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The American University in Cairo

School of Global Affairs and Public Policy

**TRANSFORMATIONAL LEADERSHIP STYLE AND ITS ROLE
IN PROMOTING INNOVATION: A CASE STUDY OF THREE
PUBLIC HOSPITALS IN EGYPT**

A Thesis Submitted to the

Public Policy and Administration Department

**in partial fulfillment of the requirements for the degree of
Master of Public Policy and Administration**

By

Ragaa Wagih Mohamed El Fiky

Supervised by

Dr. Shahjahan Bhuiyan

Summer 2016

The American University in Cairo
School of Global Affairs and Public Policy
Department of Public Policy and Administration

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ABSTRACT

This study investigates the transformational leadership style and its role in promoting employees' innovation. The study uses a mixed method approach; quantitative and qualitative analysis. To confirm the outcomes of the collected and analyzed data, a qualitative research was conducted via in-depth and descriptive analysis of the proposed correlation. Survey and interview were conducted in three public hospitals located in Cairo, Mansoura and Damietta, Egypt. Findings of quantitative and qualitative analysis strongly supported the main question of the study that transformational leadership style has a relationship and a role in promoting employees' level of innovation which was suggested in the adopted conceptual framework. Results confirmed that the three sub-questions of this research supported the main proposed question. Measures were found to be positively associated with the five proposed hypotheses and were proven to be effective on employees' innovation with a correlation of some external factors such as: "clear vision and mission", "lead by doing rather by telling", "innovative leader", "empowerment", "motivation", and "being valued".

DEDICATION

I lovingly dedicate this thesis to the soul of my dear father who always believed in me and wished to see me AUC graduate student and to my two beloved girls to inspire them to always learn.

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CHAPTER ONE

Introduction

Leadership is one of the main factors that create a proper environment for innovation in any organization. Leaders with strong abilities and human capabilities such as strategic vision, championship and entrepreneurship, can direct and impact on the innovation levels of the employees (Ali et al., 2014).

Leader is an indispensable factor in enhancing employees' innovation in any organization and innovation is a collective outcome of organizational, individual and team efforts merged together to create a new process, service or product hypothetically attractive to the market (Denti and Hemlin, 2012).

Due to the fact that developing a better style of leadership is increasingly needed and is fundamental to any organization, one should know that innovation is an important means for any organization that needs to be accustomed to the rapid universal change in a globalized competitive market. The best leadership style helps the progress of innovation among subordinates via delegation of authority, intellectual motivation and effective team participation. No doubt that innovation necessitates leaders to support and encourage their subordinates to win their hearts and minds (Avery, 2004).

Kesting et al. (2015) mentioned that leadership is essential to innovation in any organization, it decisively enhancing and influencing organizational creativity. While Gronn (2010) stated that various types of leadership have various impacts on the commitment and involvement of the individuals, Deschamps (2005) went further

and added that ineffective leadership is the reason of innovation failure of any project.

Abdurrahman (2010) argued that good leaders do not rule subordinates' actions but they observe the points of strengths and weaknesses of the team members individually to enhance them for sake of improvement and creative performance. When the employee's positive behavior is recognized, rewarded and reinforced, this encourages the individual effort to achieve the organizational goals effectively. On the other hand, employee's negative behavior should be persuaded with empowerment and support not with direct criticism or personal attack.

Because change is considered a major element of the recent progressive global business, this study highlights the various challenges that are encountered by the Egyptian public sector healthcare. It also shows that we could generate better ideas through applying the proper leadership style; these ideas will provide the right solutions to the problems. The hypotheses are about the role of transformational leadership and the teamwork in creating new initiatives and useful thoughts with the best planning and implementation. It is also about how the participation of both subordinates and leaders can result in raising the innovation level in the organization.

Oke et al. (2009) noted that innovation is not only being creative and coming up with new ideas, thought and possibilities, but also being involved in the implementation process. Oke (2009) defined innovation as radical and incremental; a radical innovation is when employees create something totally new and incremental innovation is when employees exert effort to improve something previously exists.

Empowerment is a vital element of the innovative performance and of the transformational style. Empowered employees are task-oriented and self-driven in

fulfilling their goals with no leader supervision and employees here are upgraded to become stakeholders working with their full capacity to develop the organization continuously (Oke et al., 2009).

The purpose of the study is to investigate the transformational leadership style and its role in promoting innovation of the healthcare employees of the public sector in Egypt in order to reach the highest innovation levels.

This thesis addresses the issue of leadership by looking at five suggested hypotheses and innovation through a mixed method approach; quantitative and qualitative analysis.

This chapter provides an introduction to the research, background of the research problem followed by the research questions, objectives, in addition to the proposed conceptual model, the research dependent and independent variables.

1.1 Background of the Problem

How can transformational leadership style stimulate innovation? According to Oke et al. (2009) charismatic/transformational style of leadership was of a high interest to several scholars over the last 10 years. The most suitable leadership styles are those enhancing and producing the inspiration of the organization, including charismatic-oriented or transformational styles. It is believed that transformational style considerably influencing subordinates to enhance performance and better motivation. This style is also characterized by supporting the social relationship between leaders and subordinates of the same organization. According to different theories of charismatic leadership, a transformational leader is distinguished by his or

her selfless attitude that encourages the innovation of his or her subordinates through fostered self-leadership and enhanced self-independence.

Furthermore, transformational leader is also self-confident, charismatic and caring about the needs and well-being of his or her subordinates. This leader uses hands off concept when sharing his or her vision which results in intellectual encouragement of the subordinates. To add, he is skilled in dealing with the exact needs of others also skilled in responding quickly. Leadership is essential because it decides the degree of enhancing projects' quality accepting any change and improving performance levels. Leadership styles are applied according to various innovative responses of the subordinates and how much these subordinates are self-directed (Oke et al., 2009).

1.2 Statement of the Research Problem

This research was conducted in three public hospitals in Egypt to study the following factors that help encouraging innovation in the public sector healthcare in Egypt to understand the role of transformational leadership on employees' innovation. It is a fact that in Egypt and elsewhere in developing countries public healthcare sector is mainly for those who are unable to bear the expenses of private hospitals. The image of public sector hospitals needs a major overhaul, among other things, in terms of technological development, change of employees' attitude and make them innovation oriented. In doing so, public sector needs to improve team work and to develop the process of offering customer care, to gain customer trust, to be able to face the continuous challenges with private hospitals.

1.3 Research Question

To understand the relationship between transformational leadership style and innovation, this study intends to answer the following question: "To what extent does transformational leadership style influence promoting employees' innovation of the public sector in Egypt?"

This study aims to answer the following sub-questions:

1. To what extent the levels of empowerment are associated with employee's innovation?
2. To what extent the levels of motivation are associated with employee's innovation.
3. Does "being valued" increase "being innovative?"

1.4 Hypotheses of the Study and the Conceptual Model

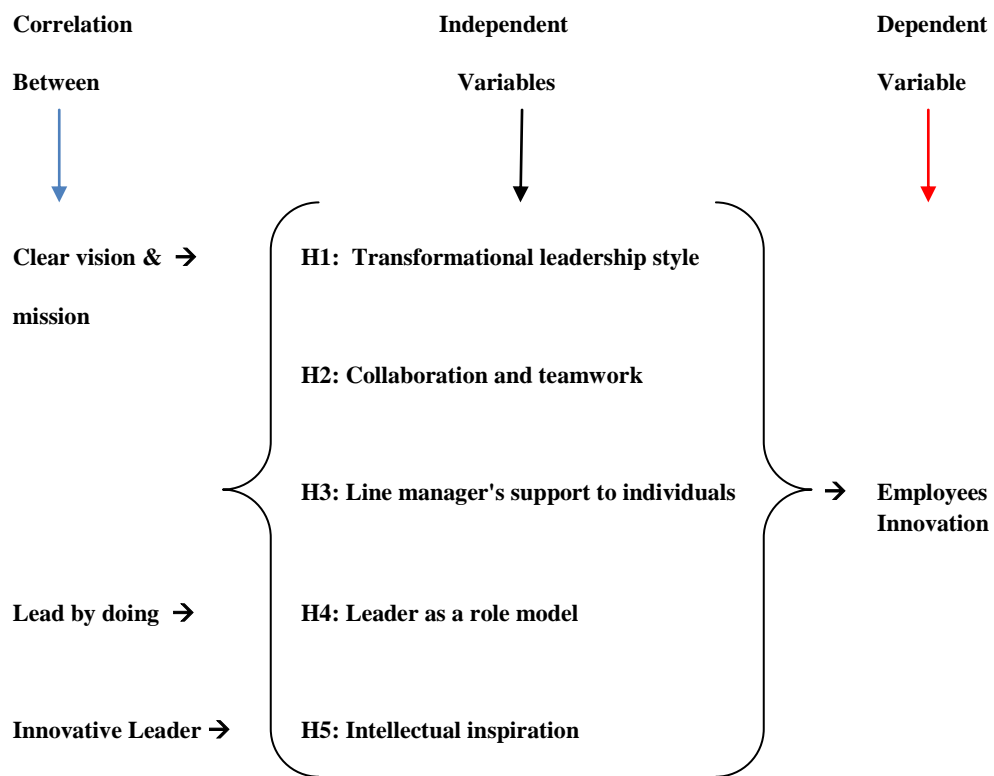
The specific objective of this study is to investigate five proposed hypotheses (Chapter three) as independent variables, outcomes are operationalized with innovation of the employees as dependent variable. The five hypotheses are:

- 1 **Hypothesis 1:** Transformational leadership style has a relationship with employees' innovation.
- 2 **Hypothesis 2:** Increasing collaboration and teamwork between employees leads to a better level of innovation.
- 3 **Hypothesis 3:** The more support given by the line manager to individuals, the higher the innovation measured.

- 4 **Hypothesis 4:** There is an important relationship between the leader as a role model and employees' innovation.
- 5 **Hypothesis 5:** Employees innovation is a direct response to the intellectual inspiration they find at work.

Figure 1 presented the conceptual framework which planned to link the empirical findings with the theoretical anticipation of the five suggested hypotheses.

Figure 1: The Proposed Conceptual Model



The above adopted conceptual model shows the relationship between the five hypotheses and their influence on employees' innovation. It also shows the correlations between three factors and three of the hypotheses. Based on the survey and interviews, these factors including; leader should have a clear vision and mission; leader should lead by doing not by saying and; leader should be innovative.

1.5 Conceptual Model Components

1.5.1 Independent Variables

This study aims to investigate the transformational leadership style and its role in promoting innovation of the public sector employees in Egypt. Independent variables were suggested through five hypotheses as such: transformational leadership style, collaboration and teamwork, line manager support, leader as a role model, and intellectual inspiration.

1.5.2 Dependent Variables

The dependent variable used in this paper was employees' innovation of the public hospitals and depends on the above mentioned five hypotheses.

