature with rapid changes in healthcare services increasing the importance of mid-level physicians (Elledge, 2018). Physicians need to learn how to be effective in the modern dynamic, team-based healthcare sector as they are accountable for the clinical decisions implemented in their daily practice.

Challenges Related to Leadership in Healthcare and Medical Education

As noted previously, the challenges faced by the leadership in medical education include the pull of market values, impact of relentless commercialization, funding, and curricula reforms (Kirp et al., 2003). Lucas (2000) identified the factors that have influenced change as: (a) rapidity with which information is expanding, (b) the spiraling competition from corporate classrooms and virtual universities, (c) the need to integrate technology in education, (d) the changing expectations and demands of students and parents, (e) the selection and management of a diverse faculty and students, and (f) the increasing accountability and the decision by governments to allocate resources to public education based on performance.

Mallon and Corrice (2009) indicated that in academic medicine, the process by which leaders are identified for important roles—deans, department chairs, directors, and other major administrative positions—traditionally has followed an "academic search" model. The authors reported on recruiting practices for leadership in academic medicine, that medical schools are constantly searching for new leaders with the right background, skills, and abilities, and the average leadership search in medical schools takes a full year. The use of search committees is the norm and usually deans appear satisfied with many aspects of the leadership search process, but less so with outcomes in achieving a more diverse leadership team, which is the most vexing challenge in the leadership search process. In order to address these challenges of recruiting new leaders, deans have undertaken innovative search strategies such as centralizing the search process, preparing prior to launch, and setting search committee expectations. Recently, teaching hospital CEOs have become more involved in the recruitment of clinical department chairs over the last decade. However, almost half of them do not participate in an evaluation of the new chair's performance within his/her first year, and sometimes deans disagree with the hospital

CEOs. Therefore, it is emphasized that there should be alignment between the teaching hospital CEO and medical school dean about expectations, competencies, financial incentives, and evaluation criteria is critical in the recruitment of new clinical department chairs.

The above mentioned challenges require that academic administrators develop a vision for healthcare and medical education, keeping in mind, the principles of policy standards.

Leadership Policy Standards in Healthcare and Medical Education

Based on the premise that leadership behaviors and practices in the medical educational context have significant implications in healthcare delivery, policy standards became necessary (Lindahl & Beach, 2009). Such standards delineate expectations regarding leadership development in medical education. The Educational Leadership Policy Standards organize the functions that constitute strong medical school leadership into six categories: (a) the first pertains to setting a widely shared learning vision; (b) the second entails developing a culture and instructional program that is conducive to both staff professional growth and student learning in the health care field; (c) the third policy standard pertains to fostering a safe, efficient, and effective environment for learning through effective management of organization, operation, and resources; (d) the fourth standard concerns collaboration with faculty and community members, response to diverse community needs and interests, and community resources mobilization; and (e) the last two standards pertain to integrity, fairness, ethical conduct and comprehension, as well as influencing the medical educational context along with social, political, legal, and cultural dimensions (Educational Leadership Policy Standards: ISLLC1, 2008).

Farver and Holt (2015) elaborate on the policy standards for educational leaders, noting that research evidence and sound educational practice inform the Interstate Leaders Licensure Consortium Standards (ISLLC) content and presentations. The National Policy Board for

Educational Administration (2015) discuss, among others, the effect of the global economy in the transformation of the medical jobs and such external factors play an important role in determining leadership effectiveness and engagement in the health care sector (Kaminskas et al., 2011).

Leaders in healthcare often have to navigate changing family structures, demographic contexts, politics, and shift of control which cuts into medical school funding and impacts operational and policy decisions (Kaminskas et al., 2011). In a survey conducted among NHS doctors, physicians were not keen on assuming leadership roles citing reasons like, "scarce time to balance family and management roles (51%)," "increased workload coupled with inadequate resources (46%)," and "loss of trust in management (43%)" (Wilson, 2014).

At the same time, the healthcare industry today brings exciting opportunities for leaders in areas of introduction of innovations towards improving human resource performance and inspiring the available workforce to develop novel and creative solutions to attain desired performance (Kaminskas et al., 2011; National Policy Board for Educational Administration, 2015). Such opportunities and considerations underscore the importance of Educational Leadership Policy Standards, as well as the need for continued policy updates and enhancements (National Policy Board for Educational Administration, 2015). As a result, the standards also have important applications in the development and implementation of effective leadership training across all levels of management in healthcare and medical education.

Leadership Training in Medical Education

Sonsale and Bharamgoudar (2017) noted that doctors have high chances of coming across complex leadership and management scenarios throughout their careers that most of them would not have had training on how to handle. This means that when thrust into such roles, the

outcomes cannot be expected to be optimal, except when medical students are provided with requisite knowledge and skills for leadership and management. This scenario emphasizes the need for curricula reforms in medical education to include managerial skills and competency.

Consequently, leadership development has been incorporated into the mainstream curriculum of medical education (Nightingale et al., 2018). The seamless integration of leadership development in the curriculum is a reflection of the efforts of medical educators to encourage independent and critical thinking skills among students (Pesut & Thompson, 2018). The incorporation of leadership development programs into medical education has therefore, led to optimal results in terms of addressing preparedness for future physicians (Pesut & Thompson, 2018). The experiential emphasis is justified by the fact that leadership in the health care field is challenging to teach. A core avenue through which such experiential training is provided is through mentoring, as well as the formation of medical student interest groups and medical student run clinics. Such activities provide medical students with distinct opportunities to learn through experience and thereby improve their leadership skills (Nightingale et al., 2018). Lastly, the introduction of dual degree programs in medical education also indicates the focus of educators on providing sufficient formal leadership training for future physician leaders (Elledge, 2018).

Leadership Programs for Practicing Doctors

Scholars believe that high-quality health care delivery primarily relies on physician leadership (Lee, 2010; McAlearney & Butler, 2008) and therefore, experts around the world support leadership development programs for practicing physicians (Blumenthal et al., 2012; Detsky, 2011; Stoller, 2009, 2013). Several programs are available in diverse formats with variable duration developed for specific target audiences with self-directed or team-based

modules. Most of these programs fulfil the requirements of Accreditation Council for Graduate Medical Education (ACGME; Blumenthal et al., 2014; Sonnino, 2016). Executive Leadership in Academic Medicine (ELAM; Morahan et al., 2010), Foundation for Advancement of International Medical Education and Research (FAIMER; Burdick, 2014), and the University of Minnesota Medical School Emerging Physician Leaders Program (EPLP; Sonnino, 2016) are some of the well-established leadership training programs.

These programs are based on properly-structured curriculum that span over a period of time and incorporate interdisciplinary institutional projects aimed at practical application of leadership skills (Arroliga et al., 2014; Savage et al., 2014). Leadership training programs are also available for all health care professionals including dentistry and nursing (Taichman & Parkinson, 2012). These training programs are intended to develop the following competencies which are unique to healthcare sector and medical education.

Leadership Competencies Specific for Healthcare and Medical Education

"The CanMEDS Physician Physician Competency Framework identifies and describes seven roles for physicians: medical expert, communicator, collaborator, manager, health advocate, scholar, and professional" (Frich et al., 2015, p. 656). The following leadership competencies have an important place in the field of healthcare and medical education and therefore, physicians should be adequately prepared in these areas (Gill et al., 2018; Shum et al., 2018; Stephen & Stemshorn, 2016).

Team Management

Engle et al. (2017) observed that changes in the modern healthcare environment have necessitated enhanced emphasis on improving the quality of care through focus on value, efficiency, and safety. Even though healthcare systems have highly educated professionals

utilizing cutting-edge technology supported by more scientific research, they are still challenged by grave safety issues. It has been documented that more than 70% of serious medical errors are avoidable and result from lack of teamwork (Franck et al., 2018). Therefore, most of the leadership development and training programs have included team leadership in the hospital settings (Nightingale et al., 2018).

Change Management

One of the crucial leadership competencies emphasized in healthcare and medical education relates to managing change. The premise for this emphasis is that change is inevitable in the medical sector and therefore, leaders should be adequately prepared to respond effectively to changing circumstances and various external factors that might impact their performance in the workplace (Mozhgan et al., 2011). The ability to manage change is closely associated with the professional obligation to care for lives. This fundamental obligation is often fulfilled through shared and transparent decision-making in which changes may be made to deliver optimal patient care (McAlearney & Butler, 2008).

Decision Making / Problem Solving

Another leadership competency that emerges in healthcare and medical education is that of decision-making and problem-solving. In order to solve complex problems, medical professionals must be able to make rational and balanced judgments and decisions. For instance, they are expected to maintain an appropriate balance between the needs of stakeholders and their own needs. They are also expected to engage in decision-making either on their own or in conjunction with their peers, and to make shared decisions towards fulfilling a common vision for patient care (Mozhgan et al., 2011). Thus, the emphasis of this leadership competency in

medical education is awareness creation and preparedness to address the evolving needs of stakeholders in the health care sector (Hollenbeck et al., 2006).

Communication

Effective communication is among the most important leadership competencies in healthcare and medical education. Appropriate communication is widely accepted as a major driver for success in leadership. In leading others, communicating a shared vision, mission, and specific objectives is crucial to achieving shared goals (Pollard & Wild, 2014). Medical educators emphasize the importance of communicating in an open and flexible manner, a factor that can help students to be effective in their future roles (Mozhgan et al., 2011). Physicians interact with members of the community as well as serve as resource persons. Their capacity to engage in teamwork through clear communication will accentuate their efficiency, effectiveness, and reputation (Pesut & Thompson, 2018).

Cross-Cultural Sensitivity

There is strong and persistent emphasis on the leadership competency of "valuing diversity." In today's globalized world, physicians and nurses tend to interact with individuals from diverse cultural and social backgrounds. This means that possessing adequate cross-cultural skills is essential for maintaining effective communication and rapport with patients (Caligiuri & Tarique, 2012). Such rapport is in turn necessary for effective diagnosis, delivery of care, and monitoring of patients' progress. Accordingly, medical educators consider it extremely important to instill a strong sense of appreciation for diversity among patients, students, and other stakeholders (Mozhgan et al., 2011).

In summary, the specific leadership competencies required in healthcare in relation to the general competencies presented in Table 2.2 are team management, change management, decision making /problem solving, communication, and cross-cultural sensitivity.

With this preamble, let us explore more about cross-cultural sensitivity in general, followed by cross-cultural sensitivity in the Gulf region with special emphasis on the Kingdom of Saudi Arabia and the Kingdom of Bahrain. We need to consider the fact that there is very little literature available with special focus on the Kingdom of Saudi Arabia and the Kingdom of Bahrain, and therefore there is a necessity for extrapolating from the global literature on cross-cultural research, some of which includes other Arabic countries in the Gulf region.

Healthcare and Medical Education in the Gulf Region

Implementation of healthcare is normally characterized by complex and dynamic Human Resource Management (HRM) in which the roles of middle managers are poorly understood, despite the significant influence they can possibly exert in day-to-day execution of activities, highlighting the need to identify their competencies for successful healthcare delivery (Chen et al., 2008). Specific to the interests of this study, researchers and policy makers in the Gulf region have found significant challenges in acquiring and training top managers amidst the socio-political and security-related developments of the last decade (Budhwar et al., 2019; Gao et al., 2017). These challenges are exacerbated by high unemployment levels coupled with rapidly increasing population and by the unwillingness of citizens to work in private sectors in Gulf countries. This problem is compounded by the lack of skilled HR professionals in the majority of the Gulf countries; thus, managers cannot rely on HR departments for assistance and often must resort to “trial and error” methods to meet their goals (Abdalla, 2015). Hence,

government is increasing efforts to prepare local nationals in leadership and managerial competencies (Afiouni et al., 2013).

A large body of research also indicates that healthcare and educational organizations present all over the world, including the Gulf region, need middle managers possessing both leadership and managerial competencies (Urquhart et al., 2018). Even though middle managers possess the primary responsibility for organizational efficiency and results, only limited information is available from the Gulf region regarding how leadership is conceptualized in relation to middle-managers, as well as the challenges facing individuals engaged as middle managers (Head of the Clinical Departments in a hospital setting, Head of the Departments in a college setting) in medical education and healthcare sectors (Barati et al., 2016; Capowski, 1994; Clements, 2013; Northouse, 2013).

Cross-Cultural Sensitivity: Global vs. Gulf Region

The world is increasingly culturally, politically, economically, and socially connected, resulting in the use of the term global society. The concept of "culture" is often misinterpreted in medical education and healthcare practice as it is commonly paralleled with race or people who share the same behavior patterns, values, and beliefs (Jenks, 2011). Such misinterpretations have adverse effects for the quality of care that patients receive.

Global Leadership

Globalization also leads to the emergence of inequalities in access to healthcare delivery. However, it is imperative to create a conducive environment for people from diverse populations to receive non-ethnocentric and culturally appropriate healthcare. Provisioning of cross-cultural healthcare is an ethical and professional obligation for all healthcare professionals (Douglas et al., 2014). The qualities linked with culturally proficient leadership include honesty,

intellectual capacity, sense of humor, creativity, persistence, determination, desire to excel, knowledgeable attitude, beliefs, responsibility, insight, self-confidence, and motivation (Hernandez et al., 2011).

In order to avoid the potential for conflict, Chang (2010) indicated that mutual respect and cooperation should be encouraged. This idea is also echoed by Becirovic and Brdarevic-Celjo (2018), quoting that "our ability to function effectively in an environment depends upon our skill in recognizing and responding appropriately to the values and expectations of those around us" (p. 244). Worldwide reviews are underway on how to align the health care and medical education with the shifting needs and socio-cultural demands (Hartley, 2016; Spring, 2008).

Gulf Leadership

According to Khan (2008), one of the main differences between Arab leadership and Western leadership is that the Arab leadership is based on the Quran and accepted Hadiths. In the Quran, God provides people with principles, tools, and skills which are required in leading their lives, relating with others, and in realizing their fullest potential. Mohammed et al. (2015) similarly noted that the difference between Western leadership and Arab leadership is that Arab leadership has religious and spiritual dimensions and is oriented toward people rather than products. This style of leadership also emphasizes motivation based on spiritual sources. Arabic leaders are not free to act as they choose or must submit to the wishes of others, but only act to implement the laws of Allah on earth (Aabed, 2006). Western leadership on the other hand, focuses on influences on a group towards accomplishing its goals. The job of the leader is to develop conditions to make the team effective.

Aabed (2006) indicated that transformational leadership usually focuses on the transformation process. According to this author, Arab leadership (Islamic leadership) can therefore be considered as transformational leadership since leaders actively work to facilitate and enable transformation in their followers in tandem with the Islamic values. According to Aabed (2006), Arab leadership also demonstrates the principles of servant leadership as it is believed that leaders should be servants to others. Arab leadership is also participatory as individuals other than the leaders are allowed to take part in the decision making.

Kingdom of Saudi Arabia

To a large extent, available literature on the cross-cultural or multicultural approach in clinical settings focuses on the importance of learning the values, attitudes, beliefs, and behaviors of specific cultural groups. Such literature emphasizes the learning of principle "dos and don'ts' for diverse cultural groups such as avoidance of eye contact, stigmatization of mental illness in Saudi Arabian culture, or lack of trust in Western healthcare systems among immigrants. However, such observations may not always apply to all the members of the cultural group to which they commonly are ascribed. Diverse practices, behaviors, and traditions may not have the same meaning for all members of the specific group as they also relate to issues such as gender, political views, class, age, or religion, for example (Kagawa-Singer & Kassim-Lakha, 2003).

For instance, common stereotypes about women being oppressed in the Middle East (Saudi Arabia, in particular) often make it hard to unbiasedly evaluate patients and families from this group. Furthermore, such misinterpretations also result in the lack of accountability for variations in quality of care given to such groups compared to other groups within the dominant culture. The cross-cultural approach to clinical leadership is therefore of heightened importance given the diversity that exists today even within highly traditional cultures.

Kingdom of Bahrain

The cultural beliefs related to healthcare in the Kingdom of Bahrain are similar to the Kingdom of Saudi Arabia. Medical students in Bahrain have reported that cultural practices of the local Arab society have posed additional challenges for learning some processes and procedures related to the medical profession. Some of these challenges included gender values and conduct towards strangers (Whitford & Hubail, 2014). Samier and ElKaleh (2019) explored the significance of incorporating pedagogical principles of postgraduate curriculum and training for educational administration and leadership, which is based on Arab perspectives, for better cultural acceptability. It is apparent that strong leadership capabilities form the bedrock for successful operations for healthcare institutions (Nightingale et al., 2018).

Having summarized the leadership skills needed for healthcare professionals, let us look at the evolving scholarship which supports the importance of leadership at all organizational levels of health care delivery, including middle managers (Gutberg et al., 2020). The contribution of middle managers in healthcare and medical education is discussed below.

Middle Managers in Transformation of Healthcare and Medical Education

Effective translation of healthcare innovation into practice depends on the middle managers to a significant extent. Nightingale et al. (2018) noted that successful middle managers in health care tend to think in a creative and innovative manner as they are most likely to collaborate with physicians within their organization, as well as physicians outside the organization. Successful middle managers in the health care sector also have proficiency and ability to analyze and apply clinical data in decision-making; this includes financial and operational data (Greilich et al., 2018).

Role of Middle Managers in Transformation of Healthcare and Medical Education

Underscoring the need to conduct research into middle managers in healthcare, Birken et al. (2012) noted that a gap exists between evidence of effective care and its translation into practice, and this gap may be attributed to poor implementation of healthcare innovation, which could be detrimental to the Gulf region which is witnessing a healthcare transformation now.

The Kingdom of Saudi Arabia and Kingdom of Bahrain have started implementing healthcare transformation from a public to more self-sustained autonomous system in which middle managers might have a key role in particularly by addressing the informational gaps between senior management and frontline clinicians in four different ways: "(a) giving information to employees regarding implementation (diffusing information); (b) making information relevant to employees (synthesizing information); (c) giving employees the tools required for implementation (mediating between strategy and day-to-day activities); and (d) encouraging employees to consistently and effectively use innovations (selling innovation implementation) during research on health services" (Birken et al., 2012, p. 5).

During healthcare transformation, middle managers have the responsibility to supervise workers, oversee project teams, manage frontline operations, as well as influence top management. These processes allow middle management to positively impact on hospital turnarounds (Birken et al., 2012). The influence of middle managers on employees is directly related to outcomes such as financial performance and competitive position of the healthcare organization (Birken et al., 2012).

In addition, middle managers are responsible for the development of appropriate strategies to address any gaps or inconsistencies in the healthcare transformation process. Since they are expected to process a substantial amount of information and develop reliable action

plans, it is apparent that having a clinical background is a significant advantage for middle managers and they tend to gain credibility and trust by sharing their clinical knowledge with other stakeholders in the field (Greilich et al., 2018; Nightingale et al., 2018).

It is important that the health sector support transfer of knowledge across middle managers using adequate training and development programs to ensure sustainability of healthcare transformation. Illustrating this point, a study by Currie et al. (2015) examined the correlation between the human resource practices and the transfer, or "brokering," of knowledge by hybrid middle managers. The study found that hybrid nurse middle managers transferred knowledge downward to their peer groups, but there were considerable barriers to transferring knowledge upward. The nurse middle managers were also limited in transferring knowledge inter-professionally as they do not have legitimacy with doctors. In addition, the study found that higher level healthcare middle managers often needed motivation to participate in the transfer of knowledge outside their area of specialization. The researchers concluded that adequate human resource practices were necessary to support effective transfer of knowledge among hybrid middle managers as well as to create motivation for participation in knowledge transfers (Currie et al., 2015).

Competencies of Successful Middle Managers in Transformation of Healthcare and Medical Education

Reflecting on the expanding role and relevance of middle managers in healthcare and medical education, Harris and Jones (2017) noted that several decades ago, research conducted on middle leadership roles in medical schools was based on subject leaders and department heads. Competencies such as team management, effective communication, human skills, emotional intelligence, and cultural competency enable the middle managers to adopt

decision-making approaches that are effective for dealing with diversity-related issues such as gender, religion, family, and race during transformation of healthcare and medical education. (Betancourt & Renfrew, 2011; Birken et al., 2012; Greilich et al., 2018). In addition, middle managers in healthcare manage resources, motivate employees, cooperate with external stakeholders, and are familiar with mechanisms for reducing stereotypes, prejudice, bias, conflict, and so on (Betancourt & Renfrew, 2011; Waddington, 2007). Since one of the goals of the dynamically transforming healthcare sector is to manage patients across the care continuum, middle managers are focused on ensuring optimal patient outcomes in home care as well as physician offices (Birken et al., 2012; Greilich et al., 2018).

Challenges Faced by Middle Managers in Healthcare Delivery

Regardless of this extensive scope of work, the decision-making power of middle managers is mostly limited as they are restricted to compliance with administrative directives and the standard operating procedures approved by the higher levels of management (Dorros, 2006; Waddington, 2007). In most countries in the Middle East, healthcare managers do not have a say in budgetary issues or in human resources functions such as hiring (Dorros, 2006). There is little or no support for innovations or initiatives on the part of the middle managers in such contexts. The problem for developing countries is not only whether leaders and managers will acquire particular skills, but whether the system will have the mechanism to retain them, as most highly competent leaders and managers (including middle management) tend to seek out environments that support their vision and self-actualization (Waddington, 2007).

Explaining the challenging environment within which middle managers operate, Greilich et al. (2018) noted that health care organizations often have a unique form of complexity in that they are frequently centralized and decentralized at the same time. This structural arrangement

with its core of professional bureaucracy might lead to operational and control issues that are beyond the middle managers' ability to manage.

Overlap of Leadership and Managerial Competencies

Successful leaders and middle managers in the healthcare sector must possess a common set of complex skills involving clinical, managerial, social, and personal aspects (Nightingale et al., 2018). Regardless of the differences in educational and practical arenas for healthcare in English-speaking and Middle East countries, the basic set of competencies underlying leadership and management performance should include emotional intelligence (self-awareness, self-management, self-motivation, self-confidence), cognitive intelligence (business skills, systems thinking, and pattern recognition), and social intelligence (social awareness, relationship competencies) (Boyatzis, 2008; Byleveld et al., 2009). According to Vriesendorp et al. (2010), the overlap between the roles of managers and leaders has created a holistic approach to managing health care institutions or programs, one in which strong leadership and managerial skills are positioned as critical factors for achieving improved quality of services and constant improvements in health care.

Frameworks for Leadership Competencies

Noting that lack of effective leadership is a critical challenge for any institution, Çitaku et al. (2012) stated that there is need for competent and effective leaders in health institutions and medical schools in order to effectively address the challenges associated with health in the modern context. Similarly, numerous researchers have indicated that high-quality leadership is vital for an educational institution to be successful (Kolb, 1996; Waters & Grubb, 2004). In their study on school leadership, Waters and Grubb (2004) found an association between principal leadership and student achievement with better principal leadership being linked with an increase

in students' success, as well as a differential effect of leadership where leaders can also have a negative effect on the success of the students. Such findings underscore the need for competent leadership in institutions that prepare students. In the modern healthcare environment, institutions are advised to recognize the competencies that employees require to be successful in their work. Such competencies, when identified among employees, can be utilized in selection, appraisal, career guidance, and promotion (Verma et al., 2006).

Chen (2018) noted that numerous models of modern leadership illustrate the specific attitudes, skills, or knowledge needed by learners in the respective fields. Accordingly, several guides have been developed for medical students and doctors on leadership competencies. Such guides describe the leadership competencies that all doctors are required to develop, and the contents of such guides are incorporated into undergraduate and postgraduate assessment processes and curricula (Chen, 2018).

As noted by Stefl (2008), current healthcare leaders and executives must have management skills that are sophisticated enough to address the increasing complexity of the healthcare environment. Past studies that examined competencies required by healthcare leaders suggest that conceptual, human, and technical skills are crucial competencies for successful management in the sector (Kokkinen et al., 2007). Hudak et al. (2000) also identified a number of management competencies (i.e., managerial capabilities) which current and aspiring health care executives should possess in order to enhance the probability of success in current and future positions of responsibility. The competencies identified as the highest-rated requisites included leadership and resource management, including cost and finance dimensions.

The above literature review endorses the need for a framework of structured and validated list of competencies for healthcare professionals, which would form the basis for

selection, training, and appraisal of personnel. To address this lacuna, the National Center for Healthcare Leadership (NCHL) took the initiative of developing an interprofessional leadership competency model more than a decade before. In 2004, NCHL published Health Leadership Competency Model 2.1, which was revised in 2018 as Model 3. This model helps the healthcare sector formulate specific objectives and goals and incorporate high-quality learning activities in the training programs that can accelerate leadership development.

Establishment of Health Leadership Competency Model 3.0

To begin with, a systematic review of scientific literature on international healthcare with emphasis on future scenarios for the year 2030 was carried out. Healthcare experts from the field of leadership development scrutinized the trends through focus group discussions followed by in-depth interviews conducted among paired-sample leaders chosen from various levels of organization and performance. The resulting data was cross checked with the NCHL Health Leadership Competency Model 2.1. Review of current literature on leadership development was also carried out to develop an evidence-based domain framework. Lastly, the new revised model was disseminated via digital survey to a wider sample of health leaders for establishing content validity and generalizability (NCHL, 2018). Table 2.3 shows the list of NCHL Competencies with description of ascending levels of competency (NCHL, 2018).

Table 2.3

List of NCHL Competencies with Description of Ascending Levels of Competency

NCHL Competency	Description of Ascending Competency Levels					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			Action Domain - Boundary Spanning			
Community Collaboration	Responds Appropriately to Community Needs	Maintains Clear Communication	Takes Personal Responsibility for Initiating Collaborative Planning	Participates with and Understands the Community	Serves the Community	-
Organizational Awareness	Uses Formal Structure	Applies Understanding of Informal Structure	Adapts Actions to Climate and Culture	Considers Priorities and Values of Multiple Constituencies	Acts Using Insights of Stakeholders' Underlying History and Issues	-
Relationship & Network Development	Develops or Sustains Informal Contacts	Builds Rapport with Associates	Sustains Formal Contacts	Establishes Important Relationships with Key Leaders	Builds and Sustains Strong Personal Networks	-
			Action Domain – Execution			
Accountability	Communicates Requirements and Expectations	Sets Limits	Sets and Upholds High Performance Standards	Addresses Performance Problems	Fosters a Culture of Accountability	-
Achievement Orientation	Strives to Do Job Well	Creates Own Measures of Excellence	Improves Performance	Sets and Works to Meet Challenging Goals	Assesses Risks/Rewards of Potential Actions	Takes Calculated Entrepreneurial Risks

NCHL Competency	Description of Ascending Competency Levels					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Analytical Thinking	Breaks Down Problems	Identifies Basic Relationships	Recognizes Multiple Relationships	Develops Complex Plans or Analyses	-	-
Communication Skills 1 – Writing	Uses Generally Accepted English Grammar	Writes Clearly and Persuasively	Prepares Effective Written Business Cases and Reports	-	-	-
Communication Skills 2 – Speaking & Facilitating	Speaks Clearly and Effectively	Prepares Effective Oral Presentations	Presents Persuasively	Facilitates Group Interactions	-	-
Initiative	Reacts to Short-term Opportunities and Problems	Responds Decisively in Time-sensitive Situations	Looks Ahead to Take Action in the Short-term	Takes Action on Longer-term Opportunities	Acts Over a Year Ahead	-
Performance Measurement	Monitors Indicators of Performance	Monitors a "Scorecard" of Quantitative and Qualitative Measures	Uses Evidence-based Approaches to Support Community Wellness	-	-	-
Process & Quality Improvement	Conducts Process Flow Analyses	Benchmarks Good Processes and Practices	Evaluates Organization Structure and Design	Works with Governance to Improve Performance	-	-
Project Management	Prepares a Detailed Project Plan	Manages Projects Effectively	Provides Project Oversight and Sponsorship	-	-	-
			Action Domain - Relations			
Collaboration	Works Cooperatively	Expresses Positive Attitudes and Expectations of	Solicits Input	Encourages Others	Builds Commitment to	-

NCHL Competency	Description of Ascending Competency Levels					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Team or Team Members			Collaborations	
Impact & Influence	Expresses Logical Intention for Action	Takes a Single Approach to Persuade	Takes Multiple Approaches to Persuade	Calculates Impact of Actions or Words	Uses Indirect Influence	Uses Complex Influence Strategies
Interpersonal Understanding	Recognizes Emotions and Concerns of Others	Interprets Emotions and Verbal Content	Commits to Understanding Others	Displays Sensitivity to Diverse Backgrounds	Actively Increases Diversity and Inclusion	-
Talent Development	Expresses Positive Expectations of Others	Gives Short-Term, Task-Oriented Instruction	Provides Constructive Feedback and Support	Supports Ongoing Development	Acts as a Developer of Talent	Develops Health Industry Talent
Team Leadership	Manages Team Meetings Well	Keeps People Informed	Promotes Team Effectiveness	Obtains Resources/Takes Care of the Team	Demonstrates Leadership	Is a Role Model for Leadership
			Action Domain - Transformation			
Change Leadership	Identifies Areas for Change	Expresses Vision for Change	Ensures Change Messages are Heard	Challenge Status Quo	Visibly Reinforces Change Vision	Manages Distress During the Change Process
Information Seeking	Consults Available Resources	Investigates Beyond Routine Questions	Delves Deeper	Conducts Research to Maintain Knowledge	Is a Recognized User of Best Practices	-
Innovation	Recognizes Patterns Based on Prior Experience	Applies Proven Concepts or Trends	Clarifies Complex Ideas or Situations	Creates New Concepts or Breakthrough Thinking	Fosters an Innovation-Supportive Culture	-

NCHL Competency	Description of Ascending Competency Levels					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Strategic Orientation	Conducts Environmental Scanning	Develops Strategy to Address Environmental Forces	Aligns Organization to Address Long-term Environment	Shapes Industry Strategy	-	-
			Enabling Domains - Values			
Professional & Social Responsibility	Acts Openly and Honestly	Promotes Organizational Integrity	Maintains Social Accountability	Promotes Community Stewardship	-	-
			Enabling Domains - Health System Awareness & Business Literacy			
Financial Skills	Explains the Organization's Financial Metrics and Reports	Manages and Assists the Budgeting Process	Understands Impact of Payment Models	Uses Financial and Needs Analyses to Inform Investment Decisions	Develops Long-term Financial Plans	-
Human Resource Management	Manages with an Understanding of Basic Employment Processes and Law	Uses Alternative Compensation and Benefit Programs	Aligns Human Resource Functions with Strategy	-	-	-
Information Technology Management	Recognizes the Potential of Information Systems in Process and Patient Service Improvement	Champions Information Technology Implementation	Seeks and Challenges the Organization to Pursue Leading-Edge Information Technology	-	-	-

NCHL Competency	Description of Ascending Competency Levels					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			Enabling Domains Self-Awareness & Self-Development			
Self-Awareness	Seeks Feedback	Improves Own Performance	Considers the Impact they Have on Others	Pursues Long-term Personal Development	-	-
Self-Confidence	Acts Confidently within Job or Role	Acts Confidently at or Slightly Beyond the Limits of their Role	States Confidence in Own Ability	Takes on Challenges	Pursues Extremely Challenging Assignments	-
Well-Being	-	-	-	-	-	-

Note. NCHL, 2018

The Health Leadership Competency Model 3.0

This revised and revalidated model consists of seven domains comprising of four "action" domains and three "enabling" domains. The Action Competency Domains describe leaders in the context of doing their work. These include Execution, Relations, Transformation, and Boundary Spanning. The Enabling Competency Domains describe preparation and development activities leaders need in order to effectively lead in the context of their preparation and development to effectively lead in their organization. These include Health System Awareness & Business Literacy, Self-Awareness & Self-Development and Values. (NCHL, 2018, p. 7)

Rationale for Developing Competencies for Middle Managers in the Gulf Region

Even though the Health Leadership Competency Model 3.0 is developed and validated employing subject matter experts from multiple disciplines, followed by refinement through industrial and educational psychologists, most contributors were from the western world with little or no contribution from the Gulf region. Despite the fact that these competencies are related to the healthcare sector, they are generic and not specific for middle managers. Hence, it is justified to conduct this study to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region, specifically the Kingdom of Bahrain and Kingdom of Saudi Arabia.

