

**The Impact of Authentic Leadership and Organizational  
Culture on  
Employees' and Patients' Satisfaction as Determinants of  
Performance The Case of Military Hospitals in Egypt**

**Sameh Nodahy Ibrahim**

**Dr. Mona Kadry**

Dean of Post graduated School of Business Arab Academy for Science, Technology,  
and Maritime Transport

**Dr. Handy Ragaee Mohamed**

Lectural of Marketing And Business Development Arab Academy for Science,  
Technology and Maritime Transport

**Abstract :**

Corporate Culture implies leadership in organizations, and several studies have suggested that leaders who practice authentic leadership increase organizations' overall job satisfaction (Cortés-Denia et al., 2023). The importance of organization culture and authentic leadership has been highlighted in the existing literature. However, few empirical studies currently address the relationship between organizational culture and performance, while the moderating role of authentic leadership remains underexplored. Drawing on the conceptualization of organizational cultures, the purpose of this research is to understand the contribution of authentic leadership in steering organizational culture affecting organization performance indicated by both employees' and patients' satisfaction.

### **The Research problem:**

The problem of this research lies in the lack of studies addressing the corporate culture especially in military hospitals in Egypt and in particular authentic leadership that is not highly researched regarding the medical field.

### **Design Methodology/Approach/Sampling:**

In recent years, Military Hospitals in Egypt changed their policies to serve civilian patients in addition to military patients and their families. This research targeted Military Hospitals in Egypt specifically in Cairo.

There are an average of 76 Military hospitals in Egypt with five Military Hospitals in Cairo, however this research focused only on Maadi Medical Hospital as it is the biggest among the five as a representation of the target population as the unit of analysis.

The research targeted Employees and patients, the research targeted the census of 580 employees working at the hospital where only 105 employees responded with a response rate of 18 percent which might be due employees' reluctance to answer and partially due to security reasons.

As for the Patients, the number of patients per week are on average 500 patients, the survey targeted this average, where the responded sample is 270 with a response rate of 54% and the valid responses were 178.

The analysis of the sample responses gathered are analyzed, presented along with the discussion and findings. In order to answer

the main research questions and to fulfill the research objectives, the descriptive analysis followed by the inferential analysis were conducted. Descriptive statistics included frequency tables, computation of mean and standard deviation as well as, graphical representation in the form of pie or bar charts . Inferential statistics included correlation and regression analysis after assessing reliability of the studied variables.

### **Findings**

Statistical Analyses conducted emphasized the moderation effect of authentic leadership on the relation between organization culture and employee satisfaction. High level of authentic leadership along with high level of organization culture yields the highest employee satisfaction level, when compared to low level of authentic leadership along with high level of organization culture which yield relatively less employee satisfaction level. This supports the research hypothesis (H4) which states: there is a significant impact of authentic leadership on the relationship between organization culture and performance.

Demographic effects were found significant, where Gender influenced both authentic leadership and employee satisfaction where females had on average higher perception levels compared to male. Age influenced both organization culture and employee satisfaction where higher perception levels were found in older ages (41 years or above). No education effect was found on the

three studied variables (organization culture, authentic leadership, and employee satisfaction).

Organization culture was found to have a strong positive correlation with employee satisfaction. Furthermore, the effect of one unit increase in organization culture was found to generate on average a 70.4% increase in employee satisfaction as perceived by the employee sample. This supports the research hypothesis (H1) which states that: there is a significant relation between Organizational Culture on Organization Performance.

### **Practical implications:**

These results provide initial evidence for the role of authentic leadership in enhancing workplace performance. The tested theoretical framework suggests that the adoption of an authentic style can promote policies and practices to proactively manage errors, paving the way to error reduction in the workplace.

There was sufficient statistical evidence that supports a moderation effect of authentic leadership on the relation between organization culture and employee satisfaction. High level of authentic leadership along with high level of organization culture yields the highest employee satisfaction level, when compared to low level of authentic leadership along with high level of organization culture which yield relatively less employee satisfaction level. This supports the research hypothesis (H4) which states: there is a significant impact of authentic leadership on the relationship between organization culture and performance.

**Originality/value:**

This research contributes to the existing literature by demonstrating both the importance of authentic leadership and cultural orientation in improving the performance of military hospitals in Egypt.

**Keywords: Authentic Leadership, Organization Culture, Employee Satisfaction, Patients' Satisfaction, Military and Public Hospitals in Egypt.**

## CHAPTER 1

### INTRODUCTION

Egyptian Armed forces, Air Forces, and their families are served by the Egyptian military hospitals as per the policy of each hospital. The public organizations are always digging to find new ways to fulfill their public interest.

Recently the military hospital management decided to add to their policy and serve the civilian patients in addition to the military patients. As a result, to the norms and traditions of the military hospital management policy and restrictions the utilization rate of the hospitals was not satisfactory for both out and in patients although the hospitals are equipped by the most updated facilities including organ transportation units.

Therefore, the progress of any organization is greatly affected by the existence and mindset of its leader, and as per the studies published in the International Journal of Human

Resource it is confirmed that a leader plays an important role because his existence can determine the progress of the organization, with the change of hospital leadership is expected for better organizational performance.

The mainstream business and health care literature is dominated by the phenomena of leadership and organizational culture (OC) which is defined as the driving force in the success or failure of an organization as per Schein,2004.

Authentic leadership is defined as “a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development” (Luthans & Avolio, 2003, p. 243).

The importance of culture in organizations is highlighted daily; as per Rousseau (2000) Organizational culture is defined as the unique characteristics that makes the organization distinctive, which can be defined by the employees’ behavior towards the small daily things. This behavior is greatly influenced by the leaders’ guidance which is reflected on both employees’ and patients’ satisfaction.

Organizational culture is the basic important concept of an organization that creates shared beliefs, norms and values that characterize the core of how to do something in the organization. One can distinguish one hospital from another, often summed up

in the phrase “how do we do things around here? – But hospital cultures like national cultures are not easily changed (Health Services Research 46:6, Part 2 December 2011). Researchers argue that culture, while partly a creature of management, is difficult to observe. culture is perhaps changed indirectly as the impacts of more concrete strategies work their way through the members of the organization and for good or ill become embedded in habits of thought and behavior (National Institute For Clinical Studies, 2003).

Culture is a crucial variable especially with unforeseeable events at the healthcare organizations such as the Covid-19 Pandemic. The culture’s Flexibility and adaptation levels with the ongoing circumstances are what determine and measure the hospitals’ performance (Liisa Mäkelä Vesa Suutari)2011

The principal methods of measuring hospital performance include but not limited to:

- regulatory inspection,
- public satisfaction surveys,
- third-party assessment,
- statistical indicators,
- employees’ satisfaction

where most of which have never been tested rigorously. The effectiveness of measurement strategies depends on many variables including their purpose, the national culture, how they are applied and how the results are used.