1.5.3 Correlations

Correlations between "Clear vision and mission" and Hypothesis one, "Leading by doing rather than by telling" and Hypothesis four, and "Being innovative leader" and Hypothesis five are mentioned in details in Chapter four.

CHAPTER TWO

Literature Review

Researchers widely discussed leadership and its different styles (e.g. Burns, 1978; Bass and Avolio, 1989; Goleman, 2000; Beck and Yeager, 2001) recognizing that the most dominant style is transformational leadership style. While Avolio (1987), Manz and Sims (1991), Hartog and Van Muujen (1997), and Arnold et al. (2001) discussed the transactional leadership style and its basic elements and the responsibilities of the successful transactional leaders.

Herbert (1981) talked about the correlations between performance of the team and leadership style. Other studies by Nurmi (1996), Ali et al. (1997), Conti and Kleiner (1997), Larson and Frank and LaFasto (1998) addressed the synergy, teamwork and leadership styles in the Middle East.

In addition, Bass (1985), Rouse et al. (1992), Klein and Pierce (2001), and Zhang et al. (2005) stressed the role of the leader that affects the performance of the team. Bass et al. (1987), Bass (2004), and Avery (2004) conducted research concentrating on transformational visionary leadership. Also, Pittaway et al. (2004), Larson & LaFasto (1998), and Avery (2004) talked about innovation. Tien (2007), Pittaway et al. (2004), Florida et al. (2002a), Barczak and Wilemon (2003), West (1996), and Martinez (2004) highlighted the enablers of innovation.

Although literature review provides an essential theoretical outline to transformational leadership and innovation, it revealed that both are separated entities and no sufficient effort was devoted to link or find the relationship between them. Hence, this study intends to relate transformational leadership to the innovation of the healthcare public sector employees because as O'Donnell (2006)

mentioned “Innovation is important as it enables public sector organizations to be more efficient, effective in terms of resource usage and quality oriented in terms of service delivery” (p. 93).

This chapter provides detailed description about the empirical and theoretical literature of the transformational leadership style, transformational leader characteristics, and factors behind choosing a certain leadership style. It also shed light on the innovation, where to find it, the relationship between innovation and leadership, innovation's main dimensions and its enablers.

2.1 Transformational Leadership Style

James Burns first introduced transformational leadership concept in his book *Leadership* (1978). He defined it as an ongoing process in which "leaders and followers raise one another to higher levels of morality and motivation" (Burns, 1978, p. 20).

According to Gumusluoğlu and Ilsev (2009), transformational style was understood as additional progress of the charismatic style, even some research refers to both styles interchangeably. Transformational style adds to employee's empowerment, promotes fundamental motivation and develops self-efficacy. Transformational leaders develop innovative actions and assure the success of their marketing because they are suitable for encouraging innovation.

Gumusluoğlu and Ilsev (2009) also asserted that transformational leadership style was described as the ability to influence subordinates by increasing their self-confidence to perform and innovate more than the expectations and by inspiring and widening subordinates' objectives. While Høytrup et al. (2012) explained

transformational style as the style that regulates interactions of concerned groups meaning; it motivates, develops and transforms the ethical goals of the subordinates. Geib and Swenson (2013) defined transformational leadership as the style which needs affirmative transformation from the subordinates and it is the style that realizes the anticipated change via organization's structure and strategy.

One of the most distinguished theories of leadership over the last three decades is transformational style as transformational leaders inspire subordinates and direct them to be aware of the significance of organizational outcomes and values (Bradley et al., 2012). To do so, transformational leaders stimulate the needs of the subordinates and encourage them to make the organization's interest and clients in higher-order priority than employees' own self-interest; that's what makes specifically transformational style useful for the non-profit and public organizations because these organizations have community oriented missions.

Bradley et al. (2012) further argued that not only transformational leadership stressing motivating expected organization's mission, but also emphasizing on subordinates' motivation, meaning; the more employees engaged and find mission worthy and attractive, the more they support it and the more they are motivated to best performance. Research widely discussed leadership and its different styles and recognized that the most leading styles are the transactional and transformational styles.

Transformational leaders encourage their subordinates to achieve the organization targets and the subordinates are motivated enough to make their best for the benefit of their organization. The basic dimension of the transformational

leadership style consists of: idealized behavior, charismatic leadership, intellectual stimulation, inspirational motivation, idealized attributes (Bradley et al., 2012).

2.2 Transformational Leader Characteristics

According to Hogg (2015), leadership has well known characteristics in various contexts, yet there are some special ones that transformational leaders should attempt to have to impact the effective growth of the organization. Hogg (2015) talked about 10 characteristics transformational leaders should enjoy:

First, self-management and internal motivation in which the leaders successfully manage to direct the organization as they are self-motivated because they love their work and their morals are associated with their organization.

Second, be able to make difficult decisions such as transformational leaders should not put off difficult decisions because part of being a leader is making decisions. This mission will be easy when leaders' decisions are aligned with the organization's objectives, goals, values and vision.

Third, control their ego: transformational leaders should do this for the benefit of the organization. Controlling their ego, assures that leaders considering organization's benefits over their personal ones and at the end, the success of any organization is an indication of a successful leader.

Fourth, be eager to take the risk: transformational leaders should be eager to take the considerable risk for the positive outcomes; they should trust their instinct as well as their teams and be brave enough to evaluate the taken risk and to inform the subordinates with their decision. When leaders fail to take difficult decisions or a proper risk, this will hinder the ability to change and growth.

Fifth, organizational awareness: organizational collective decisions should be shared by the transformational leaders. To create growth and for the benefit of the organization, transformational leaders should take the appropriate actions and proper decisions which helps in evoking change.

Sixth, adaptation: transformational leaders should possess the eagerness to adaptation and consistently respond to changing environment in open minded ways in order to pass their competitors.

Seventh, good listeners and show interest in new ideas: transformational leaders should be good listeners to new ideas from their teams and any subordinate and integrate their insight with the organization's vision. Leaders understand well that success comes from collective effort and empires cannot be built individually.

Eighth, ability to inspire subordinates: transformational leaders should inspire their subordinates not only through recognition or a motivational speech, but also by giving enough time to recognize what really inspires and motivates their subordinates.

Ninth, being proactive decision makers: transformational leaders should be proactive to make decisions supported by research, use innovative methods, try new ideas and be eager to take the risk for the sake of organizational growth.

Tenth, have clear visions: Transformational leaders should be visionary to set realistic vision, achievable mission and values that align with the organization's culture. Also, they should communicate their visions effectively with the subordinates and direct subordinates to the mission and vision of the company (Hogg, 2015).

Paarlberg (2010) defined transformational leaders as leaders who are able to make their subordinates transform their commitment to their organization and align their goals with organization's mission. In doing so, leaders inspire subordinates, motivate them through attractive vision and mission and giving enough support to accomplish the mission. Paarlberg (2010) addressed a similar feature of the transformational leaders is having the ability to form employees pride and being good role models with idealized influence. According to the study, more features of transformational leaders are being capable of changing subordinates' understanding of clarity and goal's importance, helping employees fulfill the organization's mission through stimulating them intellectually which needs effectiveness in order to drive employees to the mission through attractive and clear vision.

According to Hall (2007), transformational leadership behavior consists of: intellectual stimulation, idealized influence (known as charisma), inspirational motivation, and individualized attention or consideration.

1. Intellectual stimulation, in which the leader takes the risk, challenges expectations, enhances the innovation of the subordinates and encourages new ideas. This type leads subordinates with a vision as a framework to connect subordinates with leader and with the organization's goals. With these guides, subordinates can conquer hurdles that hinder achieving the mission.
2. Idealized influence, known as charisma, in which the leader is a role-model and behaves in an admirable way to his/her subordinates and has a clear vision, moral and values are clearly shown in his/her actions. As a result, a mutual trust will be rooted between subordinates and their leader.

3. Inspirational motivation is when the leader uses a clear vision to inspire subordinates and challenges them with high expectations of future goals. It is also when the leader uses communication symbols and images to help him/her increasing the beliefs and expectations of the subordinates to meet the vision and mission of the organization.

4. Individualized attention or consideration where the leader deals with individuals' needs, listens to the subordinates, coaches them, provides a practical learning individually and it happens when he/she delegates a mission. With this approach, leader fulfills individual's needs and self-actualization.

2.3 Factors behind Choosing Transformational Style

Referring to Burns (1978), Høystrup et al. (2012) noted that transformational leadership is about an organized relationship around a collective goal in a way that enhance, motivate and transform the actions of subordinates.

Wang and Howell (2010) asserted that transformational style focuses on both, individuals and groups, and the target is to enhance individual's skills and abilities, to develop the employees' full potential, and to raise the self-esteem and efficacy of the subordinates.

Wang and Howell (2010) noted that in transformational style, leaders attempt to recognize individuals' needs, skills, and abilities to give them training and coach them to beat their points of weaknesses. In order to unite group goals with organization goals, transformational leaders inspire and develop the group beliefs and values with the organization goal. Hence, organization's members are treated

equally. To put it simply, transformational leaders have the capability to show organization's main goals stressing the process from a social concept. Then, the organization's vision clearly highlights the impact of each individual action on the organization and the stakeholders at the same time.

Wang and Howell (2010) asserted that transformational leaders are acquired to assure the unity of the group to work towards the same goal or they can foster group's collaboration via teams' goals, recognition for group achievement and enabling socializing among group members. In transformational leadership, leaders clearly articulate vision that assures that group members' values are compatible with the collective goals. This way, subordinates consider the goals of the organization their own goals and exert utmost effort to accomplish them.

Geib and Swenson (2013) asserted that leaders of transformation style encourage subordinates to accept the process of transformation as their own process, this way permits the accomplishment of the desired transformation. Which means; we can define the transformational leaders' success by being able to lead follower to do something beyond their self-interest through clear mission and vision. Transformational leaders show a careful manner toward subordinates if interpersonal conflicts arise and also leaders seek to enhance team cooperation which increase subordinates' satisfaction of their jobs.

2.4 Innovation

Morris (2013) defined innovation as making today's product and service much better. This type is known as incremental innovation or continuous innovation.

Innovative actions in most organizations are categorized as incremental innovation. This type allows you keep your position, to compete equally with your competitors, to match their progress and to expand your shares. Some examples of incremental innovation are: (1) reducing time taken to make important task, (2) slightly decreasing cost of your products, and/or (3) creating new easier way to fill customer application or order in some minutes faster.

Klimentova (2014) argued that innovation is generating and applying new ideas or translating ideas into tangible outcomes. It is not limited to new process, product or service, but it can be creating new way of handling encountered problems. Innovation is about coming up with new ideas, applying them, integrating them to the system and observing the results. Hence, innovation is an idea and its outcome and it is a collective work involving people, systems and resources.