Chapter Summary

Developments such as increasing complexities in health financing, new institutional models, changes in regulation, insurance models, patient safety, high quality of care, as well as challenges in meeting strategic priorities, have now made it very important to consider the key competencies that characterize successful middle managers in the healthcare sector (Birken et al., 2012). Given the above scenario, an important aspect of addressing this

problem is by identifying the competencies needed by middle managers in the healthcare sector as these are responsible for executing the strategies designed and approved by the top-level leadership.

The current study is intended to evaluate the competencies required for effective middle management in healthcare institutions and medical educational institutions in Kingdom of Saudi Arabia and Kingdom of Bahrain. The extensive literature review presented in this section provides the foundation for the current study by exploring the key concepts that underlie the study as well as providing a snapshot of current empirical findings regarding these concepts. The conceptual findings and framework for leadership competencies identified in the chapter will be invaluable towards constructing a scale for required competences and for interpreting research findings.

However, unlike in (mostly) developed English-speaking countries, health leaders and managers in underdeveloped countries and culturally specific contexts (like most countries in the Middle East) do not possess managerial and leadership competencies (Dorros, 2006). In such regions and countries, most leaders and managers in the healthcare sector are trained health professionals who lack any previous managerial experience (Dorros, 2006). Such leaders attain their managerial positions solely based on their previous clinical expertise, while their lack of managerial skills is generally compensated through at-work learning and short courses (Waddington, 2007).

Health Leadership Competency Model 3.0 is developed based on the intellectual contributions, predominantly from the non-Arab world, which is distinct from the Gulf region politically, socially, and culturally. As mentioned, these competencies are not specific for middle managers. Considering the dynamic role of middle managers in healthcare, and the importance of cultural competency which enables them to be able to effectively work in a diverse environment, the purpose of this study is to identify the leadership and managerial

competencies required for successful middle managers working in the Gulf region, specifically in the Kingdom of Saudi Arabia and the Kingdom of Bahrain. The key outcome of this study is development of a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia). The next chapter will present a detailed description of the methodology to be used in the study.

CHAPTER III: METHODOLOGY

Increasing linkages in roles within the leadership domain means that leadership roles and middle management in healthcare are now delivered by physician and non-physician managers. Optimization of efficiency in healthcare organizations now depends significantly on the efficient and competent execution of such middle management roles. Research evidence supports augmenting the capacity of middle managers as an important factor for organizational growth and transformation (Urquhart et al., 2018). Identifying the competencies for middle managers is central to the determination of effective development programs for these professionals. The purpose of this study was to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region, specifically the Kingdom of Bahrain and Kingdom of Saudi Arabia. These two countries were chosen because they are both Kingdoms with a monarchy form of government and share similar healthcare systems that are currently undergoing a significant transformation from public to more self-sustained autonomous systems (Albejaidi, 2010; Khogali, 2005).

Middle managers play a pivotal role during this transition process through a number of interrelated components like supervising the workers, overseeing project teams, managing frontline operations, and appropriately developing strategies to address any gaps or inconsistencies in the healthcare transformation process. Competencies such as team management, effective communication, human skills, emotional intelligence, and cultural competency enable the middle managers to operate within a self-sustained system.

The current chapter features the presentation of the research methodology to be used in the proposed study. According to Creswell (2007), the appropriate research methodology should be informed primarily by the research questions and the delimitation of the study. Accordingly, the current study will follow a mixed method approach that utilizes both

qualitative and quantitative methods to provide a holistic investigation. The first section of this chapter presents the overall research approach followed by a section on the population and research setting. Other sections will feature the examination of the research instruments, data collection procedures, and data analysis.

Research Questions

In order to achieve the research goals outlined above, this study will seek to answer the following questions. Each research question will be explored in the context of the Gulf region, specifically the Kingdom of Bahrain and Kingdom of Saudi Arabia.

RQ1. What are the main competencies (leadership and management, respectively) identified by the top leaders (CEO / Dean / Vice Dean) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ2. What are the main competencies (leadership and management, respectively) identified by the middle managers (Head of the Clinical Departments in a hospital setting, Head of Departments in a college setting) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ3. What are the main competencies (leadership and management, respectively) identified by the employees (working under middle managers) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

Based on the competencies identified by the above three groups, the key outcome of this study is to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia).

Mixed Method Design for Scale Development

Scale development is defined as a process of developing a validated and reliable measure of construct in an appropriate numerical dimension for assessing an attribute of interest (Tay & Jebb, 2017). Scale usually consists of a number of items that enlighten different aspects of variables that are not only theoretical, but also not measurable by direct means (DeVellis, 2016).

Scholars often find it necessary to develop new scales because of the deficiency of existing instruments to address their research needs (Zhou, 2019). Although there are numerous leadership scales available, they have largely been based on a Western European and American population and there are no leadership scales to date that are designed for the Middle East population, in particular for middle managers. These managers usually comprise of heads of the various organizational units who oblige the tasks assigned by the highest level of management, and simultaneously plan strategy for task implementation through their tactical decisions in terms of technical, financial, and organizational facets (Tyrańska, 2016).

Conventionally, many researchers followed psychometric literature and survey methodology for facilitating item generation and validation during development of new scales (Rowan & Wulff, 2007). However, the technique of scale development is not simply a process within a research plan but a methodical framework starting from the stage of research design to the stage of implementation (Bryman, 2006). It has been recognized that rigorous validation and overall comprehensiveness of the generated items for scale development can be achieved through a mixed methods approach (Bryman, 2006; Collins et al., 2006). For example, qualitative interviews may be conducted prior to scale development in order to obtain key information from participants about a specific social/behavioral condition. Analysis of data generated from such interviews informs the survey design and scale

development for a larger sample size and this process is shown to enrich the quality of the research (Rowan & Wulff, 2007).

Research on application of mixed methods have showed that it can be expanded and adapted to many areas including scale development (Creswell & Clark, 2017). Many researchers have supported the idea of utilizing mixed methods to evaluate the appropriateness and utility of the newly developed scales (Collins et al., 2006; Creswell & Clark, 2017; Greene et al., 1989). Specifically, a sequential mixed method design, comprising of three stages, has been suggested; namely a qualitative phase for defining the construct, a development stage for item generation and revision, and finally, a quantitative phase for testing the instrument (Collins et al., 2006; Creswell & Clark, 2017; Greene et al., 1989).

Research Approach

There are different methods available for developing a scale such as a 13-step approach (Smolleck et al., 2006), and a 9-step approach (Boateng et al., 2018). The proposed study will utilize a 5-step mixed method approach that develops descriptive qualitative research to inform a quantitative examination of the research questions, therefore, the conceptual framework recommended by Zhou (2019) for scale development using mixed methods will be followed. This framework has five steps:

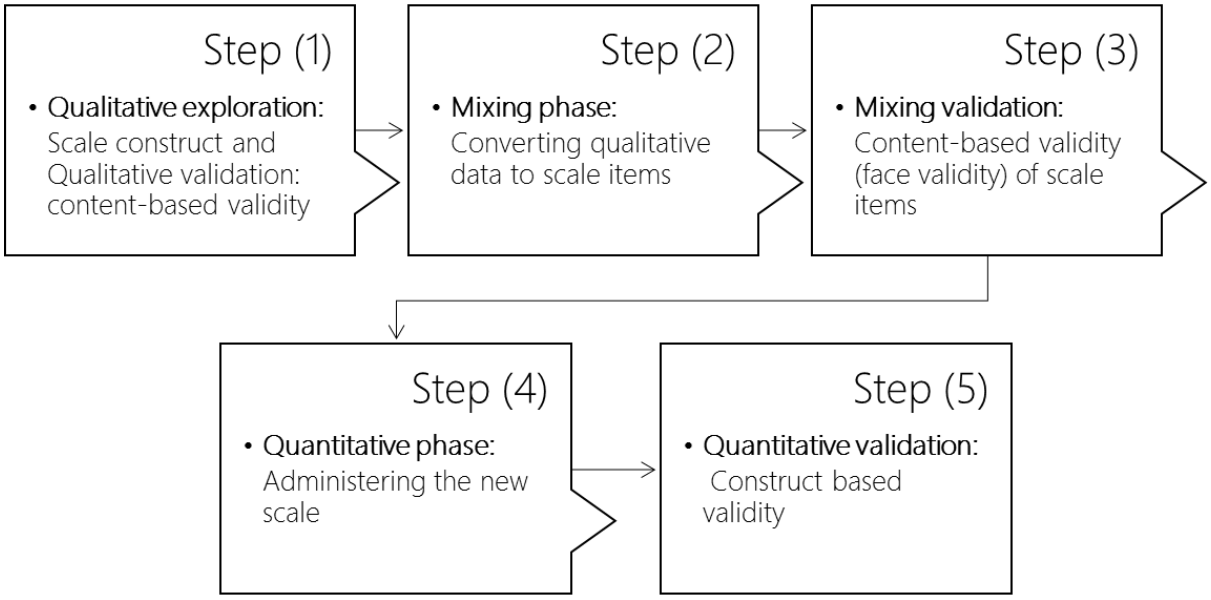
1. Qualitative exploration: Scale construct and qualitative validation:
2. Content-based validity.
3. Mixing phase: Converting qualitative data to scale items.
4. Mixing validation: Content-based validity (face validity) of scale items.
5. Quantitative phase: Administering the new scale.
6. Quantitative validation: Construct based validity. (Zhou, 2019, pp. 43–44)

Due to the complexity and breadth of the research questions, the study will be divided into two phases. Phase I will be qualitative phase comprising of the first three steps of Zhou's

conceptual framework. Phase II will be the quantitative phase addressing the last two steps of the conceptual framework. This approach is represented by a sequential mixed method design (qualitative to quantitative) with quantitative phase being dominant. Figure 3.1 depicts the sequential approach for this psychometric study.

Figure 3.1

The Conceptual Framework Based on Zhou's model



Note. Conceptual framework and sequential approach to this study based on Zhou's model. From "A Mixed Methods Model of Scale Development and Validation Analysis," by Y. Zhou, 2019, *Measurement: Interdisciplinary Research and Perspectives*, *17*(1), p. 42 (https://doi.org/10.1080/15366367.2018.1479088). © Taylor & Francis Group all rights reserved. Used with permission.

Phase I: Qualitative Phase

The qualitative phase comprises the first three steps of Zhou's (2019) model and seeks to respond to the question: What are the main leadership and managerial competencies of middle managers as identified by three groups from the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

Group 1: Top leaders in the healthcare sector (CEO / Dean / Vice Dean)

Group 2: Middle managers (Head of the Clinical Departments in a Hospital setting, Head of the Departments in a college setting)

Group 3: Healthcare employees (working under middle managers)

Step 1 Qualitative Exploration: Scale Construct and Qualitative Validation: Content-based Validity (Zhou, 2019)

Scale construction heavily depends on qualitative research because this exercise not only delivers the required information for item writing, but also offers the basis for the validity of the content of the items. I employed an inductive approach by questioning a sample of respondents to offer descriptions of their feelings / perceptions about the roles / characteristics of middle managers in their organizations (Hinkin, 1995).

I utilized semi-structured interviews to develop items for measuring leadership and managerial competencies of middle managers in healthcare systems of the Kingdoms of Bahrain and Saudi Arabia.

Population and Sampling. The target population will be from healthcare and medical educational organizations in two countries across the Gulf region, namely the Kingdom of Bahrain and the Kingdom of Saudi Arabia. Five top leaders (CEO / Dean / Vice Dean), five middle managers (Head of the Clinical Departments in a hospital setting and Head of Departments in a college setting), and five employees (working under middle managers) in

the field of healthcare and medical education were interviewed based on a semi-structured interview guide.

Bryman and Bell (2011) defined sampling as the process for choosing a sample which is a subset of the population in which research will be conducted. The study adopted techniques that save time and reduce cost constraints due to the large scope of the research. In this case, non-probabilistic techniques including simple modified random and purposeful sampling techniques were employed. The sampling techniques were critical for the sample selection based on a predetermined criterion. The inclusion criteria for the respondents comprised the following:

1. The participant must be 35 years and above;
2. Work in an educational or healthcare organization with distinct management levels; and
3. Work in an educational or healthcare organization in the Kingdom of Bahrain or The Kingdom of Saudi Arabia.

The sampling approach involved using a simple modified random sampling to select the representative sample of the population. The random sampling technique allows the possibility for all participants to appear in the research. Then, purposeful sampling within the identified random sample was done based on the predetermined selection criteria. Care was taken to recruit participants from different regions of the Kingdom of Saudi Arabia and the Kingdom of Bahrain to ensure diversity in the respondents.

Data Collection Instruments and Procedures. Due to the use of mixed methods research, triangulation of data collection is essential to improve the trustworthiness of the qualitative data (Bryman & Bell, 2011). In Phase 1, interviews were conducted from three groups (top leaders, middle managers, and employees of the healthcare sector), and the data consisted of responses from semi-structured interviews conducted by the primary

investigator. The interviews were transcribed and analysed using an emergent thematic analysis approach focusing on the competencies that respondents discuss.

The Use of Semi-Structured Interviews. The interview is "a method of data collection in which one person (an interviewer) asks questions to another person (a respondent)" (Polit et al., 2006, p. 35). Interviews are considered to be one of the most frequently used techniques for data collection (DiCicco-Bloom & Crabtree, 2006). There are three different types of interviews: unstructured where questions emerge based on the setting, semi-structured wherein a set of open-ended predetermined questions are used, and finally, structured interviews where a group of closed questions are employed (Fontana & Frey, 2005).

Interviews are usually used as the first step for generating an initial pool of items for scale development (Hutz et al., 2015). Interviews fall in the domain of inductive methods where qualitative information about a construct is acquired from the selected panel of experts or from defined target population (Kapuscinski & Masters, 2010). Researchers often consult with a group of experts for revising the items in terms of clarity and comprehension. In this study, semi-structured interviews with a group of experts were conducted during the first step (Step 1) of qualitative exploration. Such a structured discussion with experts in specific areas facilitate not only the process of item generation, but also the method of validation including content validity and face validity (Burton & Mazerolle, 2011; Dahodwala et al., 2012).

Notably, some of the shortcomings include that the process is time-consuming and labor-intensive. Apart from that, setting up the interview logistics, preparation of questions, recording and transcribing, and textual analysis require considerable effort and time. However, semi-structured interviews are suitable for the tasks where the open-ended questions need follow-up inquiries for clarification. Furthermore, the use of individual interviews rather than focus groups is more suitable given the participants' cultural

sensitivities. Participants may not be comfortable or candid about middle managers' skills in a focus group setting where there is inherently different social status (Ransome, 2013).

To gain participants' thoughts on middle manager skills and characteristics, the following questions were used in the interview:

1. Tell me about your personal and professional journey. How long have you worked as a middle manager and what have been your experiences?
2. Can you describe an individual whom you thought was an excellent middle manager? (with special focus on personal traits)
3. Can you tell me the social qualities this person possessed to become a successful middle manager?
4. In your opinion, what do you think are the competencies of this successful middle manager that might have played a greater role in overall growth of a University / Health care organization in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?
5. In your opinion, what do you think are the competencies possessed by this successful middle manager, for effective leadership in a University / Health care organization in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?
6. In your opinion, what do you think are the competencies of this successful middle manager, which would have contributed to his / her development in a University / Health care organization in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

Each interview lasted for about 15 to 20 minutes. All interviews were held virtually through the ZOOM platform and scheduled based on mutually agreed time slots. All interviews were recorded after getting informed consent from the participants.

Step 2 Mixing Phase: Converting Qualitative Data to Scale Items (Zhou, 2019)

Qualitative data analysis is commonly reliant on the process of interpretation (Cohen et al., 2011) that is achieved through the researcher reviewing the text and determining the meaning that is conveyed by the speaker. There are multiple ways of performing a textual qualitative analysis (Alhojailan, 2012) and thematic analysis is applied in this study

The Rationale for Using Thematic Analysis. Thematic analysis (TA) has been utilized by researchers as a method in various qualitative research designs (Braun & Clarke, 2019). TA is a systematic technique used to identify, organize, and provide facts regarding patterns of themes or meaning across a dataset. TA aggregates meanings and does not focus on idiosyncratic and unique events or associate themes with a single data point (Lawless & Chen, 2019). TA is considered more appropriate for finding a relationship between different variables through the process of coding and observing patterns, especially if the study involves interviews with multiple participants from diverse environments (Crawford et al., 2008). TA also provides an opportunity to present the data in a form that closely mirrors the meaning expressed by the speaker or respondent (Creswell, 2007).

In this study, the purpose is to identify the characteristics and competencies of middle managers from individuals holding different hierarchical positions in the healthcare system. Thus, the data will be analyzed with the intention of identifying those themes and patterns that address the research question.

Process of Thematic Analysis. TA is based on inductive approach and therefore, the interviews were conducted with flexibility, based on the pre-determined, semi-structured interview guide (Boyatzis, 1998). The interviews were recorded and transcribed based on the process recommended by McLellan et al. (2003) and follow the seven principles proposed by Mergenthaler and Stinson (1992):

1. Preserve the morphologic naturalness of transcription.
2. Preserve the naturalness of the transcript structure.
3. The transcript should be an exact reproduction.
4. The transcription rules should be universal.
5. The transcription rules should be complete.
6. The transcription rules should be independent.
7. The transcription rules should be intellectually elegant. (pp. 129–130)

The researcher applied an emergent coding process by developing themes that appeared across all the interviews (Boyatzis, 1998) as related to the purpose of the research, that is, to identify the characteristics and competencies of middle managers. This step comprised of three levels, namely, open coding, axial coding, and selective coding (Arasti et al., 2015). Qualitative coding is focused on identifying certain codes and themes in the text to provide meaningful information related to the intent of the research.

Open Coding. The open coding stage begins with reading the transcribed data which is presented in a textual format. It is recommended that more than one researcher should be involved in the coding process to enhance the credibility of the coding process (Côté & Turgeon, 2005). Hence, in this study, two researchers read the transcripts of the interviews line by line and assigned categories of codes to different chunks of text after comparing and conceptualizing (Ármannsdóttir & Neergaard, 2011; Khandkar, 2009). The number of codes identified can significantly vary as useful codes are determined for the purposes of understanding of the phenomenon under study. This process facilitates identification of vital categories in the form of codes and the newly emerging codes will be continuously compared with the already existing codes to provide higher level of abstraction (Georgieva & Allan, 2008). Both the researchers should arrive at an acceptable level of agreement ranging from 75% to 90% before proceeding with axial coding (Stemler, 2004).

Axial Coding. After the open coding stage is finished, the researcher will obtain numerous codes and begins with axial coding stage. The aim of axial coding is "to determine which [codes] in the research are the dominant ones and which are the less important ones . . . [and to] reorganize the data set: synonyms are crossed out, redundant codes are removed and the best representative codes are selected" (Boeije, 2009, p. 109).

Axial coding also helps to create a conceptual framework (Holloway & Schwartz, 2018). During this stage, the researcher will ascertain the evidence which illustrates a pattern and assign the relevant codes in different manner, bringing out categories and sub-categories (Arasti et al., 2015). In this study, the researcher coded for the characteristics, qualities, and competencies that the participants identified as important for effective middle managers. Further, the researcher grouped the categories according to each of the three levels of participants' roles—top leaders, middle managers, and employees of the healthcare sector.

Selective Coding. Following the stage of axial coding, the researcher proceeded with the process of selective coding and identified the sub-themes and classified them into central themes around which the analysis and interpretation of the research question was based (Dezdar & Sulaiman, 2009). The themes identified were used for item generation for measuring characteristics and competencies required for successful middle managers in the healthcare sector. A minimum of four to six items were generated for each construct (Hinkin, 1998). It is also anticipated that usually half of the original items are retained in the final scale and therefore, it is recommended to generate as many as twice the number of expected items in the final scale to be included in the survey questionnaire (Hinkin, 1998). After completion of this stage, a framework for survey questionnaire for middle manager competencies was developed and utilized in Phase 2 of the study for the development of a scale.

Role of Nvivo Software. In this study, NVivo software was to analyze the interviews. NVivo software makes this process much easier by aggregating the data assigned with the same code and numerous studies indicate that NVivo software improves the accuracy of qualitative studies (Zamawe, 2015).

Step 3 Mixing Validation: Content-based Validity (face validity) of Scale Items (Zhou, 2019)

Validity refers to the ability of an instrument to measure what it was designed to measure (Bhattacherjee, 2012). According to Cooper and Schindler (2014), validity is a primary measure of the quality of the measuring instruments in the research. It evaluates the degree that the questionnaire measures what it was intended to measure. Face validity is a subjective judgment on the operationalization of a construct (Drost, 2011).

The content validity of the measuring instrument is the degree to which the items in the constructs are able to establish the concepts being researched as noted by McDaniel and Gates (2013). Content validity has a subjective judgment from the experts regarding the appropriateness of the measurements, thus used to obtain adequate reporting regarding the research questions and the control of the research. A good content validity should have instruments that are a representative sample of the research concept (Cooper & Schindler, 2014; Sireci, 1998).

The face validity and content validity were assessed by sending the newly developed items to five experts and asking for their response about the applicability of the given characteristics and competencies. The items were presented as a binominal scale with two options, “Yes” or “No” / “Agree” or “Disagree” to denote whether the corresponding item could be included in the scale or not.

A consensus approach was used to determine which items to retain. This process of consensus development consists of discussion between the researcher and the selected experts

to reach a general agreement (Fink et al., 1984). In this case, it is crucial for four experts out of five (80%), or five experts out of six (>83%), to agree that the item reflects the competency applicable to middle managers of the healthcare sector in the Gulf region (Hinkin, 1995).

Phase II: Quantitative Phase

After completing the first three steps of Zhou's (2019) conceptual framework using a qualitative approach for generation of items for the scale development, the final two steps for reliability and construct validity will be implemented using a quantitative approach.

Step 4 Quantitative Phase: Administering the New Scale (Zhou, 2019)

The demographic variables like age, gender, nationality, and origin were included and the scale was developed using a five-point Likert scale on level of importance (1 = Not at all important, 2 = less important, 3 = Neutral, 4 = important, 5 = very important). Likert scale is usually used to elicit respondents' views by asking them the extent to which they agree or disagree with a particular question or statement. I used a five-point Likert scale because the reliability (Cronbach's alpha) is shown to increase up to five-point scale and then level off (Lissitz & Green, 1975).

Stable estimates of the standard errors provided by large samples result in enhanced confidence that observed factor loadings accurately reflect true population values. Recommendations for sample size based on "item-to-response ratios' vary from 1:4 (Rummel, 1988) to 1:10 (Schwab, 1980). However, Guadagnoli and Velicer (1988) observed that a sample size of 150 was sufficient to acquire precise results in exploratory factor analysis provided the item intercorrelations are robust (Hinkin, 1995).

Based on this recommendation, the newly developed scale was sent to 500 participants distributed equally across three groups. Therefore, around 167 participants from Group 1 (Leaders), 167 participants Group 2 (Middle managers) and 167 participants from

Group 3 (Employees under middle managers) working in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia) were recruited for this phase of the study.

Process of Recruitment. In the Kingdom of Bahrain, two medical universities and three main public hospitals were approached by the principal investigator through email and telephonic conversation. Similarly, in the Kingdom of Saudi Arabia, ten of the biggest universities and hospitals were approached through email and telephonic conversation. After obtaining consent from universities and hospitals, the new scale was administered to willing participants. To perform advanced statistical examination such as factor analysis, it is mandatory to have larger numbers of responses (minimum of five participants per each item) from each group (Kline, 2011). Therefore, the researcher collected responses from 167 participants in each group and coded them numerically. Then, the researcher proceeded with the next step, namely quantitative validation using statistical analysis.

Step 5 Quantitative Validation: Reliability and Construct Validity (Zhou, 2019)

Reliability and construct validity are two important aspects of any survey instrument. Reliability means the extent to which an instrument yields the same results over repeated trials (Hopkins, 2000). Construct validity, nowadays viewed as an amalgamation of content and criterion validity for psychological measurements, is the psychological processes that underlie measurement on the assessment device (Strauss & Smith, 2009). Messick (1995) argued that "Construct validity is an overall evaluative judgment of the degree to which [multiple forms of] evidence and theoretical rationales support the adequacy and appropriateness of interpretations and actions on the basis of test scores" (p. 741).

Measuring Reliability. Reliability is a measure of the internal consistency of the measuring instrument, as noted in Babin and Zikmund (2016). Cronbach's alpha is used to check the internal consistency of an instrument by calculating the alpha coefficient (Bonett & Wright, 2015). In 1951, Cronbach showed that this coefficient can be generally used in all

scaled measurements. As he intended this to be a starting point to develop even better indices, he named it coefficient alpha. This index is now known as Cronbach's alpha and is a widely accepted indicator of internal consistency (reliability) of a multivariate measurement composed of correlated items. In general, reliability coefficients are expected to exceed 0.80 (Bonett & Wright, 2015). For this study, the researcher used Cronbach's alpha to measure the internal consistency of the instrument.

Measuring Construct Validity. In this study, the researcher established construct validity by studying the relationships among the latent variables or constructs. To do so, Exploratory Factor Analysis (EFA) was used to determine the relationship between the variables. Factor analysis is a multivariate technique for identifying whether the correlations between a set of observed variables stem from their relationship to one or more latent variables in the data, each of which takes the form of a linear model (Babin & Zikmund, 2016; Willmer et al., 2019).

Factor Analysis as a Tool for Scale Revision. The findings of factor analysis have been used as guidelines for revision and refinement of scales (Reise et al., 2000). There are numerous examples of the use of factor analysis in the social sciences as it primarily serves three purposes:

1. Helps the researcher determine the number of latent variables which underlie a group of items;
2. Provides an explanation for variations among a relatively greater number of original variables to newly identified fewer variables, known as "condensing" information;
3. Defines the substantive content or meaning of the factors (i.e., latent variables) (DeVellis, 2016).

Process of Factor Analysis. The researcher checked whether the normality of distribution was satisfied by considering skewness and kurtosis as indicators. Variable transformation was employed if there was significant skewness and kurtosis (Tabachnick & Fidell, 1996; Schönrock-Adema et al., 2009).

After ensuring the normality of distribution, the researcher applied "Principal Components Analysis with varimax rotation" to analyze the internal structure of the scale. In this study, several predetermined criteria including "eigenvalues more than 1," "inflexion point displayed in the screen plot," and "5% proportion of variance" were applied to determine the number of factors to be retained (Schönrock-Adema et al., 2009). This criterion is based on the idea that the eigenvalues represent the amount of variation explained by a factor and that an eigenvalue of 1 represents a substantial amount of variation, at least greater than the amount accounted by a single variable (Babin & Zikmund, 2016). The items with double-loading were eliminated (Hatcher, 1994).

Subsequently, the researcher evaluated the interpretability based on the following criteria given by Lee and Hooley (2005):

1. The identified component should contain minimum of three variables with loading of 0.40 as cut-off;
2. Variables loading on a given component should share similar conceptual meaning;
3. Variables loading on different components should measure different constructs;
4. The rotation should demonstrate a pattern of "simple structure."

The higher the correlation between two items (or questions), the more likely they belong to the same latent variable or factor. Items that are not correlated do not belong to the same latent variables or factors (Bolt et al., 2016). Finally, the researcher interpreted the factors independently and arrive at a meaningful consensus (Schönrock-Adema et al., 2009).