Public hospitals face strong pressure to be more sensitive to social responsibility and responsive to patients' conditions. The Covid-19 situation in Egypt has worsened, prompting decision makers to revise the country's economic performance indicators. As per BMI Research, "healthcare spending is expected to increase as the authorities work to deal with infection rates" (BMI, July 2020).

The Ministry of Health and Population MOHP is currently the major provider for primary, preventive, and curative care in Egypt, with around 5,000 health facilities and more than 80,000 beds spread nationwide. There are no formal referral systems in the MOHP delivery system. The MOHP service delivery units are organized along several different dimensions. These include geographic (rural and urban), structural (health units, health centers, and hospitals), functional (maternal child health centers), or programmatic (immunization, and diarrheal disease control).

Specifically, with respect to inpatient services, the MOHP is the largest institutional provider of inpatient health care services in Egypt. It has about 1,048 inpatient facilities, accounting for more than 80,000 beds. Hospital services are provided through the following types of facilities.

Integrated hospitals are small, 20- to 60-bed hospitals providing primary health care and specialized medical services in the rural areas. Integrated hospitals contain well-equipped surgical theaters, X-ray equipment, and laboratories and are



responsible for serving a catchment population of between 10,000 and 25,000 people.

District hospitals are 100- to 200-bed hospitals that provide more specialized medical services and are available in every district. District hospitals are responsible for serving a catchment population of between 50,000 to 100,000 people in the urban district area.

General hospitals contain more than 200 beds and contain all medical specialties. General hospitals are available in every capital of a governorate.

Integrated, district, and general hospitals were included in the ESPA and were categorized as general service hospitals for this report.

Specialty hospitals which are located in urban areas and include specialties such as eye, psychiatric, chest (34), fever (88), heart ophthalmology (31), tumors, and gynecology and obstetrics. Specialty hospitals are available in all governorates. Fever hospitals were the only type of specialty hospital included in the ESPA.

The private sector has 2,024 inpatient facilities, with a total of about 22,647 beds. This accounts for approximately 16 percent of the total inpatient bed capacity in Egypt. Many other ministries operate their own health facilities that cater to their employees. The most important is the Ministry of Interior, which operates health facilities for police and the prison population; the Transport Ministry, which operates at least two hospitals for railway employees; the Ministry of Agriculture; the Ministry of

Religious Affairs; and the Defense Ministry, which is responsible for health facilities run by the Armed Forces.

Egypt has 14 medical schools (Faculties of Medicine), affiliated with the major universities and 36 university hospitals. University hospitals are regarded as secondary and tertiary care facilities and tend to be much more advanced in terms of technology and medical expertise in comparison with MOHP facilities. Cairo University, with a new modern hospital, is considered the largest and most sophisticated hospital in this group. These university hospitals are operated under the authority of the Ministry of Higher Education.

There are 76 military hospitals in Egypt scattered nationwide in every single governorate. They are categorized into 3 sub-groups: A, B, and C. Class "A" military hospitals are found in Cairo: there are 5 class A military hospitals in Egypt, for instance International medical center, Air force specialized hospital, El-Galaa hospital, El-Maadi Armed forces medical hospital, and Mostafa Kamel hospital in Alexandria. These hospitals have a wide range of services provided by a high standard medical team.

Nowadays, the Ministry of Defense has changed their way of thinking as currently their mission is to reach a society rich in health and wellness, so they have opened up their gates for civilians and military alike to accommodate their every medical need with their state-of-the-art technology to participate in the advancement and progress of the nation. The military has worked effortlessly to build a

medical center up to par with the latest technical and artistic levels containing all the medical departments, the various arms of Medicine equipped with the latest diagnostics, and treatment with excellence. These hospitals make use of foreign medical experts as well to improve their medical performances and advance their doctors' medical expertise.

### **1.1 Purpose**

The purpose of this paper is to understand the contribution of authentic leadership in steering organizational culture affecting organization performance indicated by both employees' and patients' satisfaction.

### **1.2 Problem Statement**

The special interest in the healthcare sector is heightened especially in times of crisis as has been witnessed by the whole world during the COVID-19 Pandemic. And thus, this has been a challenging situation for hospitals both public and private and anyone who is in the medical field.

Several studies have been conducted on organization culture and even organization culture in the healthcare sector. but the topic is yet understudied in Egypt, and based on the initial literature review there are limited, or no studies found of an attempt to address the problem with relation with authentic leadership and organizational performance represented by both employees' and patients' satisfaction. Moreover, the case of Military hospitals

and its role in the healthcare sector especially during COVID-19 Pandemic is still under research.

The research addresses the role of culture and leadership in managing public and military hospitals especially with the increased investments directed to the healthcare sector nowadays. Also, low quality services provided, or poor communication skills of hospital employees can also reduce the interest of a possible patient in choosing to be hospitalized.

The research problem lies in the lack of studies addressing the corporate culture especially in military hospitals in Egypt. Moreover, authentic leadership is not highly researched with regard to the medical field.

### **1.3 Research Significance**

1. The Importance of Healthcare sector especially nowadays
2. The importance of Military Hospitals
3. Understanding an organization's culture provides insights about the nature and efficiency of management and leadership styles.
4. Building healthcare ecosystem through Private-Public Partnerships (PPPs) to combat COVID-19: According to Dr. Ahmed AlKalawy (May 2020, <https://dailynews.egypt.com/2020/05/21/building-healthcare-ecosystem-to-combat-covid-19/>) who is a legal and PPP expert, and the Managing Partner of Kalawy and Partners, he stated that "Stronger innovative partnerships between the public and private sectors will be needed to ensure existing PPP projects

survive, as project survival is the only option. With decreased economic activity, PPP projects are going to experience considerable revenue challenges in the coming weeks, months, and (possibly) years.”

5. The importance of both employees' satisfaction and patients' satisfaction as measures of performance.

### **1.4 Research Objectives**

#### **The objectives of this research are as follows:**

1. To understand the Impact of Organizational Culture on Organization Performance.
2. To measure the impact of the organization culture on both employees' and patients' satisfaction in Military Hospitals in Egypt.
3. To understand the role of authentic leadership in moderating the relationship between organization culture and performance
4. To develop a set of recommendations for hospital leaders, the decision makers and government officials to enhance hospitals' performance.