Bland et al. (2010) stated that public sector innovation results in two vital outcomes which are advancing public goods and creating public value. While Zhang et al. (2005) mentioned that innovation is a process of several stages including: generating, developing and implementing a new behavior or useful idea. It is necessary that each stage needs different individuals, teams and behaviors. Innovation can be a new idea or procedure, new production, new structure, new service or product, new plan, new administrative system, or new organizational structure.

Innovation is everywhere, and everyone is claiming it ... "Innovation" becomes a panacea for any problem because, in essence, it expresses that whatever the challenge is; it is being dealt with successfully. But like a wet bar of soap,

“innovation” somehow eludes a firm grip. Paradoxically, we want it, but cannot really express it. (Christian Bason, Director, Denmark’s MindLab, July 12, 2010)

2.5 Where to Find Innovation

According to Morris (2013), the right place to find innovation is the place most people do not look for it. You can find the two above mentioned types of innovation in one place; this place is "your customers," as they know what they need from your products or service and they know how to be offered in a better way. Listening to your customers is the main key of your innovation, this will happen through (1) talking to them in your organization, (2) face to face conversation, and (3) surveys to know their needs. In return, they will let you know new things that will help to innovate. So, to be effectively innovative is about listening to people, creating new different thoughts and ideas and gathering new information (Morris, 2013).

2.6 The Relationship between Innovation and Leadership

According to Ali et al. (2014), leadership of the organization is the main reason of creating the proper environment for innovation because strong influence leaders have important leadership capabilities which are essential in the leadership function. Some of the leaders' capabilities are: strategic vision, championship, and entrepreneurship. Leaders are those able to drive innovation, follow a distinguished style of leadership. The process of innovation in any organization is an outcome of a collective work of organizational, team, individual effort together forming a new service, process or product that is attractive to the market.

Denti and Hemlin (2012) asserted leader can work as a facilitator when he/she supports individuals or teams to transform their inspired ideas into innovation. Leadership is a fundamental part of subordinates' innovative performance minimally for two reasons: (1) leaders create a climate that favors innovation and creativity (2) in a hierarchical process, leaders handle innovative activities and goals of the organization.

Ali et al. (2014) leaders set the main goals and activities via (1) managing money, facilities and time (2) handling knowledge resources (3) setting and handling individual and team missions (4) giving self-independence to both individuals and groups (5) managing recognition and rewards and (6) recognizing the expectations of innovative performance.

Jung, Wu, and Chow (2008) conducted a research for more understanding of the effect of transformational leaders by the Chief Executive Officers (CEOs) on the organizations' innovation. The study offered a model including the direct and the indirect effects headed by features of external environment, organizational structure and culture. The anticipated effects were tested with data collection on 50 Taiwanese participants and the result assured their anticipation of the existence of a positive relationship between transformational style and organization's innovation.

Salas, Bowers and Edens (2003) asserted that innovation and leadership should take advantage of the important preferences of the organization. It is known that management goes along with preserving the status and favoring the gradual innovation. Despite the fact that radical innovation is rational and logical, it is considered to be unclear and indefinite. Therefore, to support the policies and structure of the organization, management can contribute to gradual innovation.

Difficulty of ideas is a causal aspect of innovation which will not be achieved without processing of ideas in a passionate way when make decisions.

Salas, Bowers and Edens (2003) added that numbers are not references of favoring fundamental innovation over incremental one, unless businessmen are brought from out the organization to be on board. Finally, opportunities and challenges of innovation are achieved through the existence of open minded leaders taking the risk in a passionate way for the sake of the organization.

2.7 Innovation Main Dimensions

Tushman and Nadler (1986) referred to innovation as “innovation is the creation of any product, service or process that is new to the business unit” (p.77).

Innovation perception can be classified into two main dimensions.

The first innovation dimension is concerned with change and what is being done such as the category of innovation. In general, there are four specific categories of innovation: a) organization, b) process, c) market innovation, and d) product/service.

- 1 Organizational innovation refers to innovation happens on the organization's level not the technological change.
- 2 The second category is associated with change in how the product/service is formed and offered, meaning the processes of innovation.
- 3 Market innovation is considered very strategic in a grown industry and it is the change that connected with market segments.

- 4 The major recognized category of innovation is associated with changes that happen to the organization's product/service contributions.

The second innovation dimension is the degree of novelty involved or the limits of noticed change. The extent of change could be gradual at one hand and radical at the other hand. When we define a minor change of a service, product or process, we use gradual change. So, innovation is a result of a gradual change which happens to a developed process, service or product and gradual change is the main reason for upgrading standards of the industry or firm (Garcia and Calantone, 2002).

2.8 Enablers of Innovation

According to Munshi et al. (2005), innovation providers known as innovation enablers affect the innovation process and influence the relationship between leadership and organizational innovation. Some of the key elements of innovation are: (1) networks and (2) systems, processes and structures of leadership.

2.8.1 Networks

Networking between organizations should be built on trust. Increasingly, continuous innovation needs to have access to ideas and visions of other organizations. Within the early process of innovation, if various competitors share together their capabilities, ideas and technology, then benefits, risk and cost of offering insights to the market area will be shared too. To achieve this, exchanging of important information should be facilitated between organizations without telling the main motive. To add, intermediaries of innovation visualize new prospects from different technologies and ideas given by many organizations.

According to Munshi et al. (2005), due to shortage of talent or time, some organizations are less effective than others when searching for new market concepts. Hence, these organizations should reconsider outsourcing and hiring experts. Despite outsourcing is considered very useful for some alliances, innovations and joint ventures, at the same time it might not be suitable and strategically risky. The main idea is not being collaborative or not, but it is the necessity to match the pursued innovation with the organizational approach. While Florida (2002a) added that connection between innovation and social capital has been studied and it was concluded that the worst environment for innovation operation was in the areas where there was a tight communal bonds, unlike other communities which encourage diversity, creativity, and tolerance.

2.8.2 Systems, Processes and Structures of Leadership

Martinez (2004) notes that among researchers who investigated the relationship between innovation and leadership process was Cooper (1994) and the latter suggested a model named "stage gate" model, which facilitates and helps any organization to control, manage and direct its innovation attempts. Several organizations have applied "stage gate" model to manage their innovation process. As the Product Development and Management Association (PDMA) 1997 survey showed that the 'stage gate' model is used in almost 60% of the surveyed organizations and the best of them are using certain process of development unlike other organizations.

According to Martinez (2004), satisfaction of innovation performance for organizations that did not use formal process in managing innovation was lesser than others who used formal process. The process of management approach is very important when organization producing new products. They claimed that when

developing a new product, there are lots of similar tasks and organizations have to standardize the process management which will make the best use of these similarities without affecting the innovation.

Oke and Goffin (2001) concluded that organizations with high innovative performance rate use a formal process to develop their products or services. Scholars debated that the main criticism of the 'stage-gate' model is using only a formal process does not guarantee that innovative performance of the organization subordinates will be automatically enhanced specially for organizations need a radical innovation. It is necessary to put into consideration the additional organizational aspects that affect the innovation performance. According to Oke and Goffin (2001), "Pentathlon' (Figure 2) is a framework model which introduces some processes and organizational subjects. The main idea of this model is that to be good only in one aspect is not enough; for example: to have a satisfactory performance in all areas of the organization is better than to have it excellent in only one area.

Figure 2: The 'Pentathlon' Model



(Oke and Goffin, 2001, p. 15)

Kuczmarski et al. (1994) addressed that top and bottom areas of the above model are affected with some organizational aspects which form a good environment for developing the innovation performance. Leadership is needed to form such a good environment that helps innovation to succeed. Scholars noticed the more the top management of any organization has visible and tangible innovation commitment, the more successful the organization, particularly when supplying enough resources and proper funding than other organizations with less success.

To create an innovative organization; leaders should work as designers and architects. Though it is not adequate because according to Judge (2008), Chartered Management Institute (CMI) survey (2001) revealed that 55% of the surveyed subordinates needed inspiring leader who is characterized by a strategic way of thinking, knowledge and who has the leader's capabilities to motivate and influence his subordinates.

CHAPTER THREE

Methodology

3.1 Introduction

This chapter provides details about research methods used and it describes the data collected to examine the relationship between the five proposed hypotheses and employees' innovation by selecting three public hospitals in Egypt.

The following sections presenting details of the used methodology; such as research hypotheses, research strategy, research design, questionnaire and interview design, questionnaire respondents, questionnaire and data collection.

3.2 Research Strategy

To investigate the transformational leadership style and its impact on promoting innovation of the public sector employees, this study uses a mixed method approach; quantitative and qualitative analysis.

To validate the outcomes of the collected and analyzed data, a qualitative research was conducted via in-depth analysis of the proposed correlation. Both survey and interview were conducted in three public hospitals located in Cairo, Mansoura and Damietta, Egypt. Hospitals are funded by the Egyptian government to provide medical services to the public. Secondary data were collected from relevant journals articles, books, book chapters and official web sites of organizations/agencies.

3.3 Research Design

This research used a mixed (or balanced) approach which is used to measure both quantitative and qualitative data because as Amaratunga et al. (2002) mentioned that the mixed approach is thought of as the best complementary research. This research followed a theory-driven design to investigate the conceptual model and to link between the five suggested hypotheses (transformational leadership style, collaboration and teamwork, line manager support, role model and intellectual inspiration) as independent variables and employees' innovation as a dependent variable. This research also discussed the correlation between some factors and some of the hypotheses (according to the collected data).

3.3.1 Questionnaire Design

The tool used for collecting data was a survey questionnaire similar to a previously designed work of Arnold (2001) who carried out similar research with different context. A survey was conducted in three public hospitals and they were chosen because they are old and large and from different governorates in Egypt, and I chose public hospitals for the reasons mentioned elsewhere.

A total number of 100 copies of survey questionnaires were given to the top managers who distributed them into their subordinates of different job levels as they were strategic in achieving innovation through the department managers who were responsible for generating environment of exchanging ideas.

This survey was of high confidentiality and totally voluntary and the 100 participants were asked to answer the questions privately and then the questionnaires were gathered and put in closed envelopes. Data of the survey were analyzed

independently and variables were measured using a scale allowing various score comparison that relates to the suggested hypotheses.

3.3.2 Interview Design

After collecting and analyzing data quantitatively, the data collected from the respondents helped to design in-depth interviews with managers in three public hospitals using open ended questions. All questionnaires are included in Appendix C.

3.4 Population and Composition of Sample

The selected population sample was a purposive one. According to William (2006) he described purposive sample as "In purposive sampling, we sample with a purpose in mind. We usually would have one or more specific predefined groups we are seeking" (p. 1). Dolores and Tongco (2007: 147) noted that selecting a purposive sample could be vital for the quality of the gathered data because purposive sample enables researcher to draw the best sample that fits the research objectives.