Ethical Considerations

In conformity with the various ethical considerations in interviews, this study strived to follow the relevant procedures acceptable to both parties. In this regard, the location of the interview was purely at the discretion of the interviewee. Moreover, the interviewee was made aware of various issues surrounding their personal and reputational safety. The researcher sought to preserve the integrity of the interviewee as well as their respective workplaces. The interviews shed light on various corporate chiefs' experience of management skills required from individuals poised to serve as middle managers in healthcare and healthcare educational organizations. The results of the interviews were treated with utmost confidentiality to the extent that the interviewee will not be harmed in any way.

All interviews were conducted in an appropriate private space to protect the identity of the participants (Cridland et al., 2015). No identifiers were disclosed while reporting the results of the research. The hard copies of the transcripts were stored in a protected environment to which only authorized personnel had access and all the soft copies were protected with passwords (Surmiak, 2018).

Medical universities and public hospitals in the Kingdom of Bahrain and Kingdom of Saudi Arabia were approached by the principal investigator through email and telephonic conversation, to obtain their willingness to participate in this study. The survey was anonymous and all information related to the survey was maintained strictly confidential.

Approvals

The research protocol, including both qualitative and quantitative data collection, was approved by Antioch University's Institutional Review Board and the ethical review boards of those hospitals and medical educational settings in the Kingdoms of Saudi Arabia and Bahrain that participated in the study.

Informed written consent was obtained from all participants after explaining all aspects of the study in detail. All participants were given rights to withdraw their consent from this study whenever they wished.

Confidentiality agreements were signed by both the researcher and the participants, agreeing that the contents of the interview will remain confidential (Radack, 1994). The ensuing interviews strived to publish facts regarding the interviewee strictly on their approval. In this regard, no dissemination of the interviewees' transcripts, either in part or in whole, will be done without the expressed authority of the interviewee. The interviewees reserve the right to veto and subsequently expunge any information in the transcript that would prove averse to them or the entities in which they are employed. In this regard, any recorded data or views from the interviewees, either in writing or in tapes, were utilized in strict accordance with the implied or express wishes. Moreover, the interviewees were not normally identified unless they expressly gave permission with regards to their names and places of work to be mentioned in the ensuing transcripts.

CHAPTER IV: RESULTS

Introduction

This chapter presents the results from the mixed methods study on competencies for successful middle managers in healthcare and medical education. The purpose of the study was to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region, specifically the Kingdom of Bahrain and the Kingdom of Saudi Arabia. The study was guided by three research questions:

RQ1. What are the main competencies (leadership and management, respectively) identified by the top leaders (CEO / Dean / Vice Dean) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ2. What are the main competencies (leadership and management, respectively) identified by the middle managers (Head of the Clinical Departments in a hospital setting, Head of Departments in a college setting) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ3. What are the main competencies (leadership and management, respectively) identified by the employees (working under middle managers) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

Data for the qualitative part of the study was collected using semi-structured interviews while data for the quantitative part of the study was collected using a survey. This chapter presents the data cleaning strategy, description of participants, findings from the qualitative and quantitative phases of the study, and chapter summary.

Data Cleaning and Data File Preparation

To achieve accurate and high-quality results, a data cleaning strategy was maintained across the study. The strategy allowed the researcher to modify or remove (where appropriate) incorrect, inaccurate, and irrelevant data as well as assure that data was correctly formatted. The study was conducted in two phases, Phase 1–Qualitative and Phase 2–Quantitative. For each phase, data cleaning and data file preparation was necessary before the analysis of data.

Accuracy in data collection and consistency in the data allows the researcher to obtain results that are truthful. Accordingly, the points of data entry in the study were standardized to allow uniformity in the data. For the qualitative phase of the study, preparation for data analysis began with the recruitment process. Participants were recruited using a simple modified random sampling technique. The inclusion criteria used in sample selection were that participants must be 30 years and above; work in an educational or healthcare organisation with distinct management levels; and work in an educational or healthcare organization in the Kingdom of Bahrain or Kingdom of Saudi Arabia. This sampling strategy allowed for the creation of a uniform standard for capturing data. Recruitment of candidates who met these criteria was central to obtaining data that met the objectives of the qualitative phase of the study.

Semi-structured interviews were used to collect the data for developing items for measuring leadership and managerial competencies per the goals of the study. The interview was conducted using an interview guide to assure that the data collection process was symmetrical across the study groups (See Interview Guide, Appendix G). Completeness of data was also facilitated by the use of an interview guide such that data was generated for all required items for the intended scale on healthcare leadership competencies. The interviews were transcribed following the rules that the transcripts were exact reproductions of the

interview recordings. These same rules were followed for all transcripts, and transcripts were intellectually elegant.

The data was analyzed using thematic analysis; this technique enabled the researcher to find patterns of data that represented the competencies that emerged from the data. The use of software that facilitates automation in data analysis is an effective strategy for reducing human error and achieving efficiency in the process. Accordingly, NVivo software was used in aggregating the data assigned with the same code. A minimum of four to six items were generated for each construct, with half of the original items retained in the final scale. Efforts were also made to generate twice as many items as expected for inclusion in the final scale. The survey framework developed from this process contained twice as many items as expected for the final scale in the survey questionnaire. Six data experts conducted a review of the data and identified the items to be included in the final scale.

For the quantitative phase, demographic variables such as age, gender, nationality, and origin were included in the new scale that was developed. The scale was developed using a five-point Likert scale on level of importance (1 = Not at all important, 2 = less important, 3 = Neutral, 4 = important, 5 = very important). Likert scales elicit the extent to which participants agree or disagree with a particular question or statement. Reliability in Likert scales (Cronbach's alpha) increases up to five-point scale and then level off (Lissitz & Green, 1975). A sample size of 150 is identified through research as being sufficient to acquire precise results in exploratory factor analysis provided the item intercorrelations are robust (Hinkin, 1995). Therefore, the newly developed scale was sent to 500 participants distributed equally across the three study groups: 167 participants from top leaders, 167 participants from middle managers, and 167 participants from employees. All of these processes served to assure that the results from the study were developed from highest quality data.

Description of Participants

Participants were recruited from three groups that aligned with the professional groups for which data on competence was required: top leaders in the healthcare sector (CEO / Dean / Vice Dean); middle managers (Head of the Clinical Departments in a hospital setting, Head of the Departments in a college setting); and healthcare employees (working under middle managers). A total of 27 leaders and managers were interviewed under the study. Participants' profiles are presented in Table 4.1. Since the study is focused on competences required for successful middle managers in healthcare and medical education, additional analysis of demographic variables as pertaining to the middle managers in the study was also done.

Table 4.1

Demographic Profile of Interview Participants

S. No	Sector	Category	Age	Gender	Nationality	No. of years of experience in the field	No. of years of experience in present position
1	Health Care	Lower Management	42	M	Kingdom of Saudi Arabia	16	16
2	Medical Education	Lower Management	42	M	Kingdom of Saudi Arabia	13	12
3	Medical Education	Lower Management	43	M	Kingdom of Saudi Arabia	15	15
4	Medical Education	Lower Management	32	F	Kingdom of Bahrain	6	1
5	Medical Education	Lower Management	35	F	Kingdom of Bahrain	3	1
6	Medical Education	Lower Management	41	M	Kingdom of Bahrain	17	5
7	Health Care	Lower Management	33	F	Kingdom of Bahrain	7	2
8	Health Care	Lower Management	44	F	Kingdom of Bahrain	23	1
9	Health Care	Lower Management	41	M	Kingdom of Bahrain	15	3

S. No	Sector	Category	Age	Gender	Nationality	No. of years of experience in the field	No. of years of experience in present position
10	Health Care	Lower Management	35	M	Kingdom of Bahrain	8	1
11	Health Care	Lower Management	35	M	Kingdom of Bahrain	13	4
12	Health Care	Middle Management	41	M	Kingdom of Saudi Arabia	10	10
13	Medical Education	Middle Management	38	M	Kingdom of Saudi Arabia	4	2
14	Medical Education	Middle Management	37	M	Kingdom of Saudi Arabia	8	7
15	Medical Education	Middle Management	37	M	Kingdom of Saudi Arabia	8	7
16	Medical Education	Middle Management	38	F	Kingdom of Bahrain	9	3
17	Health Care	Middle Management	55	F	Kingdom of Bahrain	30	7
18	Health Care	Middle Management	47	F	Kingdom of Bahrain	23	10
19	Health Care	Middle Management	40	F	Kingdom of Bahrain	17	3
20	Health Care	Middle Management	41	M	Kingdom of Bahrain	16	3
21	Medical Education	Middle Management	42	M	Kingdom of Saudi Arabia	8	6
22	Medical Education	Top Management	62	M	Kingdom of Bahrain	35	14
23	Medical Education	Top Management	45	M	Kingdom of Bahrain	14	7
24	Medical Education	Top Management	52	F	Kingdom of Bahrain	27	6
25	Health Care	Top Management	49	F	Kingdom of Bahrain	15	10
26	Health Care	Top Management	42	M	Kingdom of Saudi Arabia	8	6
27	Health Care	Top Management	43	M	Kingdom of Saudi Arabia	17	2

Age

Thirty-seven percent of the participants in the study (n = 10) were in the 31–40 years age bracket; 51% (n = 14) were in the 41–50 years age bracket; 7% (n = 2) were in the 51–60 years age bracket; and 3% (n = 1) in the 61–70 years age bracket. Therefore, the highest proportion of the data came from the age demographic comprised of persons who were between 41 and 50 years old.

For the middle managers who participated in the study, 50% (n = 5) were in the 35–40 age bracket, 40% (n = 4) in the 41–50 age bracket, and 10% (n = 1) above the age of 50. This data suggests that majority of middle managers are within the 35–50 age bracket.

Gender

Sixty-two percent of the participants (n = 17) were males, 37% (n = 10) were females. This statistic indicates that a higher proportion of leaders and managers were male, and a higher proportion of the data obtained from the study were from male leaders. There were five male middle managers in the study and four female middle managers in the study.

Number of Years of Experience in Present Position

The mean years of experience in the present position of participants is six years, which represents a significant accumulation of experience in specific roles related to top leadership, middle, and lower management in healthcare. Eleven percent of the participants (n = 3) have held their presents positions for between 11 and 20 years, while 89% (n = 14) have held their positions for between one and 10 years. All middle managers (100%; n = 9) had worked for 1 to 10 years, with 55% having worked in their present positions (n = 5) for 7 to 10 years. These data indicate significant experience, from the middle management participant pool specifically, to support the effectiveness of the findings from the study.

Number of Years of Experience in the Field

The mean duration for which participants have worked in the field of medicine and healthcare is 14 years, with the lowest tenure in the field being three years and the highest being 35. This represents significant accumulation of knowledge and experience in the field, making for rich data from the study. Forty one percent of participants (n = 11) had 1 to 10 years of experience in the field; 41% (n = 11) had between 11 and 20 years of experience in the field; 11% (n = 3) had 21 to 30 years of experience in the field; and 4% (n = 1) had 30+ years of experience in the field. Sixty percent (n = 6) of middle managers had worked in the field for 1 to 10 years; 20% (n = 2) have worked in the field for 10 to 20 years, and another 20% (n = 2) had worked for 21 to 30 years in the field. Again, these data indicate a significant experience, from the middle management participant pool specifically, to support the effectiveness of the findings from the study.

Level of Leadership

Data was obtained from three groups of leaders and managers: top leaders, middle management, and lower management. Twenty-two percent of the participants (n = 6) were from Group 1 (Top Leaders); 37% (n = 10) from middle management; and 41% (n = 11) from lower management. This indicates that the majority of data obtained in this study were derived from management staff (middle and lower management).

Sector: Medical vs. Healthcare

Forty-eight percent (n = 27) of the participants were from the medical sector while 52% (n = 14) were from the healthcare sector. The data collected was therefore, largely representative of both the medical and healthcare sectors. Additional examination of participants' educational backgrounds was done to understand the specific fields in which they work. Codes were applied to identify the fields that emerged from the data. A summary of the findings on respondents' educational backgrounds is presented in Table 4.2.

Nationality

Sixty-three percent (n =17) of participants were from the Kingdom of Bahrain, while 37% (n = 10) were from the Kingdom of Saudi Arabia. Further disaggregation of participants' profiles based on sector and nationality is shown Table 4.2.

Table 4.2

Distribution of Interview Participants based on Sector and Nationality

	Sample size	Medical Education	Healthcare	KB	KSA
Top management	6 (22%)	3 (11%)	3 (11%)	4 (15%)	2 (7%)
Middle management	10 (37%)	5 (19%)	5 (19%)	5 (19%)	5 (19%)
Lower management	11 (41%)	5 (19%)	6 (22%)	8 (30%)	3 (11%)

Qualitative Analysis

The 27 experts who were interviewed under the study were asked the same 10 open-ended predetermined questions. The interview findings were transcribed and analyzed using thematic analysis. Under the data analysis strategy, an emergent coding process was utilized to develop themes from the data and identify the characteristics and competencies of middle managers in healthcare and medical education. This emergent coding process involved three levels of coding: open coding, axial coding, and selective coding (Arasti et al., 2015).

The open coding stage began with reading the transcribed data, comparing and conceptualizing chunks of data, and assigning categories of codes to such chunks of text. This process facilitates identification of vital categories of codes from the data. Subsequently, newly emerging codes were continuously compared to these existing codes to provide a

higher level of abstraction. The second step, axial coding, involved determination of which codes were dominant and which codes were less important, with redundant codes being scrutinized carefully before removal. The percentage of the codes were calculated for each question to allow the identification of dominant themes. The dominant themes identified from the process of open and axial coding were as follows: (a) Mental ability; (b) Personality; (c) Work ethics; (d) Interaction; (e) Managerial skills; (f) Attitude; (g) Commitment and Responsibility; and (h) Ambiguous. These thematic areas formed the framework for the third and final step in the thematic analysis process, which is selective coding. The questions and structure for the semi-structured interview were developed based on the review of the literature as well as from expert input. The interview questions were divided into five categories as shown in Table 4.3.

Table 4.3

Thematic Categories in Interview Questions

S. No.	Category	Description
1.	Personal	Can you describe an individual whom you thought was an excellent middle manager? (with special focus on personal traits)
2.	Social	Can you describe the social qualities this person possessed to become a successful middle manager?
3.	Structure	In your opinion, what do you think are the competencies of this successful middle manager, that might have played a greater role in overall growth of a University / Health care organization in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?
4.	Contextual	In your opinion, what do you think are the competencies possessed by this successful middle manager, for effective leadership in a University / Health care organization in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?
5.	Developmental	In your opinion, what do you think are the competencies of this successful middle manager, that would have contributed to his / her development in a University / Health care organization in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

The third level of coding involved identifying the extent to which dominant themes and associated subthemes occurred within the question categories (personal, social, structural, contextual, or developmental). Aligning the dominant themes and the categories in this manner allowed for the five final themes to emerge from the study This process is illustrated in the following mind maps.

Findings for Qualitative Analysis

Theme 1: Personal Traits Required For Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

The majority of the respondents (n = 18; 67%) identified *Personality* as the most essential trait for successful middle managers, with integrity and organization as subthemes or components of the trait. Eleven respondents (41%) identified *Managerial Skills* as being crucial for successful middle management; subthemes identified under managerial skills included time management and task management. Nine respondents (33%) identified *Work Ethics* as an important personal trait for middle managers with leadership quality and teamwork identified as its subthemes. Eight respondents (30%) identified *Mental Ability* and *Interaction* as important personal traits; good communication and active listening were identified as subthemes. Four respondents (15%) identified *Agility* and *Attitude* as desired traits; subthemes identified under *Agility* included having knowledge and being flexible, while the subtheme identified under *Attitude* included showing patience. For instance, as stated by Respondent 11:

> Middle managers are located in a unique position; they have to understand the directives from top management and communicate that to lower managers, while helping to develop strategies for the effective execution of such institutional goals. It is therefore, important to have the right personality to be able to engage diverse levels of leadership, effective action, and act with integrity while doing so.

Respondent 2 observed that:

> The middle manager must have very high work ethics to be able to cope with the job responsibilities as well as to be able to serve as a role model. So work ethics is linked to leadership ability and the ability to display effective teamwork both working upwards with organizational leaders at the top management level and teamwork working with lower level managers.

Table 4.4

Thematic Analysis of Personal Traits Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

Thematic Area (7)	**Sub theme (13)**	**Codes (62)**
Personality	Organized, Integrity	18 codes
Managerial skills	Time and Task management	11 codes
Work ethics	Leadership and Teamwork	9 codes
Interaction	Communication and Listening	8 codes
Mental ability	Decision making, Vision	8 codes
Attitude	Patience	4 codes
Agility	Knowledge and flexibility	4 codes

Figure 4.1

Map of Thematic Analysis Personal Traits Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

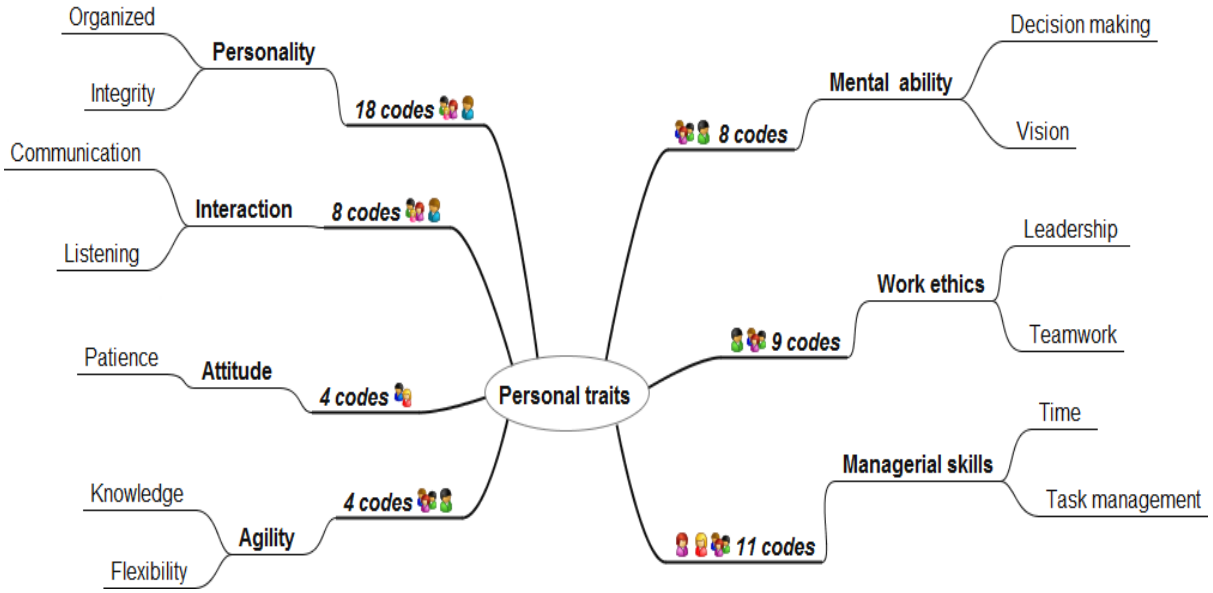
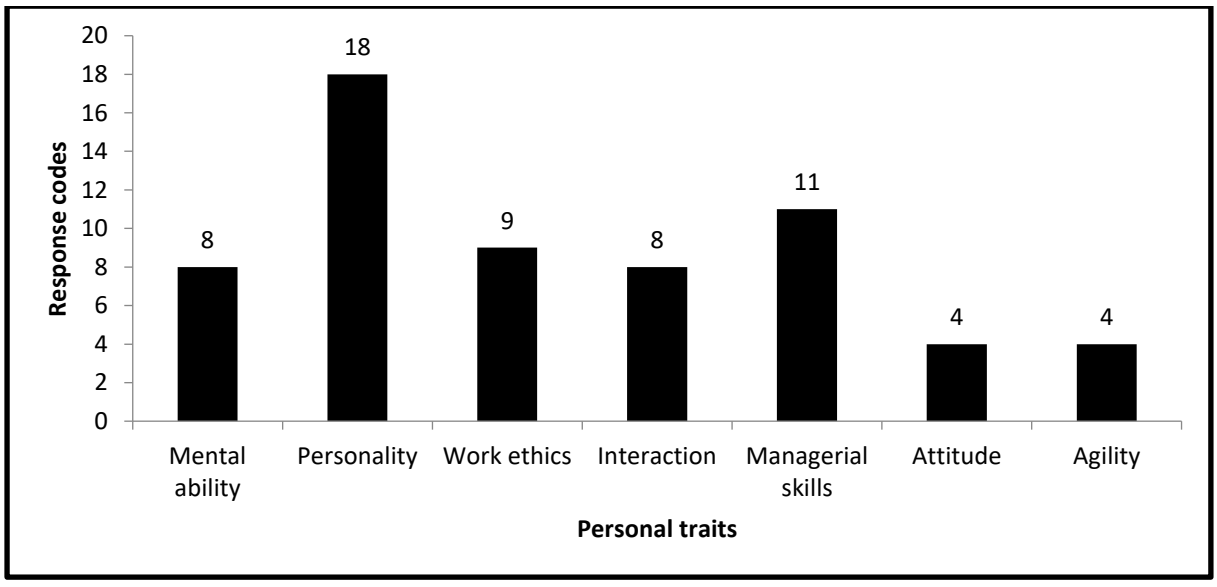


Figure 4.2

Graphical Illustration of Findings on Personal Traits Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region



Theme 2: Social Qualities Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

Social qualities required for middle managers were identified under five themes: *Personality, Interaction, Good Work Ethics, Mental Ability, and Commitment*. For each of the themes, the subthemes identified varied greatly. The majority of the respondents (n = 22; 81%) identified the *Personality* of middle managers as an all-important social quality. Subthemes identified under this quality include humility, being supportive of lower-level workers, and being honest. As stated by Respondent 10:

> To be a successful middle manager, the person is not only expected to be active, humble, and balanced, but also non-corrupt and supportive. It takes humility to interact successfully with both superiors and junior staffers. The middle manager has to be supportive of both corporate goals as well as supportive of subordinates to help them achieve those goals.

Eleven respondents (41%) identified *Interaction* as a key social quality; subthemes identified under this theme were good communication and active listening. Ten of the respondents (37%) viewed *Good Work Ethics* as indispensable for successful middle managers; subthemes identified under this theme included having the ability to motivate, lead, and be a good team player. Other subthemes identified under *Interaction* were efficiency at team management and teamwork. As observed by Respondent 1:

> A middle manager needs to have good interactional skills. This involves been able to interact well both at the personal level and at the team level. Given that the work of management involves managing a team or group, efficiency at team management and having the know-how to facilitate successful teamwork becomes non-negotiable for the middle manager.

Five respondents (19%) identified *Mental Ability* and *Commitment* as important competencies for successful middle managers. Subthemes identified under *Mental Ability* included problem-solving as well as decision making, whereas *Commitment* included a range of sub themes such as being flexible, having patience, and providing health insurance. As stated by Respondent 9:

> The very nature of middle management is such that the role requires high mental ability. It a role where the individual is always solving complex problems and making complex decisions. The ability to engage in problem-solving and decision-making is crucial to success and performance in middle management, particularly under complex circumstances.

Similarly, Interviewee 6 observed that, "Middle managers have to have the mental ability to determine employee needs and factor that into decisions while executing higher organizational programs such as managing health insurance and other benefits programs."

Table 4.5

Thematic Analysis of Social Qualities Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

Social Qualities (5)	Sub theme (22)	Codes (59)
Personality	Active, Humble, Non-Corrupt, Supportive, Accessible, Approachable, Balanced	22 codes
Interaction	Communication and Listens	17 codes
Good work ethics	Team management, player, work, Leadership qualities, Motivation	10 codes
Mental ability	Problem-solving, Decision making	5 codes
Commitment	Flexible, Manpower, Conflict of Interest, Provide health insurance, Patience	5 codes

Figure 4.3

Mind Map of Social Qualities Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

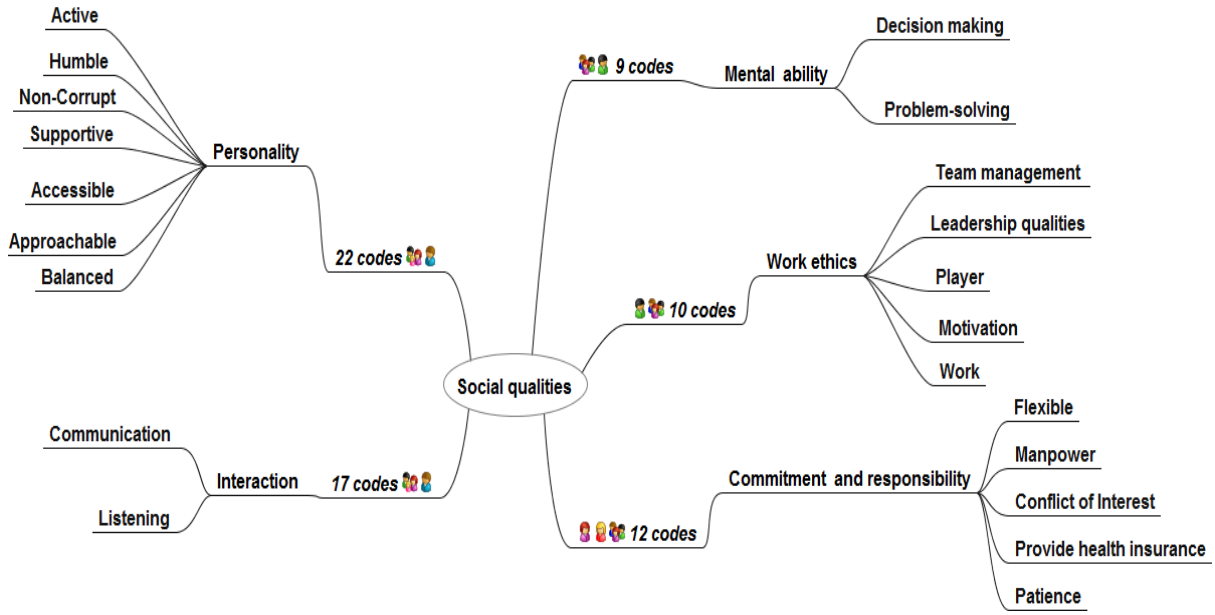
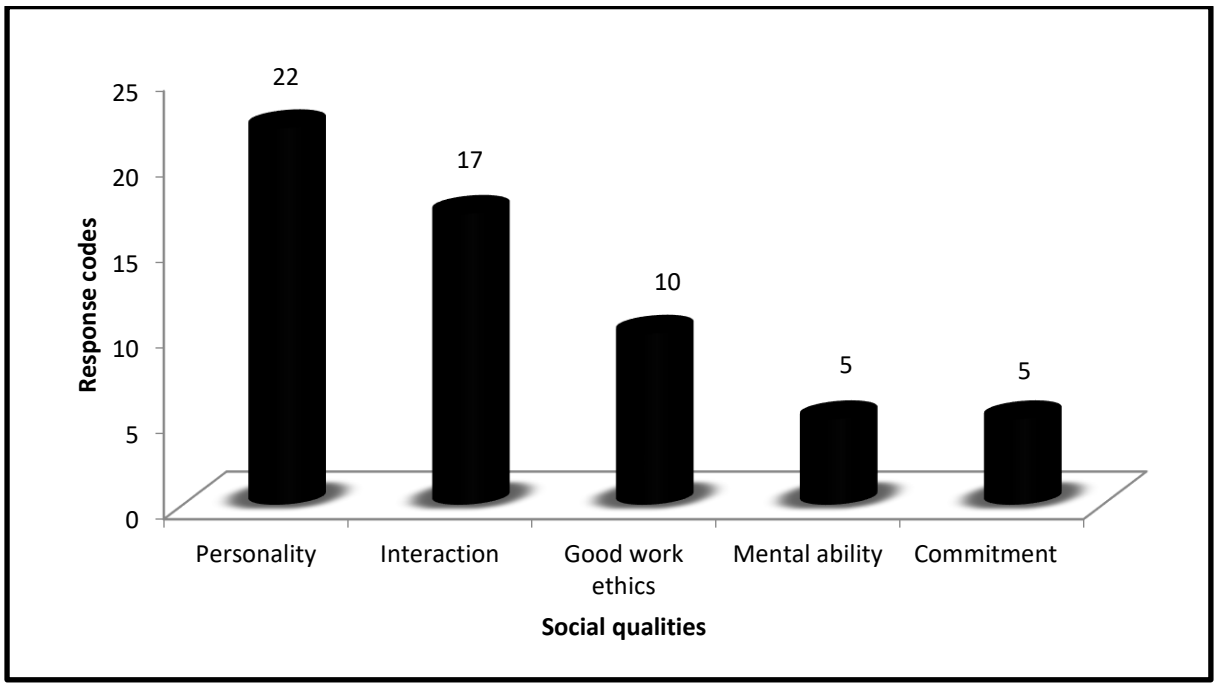


Figure 4.4

Graph of Social Qualities Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region



Theme 3: Leadership Qualities Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

Eight themes were identified in respect to the leadership qualities required for successful middle management. Eleven respondents (41%) believed in Attitude as the essential characteristic of middle managers, six respondents (22%) thought Personality to be an important competency for middle managers as leaders. Attitude included learning from others, being self-confident, and possessing a desire to grow among others. Personality was defined by being organized and having integrity. Interaction, Mental Ability, Commitment and Responsibility, and Work Ethics were also identified as being critical competences that middle managers must have in order to be effective leaders. These four themes included communication, vision, knowledge, and teamwork, respectively, as one of their sub themes. Interestingly, only two respondents (7%) thought Managerial Skills, which had time and task management as subthemes, as important. Four of the respondents were not sure of what competency exactly fitted for effective leadership. As observed by Respondent 7:

> It is imperative that a leader demonstrate high work ethics. This quality not only allows the leader to successfully address their own significant amounts of responsibility, it also serves to influence subordinates and motivate them to perform better.