### **1.5 Research Questions**

**RQ1:** What is the Impact of Organizational Culture on Organization Performance?

**RQ2:** What is the impact of organization culture on employee satisfaction?

**RQ3:** What is the impact of organization culture and patients' satisfaction?

**RQ4:** What is the role of authentic leadership in moderating the relationship between organization culture and performance?

### **1.6 Research Hypotheses**

**H1:** There is a significant relation between Organizational Culture on Organization Performance

**H2:** There is a significant relation between organization culture on employee satisfaction.

**H3:** There is a significant relation between organization culture and patients' satisfaction.

**H4:** There is a significant impact of authentic leadership on the relationship between organization culture and performance.

### **1.7 Design/methodology/approach**

This is intended to be descriptive research based on a quantitative approach in data collection and analysis with applied outcomes.

Data will be collected from employees, inpatients, and outpatients during the time of the research at Two Military Hospitals in Cairo, Egypt (The names are to be kept anonymous as per the Hospital Management and Military Regulations). The Population of employees working in the first and second hospital (the researcher aims to reach census, however it all depends on the responsiveness

of the employees, as for the patients, the average per week during the time of the study and data collection period, and we will calculate the estimated population and target sample.

This will be followed by surveys with employees and patients. This will be dyadic research with applied outcomes.

Relevant Statistical analyses will be conducted which includes and not limited to correlation, regression and other required tests will be used based on the collected data and sample size.

### **1.7.1 Research Questions & Hypotheses:**

#### **1.7.1.1 Research Questions:**

**RQ1:** What is the Impact of Organizational Culture on Organization Performance?

**RQ2:** What is the impact of organization culture on employee satisfaction?

**RQ3:** What is the impact of organization culture and patients' satisfaction?

**RQ4:** What is the role of authentic leadership in moderating the relationship between organization culture and performance?

#### **1.7.1.2 Research Hypotheses:**

**H1:** There is a significant relation between Organizational Culture on Organization Performance

**H2:** There is a significant relation between organization culture on employee satisfaction.

**H3:** There is a significant relation between organization culture and patients' satisfaction.

**H4:** There is a significant impact of authentic leadership on the relationship between organization culture and performance.

## **1.8 Research Structure**

**The proposed structure of the research is as follows:**

**Section One:** The Healthcare Sector in Egypt with focus on Public and Military Hospitals

**Section Two:** Literature Review on related theories and Models

**Section Three:** Research Methodology and Design (hypothesis and conceptual framework)

**Section Four:** Research Analysis, Discussion and Findings

**Section Five:** Conclusion, Recommendation

## **CHAPTER 2**

### **LITERATURE REVIEW**

Healthcare is a very essential sector in any country especially during the unforeseeable events such as what we lived for the past two years, the outburst of the COVID-19 pandemic. All the hospitals - public and private- were on high readiness level to face the pandemic while aiming to maintain the employees' morale, the patients' satisfaction, and the overall hospital performance.

This chapter introduces the research variables and focuses on the mediating role of the authentic leadership between organization culture and hospital performance; the performance



in this research is measured by employee and patient satisfaction. In addition, the researcher will discuss the healthcare sector with an emphasis on private, public and military hospitals in Egypt.

### **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

This chapter introduces the problem statement, Research objectives, research variables and methodology.

Within this chapter, the researcher will highlight the philosophical underpinnings of this research and outline the specific research design made and explain the analyses conducted.

#### **3.1. Research Problem**

The special interest in the healthcare sector is heightened especially in times of crisis as has been witnessed by the whole world during the COVID-19 Pandemic. And thus, this has been a challenging situation for hospitals both public and private and anyone who is in the medical field.

The research addresses the role of authentic leadership on employees' satisfaction and patient satisfaction in managing public and military hospitals especially with the increased investments directed to the healthcare sector nowadays. Also, low quality services provided, or poor communication skills of hospital employees can also reduce the interest of a possible patient in choosing to be hospitalized.

Several studies have been conducted on organization culture and even organization culture in the healthcare sector. but yet the

topic is understudied in Egypt, and based on the initial literature review there are limited or no studies found of an attempt to address the problem with relation with authentic leadership and organizational performance represented by both employees' and patients' satisfaction. Moreover, the case of Military hospitals and its role in the healthcare sector especially during COVID-19 Pandemic is still under research.

### **Research Objectives**

#### **The objectives of this research:**

1. To understand the Impact of Organizational Culture on Organization Performance
2. To measure the impact of the organization culture on both employees' and patients' satisfaction in Military Hospitals in Egypt.
3. 3- To understand the role of authentic leadership in moderating the relationship between organization culture and performance
4. To develop a set of recommendations for hospital leaders, the decision makers and government officials to enhance hospitals' performance.

### **3.2. Proposed Theoretical Framework**

In this study the researcher proposed a theoretical framework to address the problem under investigation. This theoretical framework is presented in the form of a scheme or picture showing the relationship of each variable is as follows:

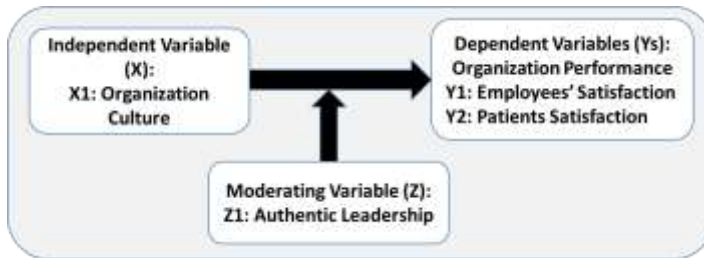


Fig.3.1: Proposed Theoretical Framework  
Source: Developed by the researcher.

### 3.3. Research Variables and Measures

#### 3.3.1. Independent Variable (X):

**X: Organizational culture.** This variable has been referred to as the norms that members of an organization perceive as their work environment which influences how members behave and adapt to achieve organizational goals. The survey questions adopted the measures of (GonzálezRomá, Tomás, & Ferreres, 1995) and (Van Muijen et al., 1999), which assesses how frequent certain situations in organizations.

#### 3.3.2. Dependent Variable: Organization Performance:

**The Organization Performance in this research is indicated by Hospital Performance and measured using Patients' and employee's satisfaction:**

**Y1: Employees' Job satisfaction:** Employee satisfaction is the extent to which employees are happy or content with their jobs and work environment. A seven-item scale will be used dealing with several aspects of employees' job satisfaction (e.g., co-

workers, work conditions, and salary) was used. A version of this scale was used previously in other studies showing a good reliability (Molero, Cuadrado, Navas, & Morales, 2007).