A number of 70 employees were included as they satisfy the definition of core employees. Core employees are defined by Boxall (1998: 266) as the critical employees capable of creating value to their organization and maintaining a competitive benefit for their organization.

A number of 30 invalid copies were excluded from the sample because 10 were incomplete and 20 were of contingent employees. Contingent employees are defined as "temporary, part-time, or fixed-term employees" (Jun et al., 2015). Therefore, this study accounted for a total number of 70 employees including top managers, middle

managers, supervisors, consultants, physicians, and different job levels. The collected questionnaires were suitable for making data analyses and the response rate was 70%.

After the quantitative data were collected and analyzed, and before start writing the conclusion and recommendation sections, a total of six respondents were interviewed from three public hospitals for the qualitative research purposes and to validate the quantitative results. Interviewees were chosen of a managerial and supervisory level because research is about leadership and because they are old, experts in healthcare and administrative field which is necessary for providing experienced opinions.

3.5 Instrumentation/Variables and Measurements

The study objective is to investigate the relationship between transformational leadership style and its role in promoting innovation of the healthcare employees. In doing so, two sets of variables were used as follow:

3.5.1 Quantitative Research Components

Independent Variables (Hypotheses)

This thesis emerged several hypotheses from existed literature review about the transformational leadership style and its role in promoting innovation of the public sector employees in Egypt. In view of this, the coming part represents the selected hypotheses in details.

Hypothesis 1: Leadership style as an influential source and a significant factor affects employees' innovation which is fundamental survival factor among competitors. Leadership is the influential social process where one person is capable of recruiting others' support to accomplish a common goal. The influence of

leadership is about encouraging a specific reaction in the employees, i.e. target accomplishment, commitment, enthusiasm and even understanding unspoken sentences (Nusair, 2012).

Transformational leadership is not imposing decisions on employees but exercising a contributory process to motivate them improving their performance on the assigned tasks and achieving their self-efficiency as well (Abdurrahman, 2010).

Hypothesis 2: The main aim of team participatory in decision making and problem solving of the organization is considering that when team members are empowered, they will generate best ideas for the benefit of the organization and members as well (Klein et al., 2001).

Hypothesis 3: Innovation is accomplished when the new thoughts of the stakeholders of any organization are applied in an environment where managerial attitudes are positive and leaders value the individual contribution. Innovation process is guided by the transformational leaders when the support given to individuals is aligned with the culture of the organization, and innovation is achieved when effective implementation of ideas takes place (Klein et al., 2001).

When the transformational line manager creates innovative environment, innovative thinking, ideas and thoughts are raised because of the proportionate relationship between the support given to the individuals and their innovation (Abdurrahman, 2010).

Hypothesis 4: Role modeling includes substituting valuable experiences and thoughts among team members aiming at creating proper ways of thinking. Hence,

leaders are anticipated to support their individuals for the purpose of generating creativity as well as lead their subordinates by suggesting solutions to solve the problems (Rouse et al. 1992).

Hypothesis 5: Opportunistic thinking considers that empowerment of employees, intellectual inspiration and transformational leadership style are some the reasons behind developing innovation in any organization (Abdurrahman, 2010).

Dependent Variable

In this study, only a dependent variable was used to test the model: innovation of the healthcare employees of the public sector hospital in Egypt which depends on the above mentioned five hypotheses. This model was tested quantitatively on employees and managers, and qualitatively on only managers. This research is different from most of similar research as it tries to discover the relationship between transformational leadership style and the innovation of the employees in a developing country since innovation theories (Shalley, Zhou, and Oldham, 2004: 948) have always been tested most of the times in Western countries. A balanced approach of quantitative and qualitative analysis was used. Data were via descriptive statistics.

3.5.2 Qualitative Research Components

Creswell (2003) mentioned that to allow in-depth understanding of certain phenomenon, some chronological procedures permit the researcher to expand his/her findings of one used method followed by another. After the quantitative data were analyzed, and before start writing the conclusion and recommendation sections, six managers were interviewed to validate the quantitative results and because it was

important to hear from the managers in order to come up with realistic opinions that enrich the outcome.

Interviewees were asked demographic questions and open ended questions. Questions were based on considering the previous situations control promoting innovation in different ways such as: Leadership style, teamwork collaboration, line manager support, leader as a role model, intellectual inspiration, levels of empowerment, motivation and "being valued". More detailed interview questions are in Appendix C.

Prior to starting every interview, the researcher presented herself and briefly explained: the reason of the interview, the duration of the interview and the objective of her study with a written assurance that results of the interview will be strictly confidential and the completed data constitute interviewees' agreement to participate with this study. Researcher also assured that as a part of the research, summary and only general results of the research will be provided and no individual or organization will be published.

Researcher also explained some definitions to the interviewees, i.e. "transformational leadership style", "innovation", and "intellectual inspiration". To overcome the linguistic and cultural differences, for the research purposes, and because all interviewees were Arabic speakers, the researcher used a simultaneous translation. To overcome problems might affect the reliability of the measurement (Rode 2005); translation back-translation method was used to keep the original meaning of the question.

3.6 Data Collection

Data of this research were collected from two sources, surveys with core employees from different job titles, as for the interviewees were only managers. The exact sample number for survey was equal to 70 managers and employees who are considered in a critical position for creating values for their hospital, while interviewees' number was 6 managers from 3 hospitals.

After obtaining the Institutional Review Board (IRB) approval, the researcher started contacting managers of different hospitals through phone calls. During the assigned appointment, an introductory letter accompanied with the IRB approval and Arabic surveys were printed and handed to the different department managers of three public hospitals located in Cairo, Mansoura and Damietta, Egypt and are funded by the Egyptian government to provide medical services to the public. (Introductory letters and IRB are in the Appendices)

In this appointment, researcher presented herself and explained the study's objectives, duration of the appointment and how the department manager will assist her in distributing, collecting and putting back the filled surveys in closed envelopes. She also clarified the importance of his participation and his employees' response will benefit her study and their organization as well.

Data collection process took place from March 19 to April 19, 2016 with a response rate of 70% of survey's. A total number of completed and valid surveys were 70 out of original 100 distributed. In-depth interviews with six managers were conducted to validate the quantitative results and to analyze the phenomenon under investigation. Interviews also, enriched the outcomes of the study, supported the answers of the research through personal stories and came up with new correlations through their experience (interviewees' opinions are explained in the analysis section).

CHAPTER FOUR

Research Findings and Data Analysis

4.1 Introduction

This chapter provides research findings and data analysis of the quantitative and qualitative research in addition to a comprehensive discussion on results extracted from survey and interview questionnaires. It provided an explanation and analysis of the data.

Quantitative data are presented in this chapter by histograms, tables, bar charts and descriptive statistics.

Surveys respondent results indicated a majority of strong agreement to the five hypotheses and the sub questions of the study (discussed in details in the next section) which means that the suggested relationship between transformational leadership style and employees' innovation was asserted. Similarly, interviewees reconfirmed this relationship. Accordingly, this research proves with a strong agreement that the five hypotheses enhancing the innovation of the employees which is (1) a direct answer to the main question of the research and (2) a support to the adopted framework.

Next section is about demographics of the core employees' survey questionnaire according to respondents' answers including gender, age, education, job level, job tenure and hospital tenure. A complete Core Employees survey questionnaire is in Appendix B.

4.2 Core Employee Survey Questionnaire

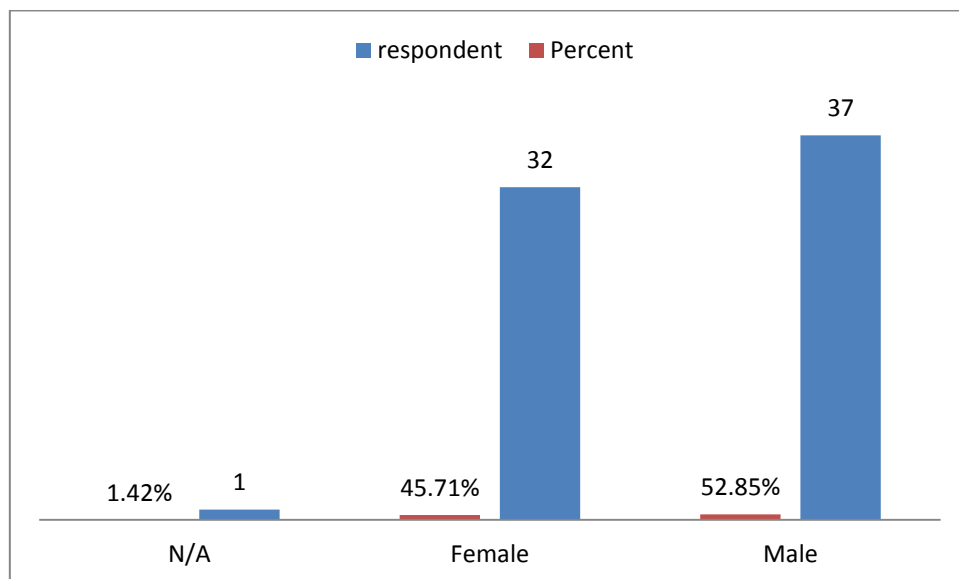
Table 1: Demographic Characteristics of Survey Respondents

	Gender	Age	Education	Job level	Job tenure	Hospital tenure	%	Total %
Male	37						52.85%	
Female	32						45.71%	
N/A	1						1.42%	100%
21-25		4					5.71%	
26-30		18					25.71%	
31-35		13					18.57%	
36-40		12					17.14%	
40+		19					27.14%	
N/A		4					5.71%	100%
Diploma			11				15.71%	
Univ. Degree			38				54.28%	
Masters			18				25.71%	
Ph.D.			3				4.28%	100%
Top Mgmt.				6			8.57%	
Mid Mgmt.								
Supervisory				11			15.71%	
Others				15			21.42%	
N/A				37			52.85%	
-4					16		22.85%	
5-10					24		34.28%	
11-15					9		12.85%	
16-20					13		18.57%	
20+					8		11.42%	100%
-4						22	31.42%	
5-10						30	42.85%	
11-15						11	15.71%	
16-20						6	8.57%	
20+						1	1.42%	100%
Total	70	70	70	70	70	70		

Gender

As presented in Table 1, the respondent demographic profile, collected data showed that male respondents outnumbered females. According to respondents' gender, Table 1 shows that 52.85% were males and 45.71% were females. It also shows an invalid percentage of 1.42% respondents did not mention their gender for unknown reason. Figure 3 shows sample distribution by gender.