Among those respondents who were not sure of what leadership qualities were required for successful middle managers, one of the reasons given was the overlap between leadership and management. As one respondent stated:

> Practically speaking, in order to be a successful middle manager, the individual has to be able to execute the assigned roles and responsibilities effectively. Persons who gain the position must have the management skills, knowledge, and educational background to be able to carry out this responsibility. The middle manager has authority over lower-level managers and employees, so I'm not sure leadership is a separate concept here.

Table 4.6

Thematic Analysis of Leadership Qualities Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

Theme (8)	Sub theme (16)	Codes (57)
Mental ability	Decision making, Vision	9 codes
Personality	Organized, Integrity	6 codes
Work ethics	Leadership and Teamwork	7 codes
Interaction	Communication and Listening	10 codes
Managerial skills	Time and task management	2 codes
Attitude	Self-confidence, Learning from others, Productive, Desire to grow	11 codes
Commitment and responsibility	Knowledge and Availability	8 codes
Ambiguous		4 codes

Figure 4.5

Mind Map of Leadership Qualities Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region

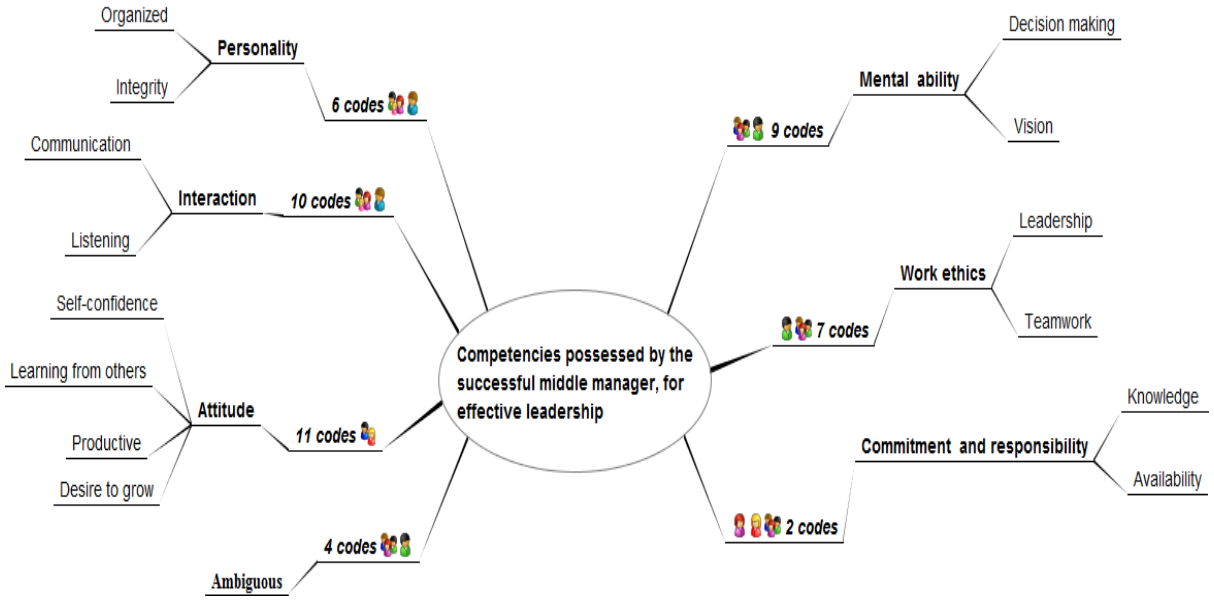
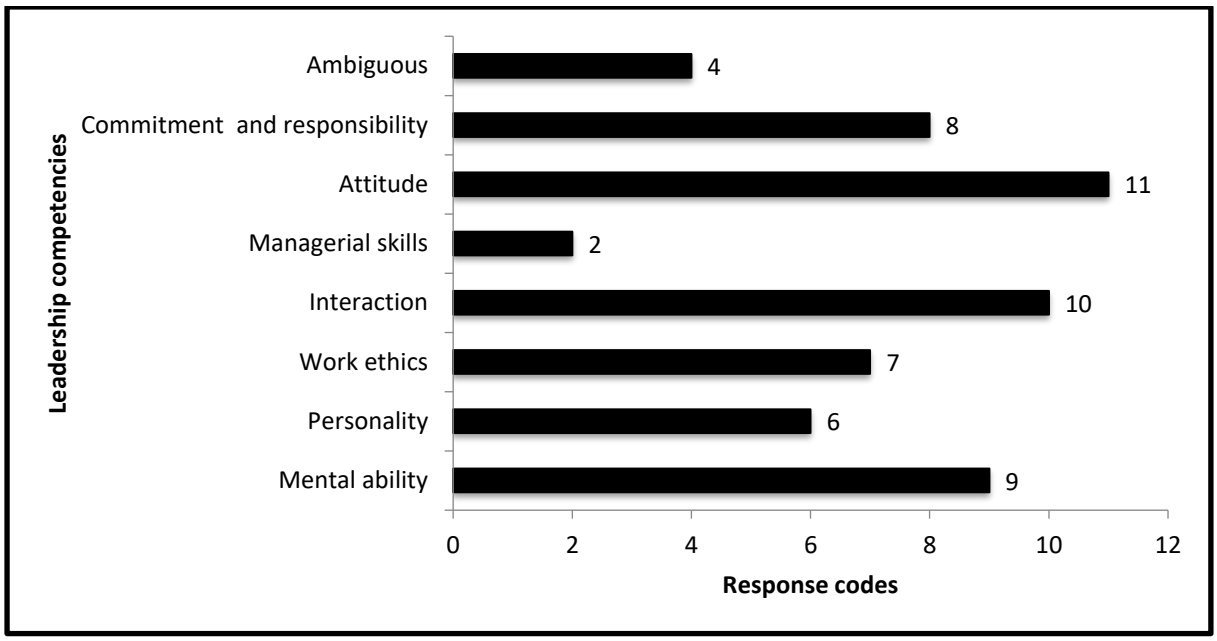


Figure 4.6

Graph of Leadership Qualities Required for Successful Middle Managers (MM) in a Medical University / Health Care Organization in Gulf Region



Theme 4: Competencies of Successful Middle Managers (MM) That Support Overall Growth of a Medical University / Health Care Organization in Gulf Region

Twelve of the respondents (44%) identified *Work Ethics* as an essential quality of middle managers with the subthemes of leadership and teamwork. Nine respondents (33%) identified *Personality* as a critical characteristic of middle managers and discussed this attribute in relation to *Mental Ability.* While decision making, vision, and problem solving delineate *Mental Ability*, being organized and possessing integrity define their *Personality.* As observed by Respondent 20:

> Personality is an important prerequisite – it determines how the middle manager handles views the organization and how they approach their roles. It requires a certain type of personality to be able to fit into a medical/ educational institution. It requires that the individual have the mental ability to adopt the culture.

Only three respondents (11%) thought *Managerial Skills*, time management and task management, play a pivotal role in the growth of an organization. Themes *Attitude* and

Interaction had one respondent each. Having patience and being democratic were subthemes of *Attitude*, while communication and good listening comprised *Interaction*. Six of the respondents (22%) lacked clarity in defining the competencies of middle managers that contributed to the growth of company. For instance, Respondent 4 stated that:

> Every worker contributes to the growth of an organization. If every person performs their duties, growth will be achieved. The middle manager is in an important position that is associated with crucial responsibilities that can derail growth if not performed well. I think the middle manager simply needs to be competent at their assigned roles and responsibilities, in order to contribute to the growth of the organization.

Table 4.7

Thematic Analysis of the Competencies of Successful Middle Managers (MM) Which Play a Greater Role in Overall Growth of a Medical University / Health Care Organization in Gulf Region

Theme (7)	Sub theme (13)	Codes (41)
Mental ability	Decision making, Vision, Problem-solving	9 codes
Personality	Organized, integrity	9 codes
Work ethics	Leadership and Teamwork	12 codes
Interaction	Communication and Listening	1 code
Managerial skills	Time and task management	3 codes
Attitude	Patience and Democratic	1 code
Ambiguous		6 codes

Figure 4.7

Mind Map of the Competencies of Successful Middle Managers (MM) Which Play a Greater Role in Overall Growth of a Medical University / Health Care Organization in Gulf Region

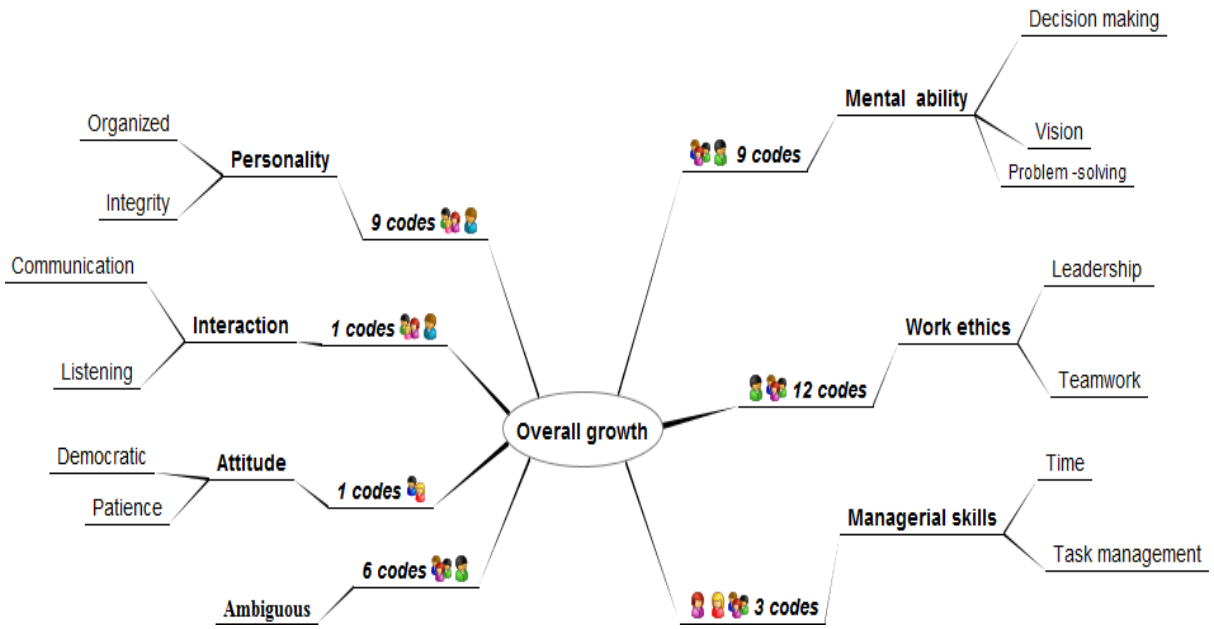
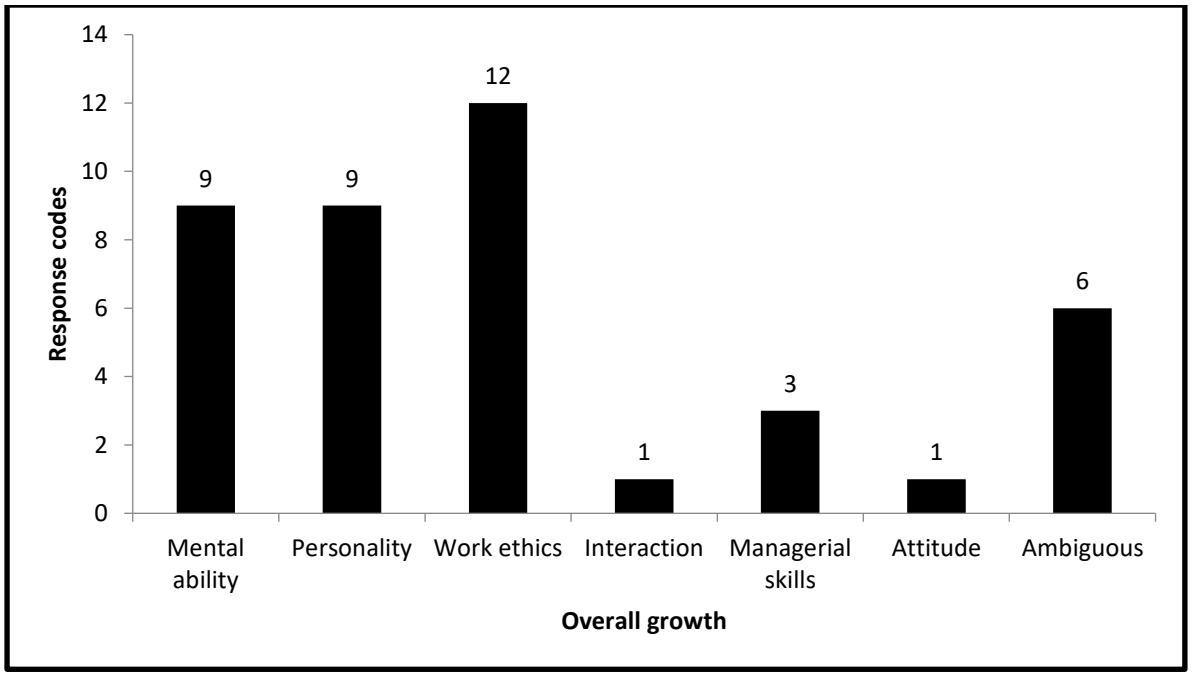


Figure 4.8

Graph of the Competencies of Successful Middle Managers (MM) Which Play a Greater Role in Overall Growth of a Medical University / Health Care Organization in Gulf Region



Theme 5: Competencies of Successful Middle Managers (MM) That Support Their Personal Development in a Medical University / Health Care Organization in Gulf Region

Several qualities were identified as being essential for the development of middle managers. Twelve respondents (44%) identified Commitment and Responsibility as important competences that support the development of middle managers; subthemes identified under the two competences were knowledge and adaptability. Work Ethics was identified by 10 respondents (37%), with the subthemes of leadership quality and teamwork. Five of the respondents (19%) credited the theme Attitude as indispensable for personal development, describing some of its subthemes as humane qualities such as sharing, giving respect, and learning from others. Three respondents (11%) were placed under the Ambiguous category as they did not mention any specific competences they thought to be important for the personal development of middle managers. As stated by Respondent 7:

> Personal development is based on individual drive and ambition, in my opinion. Any professional who wants to achieve personal growth would have to assess themselves, find out what they think they need and where they want to go, and act based on that personal assessment.

Managerial skills involving time management and task management was identified by two respondents (7%).

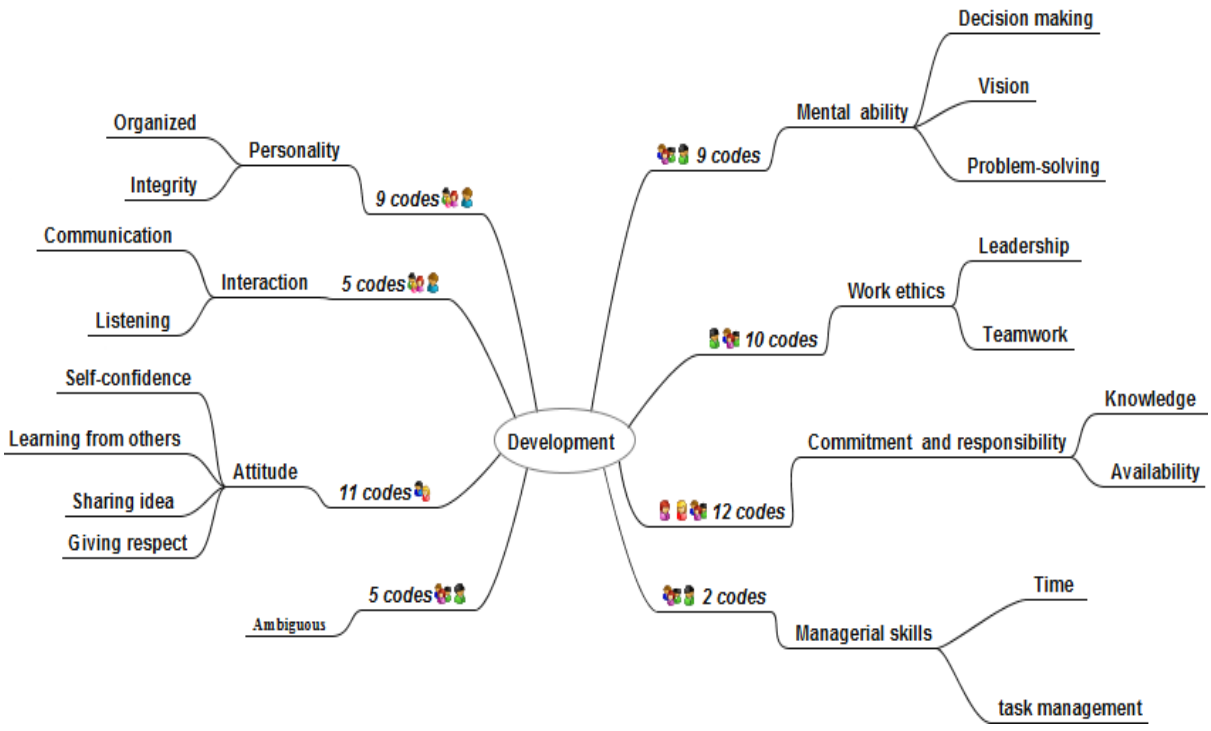
Table 4.8

Thematic Analysis of the Competencies of Successful Middle Managers (MM) Which Play a Greater Role in His / Her Personal Development in a Medical University / Health Care Organization in Gulf Region

Theme (8)	Sub theme (17)	Codes (57)
Mental ability	Decision making, Vision, Problem-solving	9 codes
Personality	Organized, Integrity	9 codes
Work ethics	Leadership and Teamwork	10 codes
Interaction	Communication and Listening	5 codes
Managerial skills	Time and task management	2 codes
Attitude	Self-confidence, Learning from others, giving respect, Sharing ideas	5 codes
Commitment and responsibility	Knowledge, Adaptability	12 codes
Ambiguous		5 codes

Figure 4.9

Mind Map of Competencies of Successful Middle Managers (MM) Which Play a Greater Role in His / Her Personal Development in a Medical University / Health Care Organization in Gulf Region



Theme 6: Suggested Area of Change in Order to Enhance Organizational Transformation

Eight themes (areas) were identified by the respondents in answer to the question, "What one thing would you like to change in your University / Health Care organization that would contribute to enhance the organizational transformation?" The themes were Financial Stability, Continuous Learning, Dynamic Authority, Democratic Set-up, Integrity, Accountability, Empowerment, and Restructuring Work or Workplace. Ten of the respondents (37%) believed that Dynamic Authority would foster organizational transformation, while nine (33%) wanted a Democratic Set up that would foster the growth potential of the organization. Eight respondents identified Financial Stability and Continuous Learning as areas for fundamental alterations for the progress of the institute. Six of the respondents (22%) identified Restructuring Work or Workplace, and five (19%) identified Empowerment as important change activities. Intriguingly, one respondent believed Accountability to be nonexistent and identified this as an important area for change. The respondent stated:

> The principles of accountability must be strengthened within the healthcare system. This should be done across all levels of organizational hierarchy. There has to be more prominent ways of emphasizing the importance of ethics and organizational justice. If these principles are enforced, we will see higher performance and transformation in the healthcare system.

Table 4.9

Thematic Analysis of Responses for Question, "What one thing you would like to change in your University / Health Care organization that would contribute to enhance the organizational transformation?"

Theme (8)	Codes (51)
Financial stability	8 codes
Continuous learning	8 codes
Dynamic authority	10 codes
Democratic set up	9 codes
Integrity	4 codes
Accountability	1 code
Empowerment	5 codes
Restructuring work/workplace	6 codes

Figure 4.10

Mind Map of Responses for Question, "What One Thing Would You Like to Change in Your University / Health Care Organization that Would Contribute to Enhanced Organizational Transformation?"

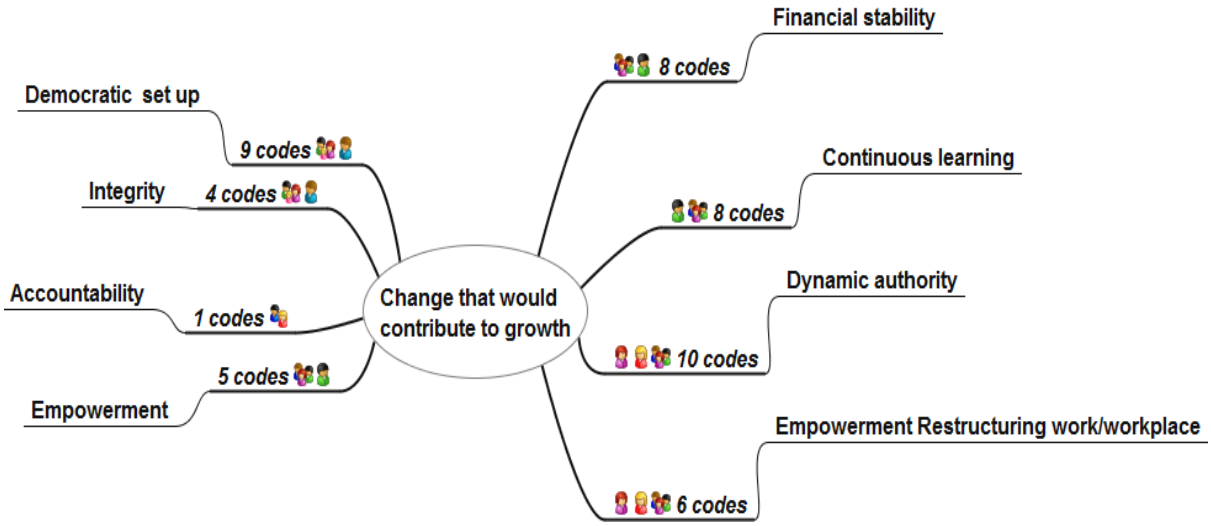
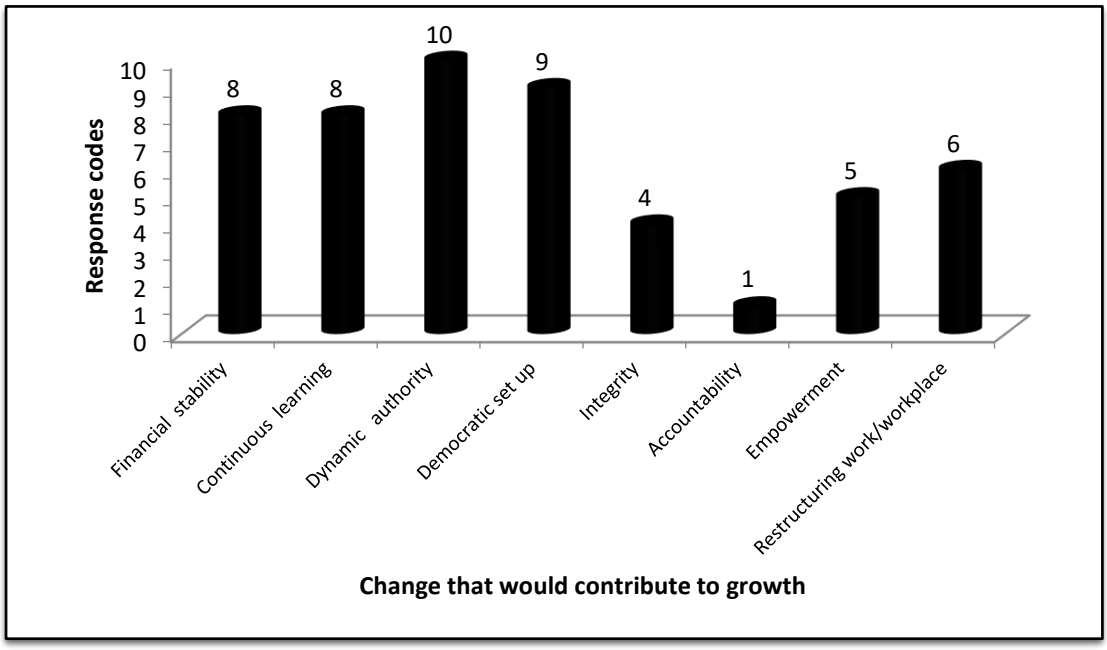


Figure 4.11

Graph of Responses for Question, "What One Thing Would You Like to Change in Your University / Health Care Organization that Would Contribute to Enhanced Organizational Transformation?"



Theme 7: Respondents Educational Background

Analysis of the educational background was conducted to identify the specific fields in which respondents work as an important part of the context in which the findings from the study may be applied. Nineteen different fields emerged from the data, with all the given fields coming under Medical Sciences. *Surgeons, Internal Medicine* and *Family Medicine accounted for two codes each.* Each of the following fields, *Neurology, Medicine and Surgery, Neuroscience, Anatomy, Hospital Management and Healthcare Governance, Medical Sciences, Pathology, Diagnostic Radiology, Safety and Healthcare Management, Orthopedic Surgery, Geriatric, Clinical Service Operations, Genetics and Nutrition, Public Health,* and *Epidemiology* accounted for just one respondent. Six respondents did not specify their field.

Table 4.10

Thematic Analysis of Respondents' Educational Background

Educational background (19)	Codes (27)
Neurology	1 code
Family Medicine	2 codes
Surgeon	2 codes
Medicine and Surgery	1 code
Neuroscience	1 code
Anatomy	1 code
Hospital Management and Healthcare Governance	1 code
Internal Medicine	2 codes
Medical Sciences	1 code
Pathology	1 code
Diagnostic Radiology	1 code
Safety and Healthcare Management	1 code
Orthopedic Surgery	1 code
Geriatric	1 code
Clinical Service Operations	1 code
Genetics and Nutrition	1 code
Public Health	1 code
Epidemiology	1 code
Others	6 codes

Theme 8: Respondents' Work Experience

This theme comprised of two subthemes: respondents' previous positions and their roles and responsibilities in their current positions. Seven positions emerged for previous experience: Head of department, training, intern/resident, faculty, and admin/manager/director. These findings indicate that participants in the study have accumulated substantial managerial and leadership experience prior to their current roles, further strengthening the strength of the evidence from this study.

Table 4.11

Thematic Analysis of Respondents' Previous Positions

Positions (7)	Codes (27)	Percentage (%)
HOD	2 codes	7.41
Training	2 codes	7.41
Intern/resident	5 codes	18.52
Faculty	4 codes	14.81
Admin/manager/ director	3 codes	11.11
Health care/ clinical job	2 codes	7.41
Nil	9 codes	33.33

Table 4.11 depicts the position held by the respondents prior to their current position in percentage and in number. Eighteen point fifty-two percent of respondents (n = 5) were either *Intern* or *Resident*s before they took up their present job. Seven point forty-one percent (n = 2) worked in the capacity of *HOD;* 7.41% (n = 2) held *Training* roles; and 7.41% (n = 2) also worked in *Health Care or Clinical jobs*. Three respondents (n = 3, 11%) worked in administration *as Admin, Manager, or Director*. Fourteen point eighty-one percent (n = 4)

worked in the teaching sector as *Faculty. Nine* respondents (n = 9, 33.33%) did not hold any position (*Nil*) prior to their current job.

Roles and Responsibilities of Respondents

Table 4.12 highlights the roles and responsibilities of the respondents in their current positions. Most of the respondents have more than one role, indicating significant amounts of responsibilities.

Table 4.12

Thematic Analysis of Roles and Responsibilities of the Respondents

Roles and Responsibilities (8)	Codes (49)	Percentage (%)
Teaching	12 codes	24.49
Administration	14 codes	28.57
Health care/Clinical Duties	7 codes	14.29
Research	5 codes	10.20
PG Training/Training Coordinator	3 codes	6.12
Chief/Deputy/Head/Supervisor	6 codes	12.24
Senior Resident	1 code	2.04
Scholar	1 code	2.04

As shown in Table 4.12, seven respondents (14.29%) perform *Health care or Clinical duties*. Fourteen respondents (28.57%) execute *Administration duties,* making this the highest percentage in terms of roles. Twelve respondents (24.49%) have *Teaching* roles. Six respondents (12.24%) have the responsibilities of *Chief, Supervisor or Head;* five respondents (10.20%) have *Research* as their main roles played, while three respondents work as *Coordinators or trainers*. The smallest percentage (2.04%) is accounted for by two persons, one a *Scholar* and the other a *Senior Resident*.

Summary of Findings

Seven major themes were identified as prerequisite Personal Traits of middle managers. These were *Personality, Agility, Attitude, Managerial Skills, Work Ethics, Mental Ability*, and *Interaction. Personality* had the highest score (67%) among the personal attributes required for middle managers. This was followed by *Managerial Skills* at 41%, *Work Ethics* at 33%, *Mental Ability* at 30%, and *Agility and Attitude* at 15%.

The Social Qualities of middle managers were essentially considered under five themes: *Personality, Interaction, Good Work Ethics, Mental Ability, and Commitment*. The majority (81%) considered Personality of middle managers as an important social quality. The next highest number was for *Interaction* (41%). *Work Ethics* scored as the third most important social quality (37%), and *Mental Ability* and *Commitment* emerged as the fourth essential social quality with 19%.

Even when respondents were not sure what competency fit for effective leadership, most believed in *Attitude* as the essential prowess of middle managers, followed by competency in *Interaction*, *Mental Ability, Commitment and Responsibility, and Work Ethics*.

Seven themes were found to play a greater role in the overall growth of a University or Healthcare Organization. *Work Ethics* was seen as an essential quality of middle managers. An equal number of respondents identified *Mental Ability* and *Personality* as critical for the growth of an organization. *Managerial Skills, Interaction,* and *Attitude* were also seen as requisite skills for development of the organization.

Five themes were identified under the essential qualities of middle managers for their own development. Many felt *Commitment and Responsibility* to be a prerequisite. *Work Ethics* was also considered important, as was *Attitude*.

Eight themes were derived for factors that would contribute to enhance the organizational transformation. These included *Financial Stability, Continuous Learning,*

Dynamic Authority, Democratic Set-up, Integrity, Accountability, Empowerment, and *Restructuring Work or Workplace*. Many respondents believed in *Dynamic Authority* and *Democratic Set- up* to bring forth potential growth. Likewise, *Financial Stability* and *Continuous Learning* were also seen as important.