**Y2: Patients' Satisfaction:** Patient satisfaction in health care constitutes an important component of hospital performance. The patient satisfaction questionnaires PSQ-18 developed by Marshall & Hays (1994) will be used.

Patient satisfaction in healthcare has developed from the idea of consumer satisfaction, but it has also changed considerably. It is now thought of as the result of the interplay between patient expectations and actual experiences with healthcare. Patients may have expectations for a variety of healthcare-related factors, and patient satisfaction with certain parts of care is influenced independently by those expectations (Sohail, 2005; Abramowitz, Cote, & Berry, 1987).

Patient satisfaction is a multifaceted concept, As per the literature (Kumari et al., 2009; Abramowitz et al., 1987), patients' satisfaction concept usually encompasses items that are critical and related to the overall patient experience with the hospital including but not limited to (communication with doctors, communication with nurses, responsiveness of hospital staff, cleanliness of the hospital environment, quietness of the hospital environment, pain management, communication about medicines, discharge information, overall rating of hospital, and recommendation of hospital, technical quality, interpersonal

manner, communication, financial considerations, time spent with doctors and nurses, registration, pharmacist service, accessibility to health care services, convenience, and the state of the facilities during their medical treatment ).” However, in this research the researcher focused on the factors that are more relevant to the culture and the authentic leadership which is organizational culture that affect organization performance indicated by both employees and patient satisfaction.

**The following socio-demographic data will be collected:**

Age, gender (coded as 1 = male and 2 = female),

Educational level (coded as 1 = high school, 2 = technical diploma or 2 years after high school, 3 = bachelor’s degree, 4 = master’s degree, 5=PhD degree),

Organizational size (coded from 1 = micro to 4 = large, depending on the number of employees)

**3.3.3. Moderating Variable (Z):**

**Z: Authentic leadership:** Authentic leadership is defined as “a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development” (Luthans & Avolio, 2003, p. 243). This variable will be measured by an alternative and optimized measure of authentic leadership developed by Levesque-Côté, J., Fernet, C., Austin, S., & Morin, A.J.S. (2017). the leadership integrated

measure explained. And mention in the literature why didn't we use either the ALQ or ALI using the 13- item Spanish adaptation (Moriano et al., 2011) of the Authentic Leadership Questionnaire (ALQ) developed by Walumbwa et al. (2008), assessing relational transparency, internalized moral perspective, balanced processing, and self-awareness.

### **3.4. The operational definition used in this research is:**

Authentic leaders are fully aware of their behaviors and care about the impression they give to Others including colleagues and subordinates. Being excellent communicators with high interpersonal skills, they are always concerned with expressing and accurately conveying what they believe through their actions.

### **3.5. Research Questions and Hypotheses**

The researcher formulated the following research questions and hypotheses.

#### **3.5.1. Research Questions:**

**RQ1:** What is the Impact of Organizational Culture on Organization Performance?

**RQ2:** What is the impact of organization culture on employee satisfaction?

**RQ3:** What is the impact of organization culture and patients' satisfaction?

**RQ4:** What is the role of authentic leadership in moderating the relationship between organization culture and performance?

### 3.5.2. Research Hypotheses:

**H1:** There is a significant relation between Organizational Culture on Organization Performance

**H1.1:** There is a significant relation between organization culture on employee satisfaction.

**H1.2:** There is a significant relation between organization culture and patients' satisfaction.

**H2:** There is a significant impact of authentic leadership on the relationship between organization culture and performance.

### 3.6. Research Assumptions and Limitations

#### 3.6.1. Assumptions

**This research has followed the assumptions below:**

**A1:** The factors and variables that are relevant but not studied in this research will be assumed to be constant and don't have any effect on the research variables during the time of this research.

**A2:** This research assumes that organization climate and Culture mean the same. Both terms are used interchangeably within this research

#### 3.6.2. Limitations

**This research is limited to the following:**

**L1:** This research is limited to the variables under study.

**L2:** This Research is limited to Military Hospitals in Cairo Governorate in Egypt

**L3:** The Employees survey is limited to the Middle and upper middle level managers in hospitals.

**L4:** The patients' satisfaction survey is limited to the items that are related and affected by the hospital culture and authentic leadership.

### **3.7. Research Methodology**

The following methodology was followed to investigate the research problem and address the research gap.

#### **3.7.1. Research Type**

This is a descriptive cross-sectional applied research based on quantitative deductive approach based on secondary data from previous studies and primary data collected from one Military Hospitals in Cairo, Egypt.

#### **3.7.2. Population, Sampling, Sampling Type**

This is dyadic research where data was collected through surveys using structured questionnaires from employees, inpatients, and outpatients during the time of the research at Three Military Hospitals in Cairo, Egypt (The names are to be kept anonymous as per the Hospital Management and Military Regulations).

In recent years, Military Hospitals in Egypt changed their policies to serve civilian patients in addition to military patients and their families. This research targeted Military Hospitals in Egypt specifically in Cairo.

There are an average of 76 Military hospitals in Egypt with five Military Hospitals in Cairo, however this research focused only on Maadi Medical Hospital as it is the biggest among the



five as a representation of the target population as the unit of analysis.

Maadi Medical Hospital represents the target population which includes all employees and patients of this hospital. The Population of hospital employees is 1500 including different jobs and managerial levels.

In number, the research targeted the census of 580 employees working at the hospital mainly physicians and nurses on middle and upper levels excluding workers and lower-level jobs and the number of patients per week is on average 500 patients.

Data was collected from employees, inpatients, and outpatients during the time of the research at one Military Hospitals in Cairo, Egypt (The names are to be kept anonymous as per the Hospital Management and Military Regulations). The Population of employees working in the first and second hospital (the researcher aims to reach census, however it all depends on the responsiveness of the employees, as for the patients, the average per week during the time of the study and data collection period, and we will calculate the estimated population and target sample.

The research targeted Employees and patients, the research targeted the census of 580 employees working at the hospital where only 105 employees responded with a response rate of 18 percent which might be due employees' reluctance to answer and partially due to security reasons.

As for the Patients, the number of patients per week are on average 500 patients, the survey targeted this average, where the responded sample is 270 with a response rate of 54% and the valid responses were 178.

The employee sample consists of more male (69.5%), compared to females (30.5%)

The Targeted sample is majority holding bachelor's degree (61.9%), followed by those who hold master's degree (23.8%), then PhD holders (11.4%) and the remaining percentage of 2.9% representing those who had technical diploma or 2 years after high school. This education distribution reflects a highly educated workforce in the military hospitals.