Figure 3: Sample Distribution by Gender

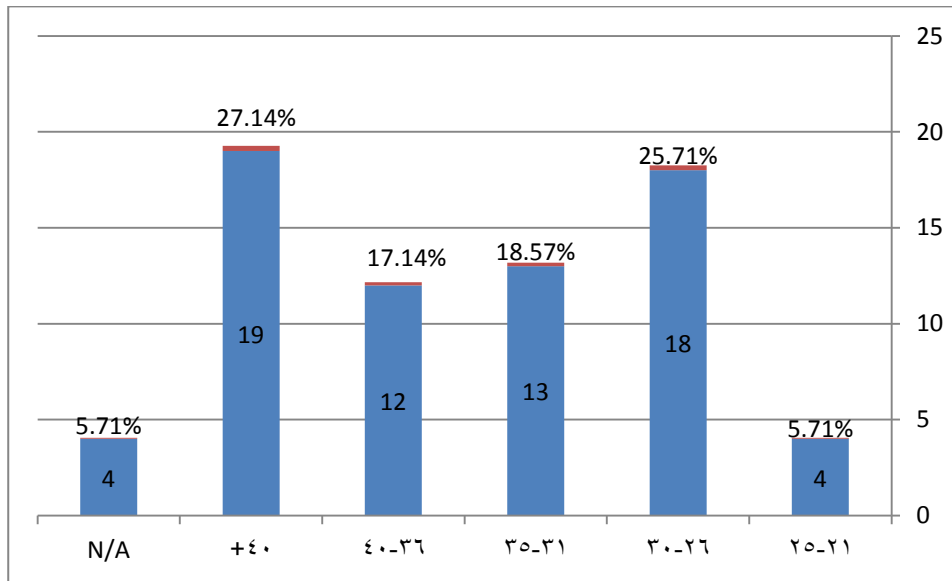


Age

Regarding age, Table 1 shows 4 respondents were between 21 to 25 years old 5.71%, 18 respondents were between 26 and 30 with a percentage of 25.71%, 13 respondents were between 31 and 35 with a percentage of 18.57%, 12 respondents were between 36 and 40 with a percentage of 17.14%, 19 respondents were over 40 with a percentage of 27.14% while 4 respondents' age was not available 17.14%.

Figure 4 shows Sample Distribution by age.

Figure 4: Sample Distribution by Age

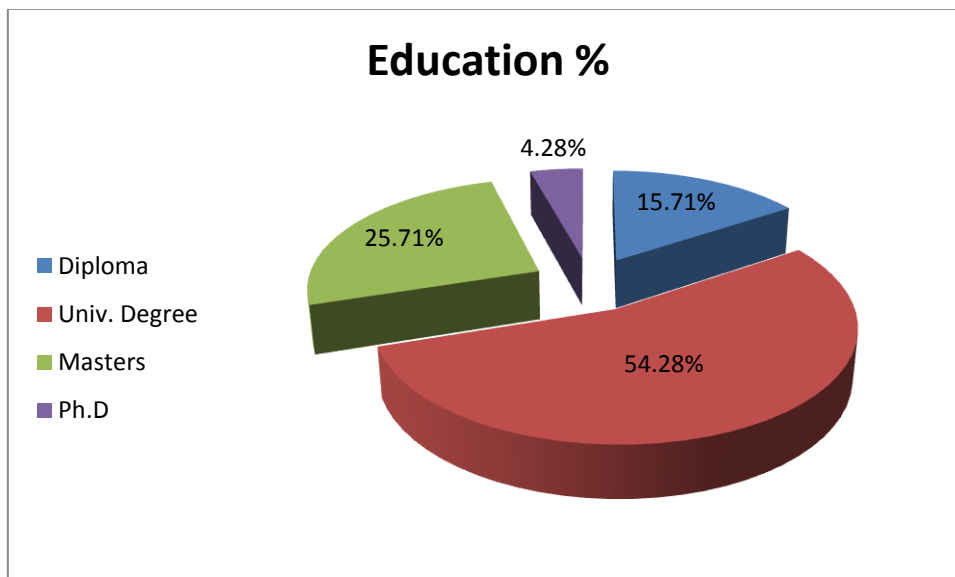


Education

Data in Table 1 show that respondents with university degree have the highest percentage 54.28%, and the lowest percentage was 4.28% for the Ph.D. holders, while master holders percentage was 25.71% and the Diploma percentage was 15.71%.

Figure 5 shows Sample Distribution by Education.

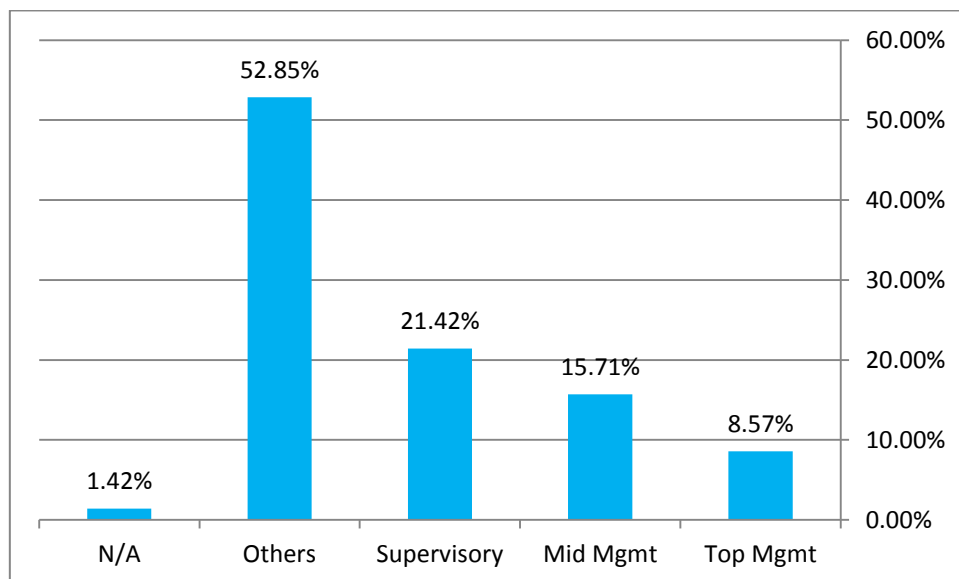
Figure 5: Sample Distribution by Education



Job Level

According to job level, Table 1 shows that 8.57% of the survey respondents were of top management, 15.71% were middle management, 21.42% were of supervisory level, while the highest percentage 52.85% were of other job titles, for example, physician, dentist, pharmacist, administrative, accountants, etc. and 1.42% no job title was written. Figure 6 shows sample distribution by job level.

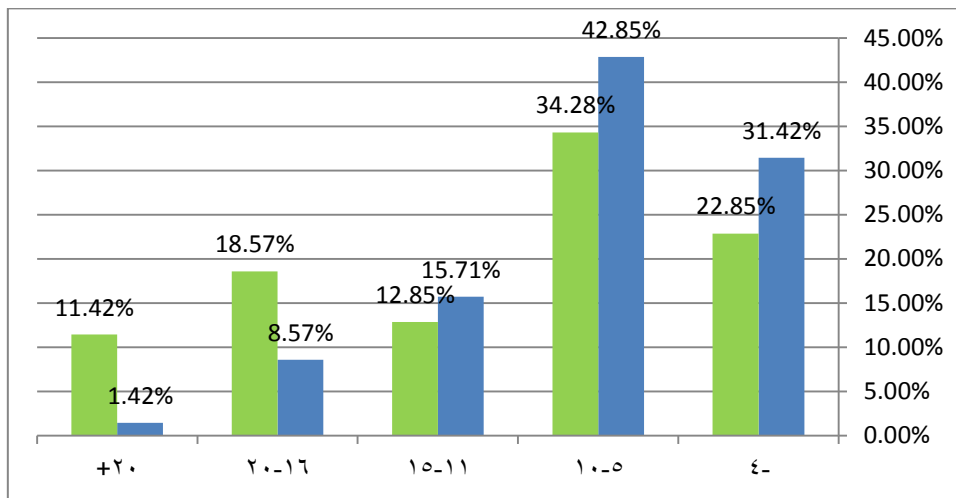
Figure 6: Sample Distribution by Job Level



Job tenure and Hospital tenure

Regarding job tenure, data in Table 1 show that the highest percentage of 34.28% was for respondents working from 5 to 10 years while other respondents were working in the same position for less than four years to more than 20 years. While the highest percentage of 42.85% was from respondents working in the same organization from 5 to 10 years and the other respondents were working less than four years to more than 20 years in the same organization. Figure 7 shows sample distribution by job tenure and work in the same organization.

Figure 7: Sample Distribution by Job Tenure and Hospital Tenure



The following section is analyzing the response of the employees on the survey questions. Survey consisted of six parts: part (1) is about demographic profile of respondents while from part (2) to (6) included questions about the five suggested hypotheses where participants had to answer 5-point Likert scale ranging from (1= strongly disagree) to (5= strongly agree) including (3= neutral midpoint). Each part contains questions related to each hypothesis separately to identify the effective percentage of the independent variables on the dependent variable which is innovation of the employees.

Analysis of respondents' demographic profile

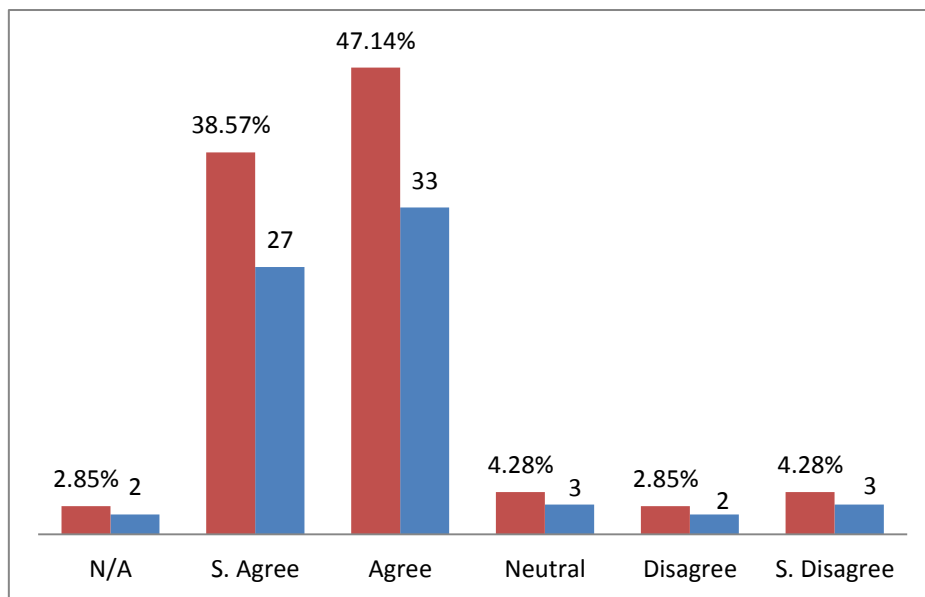
Demographic data of the respondents of survey questionnaire showed that gender, age, education, job level, job tenure, experience with same organization had no effective impact on the respondents' attitude concerning the transformational leadership style and their innovation rates.