All respondents were from diverse fields that come under Medical Sciences. While one-third of the respondents held no position prior to their current job, most others were in one of the following positions: *Intern or Residents, HOD, Health Care or Clinical jobs, Admin, Manager or Director, and Faculty*. While some have stayed for over 20 years, a few have worked there for just two years.

Most of the respondents have more than one role and a lot of responsibilities. *Health care or Clinical duties, Administration duties, and Conducting Research and Teaching* are some of the roles of the respondents.

Recommendations from Expert Panel

On identifying the competencies that are important for successful middle management and the subthemes that best describe them, an expert panel comprising of six experts convened to select items that should be included in the survey. Table 4.13 provides a summary of the composition of the panel of experts who participated in the review process.

Table 4.13

Demographic Profile of Expert Panel

Gender	Male: 3	Female: 3	
Management Level	Top: 2	Middle: 2	Low: 2
Sector	Health care: 2	Medical Education: 4	
Age group	40 to 45 years: 3	46 to 50 years: 2	More than 50 years: 1
Years of experience in the field	10 to 15 years: 3	16 to 20 years: 1	More than 20 years: 2

Consensus from Expert Panel

Five members of the expert panel agreed that all items identified from the qualitative phase of the study should be included in the final survey. The one dissenting voice was in regard to one item: multitasking. However, I included that item as the other five experts agreed on it. The items ranked by the experts are provided in Table 4.14.

Table 4.14

Ranking / Prioritizing of Items by Expert Panel

Characteristics / competencies	Very high / high priority	Medium priority	Low / Very low priority
Be productive	6	0	0
Be supportive to all stakeholders	6	0	0
Have desire to grow	6	0	0
Have more self-confidence	6	0	0
Should manage time efficiently	6	0	0
Should be active always	6	0	0
Should be corruption free	6	0	0
Should be humble	6	0	0
Treat everyone with respect	6	0	0
Willing to learn from others	6	0	0
Willing to share ideas with others	6	0	0
Be able to work in a team	6	0	0
Able to adapt to changes	6	0	0
Be able to achieve tasks as per the timeline	6	0	0
Should be an effective communicator	6	0	0
Should be an effective listener	6	0	0
Should be organized in his/her thoughts, words, and deeds	6	0	0
Should demonstrate integrity	6	0	0
Should display effective organizational skills	6	0	0
Be a motivator	5	1	0
Should display patience towards subordinates and superiors	5	1	0
Should address any conflict of interest effectively	5	1	0
Should be able to encourage teamwork	5	1	0
Should be able to manage resources (money /manpower)	5	1	0
Should be able to make appropriate decisions	5	1	0
Should be able to work with multiple teams	5	1	0

Characteristics / competencies	Very high / high priority	Medium priority	Low / Very low priority
Should follow democratic ways	5	1	0
Should have long term vision for the organization	5	1	0
Should possess leadership skills	5	1	0
Should possess problem-solving skills	5	1	0
Be accessible to all stakeholders	4	2	0
Be approachable all the time	4	1	1
Possess up-to-date knowledge in the respective field	4	2	0
Should be available for guidance	3	3	0
Should be able to balance various roles (multitasking)	1	4	1

Survey Questionnaire Developed from Qualitative Analysis

Based on the findings from the qualitative analysis and subsequent review and consensus by the expert panel, the following survey items were included in the scale for measuring leadership and managerial competencies of middle managers in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia).

Figure 4.12

Snapshot of Survey Questions

In your opinion, “What are the characteristics that are critical or most significant for a successful Middle Manager?” (Chairman / Heads of the Departments / Heads of the Clinical Services) should possess?" Please select the appropriate option on a scale of 1 to 5 (*1 – Not at all significant, 2 – Less significant, 3 – significant, 4 – more significant, 5 – most significant*). If you are not sure of the item, please select “6” (unable to assess) for that item.

		1 Not at all significant	2 Less significant	3 Significant	4 More significant	5 Most significant	UA
1	Be a motivator						
2	Be accessible to all stakeholders						
3	Be approachable all the time						
4	Be productive						
5	Be supportive to all stakeholders						
6	Have desire to grow						

7	Have more self-confidence						
8	Should manage time efficiently						
9	Should be active always						
10	Should be available for guidance						
11	Should be corruption free						
12	Should be humble						
13	Should display patience towards subordinates and superiors						
14	Treat everyone with respect						
15	Willing to learn from others						
16	Willing to share ideas with others						

In your opinion, "What are the competencies that are critical or most significant for a successful Middle Manager (Chairman / Heads of the Departments / Heads of the Clinical Services)? Please select the appropriate option on a scale of 1 to 5 (*1 - Not at all significant, 2 - Less significant, 3 - significant, 4 – more significant, 5 - most significant*). If you are not sure of the item, please select "6" (unable to assess) for that item.

		1 Not at all significant	2 Less significant	3 Significant	4 More significant	5 Most significant	UA
1	Be able to work in a team						
2	Able to adapt to changes						
3	Be able to achieve tasks as per timeline						
4	Possess up- to-date knowledge in the respective field						
5	Should address any conflict of interest effectively						
6	Should be able to balance various roles (multitasking)						
7	Should be able to encourage teamwork						
8	Should be able to manage						

	resources (money /manpower)						
9	Should be able to take appropriate decisions						
10	Should be able to work with multiple teams						
11	Should be an effective communicator						
12	Should be an effective Listener						
13	Should be organized in his/her thoughts, words and deeds						
14	Should demonstrate integrity						
15	Should display effective organizational skills						
16	Should follow democratic ways						
17	Should have long term vision for the organization						
18	Should possess leadership skills						
19	Should possess problem-solving skills						

Would you like to add any more characteristics or competencies, in addition to what are listed above, that are critical or most significant for a successful Middle Manager?. If “yes”, kindly mention them in the space provided below. If “no”, please type “NO” in the space provided below.*

The full survey contains sections on confidentiality, nature of the study, ethical considerations, demographic data including affiliation and designation, and informed consent, in addition to the questions regarding competencies that are critical or most significant for a successful middle manager (See full Survey in Appendix I).

Results for Quantitative Phase

The survey that was developed from the qualitative phase of the study was titled, “Leadership and Managerial Competency Scale for Middle Managers in Gulf Region (LMCS-MM Gulf Region).” The first step in the quantitative phase was the administration of the LMCS-MM Gulf Region. The survey was sent to 500 persons, with 202 persons returning the survey. This response rate was adequate as the target number of respondents was 150.

The data from the survey was analyzed using a series of statistical techniques in the discussion that follows.

Data Analysis

For the descriptive statistics, percentage of respondents making each response, mean and standard deviation, and measures of skewness and kurtosis, were computed for each item using SPSS version 19 (IBM Corp., 2010). The measures of skewness and kurtosis were examined for all items prior to conducting factor analysis to determine whether the items were normally distributed. It was suggested that items with levels of skewness > 2.5 should be eliminated. The remaining list of items represented the "Characteristics" and the "Competency" scale for the new scale developed for measuring leadership and competencies for successful managers in healthcare and education in the Gulf region.

After the development of the competency scale, Exploratory Factor Analysis (EFA) using principal axis factoring was conducted to determine the number and nature of the underlying factors in the competency scale. Three factors were produced from the analysis: Professionalism and problem solving, Team management and adaptation, and Time management and expertise. Reliability was established with Cronbach's alpha > 0.90. An orthogonal (Varimax) model was chosen after comparing principal axis factoring models with Oblique (Promax) and oblique rotations. The latter of these two models was clearly more realistic and revealed substantial correlations among many of the factors.

After conducting the EFA using Statistics Package for Social Sciences (SPSS v19; IBM Corp., 2010), the resulting constructs from the EFA using Principal Axis Factoring were validated using Confirmatory Factor Analysis (CFA) in AMOS version 24 (Arbuckle, 2014). We initially tried fitting our CFA model using Maximum Likelihood Estimation, but noticed that Generalized Least Squares provided a superior fit. The model fit was evaluated using the Goodness of Fit Index (GFI), Root Mean Square Error of Approximations (RMSEA),

modified $\chi 2$ fit statistics, and the comparative fit index (CFI). It is important to note that the raw and modified $\chi 2$ are usually upwardly biased with sample size. GFI evaluates the model fit by measuring the fit between an estimated model and the observed covariance matrix. A GFI and CFI greater than 0.9 is considered a good fit. The CFI is recommended over the GFI because it is less influenced by sample size. The RMSEA evaluates the model fit by assessing how well an unknown but optimally chosen parameter estimate fits the population covariance matrix and an RMSEA value of less than 0.06 suggests a good model fit.

Composite Reliability (CR) was used as measure of internal consistency of the factors where values greater than 0.70 indicates good reliability. To compute convergent and discriminant validity, the procedure proposed by Fornell and Larcker (1981) was used. In this method, we obtained discriminant validity if average variance extracted (AVE) is greater than maximum shared squared variance (MSV). For convergent validity, AVE should be equal or greater than 0.50 and lower than CR. That is, variance explained by the construct should be greater than measurement error and greater than cross-loadings. The total score for each subscale was computed using the loadings for each item produced from the CFA. The detailed results and data are presented following.

Demographic Statistics

Gender

Of the 202 respondents, 112 were female and 90 were male. Thus, 55.4% of the data was provided by female and 44.6% by males.

Age

The age group included ranged from 21 years to above 70 years (Table 4.15). Thirty-two (15.8%) respondents were less than 30 years old, 101 (50%) were between 30–50 years, 68 (33.7%) were between 50–70 years, and one (0.5%) was above 70 years old. Thus,

the higher proportion of data for this phase of the study came from leaders and managers between the ages of 30 and 50.

Table 4.15

Age Distribution of the Survey Participants

Age	Frequency	%
21 - 30 years	32	15.8
31 - 40 years	53	26.2
41 - 50 years	48	23.8
51 - 60 years	45	22.3
61 - 70 years	23	11.4
above 70 years	1	0.5
Total	202	100

Affiliation

The highest proportion of respondents, a total of 74 (36.6%), were from a medical education setting. Fifty-six respondents (27.7%) were from healthcare delivery, and 72 respondents (35.6%) worked in both sectors (medical education and healthcare delivery).

Management Level

Responses were obtained from persons in top management (n = 17; 8.4%), middle management (n = 38; 18.8%), and lower management (n = 147; 72.8%) employees. Thus, the majority of data obtained from this phase of the study (72.8%) came from persons in lower management. This factor may be important as it would indicate awareness regarding the competences that lower managers need to grow and become middle managers, as well as awareness among lower managers regarding the competencies they will need in order to be successful middle managers when they rise to that level of leadership.

Experience in the Field

The experience of the participants is shown in Table 4.16. These demographic data are very significant as they show that the findings from the study are drawn from a pool of

experienced participants, whose wealth of knowledge enrich and support the accuracy of the findings.

Table 4.16

Experience in Years of the Participants

Experience	Frequency	%
less than 1 year	2	1
01 - 10 years	78	38.6
11 - 20 years	43	21.3
21 - 30 years	54	26.7
More than 30 years	25	12.4
Total	202	100

Experience in Present Position

The experience of respondents ranged from less than one year to more than 30 years, with over 68.3% (138 respondents) having one to 10 years of experience in their present positions (Table 4.17). As with experience in the field, these demographic data regarding experience in present positions is significant as it shows that the findings from the study are drawn from a pool of experienced participants with the required knowledge and experience to provide valid information for the validation of the new scale developed under the study, LMCS-MM Gulf Region.

Table 4.17

Present Position Experience of the Participants

Experience in present position	Frequency	%
less than 1 year	22	10.9
01 - 10 years	138	68.3
11 - 20 years	34	16.8
21 - 30 years	5	2.5
More than 30 years	3	1.5
Total	202	100

Results from Statistical Analysis

The survey responses were coded as 1 (Not at all significant), 2 (Less significant), 3 (Significant), 4 (More significant), 5 (most significant), and 6 (Unable to assess [UA]). The findings are presented in Table 4.18.

Table 4.18

Responses to Characteristics Scale Items (n = 202)

	Not at all significant	Less significant	Significant	More significant	Most significant	Unable to assess (UA)
Be a motivator	1(0.5)	1(0.5)	19 (9.4)	33(16.3)	143(70.8)	5(2.5)
Be accessible to all stakeholders	1(0.5)	5(2.5)	15(7.4)	60(29.7)	117(57.9)	4(2.0)
Be approachable all the time	1(0.5)	2(1.0)	20(9.9)	59(29.2)	114(56.4)	6(3.0)
Be productive	1(0.5)	1(0.5)	16(7.9)	65(32.2)	114(56.4)	5(2.5)
Be supportive to all stakeholders	1(0.5)	1(0.5)	16(7.9)	56(27.7)	124(61.4)	4(2.0)
Have desire to grow	1(0.5)	21(10.4)	51(25.2)	123(60.9)	6 (3.0)	-
Have more self-confidence	1(0.5)	1(0.5)	19(9.4)	54(26.7)	120(59.4)	7(3.5)
Should manage time efficiently	1(0.5)	1(0.5)	16(7.9)	60(29.7)	117(57.9)	7(3.5)
Should be active always	1(0.5)	1(0.5)	30(14.9)	70(34.7)	97(48.0)	3(1.5)
Should be available for guidance	1(0.5)	2(1.0)	18(8.9)	58(28.7)	119(58.9)	4(2.0)
Should be corruption free	2(1.0)	2(1.0)	12(5.9)	51(25.2)	129(63.9)	6(3.0)
Should be humble	1(0.5)	2(1.0)	27(13.4)	59(29.2)	107(53.0)	6(3.0)
Should display patience towards subordinates and superiors	1(0.5)	-	26(12.9)	46(22.8)	123(60.9)	6(3.0)
Treat everyone with respect	1(0.5)	1(0.5)	14(6.9)	37(18.3)	139(68.8)	10(5.0)
Willing to learn from others	1(0.5)	-	20(9.9)	51(25.2)	122(60.4)	8(4.0)
Willing to share ideas with others	1(0.5)	1(0.5)	17(8.4)	57(28.2)	120(59.4)	6(3.0)

Out of the 202 respondents, 143 (70.8%) responded “be a motivator” as the “most significant” characteristic, followed by “treat everyone with respect” (n = 139; 68.8%). Twenty-one (10.4%) respondents considered “have desire to grow” as the “less significant” characteristic, far higher than other characteristics. One hundred twenty-three respondents (60.9%) considered the same characteristic, “have desire to grow,” as “more significant,” but the characteristic also has the least responses under “most significant” (n = 6; 3%).

Descriptive Statistics for Characteristics Scale Items

Descriptive statistics (mean, standard deviation, and measures of skewness and kurtosis) were run for each of the potential characteristics scale items (Table 4.19). Normality assessment usually rejects if the ratio of skewness is > ± 1 and/or kurtosis is > ± 2.

Table 4.19

Descriptive Statistics for Characteristics Scale Items (n = 202)

	Mean	SD	N	Skewness	Kurtosis
Be a motivator	4.64	0.749	202	-1.670	3.255
Be accessible to all stakeholders	4.48	0.806	202	-1.377	2.323
Be approachable all the time	4.49	0.793	202	-1.115	1.695
Be productive	4.51	0.741	202	-1.144	2.218
Be supportive to all stakeholders	4.55	0.733	202	-1.359	2.656
Have desire to grow	4.55	0.760	202	-1.166	1.819
Have more self-confidence	4.54	0.773	202	-1.162	1.969
Should manage time efficiently	4.54	0.753	202	-1.140	2.245
Should be active always	4.34	0.801	202	-0.801	0.584
Should be available for guidance	4.50	0.768	202	-1.282	2.160
Should be corruption free	4.59	0.776	202	-1.723	4.491
Should be humble	4.42	0.832	202	-0.922	0.874
Should display patience towards subordinates and superiors	4.52	0.793	202	-1.110	1.273
Treat everyone with respect	4.69	0.736	202	-1.559	3.802
Willing to learn from others	4.57	0.765	202	-1.113	1.852
Willing to share ideas with others	4.54	0.753	202	-1.210	2.262

“Treat everyone with respect” had the highest average mean score at 4.69, followed by “be a motivator” at 4.64, “free of corruption” at 4.59, and “willing to learn from others” at 4.57. The characteristic “should be active always” had the lowest mean score at 4.34, followed by

"should be humble" at 4.42. In respect to normality assessment, the data have a negative skewness as all the values are negative and kurtosis values ranging from 0.5 to 3.8 across the data set. Factors with skewness of less than -2.5 were discarded from the data set.

Gender Wise Descriptive Statistics for Characteristics Scale Items

This statistic looked at the distribution of responses for each characteristic scale item based on gender (Table 4.20). This statistic is important for understanding to what extent respective scale characteristics were deemed by the two genders to be significant for success for middle managers. This statistic may also be significant given the nature of the cultures in the Gulf region and the traditional and evolving nature of gender issues in this region.

Table 4.20

Gender Wise Descriptive Statistics for Characteristics Scale Items (n = 202)

	Not at all significant		Less significant		Significant		More significant		Most significant		Unable to assess (UA)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Be a motivator	-	1(1.1)	-	1(1.1)	13(11.6)	6(6.7)	18(16.1)	15(16.7)	78(69.6)	65(72.2)	3(2.7)	2(2.2)
Be accessible to all stakeholders	-	1(1.1)	5(4.5)	-	6(5.4)	9(10.0)	35(31.2)	25(27.8)	64(57.1)	53(58.9)	2(1.8)	2(2.2)
Be approachable all the time	-	1(1.1)	1(0.9)	1(1.1)	14(12.5)	6(6.7)	29(25.9)	30(33.3)	64(57.1)	50(55.6)	4(3.6)	2(2.2)
Be productive	-	1(1.1)	1(0.9)	-	9(8.0)	7(7.8)	32(28.6)	33(36.7)	68(60.7)	46(51.1)	2(1.8)	3(3.3)
Be supportive to all stakeholders	-	1(1.1)	1(0.9)	-	9(8.0)	7(7.8)	32(28.6)	24(26.7)	68(60.7)	56(62.2)	2(1.8)	2(2.2)
Have desire to grow	-	1(1.1)	-	-	14(12.5)	7(7.8)	25(22.3)	26(28.9)	70(62.5)	53(58.9)	3(2.7)	3(3.3)
Have more self-confidence	-	1(1.1)	-	1(1.1)	10(8.9)	9(10)	29(25.9)	25(27.8)	70(62.5)	50(55.6)	3(2.7)	4(4.4)
Should manage time efficiently	-	1(1.1)	-	1(1.1)	8(7.1)	8(8.9)	36(32.1)	24(26.7)	64(57.1)	53(58.9)	4(3.6)	3(3.3)
Should be active always	-	1(1.1)	1(0.9)	-	17(15.2)	13(14.4)	33(29.5)	37(41.1)	59(52.7)	38(42.2)	2(1.8)	1(1.1)
Should be available for guidance	-	1(1.1)	1(0.9)	1(1.1)	8(7.1)	10(11.1)	32(28.6)	26(28.9)	68(60.7)	51(56.7)	3(2.7)	1(1.1)
Should be corruption free	-	2(2.2)	1(0.9)	1(1.10	8(7.1)	4(4.4)	30(26.8)	21(23.3)	69(61.6)	60(66.7)	4(3.6)	2(2.2)
Should be humble	-	1(1.1)	1(0.9)	1(1.1)	17(15.2)	10(11.1)	31(27.7)	28(31.1)	60(53.6)	47(52.2)	3(2.7)	3(3.3)
Should display patience towards	-	1(1.1)	-	-	16(14.3)	10(11.1)	27(24.1)	19(21.1)	66(58.9)	57(63.3)	3(2.7)	3(3.3)

	Not at all significant		Less significant		Significant		More significant		Most significant		Unable to assess (UA)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
subordinates and superiors												
Treat everyone with respect	-	1(1.1)	-	1(1.1)	10(8.9)	4(4.4)	18(16.1)	19(21.1)	79(70.5)	60(66.7)	5(4.5)	5(5.6)
Willing to learn from others	-	1(1.1)	-	-	13(11.6)	7(7.8)	29(25.9)	22(24.4)	66(58.9)	56(62.2)	4(3.6)	4(4.4)
Willing to share ideas with others	-	1(1.1)	1(0.9)	-	8(7.1)	9(10.0)	35(31.2)	22(24.4)	65(58.0)	55(61.1)	3(2.7)	3(3.3)

Looking at the gender wise responses of the respondents, 72.2% of males felt that the "most significant" characteristic is to "be a motivator," and 69.6% of females felt the same. Similarly, other characteristics commonly selected to be "most significant" in both males and females include, "treat everyone with respect" (Female [n = 79; 70.5%]; Male [n = 60; 66.7%]), "be supportive to stakeholders" (Female [n = 68; 60.7%]; Male [n =56; 62.2%]), and "should be corruption-free" (Female [n = 69; 61.6%]; Male [n = 60; 66.7%]). It is worth mentioning that the most significant characteristic, according to the male respondents, was to "be a motivator" (n = 65; 72.2%), whereas female respondents felt to "treat everyone with respect" was the most required important characteristics of middle level managers (n = 79; 70.5%).

Affiliation Wise Descriptive Statistics for Characteristics Scale Items

This statistic looked at the distribution of responses for each characteristic scale item based on affiliation: medical education, healthcare, or both (Table 4.21). The statistic is important to understanding to what extent respective scale characteristics were deemed to be significant for success for middle managers by leaders and managers in the two respective fields, as well as by leaders who work simultaneously in both areas. This was important given that it would reveal whether the competences prioritized in the two settings differ or are similar.

Table 4.21

Affiliation Wise Descriptive Statistics for Characteristics Scale Items (n = 202)

	Not at all significant			Less significant			Significant			More significant			Most significant			Unable to assess (UA)		
	Medical Education	Health care	Both	Medical Education	Health care	Both	Medical Education	Health care	Both	Medical Education	Health care	Both	Medical Education	Health care	Both	Medical Education	Health care	Both
Be a motivator	1(1.4)	-	-	-	-	1(1.4)	3(4.1)	6(10.7)	10(13.9)	15(20.3)	13(23.2)	5(6.9)	53(71.6)	36(64.3)	54(75)	2(2.7)	1(1.8)	2(2.8)
Be accessible to all stakeholders	1(1.4)	-	-	1(1.4)	4(7.1)	-	2(2.7)	2(3.6)	11(15.3)	18(24.3)	23(41.1)	19(26.4)	51(68.9)	27(48.2)	39(54.2)	1(1.4)	-	3(4.2)
Be approachable all the time	1(1.4)	-	-	-	1(1.8)	1(1.4)	4(5.4)	5(8.9)	11(15.3)	20(27.0)	19(33.9)	20(27.8)	46(62.2)	32(57.1)	36(50)	2(2.7)	-	4(5.6)
Be productive	1(1.4)	-	-	1(1.4)	-	-	6(8.1)	2(3.6)	8(11)	22(29.7)	16(28.6)	27(37.5)	44(59.5)	37(66.1)	33(45.8)	1(1.4)	-	4(5.6)
Be supportive to all stakeholders	1(1.4)	--	-	-	-	1(1.4)	4(5.4)	2(3.6)	10(13.9)	16(21.6)	23(41.1)	17(23.6)	52(70.3)	30(53.6)	42(58.3)	1(1.4)	1(1.8)	2(2.8)
Have desire to grow	1(1.4)	-	-				4(5.4)	8(14.3)	9(12.5)	16(21.6)	16(28.6)	19(26.4)	51(68.9)	32(57.1)	40(55.6)	2(2.7)	-	4(5.6)
Have more self-confidence	1(1.4)	-	-	-	-	1(1.4)	7(9.5)	3(5.4)	9(12.5)	18(24.3)	17(30.4)	19(26.4)	46(62.2)	35(62.5)	39(54.2)	2(2.7)	1(1.8)	4(5.6)
Should manage time efficiently	1(1.4)	-	-	-	-	1(1.4)	5(6.8)	4(7.1)	7(9.7)	19(25.7)	20(35.7)	21(29.2)	47(63.5)	32(57.1)	38(52.8)	2(2.7)	-	5(6.9)
Should be active always	1(1.4)	-	-	1(1.4)	-	-	9(12.2)	8(14.3)	13(18.1)	23(31.1)	21(37.5)	26(36.1)	39(52.7)	27(48.2)	31(43.1)	1(1.4)	-	2(2.8)
Should be	1(1.4)	-	-	1(1.4)	-	1(1.4)	2(2.7)	6(10.7)	10(13.9)	28(37.8)	16(28.6)	14(19.4)	41(55.4)	33(58.9)	45(62.5)	1(1.4)	1(1.8)	2(2.8)

	Not at all significant			Less significant			Significant			More significant			Most significant			Unable to assess (UA)		
	Medical Education	Health care	Both	Medical Education	Health care	Both	Medical Education	Health care	Both	Medical Education	Health care	Both	Medical Education	Health care	Both	Medical Education	Health care	Both
available for guidance																		
Should be corruption free	1(1.4)	-	1(1.4)	-	1(1.8)	1(1.4)	2(2.7)	3(5.4)	7(9.7)	20(27)	17(30.4)	14(19.4)	50(67.6)	34(60.7)	45(62.5)	1(1.4)	1(1.8)	4(5.6)
Should be humble	1(1.4)	-	-	1(1.4)	1(1.8)	-	4(5.4)	8(14.3)	15(20.8)	31(41.9)	13(23.2)	15(20.8)	36(48.6)	33(58.9)	38(52.8)	1(1.4)	1(1.8)	4(5.6)
Should display patience towards subordinates and superiors	1(1.4)	-	-	-	-	-	6(8.1)	10(17.9)	10(13.9)	15(20.3)	12(21.4)	19)26.4)	51(68.9)	33(58.9)	39(54.2)	1(1.4)	1(1.8)	4(5.6)
Treat everyone with respect	1(1.4)	-	-	-	-	1(1.4)	1(1.4)	6(10.7)	7(9.7)	18(24.3)	12(21.4)	7(9.7)	52(70.3)	37(66.1)	50(69.4)	2(2.7)	1(1.8)	7(9.7)
Willing to learn from others	1(1.4)	-	-	-	-	-	7(9.5)	7(12.5)	6(8.3)	16(21.6)	12(21.4)	23(31.9)	48(64.9)	36(64.3)	38(52.8)	2(2.7)	1(1.8)	5(6.9)
Willing to share ideas with others	1(1.4)	-	-	1(1.4)	-	-	3(4.1)	5(8.9)	9(12.5)	21(28.4)	17(30.4)	19(26.4)	46(62.2)	34(60.7)	40(55.6)	2(2.7)	-	4(5.6)

"Be a motivator" and "be productive" were the common characteristics considered as the "most significant" by respondents from Medical education (71.6%) and Healthcare (66.1%) settings, respectively. Similarly, "treat everyone with respect" is the characteristic that was considered as most significant across various settings such as Medical education (70.3%), Healthcare (66.1%), and both (69.4%). The widest sector (setting-wise) discrepancies were found with the characteristic, "be accessible to stakeholders," wherein 51 respondents (68.9%) from a Medical education setting felt it was the "most significant," while only 27 respondents (48.2%) from a Healthcare setting felt it to be most significant. Similarly, for the characteristic, "be supportive to all stakeholders," 52 respondents (70.3%) from a Medical education setting felt it was the "most significant," while only 30 respondents (53.6%) from a Healthcare setting felt it to be most significant.

Designation Wise Descriptive Statistics for Characteristics Scale Items

This statistic looked at the distribution of responses for each characteristic scale item based on the designation of each participant in terms of management levels: top, middle, or lower management (Table 4.22). The statistic is central to this study as it enables the identification of characteristics identified as important for success for middle managers by persons who are in these three levels of management.

The characteristic considered as "most significant" by respondents from top management (n = 13; 76.5%), middle management (n = 29; 76.3%), and low management (n = 101; 68.7%) is again, "be a motivator" which is the first question of the questionnaire (Table 4.26). Likewise, the top management respondents felt the characteristic, "should display patience towards subordinates and superiors," as most significant (76.5%), while only 68.4% of middle management and 57.1% of low management felt it as most significant. Twenty-eight respondents

(19%) from low management level felt that the characteristic, “should be active always,” as “significant” for middle managers, while only one respondent (5.9%) from top management and one respondent (2.6%) from middle management mentioned it as a “significant” characteristic.