270 patients responded for the patients' satisfaction survey with a response rate of 54% and the valid responses were 178 while 105 employees responded for the employee satisfaction survey with the response rate of 18% which might be due to employee's reluctance to answer due to security reasons.

The researcher aims to reach the census; however, it all depends on the responsiveness of the employees.

The selection of the Hospital as a unit of analysis followed a judgmental purposive sample, whereas the employees and patients' data collection followed a non-probability convenient sampling method.

### **3.7.3. Data Analysis**

The analysis of the sample responses gathered are analyzed, presented along with the discussion and findings. To answer the main research questions and to fulfill the research objectives, descriptive analysis followed by the inferential analysis were conducted. Descriptive statistics included frequency tables, computation of mean and standard deviation as well as, graphical representation in the form of pie or bar charts. Inferential statistics included correlation and regression analysis after assessing reliability of the studied variables.

Patient sample allowed performing Principal Component Analysis using the varimax extraction method to distinguish and extract the three uncorrelated studied variables: organization culture, authentic leadership and patient satisfaction.

These extracted variables were used in assessing the direction relation hypothesized between organization culture and patient satisfaction from one hand, and the moderation effect hypothesized by authentic leadership on the relation between organization culture and patient satisfaction from the other hand.

### **3.7.4. Data Collection Measures and Tools**

The data has been collected through pre-tested measures using two surveys adopting previous research on Culture, authentic leadership and organization performance represented by patients' and employees' employee satisfaction.

Several questions in the survey were addressed for each variable with a total of 30 questions, The first section of the survey addressed the sample demographics.

The Assessment of Hospital Culture has been done using Organization Culture measures referred to in chapter two, this variable has been referred to as the norms that members of an organization perceive as their work environment which influence how members behave and adapt to achieve organizational goals. The employees' survey questions adopted the measures of (González Roma, Tomás, & Ferreres, 1995) and (Van Muijen et al., 1999), which assesses how frequent certain situations in organizations. Questions number 4, 5, 10, 25, 28, 29 and 30 were formulated to assess the hospital culture in accordance with research objectives.

Authentic Leadership has been measured by using the tools developed by Brown, responses were measured on a scale from 1 (highly unlikely) to 5 highly likely. Authentic leadership has been measured by Questions 1, 6, 11,15,16,23,24,26, and 26 in the employees' satisfaction survey.

Organization Performance has been measured through patients' satisfaction survey developed by 500 patients' and employees' satisfaction survey using the surveys developed by show, C (2003), he mentioned that "Performance must be defined in relation to explicit goals reflecting the values of various stakeholders (such as patients, professions, insurers, regulators). However, very few performance measurement systems focus on

health outcomes valued by customers. "Measurement" implies objective assessment but does not itself include judgments of values or quality; these may be added by those who later present and interpret the data."

Shaw C (2003) How can hospital performance be measured and monitored? Copenhagen, WHO Regional Office for Europe (Health Evidence Network report; <http://www.euro.who.int/document/e82975.pdf>, accessed 29 August 2003).

The principal methods of measuring hospital performance are regulatory inspection, public satisfaction surveys, third-party assessment, and statistical indicators, most of which have never been tested rigorously. Evidence of their relative effectiveness comes mostly from descriptive studies rather than from controlled trials. Shaw (2003) mentioned that "The effectiveness of measurement strategies depends on many variables including their purpose, the national culture, how they are applied and how the results are used". Moreover, inspection of hospitals measures minimal requirements for the safety of patients and personnel; it does not foster innovation or information for consumers or providers. He added that Surveys usually address what is valued by patients and the general public. Standardized surveys measure specific domains of patient experience and satisfaction. He mentioned that "Statistical indicators can suggest issues for performance management, quality improvement and further

scrutiny; however, they need to be interpreted with caution.” Employees’ satisfaction has been measured by Q2,3,7,8,9,12,13,14,17,18, 19,20, and 21.

To assess patients’ satisfaction, the researcher adopted the short-version instrument developed by Marshall & Hays in 1976. The PSQ-18 contains 18 items tapping each of the seven dimensions of satisfaction with medical care measured by the PSQ- III: general satisfaction, technical quality, interpersonal manner, communication, financial aspects, time spent with doctor, and accessibility and. convenience.

Both questionnaire questions were adapted to the research objectives and gone through a translation process. Both surveys went through a process of translation and backward translation to ensure the measure reliability.

### **3.7.5. Data Analysis**

Relevant Statistical analyses have been conducted; Exploratory factor analysis (EFA), reliability analysis and regression analysis were performed to measure the initial validity of research constructs and to test proposed hypotheses.

## **CHAPTER FOUR**

### **RESEARCH ANALYSES, DISCUSSION AND FINDINGS**

In this chapter the analysis of the sample responses gathered are analyzed, presented along with the discussion and findings. The research problem addressed is about the lack of studies addressing the corporate culture especially in military hospitals

in Egypt and in particular authentic leadership that is not highly researched regarding the medical field.

In order to answer the main research questions and to fulfill the research objectives, the descriptive analysis followed by the inferential analysis were conducted. Descriptive statistics included frequency tables, computation of mean and standard deviation as well as, graphical representation in the form of pie or bar charts. Inferential statistics included correlation and regression analysis after assessing reliability of the studied variables.

This chapter consists of two parts. Part 1 covers the analysis and findings of the Employees sample, while Part 2 presents the analysis and findings of the Patients sample.

## **CHAPTER FIVE**

### **CONCLUSION, RECOMMENDATIONS AND FUTURE RESEARCH**

The research problem lies in the lack of studies addressing the corporate culture especially in military hospitals in Egypt. Moreover, authentic leadership is not highly researched regarding the medical field.

This research was able to achieve the research objectives to understand the role of authentic leadership in moderating the relationship between organization culture and performance and to measure the impact of the organization culture on both employees' and patients' satisfaction in Military Hospitals in

Egypt. This chapter introduces the conclusion, recommendation, and future research.