The following section presents analysis, detailed graphics and tables for the answers of respondents concerning the survey questions of the five proposed hypotheses.

Hypothesis 1: Transformational leadership style has a relationship with employees' innovation

Respondents' answers showed that 38.57% strongly agreed to the above statement "in any organization, transformational leadership style affects employees' innovation" and less than half of the sample showed 47.14% agreement, while 4.28% were neutral, 2.85% disagreed and 4.28% strongly disagreed. Figure 8 presents a sample distribution by respondents' answers to Hypothesis 1.

Figure 8: Transformational Leadership Style Correlates with Employees' Innovation



Answers to the questions of first hypothesis also showed a correlation between a controlling factor "a leader with a clear vision and mission" and the first hypothesis. Data in Table 2 showed a higher percentage of agreement to this factor than the agreed percentage of the first hypothesis, as more than half 54.25% of the respondents

agreed to: "when the transformational leader has a clear vision and mission, this will increase employees' level of innovation". This means transformational leader is required to have a clear vision and mission to achieve best levels of innovation.

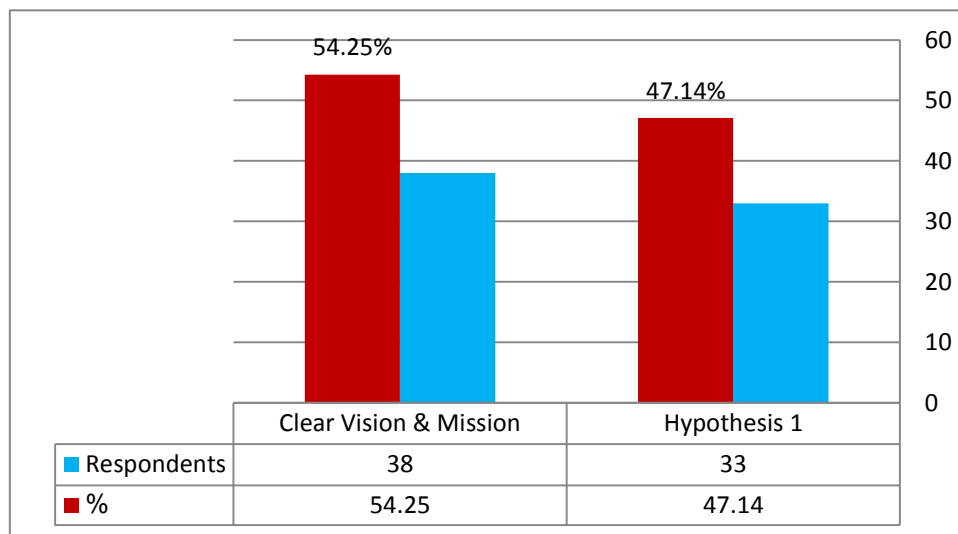
To conclude, though the relationship between hypothesis 1 and employees' innovation was proved with less than half of the sample, it was supported by a controlling factor. On the other side, based on the answers of the interviewees, 50% strongly agreed to hypothesis 1 and 100% strongly agreed if they had the chance to lead the hospitals with a transformational style in order to increase the innovation rate; they would use it to increase the level of employees' innovation. Due to the age and backgrounds of the managers in addition to their experience; managers are convinced that transformational style has a great impact on the innovation. Interviewees' responses will be explained later in this chapter. Figure 9 illustrates this correlation percentage.

Table 2: Correlation between a leader with a clear vision & mission and Hypothesis 1

	Hypothesis 1	Clear Vision & Mission
Agreed	33	38
Percentage	47.14 %	54.25%

Figure 9: Correlation between a Leader with a Clear Vision & Mission and

Hypothesis 1



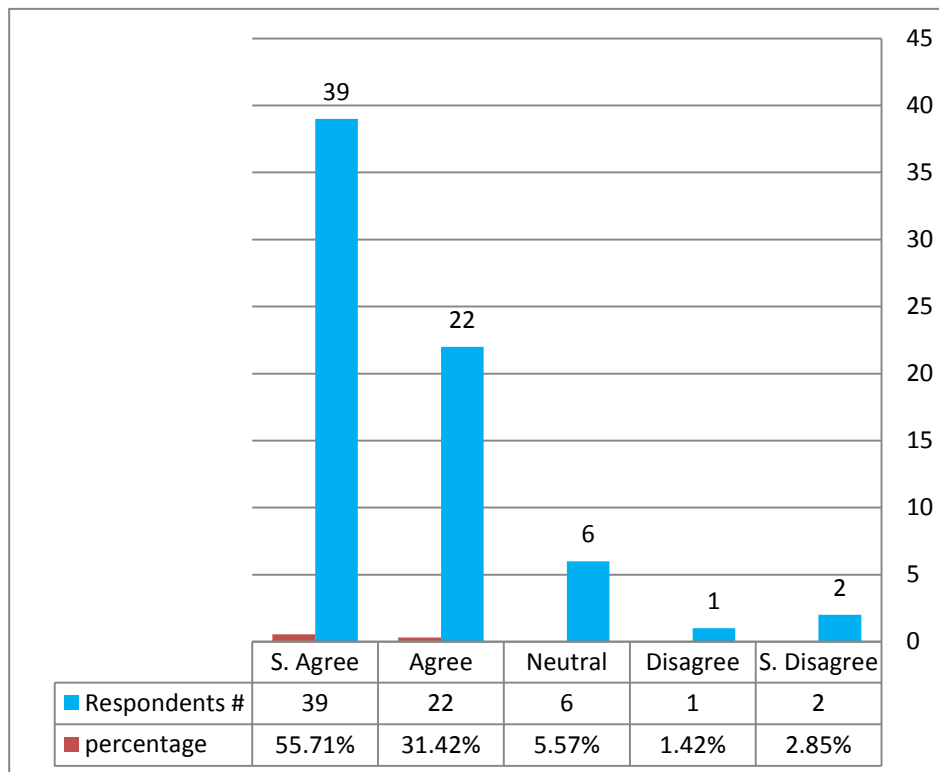
Hypothesis 2: Increasing collaboration and teamwork between employees leads to a better level of innovation.

Answers reported that the highest percentage of the respondents 55.71% strongly agreed to the statement "increasing collaboration and teamwork between employees leads to a better level of innovation" and less than half of the sample showed 31.42% agreement, while 5.57% were neutral, 1.42% disagreed and 2.85% strongly disagreed. Qualitative data also showed the highest response was for the second hypothesis with 66.60% strong agreement which ascertains the relationship between hypothesis 2 and employees' innovation.

A reasonable explanation is that innovation is a positive effect of a mixed process of: group composition, group processes, team work and group collaboration (Woodman, Sawyer & Griffin, 1993). Another possible explanation is that increasing collaboration and teamwork sustains and generates ideas which help organizations achieving their goals and missions. To add, very early, humans had to collaborate

together for protection because people realized that they would survive better when they align and collaborate (Claudia, 2006). Figure 10 shows a sample distribution by respondents' answers of Hypothesis 2.

Figure 10: Increasing Collaboration and Teamwork Leads to Innovation

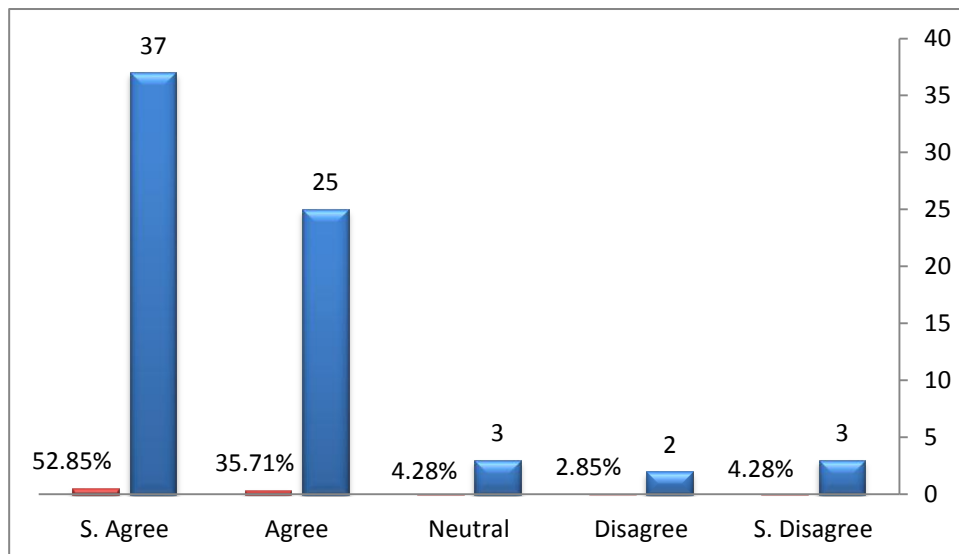


Hypothesis 3: The more support given by the line manager to individuals, the higher the innovation measured

Data showed more than half of the sample 52.85% strongly agreed to the above statement "the more support given by the line manager to individuals, the higher the innovation measured", 35.71% of the respondents agreed, while a percentage of 4.28% were neutral, 2.85% disagreed and 4.28% strongly disagreed to it. This reveals that there is a relationship between hypothesis 3 and employees' innovation.

A reasonable explanation is drawn from Millissa (2011). She referred to leader as the person in the organization who guarantees the suitability of resources, supports his/her subordinates in a way of motivational support, informational feedback, equipment and accessibility to valuable data. This kind of support enables subordinates to continue generating their new ideas and thoughts. Accordingly, this will raise their level of innovation. Figure 11 presents a sample distribution by respondents' answers to Hypothesis 3.