Table 4.22

Designation Wise Descriptive Statistics for Characteristics Scale Items (n = 202)

	Not at all significant			Less significant			Significant			More significant			Most significant			Unable to assess (UA)		
	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management
Be a motivator	-	-	1 (0.7)	-	1(2.6)	-	1(5.9)	1(2.6)	17(11.6)	3(17.6)	6(15.8)	24(16.3)	13(76.5)	29(76.3)	101(68.7)	-	1(2.6)	-
Be accessible to all stakeholders	-	-	1(0.7)	-	-	5(3.4)	1(5.9)	4(10.5)	10(6.8)	5(29.4)	10(26.3)	45(30.6)	11(64.7)	24(63.2)	82(55.8)	-	-	-
Be approachable all the time	-	-	1(0.7)	-	1(2.6)	1(0.7)	1(5.9)	2(5.3)	17(11.6)	8(47.1)	12(31.6)	39(26.5)	8(41.7)	23(60.5)	83(56.5)	-	-	-
Be productive	-	-	1(0.7)	-	-	1(0.7)	3(17.6)	2(5.3)	11(7.5)	5(29.4)	15(39.5)	45(30.6)	8(47.1)	19(50.0)	87(59.2)	1(5.9)	2(5.3)	-
Be supportive to all stakeholders	-	-	1(0.7)	-	-	1(0.7)	1(5.9)	2(5.3)	13(8.8)	7(41.2)	11(28.9)	38(25.9)	8(47.1)	24(63.2)	92(62.6)	1(5.9)	1(2.6)	-
Have desire to grow	-	-	1(0.7)	-	-	-	4(23.4)	2(5.3)	15(10.2)	3(17.6)	11(28.9)	37(25.2)	9(52.9)	23(60.5)	91(61.9)	1(5.9)	2(5.3)	-
Have more self-confidence	-	-	1(0.7)	-	-	1(0.7)	3(17.6)	2(5.3)	14(9.5)	8(47.1)	10(26.3)	36(24.5)	5(29.4)	24(63.2)	91(61.9)	1(5.9)	2(5.3)	-
Should manage time efficiently	-	-	1(0.7)	-	-	1(0.7)	3(17.6)	2(5.3)	11(7.5)	5(29.4)	15(39.5)	41(27.9)	8(47.1)	20(52.6)	89(60.5)	1(5.9)	2(5.3)	-
Should be active always	-	-	1(0.7)	-	-	1(0.7)	1(5.9)	1(2.6)	28(19.0)	7(41.2)	16(42.1)	47(32.0)	8(47.1)	21(55.3)	68(46.3)	1(5.9)	-	-
Should be available for guidance	-	-	1(0.7)	-	-	2(1.4)	1(5.9)	2(5.3)	15(10.2)	6(35.3)	15(39.5)	37(25.2)	10(58.8)	20(52.6)	89(60.5)	-	1(2.6)	-
Should be corruption free	-	-	2(1.4)	-	-	2(1.4)	1(5.9)	1(2.6)	10(6.8)	4(23.5)	14(36.8)	33(22.4)	12(70.6)	21(55.3)	96(65.3)	-	2(5.3)	-
Should be humble	-	-	1(0.7)	-	1(2.6)	1(0.7)	1(5.9)	3(7.9)	23(15.6)	10(58.8)	12(31.6)	37(25.2)	6(35.3)	22(57.9)	79(53.7)	-	-	-
Should display patience towards subordinates and superiors	-	-	1(0.7)	-	-	-	3(17.6)	3(7.9)	20(13.6)	1(5.9)	9(23.7)	36(24.5)	13(76.5)	26(68.4)	84(57.1)	-	-	-

	Not at all significant			Less significant			Significant			More significant			Most significant			Unable to assess (UA)		
	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management	Top Management	Middle Management	Low Management
Treat everyone with respect	-	-	1(0.7)	-	-	1(0.7)	1(5.9)	1(2.6)	12(8.2)	5(29.4)	10(26.3)	22(15.0)	10(58.8)	25(65.8)	104(70.7)	1(5.9)	2(5.3)	-
Willing to learn from others	-	-	1(0.7)	-	-	-	3(17.6)	1(2.6)	16(10.9)	6(35.3)	10(26.3)	35(23.8)	8(47.1)	25(65.8)	89(60.5)	-	2(5.3)	-
Willing to share ideas with others	-	-	1(0.7)	-	-	1(0.7)	3(17.6)	3(7.9)	11(7.5)	4(23.5)	13(34.2)	40(27.2)	10(58.8)	21(55.3)	89(60.5)	-	1(2.6)	-

The quantitative analysis of the competencies as viewed by top, middle, and low management revealed that the competency considered as “most significant” by the maximum number of respondents from top management (n =13; 76.3%), middle management (n = 29; 73.7%), and low management (n = 108; 73.5%) were “be able to work in a team,” “should be able to take appropriate decisions,” and “should be an effective communicator,” respectively (Table 4.23). Seventy point six percent of the top management respondents felt that the competency, “should have long term vision for the organization,” was most significant, which resonated with the views of middle management (65.8%) and low management (61.9%) as well. Ninety-nine respondents (67.3%) from low management level felt that the competency, “should possess leadership skills,” was “most significant” for middle managers, while only six respondents (35.3%) from top management mentioned it as the “most significant” competency. Similarly, 23.5% from top management felt that the competency, “possess up-to-date knowledge in the respective field,” was “significant” for middle managers, while only 5.3% of respondents from middle management stated it as a “significant” competency.

Table 4.23

Designation Wise Descriptive Statistics for Competency Scale Items (n = 202)

	Not at all significant			Less significant			Significant			More significant			Most significant			Unable to assess (UA)		
	TM	MM	LM	TM	MM	LM	TM	MM	LM	TM	MM	LM	TM	MM	LM	TM	MM	LM
Be a motivator	-	-	1(0.7)	-	1(2.6)	-	1(5.9)	1(2.6)	17(11.6)	3(17.6)	6(15.8)	24(16.3)	13(76.5)	29(76.3)	101(68.7)	-	1(2.6)	-
Be accessible to all stakeholders	-	-	1(0.7)	-	-	5(3.4)	1(5.9)	4(10.5)	10(6.8)	5(29.4)	10(26.3)	45(30.6)	11(64.7)	24(63.2)	82(55.8)	-	-	-
Be approachable all the time	-	-	1(0.7)	-	1(2.6)	1(0.7)	1(5.9)	2(5.3)	17(11.6)	8(47.1)	12(31.6)	39(26.5)	8(41.7)	23(60.5)	83(56.5)	-	-	-
Be productive	-	-	1(0.7)	-	-	1(0.7)	3(17.6)	2(5.3)	11(7.5)	5(29.4)	15(39.5)	45(30.6)	8(47.1)	19(50.0)	87(59.2)	1(5.9)	2(5.3)	-
Be supportive to all stakeholders	-	-	1(0.7)	-	-	1(0.7)	1(5.9)	2(5.3)	13(8.8)	7(41.2)	11(28.9)	38(25.9)	8(47.1)	24(63.2)	92(62.6)	1(5.9)	1(2.6)	-
Have desire to grow	-	-	1(0.7)	-	-	-	4(23.4)	2(5.3)	15(10.2)	3(17.6)	11(28.9)	37(25.2)	9(52.9)	23(60.5)	91(61.9)	1(5.9)	2(5.3)	-
Have more self-confidence	-	-	1(0.7)	-	-	1(0.7)	3(17.6)	2(5.3)	14(9.5)	8(47.1)	10(26.3)	36(24.5)	5(29.4)	24(63.2)	91(61.9)	1(5.9)	2(5.3)	-
Should manage time efficiently	-	-	1(0.7)	-	-	1(0.7)	3(17.6)	2(5.3)	11(7.5)	5(29.4)	15(39.5)	41(27.9)	8(47.1)	20(52.6)	89(60.5)	1(5.9)	2(5.3)	-
Should be active always	-	-	1(0.7)	-	-	1(0.7)	1(5.9)	1(2.6)	28(19.0)	7(41.2)	16(42.1)	47(32.0)	8(47.1)	21(55.3)	68(46.3)	1(5.9)	-	-
Should be available for guidance	-	-	1(0.7)	-	-	2(1.4)	1(5.9)	2(5.3)	15(10.2)	6(35.3)	15(39.5)	37(25.2)	10(58.8)	20(52.6)	89(60.5)	-	1(2.6)	-
Should be corruption free	-	-	2(1.4)	-	-	2(1.4)	1(5.9)	1(2.6)	10(6.8)	4(23.5)	14(36.8)	33(22.4)	12(70.6)	21(55.3)	96(65.3)	-	2(5.3)	-
Should be humble	-	-	1(0.7)	-	1(2.6)	1(0.7)	1(5.9)	3(7.9)	23(15.6)	10(58.8)	12(31.6)	37(25.2)	6(35.3)	22(57.9)	79(53.7)	-	-	-
Should display patience towards subordinates and superiors	-	-	1(0.7)	-	-	-	3(17.6)	3(7.9)	20(13.6)	1(5.9)	9(23.7)	36(24.5)	13(76.5)	26(68.4)	84(57.1)	-	-	-
Treat everyone with respect	-	-	1(0.7)	-	-	1(0.7)	1(5.9)	1(2.6)	12(8.2)	5(29.4)	10(26.3)	22(15.0)	10(58.8)	25(65.8)	104(70.7)	1(5.9)	2(5.3)	-
Willing to learn from others	-	-	1(0.7)	-	-	-	3(17.6)	1(2.6)	16(10.9)	6(35.3)	10(26.3)	35(23.8)	8(47.1)	25(65.8)	89(60.5)	-	2(5.3)	-
Willing to share ideas with others	-	-	1(0.7)	-	-	1(0.7)	3(17.6)	3(7.9)	11(7.5)	4(23.5)	13(34.2)	40(27.2)	10(58.8)	21(55.3)	89(60.5)	-	1(2.6)	-

Descriptive Statistics for Competence Scale Items

Descriptive statistics (mean, standard deviation, and measures of skewness and kurtosis) were run for each of the potential competency scale items (Table 4.24). The survey responses were coded as 1 (Not at all significant), 2 (Less significant), 3 (Significant), 4 (More significant), 5 (most significant), and 6 (Unable to assess [UA]).

Table 4.24

Descriptive Statistics for Competence Scale Items

	Mean	SD	N	Skewness	Kurtosis
Be able to work in a team	4.56	0.797	202	-1.416	2.114
Able to adapt to changes	4.54	0.754	202	-1.333	2.253
Be able to achieve tasks as per timeline	4.44	0.766	202	-1.075	1.094
Possess up- to-date knowledge in the respective field	4.41	0.788	202	-1.179	1.570
Should address any conflict of interest effectively	4.51	0.755	202	-1.314	2.063
Should be able to balance various roles (multitasking)	4.48	0.768	202	-1.000	1.669
Should be able to encourage teamwork	4.59	0.735	202	-1.391	2.952
Should be able to manage resources (money /manpower)	4.49	0.812	202	-1.235	1.726
Should be able to take appropriate decisions	4.63	0.757	202	-1.557	3.332
Should be able to work with multiple teams	4.56	0.718	202	-1.490	3.070
Should be an effective communicator	4.66	0.682	202	-1.732	4.253
Should be an effective listener	4.58	0.763	202	-1.373	2.432
Should be organized in his/her thoughts, words and deeds	4.54	0.760	202	-1.217	1.797
Should demonstrate integrity	4.60	0.699	202	-1.390	3.180
Should display effective organizational skills	4.54	0.747	202	-1.421	2.414
Should follow democratic ways	4.34	0.912	202	-0.997	1.051
Should have long term vision for the organization	4.55	0.772	202	-1.656	3.906
Should possess leadership skills	4.64	0.685	202	-1.469	3.816
Should possess problem-solving skills	4.66	0.731	202	-1.297	2.970

Exploratory Factor Analysis

A principal components analysis with varimax rotation for the competency scale was carried out with the original 19 items. The determination of the number of factors to be extracted depends on how strongly and cleanly the variables load on the factors. The variable will load

strongly in a particular factor if the loading > 0.40, and it is considered clean if the absolute difference between the loadings is > 0.20. Table 4.25 shows the loading of the 17 items on the three factors and the accounted cumulative variance with the entire sample (>64%). Factor analysis results for competency scale demonstrated that CMP11 and CMP 13 did not load on the factor well (factor loading [FL] = <40) and was poorly or inversely related to most of other items in this factor. Therefore, CMP11 and CMP 13 were deleted from the model.

Table 4.25

Factor Loadings and Communalities for the Competency Scale

Scale	Item	1	2	3	Communalities
Should demonstrate integrity	CMP14	0.841			0.75
Should possess leadership skills	CMP18	0.788			0.64
Should display effective organizational skills	CMP15	0.761			0.71
Should have long term vision for the organization	CMP17	0.754			0.59
Should possess problem-solving skills	CMP19	0.681			0.72
Should be able to take appropriate decisions	CMP9	0.662			0.72
Should be an effective Listener	CMP12	0.618			0.69
Should be able to work with multiple teams	CMP10	0.569			0.64
Should follow democratic ways	CMP16	0.545			0.57
Be able to work in a team	CMP1		0.776		0.64
Should be able to encourage teamwork	CMP7		0.773		0.68
Should be able to manage resources (money /manpower)	CMP8		0.728		0.72
Able to adapt to changes	CMP2		0.694		0.71
Should be able to balance various roles (multitasking)	CMP6		0.550		0.69
Be able to achieve tasks as per timeline	CMP3			0.770	0.63
Possess up- to-date knowledge in the respective field	CMP4			0.590	0.63
Should address any conflict of interest effectively	CMP5			0.573	0.61
Cronbach’s alpha		0.94	0.93	0.86	0.93
Eigenvalue		10.4	3.4	1.7	
KMO and Bartlett's Test					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.96				
Bartlett's Test of Sphericity					
Approx. Chi-Square	2905.11				
df	136				
Sig.	0				

Bartlett's Test of Sphericity in EFA evaluates all factors together and each factor separately against a hypothesis stating that there are no factors. The Bartlett's Test of Sphericity in this study was significant ($P < 0.0001$), indicating that enough shared variance is present. The Kaiser-Meyer-Oklin (KMO) is a measure that provides an approach to comparing the zero-order correlations to the partial correlations between pairs of variables. The KMO in the study model was 0.96; Kaiser (1974) stated that if the KMO is > 0.50, it is acceptable. The closer the KMO is to 1, the better the correlations between the pairs of variables that can be explained by the other variables. Analysis of Moment Structure (AMOS) implements the general approach to data analysis known as structural equation modeling (SEM). The multivariate normality of the data was examined by conducting normality checks by using AMOS v. 24.0 software. The 16 items' distribution in this study is accepted because none of them deviate from normality (Table 4.29).

Items such as "should demonstrate integrity" (CMP14; FL = 0.841), "should possess leadership skills" (CMP18; FL = 0.788), "should display effective organizational skills" (CMP15; FL = 0.761), "should have long term vision for the organization" (CMP17; FL = 0.754), "should possess problem-solving skills" (CMP19; FL = 0.681), "should be able to take appropriate decisions" (CMP9; FL = 0.662), "should be an effective listener" (CMP12; FL = 0.618), "should be able to work with multiple teams" (CMP10; FL = 0.569), and "should follow democratic ways" (CMP16, FL = 0.545) loaded together as "Factor 1." This factor was named as "professionalism and problem solving" based on the common attributes. Professional behavior and problem-solving skills were considered as vital competencies for middle managers by many authors (Browne et al., 2014; Glaser et al., 2015; Huy, 2011; Mozhgan et al., 2011; Raes et al., 2011).

Items comprising of "be able to work in a team" (CMP1; FL = 0.776), "should be able to encourage teamwork" (CMP7; FL = 0.773), "should be able to manage resources (money /manpower)" (CMP8; FL = 0.728), "able to adapt to changes" (CMP2; FL = 0.694), and "should be able to balance various roles (multitasking)" (CMP6; FL = 0.550) loaded together as "Factor 2." Since this factor was dealing with various aspects of "team performance" and "ability to adapt," this factor was named "team management and adaptation." This finding resonates with the ideas published in many studies in the field of medical education and healthcare delivery (Engle et al., 2017; Franck et al., 2018; McAlearney & Butler, 2008; Mozhgan et al., 2011; Nightingale et al., 2018;).

Three items, namely, "be able to achieve tasks as per timeline" (CMP3; FL = 0.770), "possess up-to-date knowledge in the respective field" (CMP4; FL = 0.590), and "should address any conflict of interest effectively" (CMP5; FL = 0.573) loaded together as a third factor. Since all the items referred to different domains, Factor 3 was named as "Time management and expertise," considering the items with higher FL. This finding is consistent with the theories proposed by other authors as well (Kaminskas et al., 2011; Varkey et al., 2009). Cronbach's alpha coefficient for the internal consistency of the total sample was 0.93. Cronbach's alpha value was found to be 0.94 for Factor 1; 0.93 for Factor 2, and 0.83 for Factor 3. The correlation matrix of three factors is shown in Table 4.26.

Table 4.26

Correlation Matrix

Factor	Professionalism and problem solving	Team management and adaptation	Time management and expertise
Professionalism and problem solving	1.000	0.791	0.759
Team management and adaptation	0.791	1.000	0.773
Time management and expertise	0.759	0.773	1.000

A structural model was identified for the scale based on three inter-related constructs: professionalism and problem solving, team management and adaptation, and time management and expertise. As stated previously, these three factors emerged from the EFA analysis. The level of correlation between the variables were determined and then the statistical model fit was evaluated for fit with the actual dataset using a number of "goodness-of-fit" statistics, as presented following.

Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was carried out over the variance–covariance matrix for the three-factor model through the AMOS v. 24.0 statistical package. The estimation method was the Maximum Likelihood. To achieve model identification, regression coefficients of the error terms over the endogenous variables were fixed to 1. The CFA was carried out in order to determine whether the hypothesized statistical model fit the actual dataset, and a number of "goodness-of-fit" statistics were used on the three-factor models derived by means of the EFA.

The measurement model fit using CFA is shown in Table 4.31. The model fit the data adequately with a good GFI (GFI = 0.90), TLI (0.96), and RMSEA (RMSEA = 0.06). The raw χ^2 is 116 and $\chi 2$ /df is 1.76 with p-value < 0.0001 (Table 4.27).

Table 4.27

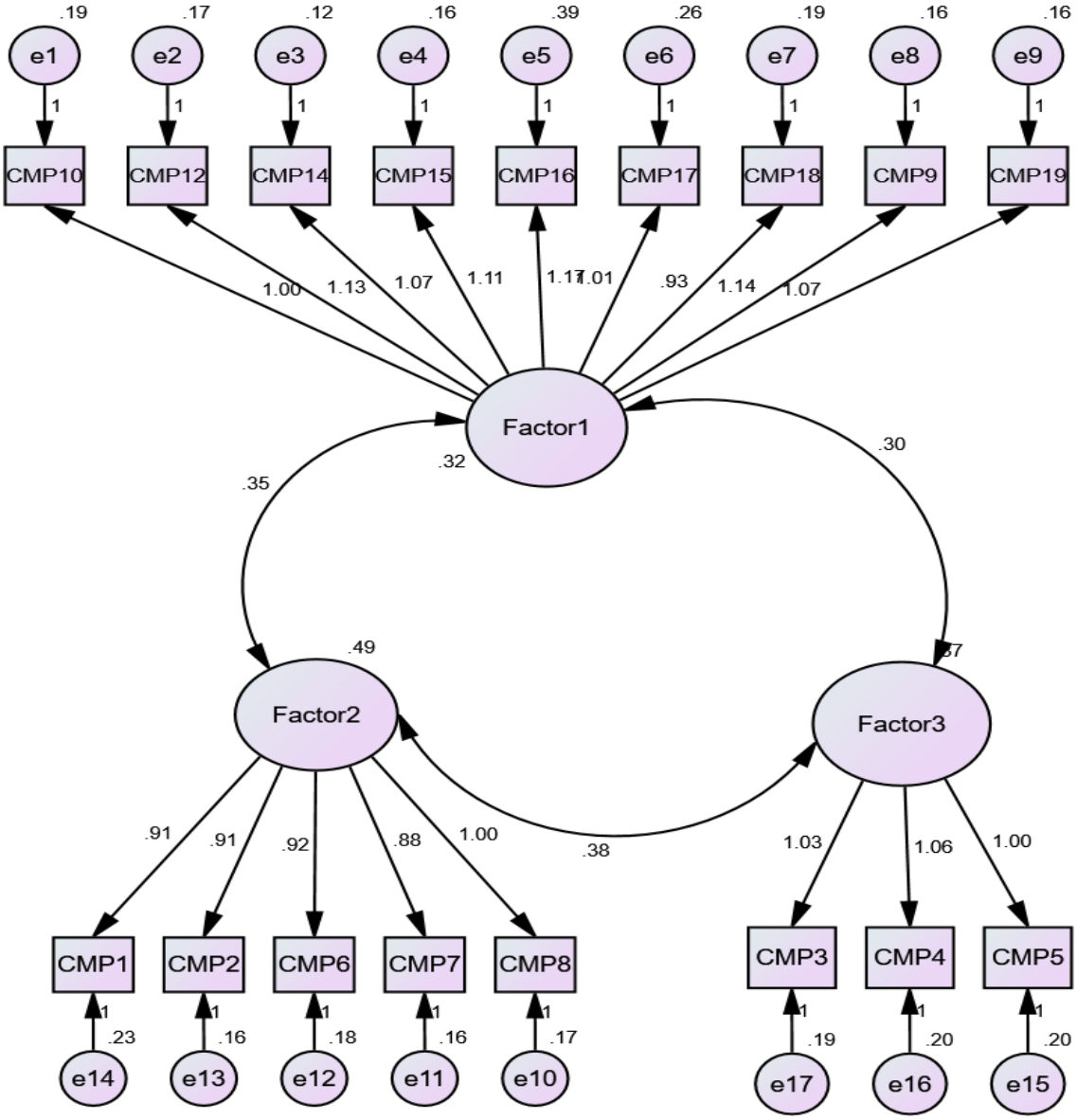
Confirmatory Factor Analysis Process for the Competency Scale

$\chi 2$	RMSEA	TLI	CFI	GFI	χ 2 /df	P value
116	0.06	0.96	0.96	0.90	1.76	0.0001

Following the guideline of AMOS analysis, the factors (latent variables) are enclosed in circles. The items (observed indicators) are enclosed in rectangles, whereas the measurement errors are enclosed in ellipses. The structural model is identified by three inter-related constructs that are connected to each other with double-headed arrows, representing a pattern of inter correlations (Figure 4.13). The single-headed arrows, leading from the circles to the rectangles, are regression paths representing the link between the factors and their respective set of observed variables; these coefficients represent factor loadings. Moreover, the single-headed arrows from the ellipses to the rectangles represent measurement errors associated with the observed variables.

Figure 4.13

Competency Scale Model Resulting from Confirmatory Factor Analysis. Correlations Between Factors and Items are Shown. Range is 0–1.



The Average Variance Extracted (AVE) of the constructs in the study were measured and compared to the inter-factor correlations. Preliminary evidence of convergent validity was determined when the AVE of each construct was higher than its correlation with other constructs. While discriminant validity of the competency scale was preliminarily determined by assessing the Maximum Shared Variance (MSV), and found to be lower than the AVE for all of the constructs in the scale. Convergent and Discriminant validities results are available in Table 4.28.

Table 4.28

Convergent and Discriminant Validities Results

	AVE	**CR**	**MSV**
Professionalism and problem solving	0.66	0.94	0.09
Team management and adaptation	0.69	0.80	0.14
Time management and expertise	0.66	0.85	0.12

Reliability and Validity of The New "Leadership and Managerial Competency Scale for Middle Managers in Gulf Region (LMCS-MM Gulf Region)"

The objective of this study was to develop a valid scale for measuring the competences for successful middle managers in healthcare and medical education in the Gulf region, particularly in the Kingdom of Saudi Arabia and the Kingdom of Bahrain. As stated in the literature, scale development involves identifying the attributes of a construct and developing appropriate numerical dimensions for such attributes, such that a reliable measure of construct is created (Tay & Jebb, 2017). Thus, measurement scales comprise of items that define different aspects of the construct of interest (DeVellis, 2016). The conceptual challenge identified from

this study regarding the provision of adequate training to middle managers was that a valid scale does not exist with which to measure such competences and determine areas where intervention is needed. The development of this scale represents an important solution for that problem, one that has both empirical and practical implications.

Rowan and Wulff (2007) outlined the key steps in scale development. According to this scholar, qualitative interviews can facilitate the collection of key information regarding a variable of interest. The findings from the analysis of such data in turn inform the survey design and final scale development (Rowan & Wulff, 2007). This study followed this procedure as a qualitative interview was first conducted to collect data on the personal, social, context, and development characteristics that are relevant for successful middle managers. The findings from the qualitative analysis were analyzed and used to develop a survey. The new competency scale was developed after the findings from the survey were analyzed and outlying items eliminated from the survey. The new scale developed under this study for measuring leadership skills and competences required for successful middle managers is termed the "Leadership and Managerial Competency Scale for Middle Managers in Gulf Region (LMCS-MM Gulf Region)."

Validation of a scale is an important part of the scale development process. Scale validity involves testing the new scale to ascertain that it indeed measures the construct that it is designed to measure (valid scale), and scale reliability means that the scale measures the construct in a precise and consistent manner. It is possible for a scale to be valid but not reliable, and vice versa. Therefore, both measures of quality are important aspects in the scale development process to assure accuracy and adequacy of the scale (Bryman, 2006; Collins et al., 2006).

Reliable scales yield the same results every time where the underlying condition is the same. Thus, reliability indicates that the scale is consistent. Internal consistency reliability was measured for the new scale developed. Internal consistency reliability focuses on the consistency between different items. It indicates the extent to which participants in the study rated the multiple-item construct measure administered to them in a similar manner. For this study, reliability was estimated in terms of average item-to-total correlation and Cronbach's alpha calculated. Cronbach's alpha is a measure of reliability that measures the strength of consistency between different items. The resulting reliability coefficient α has a value ranging from 0 to 1. If scale items are not related or correlated, then $\alpha = 0$. Where all of the items are highly correlated, the coefficient α will approach 1 with increasing number of scale items. The higher α is, the higher the correlation and the reliability of the scale. Although variable depending on the study, a minimum α between 0.65 and 0.8 is usually recommended as acceptable and demonstrative of reliability. The factors that emerged from the EFA using Principal Axis Factoring were professionalism and problem solving, team management and adaptation, and time management and expertise. These resulting constructs from the EFA were validated using Confirmatory Factor Analysis (CFA). The internal consistency of the factors was measured using Composite Reliability (CR); good reliability was obtained as the coefficient values were greater than 0.70. Cronbach's alpha coefficient for the internal consistency of the total sample was 0.93. Cronbach's alpha value was found to be 0.94 for Factor 1; 0.93 for Factor 2, and 0.83 for Factor 3.

Validity is a quality measure that shows the extent to which the underlying construct is adequately represented by the scale or measure. Assessment of validity using empirical methods yields a type of validity known as criterion-related validity. Thus, criterion related validity was

measured for the new scale. There are four types of criterion-related validity: convergent, discriminant, predictive, and concurrent; for this study, convergent and discriminant validity of the new scale were measured. Convergent validity indicates how closely a measure converges or relates to the construct being measured while discriminant validity shows the opposite effect or discrimination.

Bivariate correlations were computed for this three-item measure of competences for the successful middle manager: professionalism and problem solving, team management and adaptation, and time management and expertise. Exploratory factor analysis aggregates a set of items to smaller sets of factors based on principal components analysis. Factors that have an eigenvalue that is greater than 1.0. are extracted. Appropriate rotation technique is then applied to compute factor weights for aggregating individual items into a composite measure. Where convergent validity is adequate, the items under a construct would exhibit factor loadings in the range of 0.60 and higher for a single or same-factor loadings, and factor loadings ranging from 0.30 and below on all other factors for discriminant validity.

Adequate discriminant validity was obtained for the scale on the competences of middle managers as the average variance extracted (AVE) was greater than maximum shared squared variance (MSV). For convergent validity, AVE was equal or greater than 0.50 and lower than CR. In other words, the variance explained by the construct was greater than measurement error and greater than cross-loadings. Thus, a validated scale for measuring the competency required for successful middle managers in the Gulf region emerged from exploratory and confirmatory factor analysis with statements related to the characteristics and competences required for middle managers in the Gulf Region (Figure 4.14).

Figure 4.14

Leadership and Managerial Competency Scale for Middle Managers in Gulf Region (LMCS-MM Gulf Region)

Part A: Characteristics

	Characteristics Scale Items	1	2	3	4	5	0
1.	Be a motivator						
2.	Be accessible to all stakeholders						
3.	Be approachable all the time						
4.	Be productive						
5.	Be supportive to all stakeholders						
6.	Have desire to grow						
7.	Have more self-confidence						
8.	Should manage time efficiently						
9.	Should be active always						
10.	Should be available for guidance						

11.	Should be corruption free						
12.	Should be humble						
13.	Should display patience towards subordinates and superiors						
14.	Treat everyone with respect						
15.	Willing to learn from others						
16.	Willing to share ideas with others						

Part B: Competency

	Competency Scale Items	1	2	3	4	5	0
1.	Be able to work in a team						
2.	Able to adapt to changes						
3.	Be able to achieve tasks as per timeline						
4.	Possess up- to-date knowledge in the respective field						
5.	Should address any conflict of interest effectively						

6.	Should be able to balance various roles (multitasking)						
7.	Should be able to encourage teamwork						
8.	Should be able to manage resources (money /manpower)						
9.	Should be able to take appropriate decisions						
10.	Should be able to work with multiple teams						
11.	Should be an effective Listener						
12.	Should demonstrate integrity						
13.	Should display effective organizational skills						
14.	Should follow democratic ways						
15.	Should have long term vision for the organization						
16.	Should possess leadership skills						
17.	Should possess problem-solving skills						

Highest Score =5 Lowest Score =0

Chapter Summary

This chapter presented the detailed findings from the qualitative phase of the study on leadership skills and competencies for middle managers and the results from the quantitative phase of the study. Data for the qualitative phase were collected using semi-structured interviews conducted with 27 participants comprising of seven leaders, nine managers, and 11 employees who work under middle managers. Data were analyzed using thematic analysis. The outcome from this phase of the study was the development of a survey on the competences for successful middle managers. Data for the quantitative phase of the study was collected through administration of the survey. Data analysis was done using a number of statistical techniques including descriptive statistics, exploratory factor analysis, and confirmatory factor analysis. A structural model was identified for the new scale based on three inter-related constructs: professionalism and problem solving, team management and adaptation, and time management and expertise. The final outcome from the analysis phase of the study was the development of a validated scale for the measurement of leadership skills and competences for middle managers in the Gulf region. A detailed discussion of the findings and results from the study is presented in the next chapter.