**References:**

- Algera, P.M. and Lips-Wiersma, M. (2012), "Radical Authentic Leadership: Co-creating the conditions under which all members of the organization can be authentic", *The Leadership Quarterly*, Vol. 23 No. 1, pp. 118-131.
- Ambrecht, F. M. R., Jr., Chapas, R. B., Chappelow, C. C., and Farris, G. F. (2001). Knowledge management in research and development. *Research Technology Management*, 44(4), 28– 48.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315–338. <https://doi.org/10.1016/j.leaqua.2005.03.001>
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *Leadership Quarterly*, 16(3), 315-338.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15, 801-823.
- Avolio, B. J., Wernsing, T., & Gardner, W. L. (2018). Revisiting the development and validation of the authentic leadership questionnaire: Analytical clarifications. *Journal of Management*, 44(2), 399-411.
- Avolio, B.J. and Gardner, W.L., 2005. Authentic leadership development: Getting to the root of positive forms of leadership. *The leadership quarterly*, 16(3), pp.315-338.
- Avolio, B.J., Gardner, W.L., Walumbwa, F.O., Luthans, F. and May, D.R., 2004. Unlocking the mask: A look at the process by which authentic



- leaders impact follower attitudes and behaviors. *The leadership quarterly*, 15(6), pp.801-823.
- Azhar, K (2003), *Business Policy and Strategic Management*, NewDelhi, Tata McGraw-Hill.
- Bass, B. M. & Avolio, B. J. (2000). *Manual for Multi-Factor Leadership Questionnaire* (2nd ed.). Redwood City: Mind Garden.
- Bass, B. M. & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, 10(2), 181–217. [https://doi.org/10.1016/S1048-9843\(99\)00016-8](https://doi.org/10.1016/S1048-9843(99)00016-8)
- Bate, S. P. (2010). *Strategies for cultural change*. Routledge. Bell DeTienne, K., and Jackson, L. A. (2001). Knowledge management: understanding theory and developing strategy. *Competitiveness Review: An International Business Journal*, 11(1), 1- 11.
- Begley, P. T. & Stefkovich, J. (2007). Integrating values and ethics into post secondary teaching for leadership development: principals, concepts and strategies. *Journal of Educational Administration*, 45(4), 398-412.
- Blakeley, K., 2016. 6 Responsible leaderships. *Responsible Leadership: Realism and Romanticism*, 4, p.108.
- Bulach, C., Lunenburg, F. C. & Potter, L. (2012). *Creating a culture for high-performing schools: A comprehensive approach to school reform* (2nd ed.).
- Cerne, M., Maric, M., Dimovski, V., Penger, S., & Skerlavaj, M. (2014): Congruence of leader self-perceptions and follower perceptions of authentic leadership: Understanding what authentic leadership is and how it enhances employees' job satisfaction, *Australian Journal of Management*: 39(3): 453-471 .
- Cervo CS, Mónico LSM, Santos NR, Hutz CS, Pais L. Authentic Leadership Questionnaire: invariance between samples of Brazilian and Portuguese employees. *Psicol Reflexão Crítica*. 2016;29(1):40–40. doi: 10.1186/s41155-016-0046-4.

- Coetzer, M.F., Bussin, M.H.R. & Geldenhuys, M., 2017, Servant leadership and work-related well-being in a construction company, SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde 43(0), a1478. <https://doi.org/10.4102/sajip.v43i0.1478>
- Cooper, C. D., Scandura, T. A., & Schriesheim, C. A. (2005). Looking forward but learning from our past: potential challenges to developing authentic leadership theory and authentic leaders. *The Leadership Quarterly*, 16(3), 475-493.
- Cortés-Denia, D., Luque-Reca, O., Lopez-Zafra, E., & Pulido-Martos, M. (2023). Does authentic leadership promote higher job satisfaction in public versus private organizations? exploring the role of vigor and engagement. *Heliyon*, 9(1). <https://doi.org/10.1016/j.heliyon.2023.e12906>
- Davies, H. T., Nutley, S. M., and Mannion, R. (2000). Organizational culture and quality of health care. *BMJ Quality and Safety*, 9(2), 111-119. 102
- De Bono, S., Heling, G., and Borg, M. A. (2014). Organizational culture and its implications for infection prevention and control in health care institutions. *Journal of Hospital Infection*, 86(1), 1-6.
- Derue, D.S., Nahrgang, J.D., Wellman, N.E.D. and Humphrey, S.E., 2011. Trait and behavioural theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel psychology*, 64(1), pp.7-52.
- Dinh, J., Lord, R., Gardner, W., Meuser, J., Liden, R. and Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, [online] 25(1), pp.36-62. Available at: <https://doi.org/10.1016/j.leaqua.2013.11.005>.
- Edmondson, A. C. (2003). Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. *Journal of management studies*, 40(6), 1419-1452.

- Elrehail, H., Emeagwali, O. L. & Abdallah, A. (2018). The impact of transformational and authentic leadership on innovation in higher education: The contingent role of knowledge sharing. *Telematics and Informatics*, 35(1), 55-67.
- Leigh JModelling suggests authentic leadership from managers influences structural empowerment, job satisfaction and self-rated performance among nurses *Evidence-Based Nursing* 2014;17:55-56.
- Ernst, H. (2001). Corporate culture and innovative performance of a firm. *Management of Engineering & Technology*, 2, 532-535
- Kopelman, R. E., Brief, A. P., & Guzzo, R. A. (1990). The role of climate and culture in productivity.
- Ernst, H. (2001). Corporate culture and innovative performance of a firm. *Management of Engineering & Technology*, 2, 532-535
- Fidler, T. (2013). *Authentic Leadership* | Harvard Business Publishing Corporate Learning. [online] Harvard Business.org. Available at: <http://www.harvardbusiness.org/blog/authenticleadership-0>.
- Form (FWS-SF): Results and implications of a South African study. *Journal of Psychology in Africa*, 27(4), 303-309.
- Gardner, W.L., Avolio, B.J., Luthans, F., May, D.R. and Walumbwa, F., 2005. "Can you see the real me?" A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16(3), pp.343-372.
- George, B. (2015). *Forbes Welcome*. [online] Forbes.com. Available at: <https://www.forbes.com/sites/hbsworkingknowledge/2015/11/10/the-true-qualities-of-authentic-leaders/#50246e53f74d>.
- Giallonardo, L. M., Wong, C. A., & Iwasiw, C. L. (2010). Authentic leadership of preceptors: Predictor of new graduate nurses' work engagement and job satisfaction. *Journal of Nursing Management*, 18(18), 993-1003.