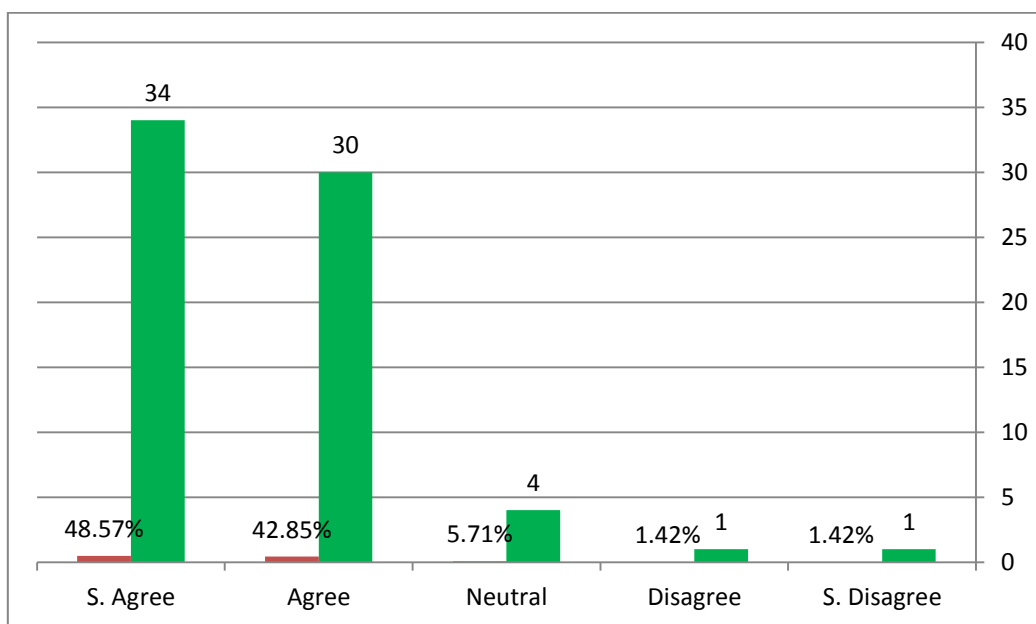
Figure 11: The More Support Given by the Line Manager to Individuals, the Higher innovation measured



Hypothesis 4: There is an important relationship between the leader as a role model and employees' innovation

Respondents' answers showed that almost half of them 48.57% strongly agreed to the above statement that there is an important relationship between the leader as a role model and employees' innovation and less than half of the sample showed 42.85% agreement, while 5.71% were neutral, 1.42% disagreed and 1.42% strongly disagreed to the statement. Figure 12 presents a sample distribution by respondents' answers to hypothesis 4.

Figure 12: There is an Important Relationship between the Leader as a role Model and Employees' Innovation

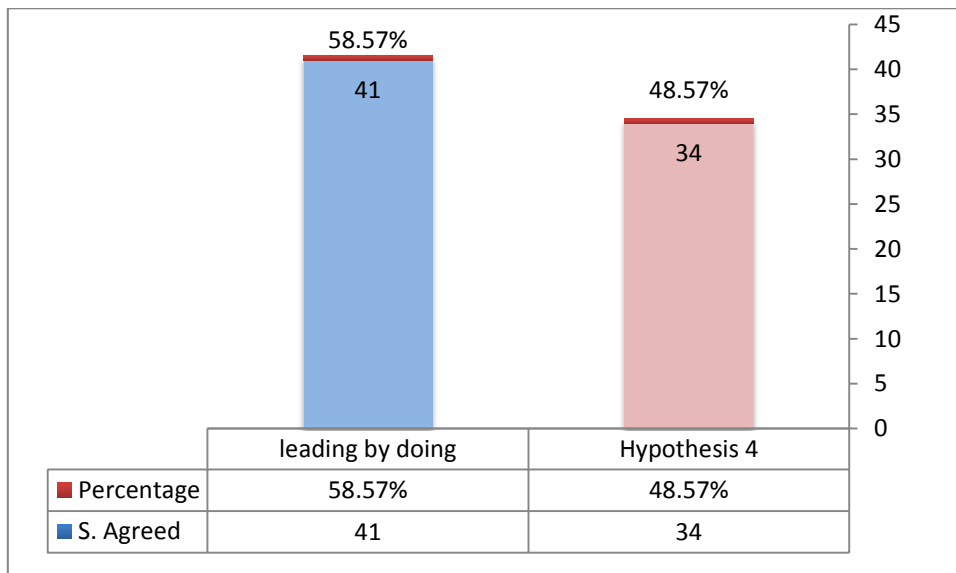


Collected data of the questions of the fourth hypothesis also showed that there is a correlation between a controlling factor "leading by doing rather than by telling" and the fourth hypothesis. Data in Figure 13 showed 58.57% which is a higher percentage of strong agreement to this factor compared to 48.57% strongly agreed to the fourth hypothesis. This means there is an important relationship between the leader as a role

model and employees' innovation only when leader leads by doing rather than by telling what to do; this relationship is supported by a controlling factor.

To explain this relationship, a role model leader is the one who guides subordinates by doing, by coaching, by showing the benefits of accomplishing the tasks correctly, and by doing-it-himself first. Accordingly, a role model leader is considered as an essential tool for employees' motivation and for creating positive environment in the organization which highly enhances the innovation of the employees (James, 2002). Figure 13 demonstrates this correlation percentage.

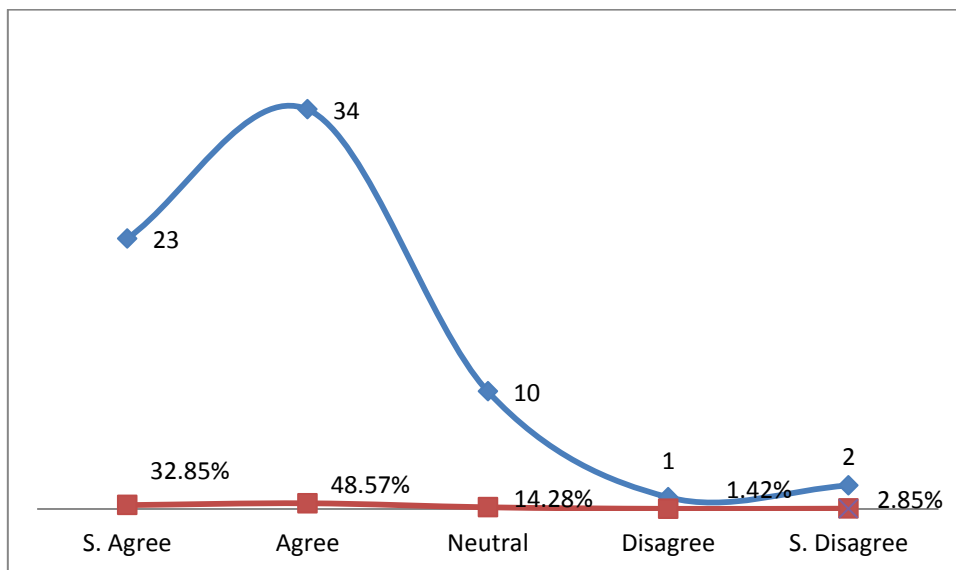
Figure 13: Correlation between the Factor "Leading by Doing Rather than by Telling" and Hypothesis 4



Hypothesis 5: Employees' innovation is a direct response to the intellectual inspiration they find at work

Reviewing the answers, it appears that almost half of them 32.85% strongly agreed to the above statement that employees' innovation is a direct response to the intellectual inspiration they find at work and less than half of the sample showed 48.57% agreement, while 14.28% were neutral, 1.42% disagreed and 2.85% strongly disagreed. Figure 14 presents a sample distribution by respondents' answers to Hypothesis 5.

Figure 14: Employees' Innovation is a Direct Response to the Intellectual Inspiration they Find at Work



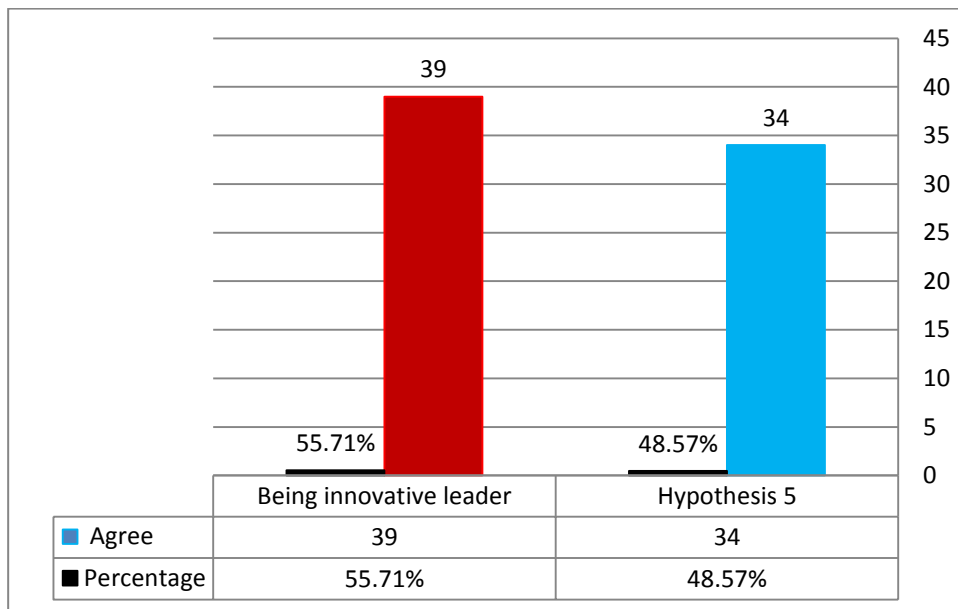
Collected data of the questions of the fifth hypothesis also showed that there is a correlation between the moderating factor "being innovative leader" and the fifth hypothesis. Data in Table 3 showed 55.71% which is a higher percentage of

agreement to this factor compared to 48.57% agreed to the fourth hypothesis. This means employees' innovation is a direct response to the intellectual inspiration they find at work when they have an innovative leader. Hypothesis 5 showed the lowest percentage of agreement yet it was supported by a dominating factor which is "being innovative leader". Figure 15 illustrates this correlation percentage.

Table 3: Correlation between the Dominating factor "Being Innovative Leader" and Hypothesis 5

	Hypothesis 5	Being innovative leader
Agreed	34	39
Percentage	48.57%	55.71%

Figure 15: Correlation between "Being innovative leader" and Hypothesis 5



All Hypotheses by percentage ranking:

Data in Table 4 indicated that the highest response of research participants 55.71% strongly agreed to Hypothesis 2 "increasing collaboration and teamwork between employees lead to a better level of innovation" which is an indication that the most effective variable on employees innovation is increasing collaboration and team work between employees.

The second highest percentage of strong agreement was 52.85% for hypothesis 3 is an indication of "the more support given by the line manager to individuals, the higher the innovation measured".