CHAPTER V: DISCUSSION

Achieving world class healthcare and medical education in order to deliver high-quality, patient-centered, and safe care at all times is an important strategic goal for countries in the Gulf region. The role of middle managers is central to this feat (Sheikh et al., 2019) because of their unique positioning in the delivery of organizational strategy. The need for healthcare organizations in the Gulf region to improve upon their leadership and managerial portfolios to fulfill their vision has been established by evidence from both the literature and practice. However, the role of middle managers in the region is not well-defined, both in scholarly and practical contexts. There is little information on leadership and management competencies for middle managers in the healthcare sector in the region and insignificant literature to support effective capacity building for this group of professionals. In tandem with the deficiency in skilled HR staffing, in a majority of the Gulf countries, middle managers in the region often resort to trial and error methods to deliver their roles (Abdalla, 2015). This study thus emerged from the lack of scholarship on middle managers in healthcare and medical education in the Gulf region.

The governments in these countries are focused on effective and efficient transition toward modernized healthcare and medical education (Ministry of Health, 2020). Achieving the goal of transformation in healthcare and medical education requires that middle managers possess the unique set of leadership and managerial competencies needed to cope with transformation in the sector. The purpose of the study was therefore, to explore the leadership and managerial competencies needed for successful middle managers and identify the desired competencies for middle managers in the medical education and healthcare context in the Gulf region, especially the Kingdom of Saudi Arabia and Kingdom of Bahrain. The specific goals of

the study were two-fold: to identify the leadership and managerial competencies required for successful middle managers during transformation of the healthcare sector, and to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia). Three research questions guided the study:

RQ1. What are the main competencies (leadership and management, respectively) identified by the top leaders (CEO / Dean / Vice Dean) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ2. What are the main competencies (leadership and management, respectively) identified by the middle managers (Head of the Clinical Departments in a hospital setting, Head of Departments in a college setting) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ3. What are the main competencies (leadership and management, respectively) identified by the employees (working under middle managers) that characterize successful middle managers in the healthcare sector of the Gulf region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

The study utilized a mixed method approach that incorporated descriptive qualitative research to inform a quantitative examination of the research phenomenon. This chapter presents a detailed discussion of the findings and results from the study. Due to the complexity and breadth of the study, the discussion is presented in three sections: discussion of the research questions within the context of the themes identified in the qualitative phase of the study; a

review of the role of middle management, and especially in the context of the Gulf region; and validity of the new scale for measuring the leadership and managerial competencies of middle managers in the Gulf region, particularly, the Kingdoms of Saudi Arabia and Bahrain.

Competences and Qualities Required for Successful Middle Managers in Healthcare and Medical Education in the Gulf Region

As stated in the literature, the attainment of competency is determined by three factors: personal characteristics, job demands, and organizational environment (Boyatzis, 2008). These three factors are in turn defined by several variables: personal characteristics encompass variables such the person's capability, morals, vision, personal philosophy; job demands encompass variables such as career stage, interests, roles, responsibilities, duties; and organizational environment includes job culture, climate of the organization, economic, political, societal, ecological, and spiritual environment (Boyatzis, 1998). Similarly, there are many forms of competencies described in the literature such as professional competency, clinical competency, leadership competency, emotional competency, social competency, cognitive competency, management competency, core competency (specific to the sector), functional competency, technical competency, and so on (Boyatzis, 2008). Leaders are described as individuals who are capable of inspiring and directing others' actions towards an identified short-term, intermediate, or long-term goal (Hilliard, 2010). As further observed by Styhre and Sundgren (2005), successful leadership relies on the capacity of the individual to effectively manage change and demonstrate creative leadership behavior. These theoretical underpinnings provide the justification for examination of the personal and social competences required for successful middle managers in healthcare and medical education in the Gulf region, as well as

for contextual and developmental factors that are such characteristics and competency development for middle managers.

Several personal competences were identified in the study as being critical for successful middle managers. Many competences or skills were also closely aligned with various traits, such that in primary data these constructs were often used interchangeably. Accordingly, while the study sought to focus on competences (skills), traits are often incorporated into the discussion because of their emergence in the data and the value they add to the interpretation of the findings due to the close link between the two constructs. One of the key findings of this study was that personality, involving integrity as a personality trait and organization as a competence, was an important personal quality required for successful middle managers. This finding is supported in the literature: personality constructs are identified as being critical to both successful leadership and middle management. For instance, emotional intelligence, which is an important component of personality that would underlie other attributes such as integrity and organization, is identified as essential for middle managers. Goleman (1995) noted that the most effective leaders are characterized by a high level of emotional intelligence. Tognazzo et al. (2017) observed that emotional intelligence enables the middle manager to manage his own emotions and that of subordinates effectively, as well as manage relationships with subordinates in a way that is positive for all parties and leads to success in the organization. Tognazzo et al. (2017) also further observed that emotional intelligence influences task and relationship-related behavioral competencies as well as organization performance.

Another personal quality or characteristic identified in the literature as being important for middle managers is intellectual stimulation and individualized consideration (Moon et al., 2019). These traits align with the transformational style of leadership which is also identified as

one of the recommended competences for middle managers. As observed by Ratiu et al. (2017), a connection exists between transformational leadership and managerial behavior in general, and between transformational leadership and middle management, in particular. This style of leadership is associated with managerial effectiveness during organizational change and during complex change, an organizational context requiring strong demonstration of organization competences and one in which the middle manager frequently operates (Antonakis & House, 2014; Carter et al., 2012; Gill et al., 2018).

The managerial competences of time management and task management were also identified in this study as an important personal competency for middle managers. From the perspective of personal competency, managerial skills may be understood in the context of being an attribute that is unique to the individual. For instance, different individuals may have different levels and range of managerial competences. The significance of managerial skills for middle management is also noted in the literature; Lau et al. (1980) describe these middle management competencies in the context of constructs such as executive leadership, managerial leadership, and supervisory leadership. Mumford et al. (2000) described managerial skills in terms of knowledge and problem-solving skills, while Oleksyn (2006) described them in terms of fundamental knowledge, core skills, strategic management, and innovative skills. All of these constructs involve effective time and task management abilities.

Other personal competences identified in the study for middle managers include mental ability, interaction involving good communication and active listening, agility (involving knowledge and flexibility), and attitude (involving patience). All these constructs are supported in the literature. As observed by Katz (1974), effective leadership involves three types of personal skills: technical, human, and conceptual. Technical skills are knowledge and skills

related to a particular type of work or activity or specialization / area of competency; human skills refer to the knowledge and ability to work with people and involve skills such as good communication, relationship building, promoting cooperation in the team, creating an atmosphere of trust and psychological security, and demonstrating sensitivity and concern for welfare of subordinates.

Under the study, social qualities required for middle managers were identified as humility, good communication, active listening, good work ethics, the ability to motivate, lead, and be a good team player. Other qualities identified include team management, teamwork, problem-solving, commitment, patience, and flexibility. As in personal competences required for successful middle managers, these qualities are also supported by the literature, albeit not necessarily as individual variables or constructs or as social qualities. For instance, good communication and relationship skills have been discussed under personal competences required for middle managers (Katz, 1974; Lau et al., 1980; Mumford et al., 2000). Similarly, social judgment skills, implying a sound knowledge of people and social systems, was also identified in the literature as being an important competency for successful middle managers (Katz, 1974). Furthermore, it is observed in the literature that social judgment skills may involve elements such as discernment, social insight, flexible behavior, and social performance (Mumford et al., 2000).

Under leadership qualities required for successful middle managers (MM) in a Medical University / Healthcare organization in the Gulf region, the study again found a mix of traits and skills described interchangeably among many participants. The study found several characteristics to be important viz self-confidence, a desire to grow, being organized, having integrity, communication, vision, knowledge, teamwork, and time and task management. Again,

a majority of these variables or related variables have been discussed under the findings for personal and social competences required for successful middle managers. Similar attributes were also identified for characteristics that contribute to the personal growth of the manager (commitment, responsibility, attitude, and work ethics) and characteristics of the middle manager that supports organizational transformation (work ethics, mental ability, personality, interaction, managerial skills, and attitude).

These competences identified for leadership are all supported in the literature, falling under any or a number of the organizational theories or emerging as findings from empirical studies. As noted in the literature, effective leadership skills are necessary for creating conditions for effective teamwork, improved operational results, and useful flow of information (Boateng, 2012; Johansson & Svensson, 2017; McAlearney & Butler, 2008; Northouse, 2013); transformational leadership skills specifically are connected to managerial behavior and managerial effectiveness during transformations (Antonakis & House, 2014; Carter et al., 2012; Gill et al., 2018). Also, managers who adopt a learning-oriented style have been found to be more competent in their work (Doos et al., 2015), especially within the domain of middle management. Human, technical, and conceptual skills are also identified as important (Katz, 1974), although these constructs intercept with already discussed elements such as communication, knowledge, and relationship building. Problem-solving skills, the ability to recognize a problem, collect information, and create work plans for problem-solving (Mumford et al., 2000) are a core set of managerial skills**.** Knowledge, the accumulation of information, and the possession of a mental framework in which information is organized, is also identified as a vital tool in the middle manager's portfolio (Mumford et al., 2000).

The literature further outlines leadership competencies that have an important place in the field of healthcare and medical education specifically, areas in which physicians should be adequately prepared (Gill et al., 2018; Shum et al., 2018; Stephen & Stemshorn, 2016). Areas outlined in the literature for physician preparation include team management towards improving the quality of care through critical focus on value, efficiency, and safety (Engle et al., 2017), and change management based on the premise that change is inevitable in the medical sector and leaders should be prepared to respond effectively to changing circumstances (Mozhgan et al., 2011). Other competency areas for physician preparation include decision making / problem solving (the ability to make rational and balanced judgments and decisions; Mozhgan et al., 2011) and effective communication: leading others, communicating a shared vision, mission, and specific objectives (Pesut & Thompson, 2018; Pollard & Wild, 2014). These elements are all found in the various themes identified under this study.

Given that the objective of the study was to identify the competences required for successful middle managers from the perspective of lower, middle, and top managers, aggregation of the data based on hierarchical management position represents an important part of the findings, allowing the study to fulfill its objective. Both top and lower management identified the ability to motivate as comprising one of the most significant characteristics for middle managers. Top management also indicated that concern and consideration of subordinates was important. Lower management considered being active as important for middle managers. Middle management had lower scores for these attributes. These findings illustrate the different ways in which middle management is perceived across the three levels of management. Top management, with its location at the top of the hierarchy, focuses on the welfare of subordinates and identifies this as a significant area for middle managers as well. Lower management at the

lower level suggests that middle management should involve more action, potentially aligning with expectations required for career advancement from lower to middle management. Importantly, middle managers acknowledge concern for employee well-being, relationship, communication, and being active as crucial competences, representing a mix of all competences identified by the three levels of management. These characteristics and competences are summed in the new scale for measuring leadership and competences of middle managers developed under the study.

An important competency that is mentioned in the literature as a leadership competency for physicians, but was not mentioned in the study findings is cross-cultural sensitivity. In the modern global context, there is strong emphasis on leadership that values diversity since physicians and nurses tend to interact with patients and families from diverse cultural and social backgrounds (Caligiuri & Tarique, 2012). Accordingly, the current thinking is to instill a strong sense of appreciation for diversity among medical students (Mozhgan et al., 2011). It is likely that this competency was not considered a priority by the research participants given the focus of the study on the Gulf region as against competences required for middle managers in a global sense. The literature, however, emphasizes cross-cultural sensitivity as being important for leaders and managers in the modern society as the flow of people across borders means that health systems are now providing care for people from within different cultures and background, irrespective of the specific culture in the institution's geographic location (Caligiuri & Tarique, 2012; Mozhgan et al., 2011).

These findings also reflect an intersection between personal and social traits, demonstrating the broad scope of the study and suggesting that further studies in the area focus on singular traits and variables.

Complexity in the Role of the Middle Manager

A key finding that emerged from this study is that complexity in the role of the middle manager and the changeable nature of leading at this level creates challenges for the conceptualization of boundaries in the role of the middle manager. The competences required for successful middle management were found to be similar when viewed based on the perceptions of top management, middle management, and lower management. This finding is significant as it does not reveal a boundary in the role of the middle manager and stops short of allocating specific competency sets to the middle manager whether viewed from higher up the organizational hierarchy or from below. The literature supports this complexity.

As noted in the literature, middle management is located in the middle of hierarchical managerial system(s), that is, between top-level and the lowest level (Taylor, 2007). While top management hold positions and designations such as chief executive officers, president, vice-president, and directors, middle managers hold designations such as department heads, branch managers, head of clinical services, and general managers. Middle managers are under the authority of top management, but have authority over lower management levels. Middle managers implement the decisions of top management and are accountable to top management. This structural location at the middle of the management hierarchy means that middle managers must have the skills and competency to work with both higher and lower-level management appropriately. Specifically, they must have the skills to be able to communicate appropriately with both top management and lower level management; they must have the expertise and knowledge to be able to interpret top management decisions and develop actions for its execution across the organization; and middle managers must also have the mental ability and organization skills to compartmentalize their responsibilities and successfully serve as a conduit for top

management decisions and organizational expected outcomes. These competences are supported by the findings of the study and the literature by numerous scholars (Gill et al., 2018; Pesut & Thompson, 2018; Pollard & Wild, 2014; Shum et al., 2018; Stephen & Stemshorn, 2016).

Going beyond the competences demanded by their hierarchical location on the organizational structure, a critical set of competences are also required by middle managers based on their specific designations, field, responsibilities, and other unique job characteristics. As observed by Geraghty (2017), top management makes decisions on the goals, strategy, and outcomes, while middle management adopts and executes the strategy, converting the strategy into outcomes. This involves directing personnel, operations control, planning, and deploying resources towards executing the decisions of top management. Depending on their specific areas, middle managers may have the responsibility of harmonizing and connecting groups, departments, and divisions within the organization, as well as managing subunits and individual managers who report to them ("Human Resources Management," n.d.; Roth, 2016). These roles locate middle management as a crucial role for successful strategy implementation and the achievement of organizational vision (Browne et al., 2014; Glaser et al., 2015; Huy, 2011; Raes et al., 2011). Conversely, where middle management lacks the expertise and professionalism to engage these roles successfully, the impact may include weakening of the quality of the outcomes, delay in expected outcomes, and even disruption of the organizational strategy and goals (Balogun & Johnson, 2005; Mantere, 2008; Wooldridge et al., 2008). A number of competences identified in the current study are crucial to the execution of middle management roles such as communication, teamwork, problem-solving, and technical and conceptual skills. Similarly, a number of qualities identified as essential for middle managers would support their

ability to be successful in their roles. These include qualities such as interaction, humility, integrity, listening ability, and the willingness to learn.

The broadness and complexity of the role of the middle manager creates a challenge for defining the boundaries of the role. For instance, an orthopaedic surgeon has a clearly defined role with clear boundaries. The boundaries for the role of a middle manager will continue to shift with growth in the organization or any shift in organizational priorities. A fluidity is thus created such that defining the required competences for middle managers becomes associated with structure, needs, strategies, and goals of the specific organization and field in which the middle manager works. Closely related to the challenge in creating boundaries is the changing nature of leadership within the role of the middle manager. For instance, in working with top management, the middle manager may serve as a member of a project team. In working with lower management, the middle manager may serve as a manager. Thus, middle managers may shift from team member to manager dependent on the project. Successful execution of these roles would require the mental ability to compartmentalize roles, good communication skills, complex but effective relationship building skills, problem-solving skills, and a range of other skills depending on the middle management experience and environment. Again, these competences for the successful middle manager would serve to facilitate success, even in the face of fluidity in roles and leadership roles that were also identified both under this study and in the literature.

The current study focused on the context of transformation of healthcare and medical education within the Gulf region. In transforming organizations, competent middle managers equipped with a critical set of skills lead and manage change processes (Dopson & Stewart, 1990; Huy, 2001; Johansson & Svensson, 2017). Where the middle managers do not have those skill sets, the transformation efforts may be stalled or less impactful. As noted in the literature,

the implementation of healthcare is complex and dynamic, creating even more challenges for middle managers in regard to the competencies needed for successful health care delivery (Chen et al., 2008) and to drive transformations. For example, as a basic requirement, successful middle managers in the healthcare sector must have the proficiency and ability to analyze and apply clinical data in decision-making (Greilich et al., 2018). In contexts of transformation, such a proficiency requirement would expand to include the need for proficiency in strategy management, change management, and change leadership.

As noted in the literature, the Gulf region has several unique characteristics that reflect on both the pool of middle managers available, and the portfolio of skills located within that sector of the workforce. Researchers and policy makers in the Gulf region have noted significant challenges in the acquisition and training of top managers in the last decade, a situation potentially related to the socio-political and security-related developments in the region across the past decade (Budhwar et al., 2019; Gao et al., 2017). Other macro-environmental factors that may reflect upon the problem include rapidly increasingly population, high unemployment levels, the unwillingness of citizens to work in private sectors in Gulf countries, and low numbers of skilled HR professionals in majority of the gulf countries (Abdalla, 2015).

The cultures of the countries in the Gulf region are also an important factor that impact how leadership is perceived and executed. The Arab culture is framed upon religion and submission to Allah. Accordingly, Arab leadership is framed upon religious and spiritual dimensions beliefs which are based on the Quran and Hadiths (Mohammed et al., 2015). Arab cultures are collective in nature. However, unlike other collective cultures where people focus on traditions, the foundation and framework for collectivity in the Arab cultures is Islam and the Quran. Aabed (2006) discussed the concept of Arab leadership or Islamic leadership and

observed that Arab leadership (Islamic leadership) is transformational, participatory, as well as aligns with servant leadership styles. Arab leadership is transformational because leaders actively work to enable transformation in their followers in tandem with Islamic values; participatory because other individuals are allowed to participate in decision-making; and aligns with servant leadership based on the belief that leaders should be servants to others. It will, therefore, be expected that part of the portfolio for leaders and middle managers in healthcare and medical education in the region will be comprised by servant leadership skills, participatory leadership skills, and transformational leadership skills. These skills were also identified under this study as being essential for success for middle managers.

Selection of middle managers in the region is also affected by the collectivist culture of the region. Middle managers are primarily selected based on recommendations from HR managers. As observed in the literature, this practice is reflective of the dominant collectivist culture; greater trust is placed in candidates who are recommended by persons who hold high positions of authority or important figures in the field and in society (Sheikh et al., 2019). Thus, selection of candidates for middle management was based on location within a specific social group rather than merits for middle management positions (Tinline & Cooper, 2016). However, the need to achieve transformation in healthcare highlights equally the need to select competent managers with requisite skills to deliver innovation, efficiency, and creative leadership. The lack of a structure for measuring such competences served as a barrier to change in the selection approach. The new tool for measuring leadership skills and competences for successful middle managers will therefore support change in the selection process for middle managers by allowing healthcare organizations and medical education systems to select managers based on their management potentials and skills.

The Kingdom of Bahrain and the Kingdom of Saudi Arabia share the same religion, culture and cultural beliefs related to healthcare. The cultural practices within the Arab society that pose challenges for learning and for some aspects of healthcare delivery are similar within both countries. Challenges noted in the literature include gender values and conduct towards strangers (Whitford & Hubail, 2014). The effective preparation of professionals for middle management roles or the development of middle managers in these Gulf countries would have to incorporate pertinent culture and diversity skills to allow them to overcome challenges associated with culture in performing their roles.

These findings are resonant with Global Leadership and Organizational Behavior Effectiveness (GLOBE) study, which was based on a comprehensive comparison of the cultural attributes across 170 countries, documented by more than 500 researchers (House et al., 2004). The results of the GLOBE study from the Gulf region pointed out that each country exhibited substantial variation in different cultural dimensions, ranging through "assertiveness orientation," "performance orientation," "uncertainly avoidance," and "gender egalitarianism." Therefore, MM in the Gulf region are expected to deal with members of another culture in a more informed manner (Javidan & Dastmalchian, 2009; Kabasakal & Dastmalchian, 2001; Sheikh et al., 2013).

In addition, this study also found that organizational transformation in health care and medical education in the Gulf region can be achieved by change in the following areas: Financial Stability (providing funding to support new systems and technologies), Continuous Learning (effective transfers of information and skills across the healthcare organization and medical education institution), Dynamic Authority, Democratic Set-up (allowing increased participation within the organization), Integrity, Accountability, Empowerment (providing employees with

knowledge and tools for the work and creating opportunities for them to use such tools) and Restructuring Work or Work place (Incorporating new systems, new methods, and new ideologies to improve organizational outcomes). An alignment exists between the areas identified for transformation and the current efforts of the governments of the two Kingdoms to transform their respective healthcare systems. For instance, both countries are implementing healthcare transformation from public to more self-sustained autonomous system. As noted in the literature by Birken et al. (2012), some strategies being pursued under these transformation efforts include empowering employees by diffusing or giving information to employees regarding implementation; making information relevant to employees; providing tools to mediate strategy and day-to-day activities; and encouraging innovations and research. Middle managers as strategy executors would need to have the competency and skillset that will support the successful execution of these strategies.

Chapter Summary

This chapter presented a detailed discussion of the findings and results from this study on leadership skills and competences for successful middle managers in the Gulf region. The characteristics and competences identified by top, middle, and lower management are discussed in the context of the literature. The changing nature of leadership at the middle management level and the challenge associated with defining the boundaries of the role emerged as important theoretical findings. Similarly, the role of culture was also found to be important in defining the competences for middle managers in the region, given its unique culture. Detailed review of the process of scale reliability and validity assessment for the new scale developed under the study, the LMCS-MM Gulf Region, was also discussed. The next chapter presents the implications of

the findings, strengths, limitations, and recommendations that emerge from the study, and conclusions.

CHAPTER VI: CONCLUSION

This study on the competencies for successful middle managers in the Gulf region was conducted using a mixed methods approach. The research approach allowed for development of a survey tool for identifying items that best describe the competencies and characteristics of the successful middle manager. The final outcome for the study was the development of a validated scale for measuring the leadership and managerial competencies that support successful middle management in the Gulf region. This chapter presents the implications of the study, strengths and weaknesses, recommendations that emerge from the study, and lastly, conclusions.

Implications

The findings from the study have several implications for both practice and scholarship. These are presented following.

Implications for the Selection Process for Middle Managers

The selection process for middle managers in the Gulf region relies heavily on recommendations from persons who hold high positions of authority or who are located in the higher echelons of society. Persons recommended by such benefactors are given prior consideration for placement into middle management positions. This process not only creates a situation where the best fit candidate may be left out, it also reduces the efficiency of the middle management function where an unsuitable candidate executes the role. The outcome for this scenario is a perpetuation of the inefficiencies that affect the healthcare system and a lack of improvement in the system. Conversely, the absence of validated tools for measuring the skills and attributes of potential candidates also meant that the collectivist selection method represented the best acceptable option for selection of middle managers as against being an aberration in the selection process. The competency scale developed from this study may

therefore, serve to strengthen the selection process for middle managers in the Gulf region by providing a tool for measuring the attributes of potential candidates and so assure that selection processes are objective and identify the best fit candidates for the role of middle management.

Implications for Training and Development of Middle Managers

Modern institutions operate in a complex environment defined by challenges created by rapid technological advancement, increased mobility, changing human needs and expectations, intensive competition among firms and institutions, and new challenges for the effective use and application of scarce resources (Chen et al., 2008). These challenges also create new roles for the workforce and the need for new sets of skills and capacities. Traditional or formal education often delivers critical information and standard sets of skills. However, the issues that arise in the workplace are often not clearly defined within the parameters of such standardized skillsets. For instance, leaders in healthcare and medical education are confronted by challenges such as lack of accountability at some level of the organizational hierarchy, heightened stakeholder sensitivity towards inefficient leadership, commercialization of the central purpose for medical education and healthcare, and unmet expectations for medical education (Schwartz & Pogge, 2000). Leaders in medical education also face challenges such as securing research support, maintaining the financial stability of the organization, and assuring that the curriculum is adequate (Çitaku et al., 2012). These challenges require the possession of skillsets that may be outside of that delivered in the classroom.

Going beyond merely participating in an adequate clinical curriculum (Al Kuwaiti & Al Muhanna, 2018), attributes such as creativity, humility, confidence, communication, teamwork, and emotional intelligence have also been identified as necessary skills required for successful engagement in healthcare and medical education leadership (Varkey et al., 2009). Reflecting the

validity of these concerns, organizations such as the Accreditation Council for Graduate Medical Education (ACGME) and Canada's CanMEDS physician competency framework emphasize the requirement doctors should demonstrate the ability to work as members or leaders/managers of a health care team (Clyne et al., 2015). Accordingly, various leadership development programs have been developed for physicians such as the Executive Leadership in Academic Medicine (ELAM; Morahan et al., 2010), University of Minnesota Medical School Emerging Physician Leaders Program (EPLP), and Foundation for Advancement of International Medical Education and Research (FAIMER; Burdick, 2014; Sonnino, 2016). Thus, development and training programs represent a critical strategy for developing leadership skills for persons who hold leadership and managerial positions in healthcare and medical education. Building on the leadership development format, identification of the competencies for successful engagement in middle management as achieved under this study, allows for effective planning of training and development programs both in the context of professional development and self-development. Training for middle management can be tailored to build up areas of deficiency and to strengthen areas of strength for the candidate as identified through the new competency scale. Specifically, use of the scale would facilitate effective training to build middle management competency for professionalism and problem solving, team management and adaptation, and time management and expertise, which are the underlying constructs in the scale.

Implications for Successful Delivery of Middle Management

The location of middle managers in the structural hierarchy between top management and lower management is a unique attribute that shapes the role of the middle manager. Middle managers have a defining role of translating the goals and strategies identified by top management into actions that can be executed at the lower levels of organizational hierarchy.

Middle managers have the responsibility of assuring that strategic objectives identified by the top management are achieved. Practical functions towards achieving such objectives may include diffusing and synthesizing information, implementing innovations, and mediating between strategy and daily operations of the organization (Birken et al., 2012; Sheikh et al., 2019).

The complexity of the middle manager role has been identified in the literature. Middle managers play diverse roles as managers of resources, coordinators, negotiator, director of personnel, performance evaluator, communicator, problem solver, change agent, and many more. Reflecting the changing nature of leadership at this level, they can play roles as leaders in certain situations or function as team members in others. The boundaries of the role of middle management also fluctuates depending on the strategic priorities of the organization such that new roles are created with changes, adjustments, and transformations at any organizational level. To be successful at the role of middle management, an expansive portfolio of skills and competences such as leadership, emotional intelligence, human skill, cultural competence, technical skill, conceptual skill, social judgment, and knowledge are needed as identified both in this study and in the literature. These roles are critical to effectiveness in the middle management role, personal development as a middle manager, and to organizational growth and transformation through the function of middle management. Other competences and attributes identified for successful middle managers include creative and innovative thinking, clinical data analysis, and decision-making including clinical, financial, and operational aspects (Greilich et al., 2018; Nightingale et al., 2018). Given the wide-ranging roles of middle managers and the associated pool of skills required to effectively engage in the role, a valid and reliable scale such as developed under this study, facilitates a structured approach to identifying, assessing, and developing such required skills and competences.

Implications for Transformation of the Healthcare System in the Gulf Region

High incidence of non-communicable diseases and rapid population growth, particularly due to the influx of expatriates, are creating pressures on the healthcare systems in the Gulf region countries of Saudi Arabia, Kuwait, Bahrain, Oman, United Arab Emirates, and Qatar (Meo et al., 2015). Transformation of healthcare in the Gulf region is an important priority to improve the health status and quality of life of people. Governments in the region are pursuing multi-focal strategies towards transforming their healthcare systems and redefining their healthcare outcomes.

Healthcare systems across the Gulf region largely depend on governmental support. Such government-funded healthcare systems are associated with substantial control and regulatory mechanisms while having limited focus on medical research and education. Both the Kingdom of Saudi Arabia and the Kingdom of Bahrain are now engaging in health system transformations that involve the introduction of autonomous, value-based health care and medical education. Bahrain's 2019–2022 Government Action Plan of Bahrain includes the goal of restructuring the country's health care system towards achieving a more autonomous, self-directed, and flexible healthcare model (Ministry of Health, 2020).

In terms of performance, the outcomes from both the medical education and healthcare sector of the Gulf region countries are dependent upon the types of healthcare systems as stated above, challenges related to performance, and emerging challenges to health and medical education. Underperformance of the healthcare system is related to challenges such as inadequate governance, low innovation in healthcare, incompetency in aspects of public-sector healthcare delivery, and conflicting ideas (Khogali, 2005).

Workforce development is considered a critical strategy in achieving transformation goals and improving the performance of the healthcare system. Accordingly, both countries have strategic goals that include developing skilled and competent health care professionals alongside enhancing the delivery of high-quality health care and medical education (Meo et al., 2015). Aspects of healthcare reformation also include expanding innovation in healthcare through defined focus on medical research and education as well as investment in innovative healthcare infrastructure and technologies. Addressing these problems and improving the efficiency of the healthcare system would require skilled and competent management across all levels. Whereas insufficient emphasis had been placed on the role of middle management and the need to build organizational capacity in this area previously (Asmri et al., 2019), the case is now being increasingly made that translation of transformation strategies into desired goals would require effective management of the strategy. Such efficient management can only be achieved by competent strategic managers, specifically middle managers. In tandem with a reconsideration of strategic priorities as part of the modernization of the healthcare system of the Gulf region, a more uniform approach to selection of management level workers in healthcare and medical education and capacity building will have to be developed. The lack of a valid scale to identify and measure the competencies required for successful middle management comprised a theoretical gap and a barrier to effective practice in terms of the selection and training of middle managers in healthcare and medical education in the Gulf region. The availability of a scale for measuring the competencies of both potential candidates and persons who are already employed as middle managers will contribute to improving the portfolio of skills available in middle management, and thus, to the efficiency and transformation of the healthcare system in the Gulf region.

Implications for Leadership and Change in the Gulf Region

The "Leadership and Managerial Competency Scale for Middle Managers in Gulf Region (LMCS-MM Gulf Region)" developed under this study did not measure the skills and attributes of potential candidates for middle management positions in its development strategy. Rather, the measures reflect what people in the three levels of management (lower, middle, and top) value in a (hypothetical) middle manager. The scales identified in the study point to constructs such as emotional intelligence, transformational leadership (intellectual stimulation and individualized consideration), high level cognitive skills, and a constellation of other skills (decision making, communication, problems solving) for which there is existing, reliable diagnostics, further strengthening both the reliability and the utility of the scale for measuring leadership and managerial competences.