- Gould, D. J., Hewitt-Taylor, J., Drey, N. S., Gammon, J., Chudleigh, J., and Weinberg, J. R. (2007). The CleanYourHandsCampaign: critiquing policy and evidence base. *Journal of Hospital Infection*, 65(2), 95-101. 103
- growth mindset. *International Journal of Pure and Applied Mathematics*, 118(19), 383-401.
- Habib, S., Aslam, S., Hussain, A., Yasmeen, S., & Ibrahim, M. (2014). The impact of organizational culture on job satisfaction, employees' commitment and turnover intention. *Advances in Economics and Business*, 2(6), 215–222. <https://doi.org/10.13189/aeb.2014.020601>
- Hannah, S. T., Avolio, B. J., & Walumbwa, F. O. (2011). Relationships between authentic leadership, moral courage, and ethical and pro-social behaviors. *Business Ethics Quarterly*, 21(4), 555-578.
- Hannah, S.T., Lester, P.B. and Vogelgesang, G.R., 2005. Moral leadership: Explicating the moral component of authentic leadership. *Authentic leadership theory and practice: Origins, effects and development*, 3, pp.43-81.
- Harter, J.K., Schmidt, F.L. and Hayes, T.L., 2002. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis.
- Hoffman, B.J., Woehr, D.J., Maldagen- Youngjohn, R. and Lyons, B.D., 2011. A great man or great myth? A quantitative review of the relationship between individual differences and leader effectiveness. *Journal of Occupational and Organizational Psychology*, 84(2), pp.347- 381.
- Holberton, P. (2004). The leadership journey: becoming an enlightened leader. *Handbook business Strategy*, [online] 5(1), pp.53-58. Available at: <http://www.emeraldinsight.com/doi/full/10.1108/10775730410494026>.
- Hoover, P. (2017). The Importance of Authentic Leadership. [online] Sites.psu.edu. Available at: <https://sites.psu.edu/leadership/2017/04/24/the-importance-of-authentic-leadership/>.

- Ilies, R., Morgeson, F. and Nahrgang, J. (2005). Authentic leadership and eudaimonic well being: Understanding leader–follower outcomes. *The Leadership Quarterly*, [online] 16(3), pp.373-394. Available at: <https://doi.org/10.1016/j.leaqua.2005.03.002>
- Jacsó, P. (2010). Comparison of journal impact rankings in the SCImago Journal & Country Rank and the Journal Citation Reports databases. *Online Information Review*, 34(4), 642-657.
- Jam, F. A., Kaur, S., & Kwee, N. B. (2016). Interactive effects of gender and leadership styles on open service innovation: A study of Malaysian doctors. *International Journal of Environmental Research*, 13(3), 1287-1304.
- Jiang, H., Men, R. L. (2017). Creating an engaged workforce: The impact of authentic leadership, transparent organizational communication, and work-life enrichment. *Communication Research*, 44(2),
- Kampa, J., Rigotti, T., & Otto, K. (2017). Mechanisms linking authentic leadership to emotional exhaustion: The role of procedural justice and emotional demands in a moderated mediation approach. *Industrial Health*, 55, 95–107. doi:10.2486/indhealth.2016-0046
- Khan, Sher & Muhammad, Bashir & Afridi, Wahid & Sarwar, Imran. (2021). EFFECT OF AUTHENTIC LEADERSHIP ON JOB SATISFACTION AND EMPLOYEE ENGAGEMENT.
- Klenke, K. ed., 2016. *Qualitative research in the study of leadership*. Emerald Group Publishing Limited.
- Kopelman, R. E., Brief, A. P., & Guzzo, R. A. (1990). The role of climate and culture in productivity. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 282-318).
- Lee, C. S. (2018). Authentic leadership and organizational effectiveness: The roles of hope, grit, and growth mindset. *International Journal of Pure and Applied Mathematics*, 118(19), 383-401.

- Levesque-Côté, J., Fernet, C., Austin, S., & Morin, A. J. S. (2018). New wine in a new bottle: Refining the assessment of authentic leadership using exploratory structural equation modeling (ESEM). *Journal of Business and Psychology*, 33(5), 611-628.
- Luthans, F., Norman, S. and Hughes, L., 2006. Authentic leadership. *Inspiring leaders*, pp.84-104.
- Marcoulides, G. and Heck, R.H. (1993). Organizational Culture and Performance: Proposing and Testing a Model, *Organizational Science*, 4(2) : 209-223.
- MAY, D., CHAN, A., HODGES, T. and AVOLIO, B. (2003). Developing the Moral Component of Authentic leadership. *Organizational Dynamics*, [online] 32(3), pp.247-260. Available at: [https://ac.els-cdn.com/S0090261603000329/1-s2.0-S0090261603000329-main.pdf?\\_tid=989dc452-b1ea-11e7-b10d0000aab0f26&acdnat=1508100860\\_72ec97f3d0c18e702c5e89ba1457d56a](https://ac.els-cdn.com/S0090261603000329/1-s2.0-S0090261603000329-main.pdf?_tid=989dc452-b1ea-11e7-b10d0000aab0f26&acdnat=1508100860_72ec97f3d0c18e702c5e89ba1457d56a).
- McAuliffe, N., Bostain, N. S., & Witchel, A. D. (2019). The relationship between authentic leadership, trust, and engagement in library personnel. *Journal of Library Administration*, 59(2), 129-148.
- Melo, T. R. (2016). The impact of corporate social responsibility on organizational performance. Doctor of Business Administration Dissertation, Walden University. <https://doi.org/10.14201/gredos.76522>
- Miao, C., Humphrey, R. H., & Qian, S. (2018). Emotional intelligence and authentic leadership: A meta- analysis. *Leadership & Organization Development Journal*, 39(5), 679-690.
- Monzani, L., Braun, S., & Van Dick, R. (2016). It takes two to tango: The interactive effect of authentic leadership and organizational identification on employee silence intentions. *German Journal of Human Resource Management*, 30(3-4), 246-266.

- Monzani, L., Knoll, M., Giessner, S., Van Dick, R., & Peiró, J. M. (2019). Between a rock and hard place: Combined effects of authentic leadership, organizational identification, and team prototypicality on
- Moriano, J. A., Molero, F. & Mangin, J.-P. L. (2011). Liderazgo auténtico: Concepto y validación del cuestionario ALQ en España. *Psicothema*, 23(2), 336-341.
- Mubarak, F., & Noor, A. (2018). Effect of authentic leadership on employee creativity in project-based organizations with the mediating roles of work engagement and psychological empowerment. *Cogent Business & Management*, 5(1), 1-14.
- Neider, L. L., & Schriesheim, C. A. (2011). The Authentic Leadership Inventory (ALI): Development and empirical tests. *The Leadership Quarterly*, 22(6), 1146-1164.
- New York, NY: Wiley. Bulach, C., Lunenburg, F. C., & Potter, L. (2012). *Creating a culture for high-performing schools: A comprehensive approach to school reform* (2nd ed.).
- Northouse, P. (2007). *Leadership*. 4th ed. Thousand Oaks: Sage Publications, Inc, pp.1-9.
- Ogbonna, E and Harris, L. (2002). Managing organizational culture: Insights from the hospitality industry. *Human Resource Management Journal*, 12(1), 22-53.
- Oh, J., Cho, D., & Lim, D. H. (2018). Authentic leadership and work engagement: The mediating effect of practicing core values. *Leadership & Organization Development Journal*, 39(1), 276-290.
- Ortega-Parra, A., & Sastre-Castillo, M., (2013). Impact of perceived corporate culture on organizational commitment. *Management Decision*, 51, 1071-1083.
- Panczyk M, Jaworski M, Iwanow L, Cieślak I, Gotlib J. Psychometric properties of Authentic Leadership Self- Assessment Questionnaire in a