Leadership in the context of this study also encompasses three dimensions: the theoretical construct of leadership and its manifestations, leadership in the context of the gulf culture with its religious framework, and leadership in terms of directing and managing institutions of medical education and healthcare organizations. The implications of the tool for leadership and change in the Gulf region therefore, involves the identification of a leadership and management competency framework that aligns all three dimensions. The tool provides top management, policy makers, and decision makers in medical education and healthcare organizations a validated way of assessing the middle management function. This can involve professionals who are already employed in the institutions as middle managers or pools of incoming candidates. The tool allows for the measurement of middle managers' competences located within the broader frameworks of professionalism and problem solving, team management and adaptation, and time management and expertise, the underlying constructs in the scale. The tool may be used

for several functions such as training and development, hiring decisions, and promotion decisions. The tool can also contribute to evidence-based and objective performance appraisal for middle managers in healthcare in the Gulf region.

Implications for Research

The findings from this study have implications for further research. A portfolio of skills and competences have been identified in the validated scale developed through this study. However, the competences scale was validated using participants from the Gulf region. As noted in this study, the Gulf region is defined by its unique culture that is based on the Hadith and the Quran, adding religious dimensions to work cultures and contexts. Other regions of the world with different cultures as well as differing economic, social, and health characteristics, may have different experiences of middle management. Therefore, validation for use in other cultures will facilitate the development of versions of the tool that are best suitable for those cultures. Similarly, depending on specific organizational needs, additional research can be done using some items in the new scale, particularly where there is a need to explore more in-depth the prevalence or impact of a given competence or character item from the scale on the middle manager.

Strengths and Limitations

Strengths

The use of a proven research approach, or an approach used in similar studies, represents an important strength for empirical studies. Accordingly, the use of a mixed method approach that incorporates descriptive qualitative research to inform the quantitative examination of the research phenomenon and the development of the survey contributed to the strength of the evidence from the study. The use of a qualitative approach to collect data regarding the

phenomenon allowed the generation of pertinent items to be included in the survey. This process enhanced the truthfulness of the survey tool and subsequently, the competency scale that was developed from the findings of survey (Creswell & Clark, 2017). Similarly, the strength of evidence for the findings was strengthened through the use of quantitative, statistical, data analysis techniques.

Several measures of quality were evaluated for the study. As stated previously, validity refers to the ability of an instrument to measure what it was designed to measure (Bhattacherjee, 2012). Content-based validity (face validity) of scale items was also established. Content validity for the scale was established through both the semi-qualitative interview findings and the subjective judgment from the expert panel regarding the appropriateness of the measurements. The use of statistical techniques in measuring the reliability and validity of the new competence scale developed under the study also represents a strength in the study. The measurement of criterion related validity and convergent validity were measured using techniques such as exploratory and confirmatory factor analysis. In-depth documentation of the research procedures was also done to facilitate reproducibility such that the study can be replicated by other researchers. This element contributes to the truthfulness and reliability of the research process.

Limitations

Qualitative research approaches are subject to subjective bias. Such bias can occur during the data collection process where the researcher's opinion impacts how the data is recorded or used by the researcher, where participants do no give accurate information for any reason, and in the data interpretation process where the researcher is influenced by their own opinion in the data interpretation process. To avoid or minimize this condition, the researcher adopted a strict and well-defined coding technique in qualitative data analysis. Moreover, the use of software for data

generation and coding can greatly reduce the occurrence of bias and human error. Accordingly, Nvivo, a research software for qualitative analysis, was used in categorizing the codes that emerged from this study.

The study focused on middle managers in the Gulf countries, specifically the Kingdoms of Saudi Arabia and Bahrain. Therefore, the findings of the study can be generalized to countries in the Gulf region as they have similar cultural, economic, demographic, and social landscapes. However, the study cannot be generalized to other countries outside the region as they may have non-collective cultures or differ in other critical areas that affect middle management. For such cultures and countries, it is recommended that the new Competency scale be used as a guide in developing training and research programs, and that validation of the tool be done to assess its reliability and validity for such cultures before its standardized use.

Recommendations

A number of recommendations emerged from this study.

- Given that the roles of the middle manager are complex, use of a valid, reliable scale for identifying the desired values in the aspiring applicants is valued. There are other tools for measuring these appraised skills and attributes in potential candidates, and this scale can act as a supplementary tool for candidate selection, which is imperative towards achieving best fits for the job.
- Standardization of the hiring process is an important organizational attribute that helps organizations learn what works and what does not. Incorporating assessment of middle management into their hiring processes for middle managers will help organizations identify what works in terms of the quality of the managers they hire and their level of fit and performance in the job.

- Leaders and governments in the Gulf region countries can apply the survey in the determination of candidates best qualified to hold middle management functions and strategy manager functions in important organizations and projects on healthcare transformation within the region.
- Healthcare organizations and medical education institutions in the Kingdoms of Saudi Arabia and Bahrain can apply the new Competency scale for successful middle managers in selecting best fit candidates to work with them. Such organizations can also apply the scale in refining their training and development programs. The new scale can help them identify the areas in which their middle managers are deficient and require development, as well as identify the areas in which middle managers possess a strong suit of skills and competences that can be leveraged to support organizational growth in specific areas.
- This scale might also contribute to more evidence-based and less biased performance evaluation of middle managers in health care.

The survey can also be used as a strategic tool for organizational transformation and growth; standardized or periodic administration of the survey will help healthcare and medical education institutions track their portfolio of middle management competences and plan for specific competencies they need to achieve their corporate goals. Routine administration of the survey across all levels of management may also be helpful for organizations.

Conclusion

The role of middle managers is critical for the optimization of healthcare organizations given the increasingly complex challenges that confront healthcare and medical education. Leaders in these fields and governments are confronting the need to improve upon health

outcomes for populations in the face of changing human needs and complex emerging health challenges. In the Gulf region, the transformation of healthcare to address these issues represents a strategic priority of the government and the institutions and organizations that work in this field. The role of the middle manager in translating the decisions and strategies determined by top management into effective action and measurable results locates these professionals as being pivotal to transformations in healthcare and medical education. This study sought to address the gap in literature and in practice regarding the competences required for successful management. Specifically, the study sought to identify the leadership skills and competences required for successful middle managers, and to develop a feasible, reliable, and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf region, specifically the Kingdom of Bahrain and Kingdom of Saudi Arabia. The competences scale for middle managers in the healthcare and medical education developed from this study is validated and reliable for use in the Gulf region. It is recommended that the scale be validated for use in other regions of the world as the role of middle management is influenced by the prevailing culture as well as other parameters such as social, economic, and demographic conditions.

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APPENDIX A: REC APPROVAL KB AGU

RESEARCH and ETHICS COMMITTEE (REC)
Arabian Gulf University
College of Medicine and Medical Sciences

Research Ethics Approval

Proposal Title	**Competencies for Successful Middle Managers in Healthcare and Medical Education**
Reference No.	**E025-PI-12/20**
Period of Approval	**1 year**
Principle Investigator	**Dr. Ahmed Al Ansari**

Dear Dr. Ahmed Al Ansari,

Thank you for applying for a research ethics approval through the Research & Ethics Committee. The Committee has reviewed and discussed your application to conduct the research with yourself as the Principal Investigator.

The committee is pleased to confirm that your research proposal satisfies and conforms with the criteria of the ethical and research guidelines of Arabian Gulf University, on the basis described in the application forms and supporting documents presented.

If you have received a Grant for this project, the acceptance is given provided that you comply with the conditions set out in Grant Award Letter. You are advised to study the conditions carefully.

We approve the research to be conducted in the presented form. NONE of the Investigator and/or co-investigator(s) participating in this study took part in the decision making and voting procedure for this study.

RESEARCH and ETHICS COMMITTEE (REC)
Arabian Gulf University
College of Medicine and Medical Sciences

The Research & Ethics Committee expects to be informed about the progress of the study in an interim report, any revision in the protocol and patient information/informed consent should be immediately notified to the REC for consideration.

This research is approved for the period mentioned above only. In case the Principal Investigator wanted to extend the research period or in case of any changes in Principle Investigator or Co-investigators, the Principle Investigator will have to inform the Committee in writing before any of these changes and the Committee does not guarantee an acceptance until reviewed.

The approval applies to research conducted in the Arabian Gulf University. If the project involves the Ministry of Health as the research setting, an additional ethical approval must be obtained before carrying out the study from the Research Technical Support Team (RTST), Office of the Assistant Undersecretary for Training and Planning.

Please note that the project has to be approved also by the Vice- Dean for Graduate Studies and Research if your research involves medical students.

Good luck with your project. Sincerely,
Dr. Khaled Greish
Chairman, Research and Ethics Committee

Dated: 13 December 2020
CC: Dean- College of Medicine and Medical Studies Vice Dean of Graduate Studies and Research

APPENDIX B: REC APPROVAL KB MOH

22G45-40-01925

KINGDOM OF BAHRAIN
MINISTRY OF HEALTH
P.O. BOX 12
Bahrain, Arabian Gulf

مملكة البحرين
وزارة الصحة
ص. ب ١٢
البحرين - الخليج العربي

No. ..... الرقم :

Date 01/12/2020 التاريخ :

Research Proposal Ethical Approval

Dear **Dr. Ahmed Al Ansari**,

We would like to inform you that the **Secondary Health Care Research Sub Committee (SHCRC)** has approved your participation in the research titled:

"**Competencies for Successful Middle Managers in Healthcare and Medical Education**" ; approval date 01/12/2020.

We all wish you a successful research and request you to update us with its progress.

Best wishes.

Regards,

On behalf of the **SHCRC**

Dr. ***Eman Farid***
Head of the SHCRC

Ministry of Health
Secondary Health Care Research
Subcommittee
اللجنة الفرعية للبحوث الصحية بالرعاية الثانوية
وزارة الصحة

Dr. Eman Farid
Consultant Immunologist
Pathology Department SMC
Code No. 413

APPENDIX C: REC APPROVAL KSA

Kingdom of Saudi Arabia Ministry of Education

Prince Sattam Bin AbdulAziz University

Deanship of Scientific Research Research Ethics Committee in Health and Science Deciplines

وزارة التعليم المملكة العربية السعودية

جامعة الأمير سطام بن عبدالعزيز

عمادة البحث العلمي

التخصصات الصحية والعلمية لجنة أخلاقيات البحث في

جامعة الأمير سطام بن عبد العزيز
Prince Sattam Bin Abdulaziz University

ETHICS COMMITTEE CERTIFICATE OF APPROVAL

Date : December 3, 2020

Dear Dr**. Ahmed Mohammed Al Ansari**

The Research Ethics Committee in Health and Science Deciplines (REC-HSD) has reviewed your request for ethical approval for the research proposal No: B-1/2020. The proposal meet the ethical guidelines of the Prince Sattam bin Abdulaziz University, Deanship of Scientific Research and full ethical approval has been granted.

Approval No	**REC-HSD-B-1-2020**
Project title	**Competencies for Successful Middle Managers in Healthcare and Medical Education**
Approval date	**03.12.2020**
Experity date	**02.12.2021**
REC-HSD Decision	**Approval**

The standard conditions of this approval are

a. Conduct the project strictly in accordance with the proposal submitted and granted ethical approval

Contact the REC-HSD before any change of the study protocol

Report any serious adverse effects on participants and the action taken to address those effects

Notify the committee if the Principal Researcher unable to continue in that role, or any other change in research personnel involved in the project;

Provide final report of the project to confirm your research has been completed

Dr. Sameer Alghamdi

REC-HSD Chairman

APPENDIX D: REC ANTIOCH UNIVERSITY

---------- Forwarded message ----------

Date: Mon, Dec 14, 2020 at 5:39 PM
Subject: Online IRB Application Approved Competencies for Successful Middle Managers in Healthcare and Medical Education December 14, 2020, 2:39 pm
To:

Dear Ahmed Ansari ,
As Chair of the Institutional Review Board (IRB) for 'Antioch University , I am letting you know that the committee has reviewed your Ethics Application. Based on the information presented in your Ethics Application, your study has been approved.
Renewal is not required, however, any changes in the protocol(s) for this study must be formally requested by submitting a request for amendment from the IRB committee. Any adverse event, should one occur during this study, must be reported immediately to the IRB committee. Please review the IRB forms available for these exceptional circumstances.
Sincerely,
Lisa Kreeger

APPENDIX E: INVITATION FOR INTERVIEW

Invitation

Dear Dr ,

I would be grateful if you could kindly provide me with the opportunity to meet with you as an academic leader. Your role and contribution as a _____, of _____ for the last ___ years has definitely made a change on _____ . Therefore, I would highly value your involvement in my research project where you can share your experiences, challenges and success stories.

The main purpose of this research project is to gain a better understanding of and more insight in the competencies required for the middle managers in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia) .

The key outcome of this study is to develop a feasible, reliable and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia).

If you are interested to contribute to the study, kindly let me know of the most convenient time and venue for the meeting. More details about the study will be provided to you upon your agreement to be involved in this study.

Should you require further details, please don't hesitate to contact me.

I look forward to hearing from you soon.

Dr.

APPENDIX F: INFORMED CONSENT FORM

CONSENT FORM

The Researcher (Dr. Ahmed Al Ansari) and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of subjects. This form and the information it contains are given to you for your own protection and full understanding of the procedures**.** Your signature on this form will signify that you have received a document, which describes the procedures, possible risks, and benefits of this research project, that you have received an adequate opportunity to consider the information in the document, and that you voluntarily agree to participate in the project.

Any information that is obtained during this study will be kept confidential to the full extent permitted by law. Knowledge of your identity is not required. You will not be required to write your name or any other identifying information on the research materials. Materials will be held in a secure location and will be destroyed after the completion of the study.

Having been asked by (*Dr.* Ahmed Al Ansari), a Doctorate student at Antioch university in: A doctoral research on (Competencies for Successful Middle Managers in Healthcare and Medical Education in the Gulf Region) for the doctoral thesis data collection.

Purpose:

This project is conducted to collect data for the doctoral thesis, some parts of which may be presented in conference papers and published in journal articles. The ultimate purpose of conducting this study is to fill a gap in the international organization literature by contributing to knowledge on the Bahraini educational context and development of a feasible, reliable and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia).

In order to achieve the research goals outlined above, the study will seek to answer the following

questions. Each research question will be explored in the context of Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)

RQ1. What are the main competencies (leadership and management, respectively) identified by the top leaders (CEO / Dean / Vice Dean) that characterize successful Middle managers in the health care sector of Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ2. What are the main competencies (leadership and management, respectively) identified by the Middle Managers (Head of the Clinical Departments -in a Hospital setting, Head of Departments -in a college setting) that characterize successful Middle managers in the health care sector of Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ3. What are the main competencies (leadership and management, respectively) identified by the employees (working under middle managers) that characterize successful Middle managers in the health care sector of Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

Interview process:

There will be one interviews, 45 to 60 minutes long and held in a place chosen by the participants. A voice recorder will be used upon the agreement of the participants and in case they do not agree, a note will be taken. The interviews will be transcribed, and a copy will be given to the participants upon request. The CD record, interview notes, and transcription will be kept in a locked cabinet and the researcher will be the one with sole access to it. Upon completion of the assignment or the thesis, the soft copy of the recordings and original transcripts will be destroyed. I have read the procedures specified in the document.

I understand the procedures to be used in this study and any personal risks to me in taking part. I agree to participate by taking part in: 60 to 90-minute interview.

At: _____

I understand that I may withdraw my participation in this study at any time.

I also understand that I may register any complaint I might have about the study with the researcher named above or with:

Dr. Elizabeth Holloway (Supervisor)

Professor of leadership at Antioch University

I may obtain copies of the results of this study, upon its completion, by contacting:

Name: Dr Ahmed AL Ansari

I have been informed that the research material will be held confidential by the Researcher.

I understand that my supervisor or employer may require me to obtain his or her permission prior to my participation in a study such as this.

NAME (Please type or print legibly): _____

SIGNATURE: _____

DATE: _____

ONCE SIGNED, A COPY OF THIS CONSENT FORM SHOULD BE PROVIDED TO THE SUBJECT.

Confidentiality and rights to withdraw from the study

The results of the interview will be treated with outmost confidentiality to the extent that the interviewee will not be harmed in any way from their attendant opinions.

APPENDIX G: INTERVIEW GUIDE

Introduction

The ultimate purpose of conducting this study is to fill a gap in the international organization literature by contributing to knowledge on the Bahraini educational context and development of a feasible, reliable and valid scale for measuring leadership and managerial competencies of middle managers in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia).

In order to achieve the research goals outlined above, the study will seek to answer the following questions. Each research question will be explored in the context of Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)

RQ1. What are the main competencies (leadership and management, respectively) identified by the top leaders (CEO / Dean / Vice Dean) that characterize successful Middle managers in the health care sector of Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ2. What are the main competencies (leadership and management, respectively) identified by the Middle Managers (Head of the Clinical Departments -in a Hospital setting, Head of Departments - in a college setting) that characterize successful Middle managers in the health care sector of Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

RQ3. What are the main competencies (leadership and management, respectively) identified by the employees (working under middle managers) that characterize successful Middle managers in the health care sector of Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

Competencies of Successful Middle Managers | **2**

Interview process:

There will be one interviews, 45 to 60 minutes long and held in a place chosen by the participants. A voice recorder will be used upon the agreement of the participants and in case they do not agree, a note will be taken. The interviews will be transcribed, and a copy will be given to the participants upon request. The CD record, interview notes, and transcription will be kept in a locked cabinet and the researcher will be the one with sole access to it. Upon completion of the assignment or the thesis, the soft copy of the recordings and original transcripts will be destroyed.

You may withdraw your participation in this study at any time.

Any information that is obtained during this study will be kept confidential to the full extent permitted by law. Knowledge of your identity is not required. You will not be required to write your name or any other identifying information on the research materials. Materials will be held in a secure location and will be destroyed after the completion of the study.

This project is conducted to collect data for the doctoral thesis, some parts of which may be presented in conference papers and published in journal articles.

Participant code: _____

Gender:

Nationality & Origin:

Competencies of Successful Middle Managers | **3**

I. Personal Information:

1. What is your educational background (Degree/ Field)?
2. What are your main roles and responsibilities? For how long have you been working in this organization?
3. For how long have you been working in this country?
4. What other positions have you held and in what organization/country prior to working here? For how long?

II. Main Interview Part

A. Personal

Can you describe an individual whom you thought was an excellent middle manager? (with special focus on personal traits)

B. Social

Can you tell me the social qualities this person possessed to become a successful middle manager?

C. Structure

In your opinion, what do you think are the competencies of this successful middle manager, that might have played a greater role in overall growth of a University / Health care organization in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

D. Contextual

Competencies of Successful Middle Managers | **4**

In your opinion, what do you think are the competencies possessed by this successful middle manager, for effective leadership in a University / Health care organization in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

E. Development

In your opinion, what do you think are the competencies of this successful middle manager, that would have contributed to his / her development in a University / Health care organization in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)?

III. Concluding Questions

If you could change one thing in your University / Health Care organization that would contribute to enhance the organizational transformation in alignment with the transformation of health care sector in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia)? What would it be? Why?

Thank you for participating in this research study

APPENDIX H: EXPERT SURVEY

Expert opinion on items to be included in scale for measuring leadership and managerial competencies of middle managers in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia).

The student's name: Dr. Ahmed Al Ansari

Affiliation with Antioch: Doctorate student of Antioch University

The supervisor's name: Dr. Elizabeth Holloway
Professor of leadership at Antioch University

The title of the project: 'Competencies for Successful Middle Managers in Healthcare and Medical Education'.

The nature of the assignment and the purpose of the survey:
The objective of conducting this study is to fill a gap in the international literature on **"What characteristics and/or competencies should a competent Middle Manager (MM) have?",** and develop a feasible, reliable and valid scale for measuring leadership and managerial competencies of MM in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia). MM are those who play vital role in the successful functioning of an organization. In the context of health care sector, the role of MM is executed by Chairman / Heads of the Departments / Heads of the Clinical Services. This project is conducted to collect data for the doctoral thesis, some parts of which may be presented in conference papers and published in journal articles.

Process:
I conducted around 27 semi-structured interviews and analyzed them using thematic analysis. The themes and subthemes emerged out of the thematic analysis have been added as items in this survey. I request your opinion, as an expert, on what items to be included in the final scale on 'measuring leadership and managerial competencies of middle managers' which will be validated subsequently. Please select the response 'yes' if you feel that the given item to be included in the final scale. **Please select <u>ONLY</u> those characteristics and/or competencies that you feel as truly essential for a competent MM.** Select 'no' if you think that the given item to be excluded from the final scale.

Possible risks, and benefits to the participants:
There are no anticipated risks related to participating in this study. You may have to spend 10 to 15 minutes for answering this survey. The possible immediate benefit would be that the participants might become aware of various qualities and competencies that could contribute to the success of MM. The long-term benefit might be the successful implementation of the scale which could possibly improve the productive functioning of MM in health care sector.

The voluntary nature of participation:
You are provided with adequate opportunity to consider the information in this document and decide on voluntarily agree to participate in this project. You may choose to withdraw from the study at any point of time. Your signature (digital / hard copy) on this form will signify that you have received a copy (digital / hard copy) of this document, which describes the procedures, possible risks, and benefits of this research project and you voluntarily consent to participate in this study.

Confidentiality and rights to withdraw from the study:
Any information that is obtained during this study will be kept confidential to the full extent permitted by law. Knowledge of your identity is not required. You will not be required to write your name or any other identifying information on the survey. All the data collected will be held in a secure location and will be destroyed after the completion of the study.

Other ethical considerations:
This study is approved by ethical committees of Antioch University, Arabian Gulf University, MOH - Bahrain and MOH - Saudi Arabia.

Consent to participate:
I understand that I may withdraw my participation in this study at any time. I have been informed that the research material will be held confidential by the Researcher.
I also understand that I may register any complaint I might have about the study with the researcher named above or with:
Dr. Elizabeth Holloway (Supervisor) Professor of leadership at Antioch University Email:

I may obtain copies of the results of this study, upon its completion, by contacting:
Name: Dr Ahmed Al Ansari
Mobile:
Email:

NAME (Please type or print legibly):

SIGNATURE:

DATE:

<u>Expert opinion on items to be included in scale for measuring leadership and managerial competencies of MM</u>

In your opinion, **"What characteristics and/or competencies should a competent MM have?"**.

Please select <u>ONLY</u> those characteristics and/or competencies that you feel as truly essential for a competent MM

S. No	Characteristics	Yes	No
1	Be a motivator		
2	Be accessible to all stakeholders		
3	Be approachable all the time		
4	Be productive		
5	Be supportive to all stakeholders		
6	Have desire to grow		
7	Have more self-confidence		
8	Should manage time efficiently		
9	Should be active always		
10	Should be available for guidance		
11	Should be corruption free		
12	Should be humble		
13	Should display patience towards subordinates and superiors		
14	Treat everyone with respect		
15	Willing to learn from others		
16	Willing to share ideas with others		
	Competencies		
17	Be able to work in a team		
18	Able to adapt to changes		
19	Be able to achieve tasks as per timeline		
20	Possess up- to-date knowledge in the respective field		
21	Should address any conflict of interest effectively		
22	Should be able to balance various roles (multitasking)		
23	Should be able to encourage teamwork		
24	Should be able to manage resources (money /manpower)		
25	Should be able to take appropriate decisions		
26	Should be able to work with multiple teams		
27	Should be an effective communicator		
28	Should be an effective Listener		
29	Should be organized in his/her thoughts, words and deeds		
30	Should demonstrate integrity		
31	Should display effective organizational skills		

32	Should follow democratic ways		
33	Should have long term vision for the organization		
34	Should possess leadership skills		
35	Should possess problem-solving skills		

If, you would like to have the copy of the findings from the study, send a personal email to

Thank you for participating in this survey.

APPENDIX I: FINAL SURVEY

Survey on items to be included in scale for measuring leadership and managerial competencies of middle managers in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia).

The student's name: Dr. Ahmed Al Ansari

Affiliation with Antioch: Doctorate student of Antioch University

The supervisor's name: Dr. Elizabeth Holloway
Professor of leadership at Antioch University

The title of the project: 'Competencies for Successful Middle Managers in Healthcare and Medical Education'.

The nature of the assignment and the purpose of the survey:

The objective of conducting this study is to fill a gap in the international literature on "What are the competencies/ characteristics that are critical or most significant for a successful Middle Manager (MM)?", and develop a feasible, reliable and valid scale for measuring leadership and managerial competencies of MM in the Gulf Region (Kingdom of Bahrain and Kingdom of Saudi Arabia). MM are those who play vital role in the successful functioning of an organization. In the context of health care sector, the role of MM is executed by Chairman / Heads of the Departments

/ Heads of the Clinical Services. This project is conducted to collect data for the doctoral thesis, some parts of which may be presented in conference papers and published in journal articles.

Task: In your opinion, What are the competencies / characteristics that are critical or most significant for a successful Middle Manager? Please select the appropriate option on a scale of 1 to 5 (1 - Not at all significant , 2 - Less significant, 3- significant, 4 – more significant, 5 - most significant). If you are not sure of the item, please select 'unable to assess' for that item.

Possible risks, and benefits to the participants:

There are no anticipated risks related to participating in this study. You may have to spend 10 to 15 minutes for answering this survey. The possible immediate benefit would be that the participants might become aware of various qualities and competencies that could contribute to the success of MM. The long-term benefit might be the successful implementation of the scale which could possibly improve the productive functioning of MM in health care sector.

The voluntary nature of participation:

You are provided with adequate opportunity to consider the information in this document and decide on voluntarily agree to participate in this project. You may choose to withdraw from the study at any point of time.

Confidentiality and rights to withdraw from the study:

This is an anonymous survey. Any information that is obtained during this study will be kept confidential and will be destroyed after the completion of the study.

Other ethical considerations:

This study is approved by the Research and Ethics committees of Antioch University, Arabian Gulf University, Secondary Health Care Research Sub Committee, MOH, KB, and Prince Sattam Bin AbdulAziz University, Ministry of Education, KSA.

Consent to participate:

I understand that I may withdraw my participation in this study at any time. I have been informed that the research material will be held confidential by the Researcher.

I also understand that I may register any complaint I might have about the study with the researcher named above or with:

Dr. Elizabeth Holloway (Supervisor)
Professor of leadership at Antioch University Email:

I may obtain copies of the results of this study, upon its completion, by contacting:

Name: Dr Ahmed Al Ansari

I give my consent to participate in this survey.

Y
N

Your gender

Male
Female

Your age in years

21 - 30 years
31 - 40 years
41 - 50 years
51 - 60 years
61 - 70 years
above 70 years

You are affiliated to which of the following

Health care delivery
Medical education
Both

Your designation
President
Vice President
Chief Executive Officer
Chief Operating Officer
Dean
Vice Dean
Chairman of Clinical Department
Chairman of Academic Department
Professor Associate
Professor Assistant
Professor Lecturer / Tutor
Senior resident
Registrar
Other…

Total number of years of experience in your field
Less than 1 year
01 - 10 years
11 - 20 years
21- 30 years
More than 30 years

Years of experience in the present position
Less than 1 year
01 - 10 years
11 - 20 years
21- 30 years
More than 30 years

3

In your opinion, 'What are the characteristics that are critical or most significant for a successful Middle Manager?' (Chairman / Heads of the Departments / Heads of the Clinical Services) should possess?". Please select the appropriate option on a scale of 1 to 5 (1 - Not at all significant, 2 - Less significant, 3- significant, 4 – more significant, 5 - most significant). If you are not sure of the item, please select '6' (unable to assess) for that item.

		1 Not at all significant	2 Less significant	3 Significant	4 More significant	5 Most significant	UA
1	Be a motivator						
2	Be accessible to all stakeholders						
3	Be approachable all the time						
4	Be productive						
5	Be supportive to all stakeholders						
6	Have desire to grow						
7	Have more self-confidence						
8	Should manage time efficiently						
9	Should be active always						
10	Should be available for guidance						
11	Should be corruption free						
12	Should be humble						
13	Should display patience towards subordinates and superiors						
14	Treat everyone with respect						
15	Willing to learn from others						
16	Willing to share ideas with others						

4

In your opinion, 'What are the competencies that are critical or most significant for a successful Middle Manager?' (Chairman / Heads of the Departments / Heads of the Clinical Services) . Please select the appropriate option on a scale of 1 to 5 (1 - Not at all significant, 2 - Less significant, 3- significant, 4 – more significant, 5 - most significant). If you are not sure of the item, please select '6' (unable to assess) for that item.

		1 Not at all significant	2 Less significant	3 Significant	4 More significant	5 Most significant	UA
1	Be able to work in a team						
2	Able to adapt to changes						
3	Be able to achieve tasks as per timeline						
4	Possess up- to-date knowledge in the respective field						
5	Should address any conflict of interest effectively						
6	Should be able to balance various roles (multitasking)						
7	Should be ableto encourage teamwork						
8	Should be able to manage resources (money /manpower)						
9	Should be able to take appropriate decisions						
10	Should be able to work with multiple teams						
11	Should be an effective communicator						
12	Should be an effective Listener						
13	Should be organized in his/her thoughts, words, and deeds						
14	Should demonstrate integrity						
15	Should display effective organizational skills						
16	Should follow democratic ways						
17	Should have long term vision for the organization						
18	Should possess leadership skills						
19	Should possess problem-solving skills						

Would you like to add any more characteristics or competencies, in addition to what are listed above, that are critical or most significant for a successful Middle Manager ?. If 'yes', kindly mention them in the space provided below. If 'no', please type 'NO' in the space provided below. *

Thank you for participating in this survey.

If, you would like to have the copy of the findings from the study, send a personal email to

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2 Attachments