- population- based sample of Polish nurses. *J Adv Nurs*. 2019;75:692–703. <https://doi.org/10.1111/jan.13922> | PANCZYK ET AL.
- Parikh, M. (2001). Knowledge management framework for high-tech research and development. *Engineering Management Journal*, 13(3), 27–33.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107-142.
- R. Al-Dossary et al. Job satisfaction of nurses in a Saudi Arabian university teaching hospital: a cross-sectional study, *International Nursing Review*
- Raja, S., & Agrawal, R. (2017). Cross-Cultural validation of the perceived brand greenness scale. In M.
- Rautenbach, C., & Rothmann, S. (2017). Psychometric validation of the Flourishing at Work Scale - Short
- Reed, L. L., Vidaver-Cohen, D., & Colwell, S. R. (2011). A new scale to measure executive servant
- Regan, S., Laschinger, H. K. S., & Wong, C. A. (2016). The influence of empowerment, authentic
- Rego, A., Sousa, F., Marques, C. and e Cunha, M.P., 2012. Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65(3), pp.429-437
- Rego, A., Sousa, F., Marques, C., & Cunha, M. P. (2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65(3), 429-437.
- Richard, C. (2002). Experiments with New Teaching Models and Methods. *International Public Management Review*.
- Robbins, S.P (1986), *Organizational Behaviour: Cases, Concepts and Controversies*. Prentice Hall, New Delhi.



- Rousseau, D. M. (2000), Assessing organizational culture: The case for multiple methods. In B. Schneider (Ed.), *Organizational climate and culture*. San Francisco: Jossey-Bass.
- Ryu, S. Y. (2015). *Kunja leadership: Concept and nomological validity*. Leadership & Organization  
San Francisco, CA: Jossey-Bass.
- Denison, D. R. (1990). *Corporate culture and organizational effectiveness*. New York, NY: Wiley.
- Bulach, C., Lunenburg, F. C., & Potter, L. (2012). *Creating a culture for high-performing schools: A comprehensive approach to school reform* (2nd ed.).
- Schein, E.H. (2004) 2nd ed, *Organizational Culture and Leadership*. San Francisco: Jossey-Bass
- Schien, E.H. (1992). *Organizational Culture and Leadership*, 2nd Edition, San Francisco; Jossey-Bass.
- Shahzad, F., Luqman, R., Khan, A., & Shabbir, L. (2012). Impact of organizational culture on organizational performance: An overview. *Interdisciplinary Journal of Contemporary Research in Business*, 3, 975-985.
- Shamas-Ur-Rehman Toor & George Ofori, 2009. "Authenticity and its influence on psychological well-being and contingent self-esteem of leaders in Singapore construction sector," *Construction Management and Economics*, Taylor & Francis Journals, vol. 27(3), pages 299-313.
- Shamir, B., & Eilam, G. (2005). "What's your story?" A life-stories approach to authentic leadership development. *The Leadership Quarterly*, 16, 395-417.
- Shirey, Maria R. (2009) *Authentic Leadership, Organizational Culture, and Healthy Work Environments*. *Critical Care Nursing Quarterly* 32(3):p 189-198, July 2009. | DOI: 10.1097/CNQ.0b013e3181ab91db
- Simoneaux, S., & Stroud, C. (2014). A strong corporate culture is key to success. *Journal of Pension Benefits*, 22(1), 51-53.
- Stander, F. W., Beer, L. T. de, & Stander, M. W. (2013). *Authentic leadership as a source of optimism, trust in the organization and work*

- engagement in the public health care sector. *SA Journal of Human Resource Management*, 13(1), 1-12.
- Van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management*, 37(4), 1228-1261.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89–126. <https://doi.org/10.1177/0149206307308913>
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89-
- Walumbwa, F.O., Avolio, B.J., Gardner, W.L., Wernsing, T.S. and Peterson, S.J., 2008. Authentic leadership: Development and validation of a theory-based measure. *Journal of management*, 34(1), pp.89-126.
- Wiewiora, A., & Kowalkiewicz, A. (2018). The role of authentic assessment in developing authentic leadership identity and competencies. *Assessment & Evaluation in Higher Education*, 44(3), 415-430.
- William L. Gardner, Claudia C. Cogliser, Kelly M. Davis, Matthew P. Dickens, Authentic leadership: A review of the literature and research agenda, *The Leadership Quarterly*, Volume 22, Issue 6, 2011, Pages 1120-1145, ISSN 1048-9843, <https://doi.org/10.1016/j.leaqua.2011.09.007>.
- Wong, C.A., Cummings, G.G. (2009) The influence of authentic leadership behaviours on trust and work outcomes of healthcare staff. *J. Leadersh. Stud.* 3 (2), 6–23. <http://dx.doi.org/10.1002/jls.20104>.
- World Health Organization. (2018, May). Country Cooperation Strategy at a Glance. [https://apps.who.int/iris/bitstream/handle/10665/137164/ccsbrief\\_egy\\_en.pdf;jsessionid=241E95F079C608B743E6A66EE332A3F4?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/137164/ccsbrief_egy_en.pdf;jsessionid=241E95F079C608B743E6A66EE332A3F4?sequence=1)

- Xiong, H.-B., & Fang, P. (2014). Authentic leadership, collective efficacy, and group performance: An empirical study in China. *Social Behavior and Personality*, 42(6), 921-932.
- Yagil, D., & Medler-Liraz, H. (2014). Feel free, be yourself: Authentic leadership, emotional expression, and employee authenticity. *Journal of Leadership & Organizational Studies*, 21(1), 59-70
- Yirdaw, A. (2016). Quality of Education in Private Higher Institutions in Ethiopia: The Role of Governance. *SAGE Open*, 6(1), 1-12.
- Zhou P, Bundorf K, Le Chang J, Huang JX, Xue D. Organizational culture and its relationship with hospital performance in public hospitals in China. *Health Serv Res*. 2011 Dec;46(6pt2):2139-60. doi: 10.1111/j.1475-6773.2011.01336.x. Epub 2011 Oct 18. PMID: 22092228; PMCID: PMC3392996.