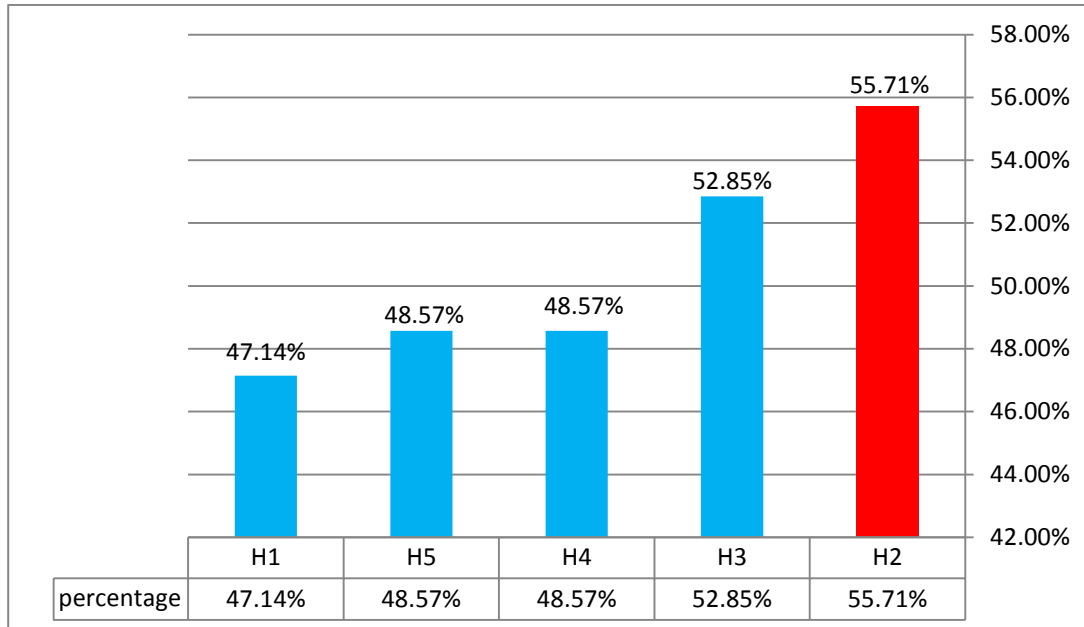
While hypotheses 4 and 5 had the same percentage of agreement as 48.57% strongly agreed to "there is an important relationship between the leader as a role model and employees' innovation". Similarly, same percentage agreed to the statement "employees' innovation is a direct response to the intellectual inspiration they find at work".

Whereas less than half of the sample or we can say the lowest percentage of agreement of the respondents was 47.14% to the first hypothesis "transformational leadership style affects employees' innovation". Figure 16 illustrates hypotheses by ranking.

**Table 4: Hypotheses by Percentage Ranking
from the Highest to the Lowest Percentage**

Ranking	Level of Agreement	Hypothesis	Percentage
1	Strongly Agreed	H2	55.71%
2	Strongly Agreed	H3	52.85%
3	Strongly Agreed	H4	48.57%
4	Agreed	H5	48.57%
5	Agreed	H1	47.14%

**Figure 16: Hypotheses by percentage ranking
from the highest to the lowest percentage**



Affecting factors by percentage ranking:

While the above mentioned data showed that hypothesis two had the highest percentage of strong agreement, there are some controlling factors appeared to have correlation that highly affect three of the hypotheses. Table 5 illustrates these factors as the respondents answers showed the most controlling factor was "Leading by doing rather than by telling" with the highest percentage 58.57% of strong agreement with hypothesis 4 which means there is an important relationship between leader as a role model and employees' innovation when the leader leads by doing not by telling what to do.

The second factor that was considered effective factor was "Being innovative leader" with a percentage of 55.71% agreement with hypothesis 5, which was an

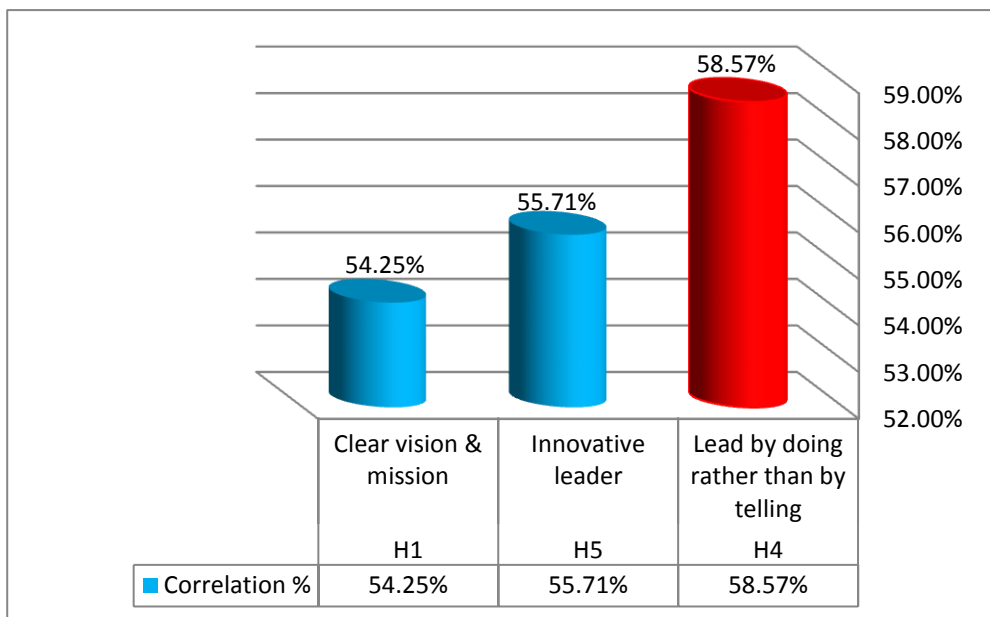
indicator that employees innovation was a direct response to the intellectual inspiration they find at work when they had an innovative leader.

The last moderating factor is "Clear vision and mission" with a percentage of 54.25% agreement with and Hypothesis 1, which means that transformational leadership style enhances employees' innovation only when the leader has a clear vision and mission. Figure 17 illustrates the affecting factors by ranking.

Table 5: Affecting factors by percentage ranking

Ranking	Level of Agreement	Hypothesis	Affecting factors	Correlation %
1	Strongly Agreed	H4	Lead by doing rather than by telling	58.57%
2	Agreed	H5	Being innovative leader	55.71%
3	Agreed	H1	Clear vision and mission	54.25%

Figure 17: Affecting Factors by Ranking



To conclude, the findings of survey data showed that there are correlations between three variables and three hypotheses affecting employees' innovation. Three correlations are:

1) "Clear vision & mission" and Hypothesis 1, which means that transformational leadership style influences employees' innovation when the leader has a clear vision & mission.

2) "Leading by doing rather than by telling" and Hypothesis 4, which means there is an important relationship between leader as a role model and employees' innovation when the leader leads by doing not by telling what to do.

3) "Being innovative leader" and Hypothesis 5, which means employees innovation is a direct response to the intellectual inspiration they find at work when they have an innovative leader.

These correlations are proved to positively influence the innovation of the employees which support the main question of the thesis and the conceptual framework. Next section is presenting and analyzing interviews' collected data.

4.3 Interview Questionnaire

The following section provides analysis of demographic characteristics of the interview respondents. After collecting and analyzing data quantitatively, interviews were conducted with six managers in three public hospitals using open ended questions. Responses of the interviewees were positive with extended dialogues that helped research by their in-depth replies and insights, interviewees were cooperative

in answering all questions perhaps because the researcher was introduced to them through a mutual acquaintance.

Roshan (2009) discussed that qualitative research feels more realistic answers than of the numerical quantitative data. It gives a descriptive capabilities to the research because the in-depth unstructured data given. A complete interview questions is in Appendix C.

In the present sample, Table 6 represents collective demographic responses by managers on the interview reported that male respondents outnumbered females with 83.33% males and 16.66% females. Interviewees age was 50% above 40 years, 33.30% from 36-40 and 16.66% age was from 31-35 years. Education data showed that, 33.30% with bachelor's degrees, 16.66% had master's degrees and 50% had Ph.D.'s. Interviewees' data of job levels showed that were 33.30% were top management, 50% were middle management, while 16.66% were of supervisory level. Job tenure data showed 16.66% worked for the same organization less than 4 years, 50% from 5 to 10 years, while 33.30% from 16 to 20 years. Fifty percent of the interviewees were in the same position for less than 4 years and the other 50% from 5 to 10 years.

Table 6: Demographic Characteristics of Interview Respondents

	# of Interviewees	Percentage	Total %
Gender			
* Male	5	83.33%	
* Female	1	16.66%	100%

Age			
* From 31 to 35 years old	1	16.66%	
* From 36 to 40 years old	2	33.30%	

* Above 40 years old	3	50%	100%
<hr/>			
Education			
* University Degree	2	33.30%	
* Masters	1	16.66%	
* Ph.D.	3	50%	100%
<hr/>			
Job level			
* Top Management	2	33.30%	
* Middle Management	3	50.00%	
* Supervisory Level	1	16.66%	100%
<hr/>			
Job Tenure			
* Less than 4 years	1	16.66%	
* From 5 to 10 years	3	50%	
* From 16 to 20 years	2	33.30%	100%
<hr/>			
Hospital Tenure			
* Less than 4 years	3	50%	
* From 5 to 10 years	3	50%	100%

The following section provides research findings and analysis according to answers of the interviewees. Interview questions aimed to investigate the following:

- The role of transformational leadership style on promoting employees' innovation
- Collaboration and team work between employees lead to a better level of innovation
- Line manager support and employees' innovation
- Leader as a role model for employees' innovation
- Intellectual inspiration and employees' innovation

- Levels of empowerment and employees' innovation
- Levels of motivation and employees' innovation
- Being valued and being innovative.

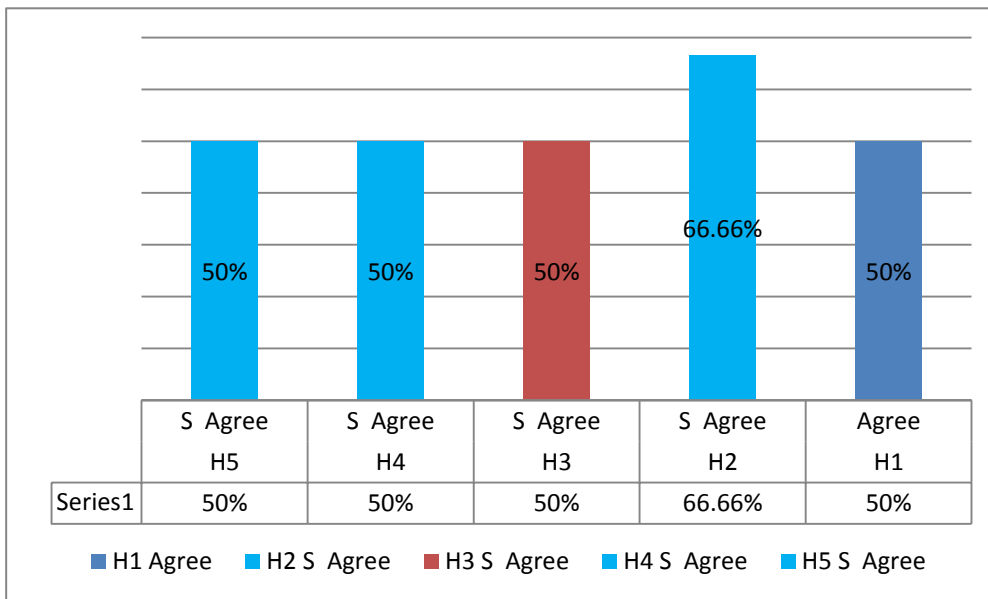
In addition to findings of the survey and based on the discussion with the interviewees, findings and data of the interview also asserted the relationship between the five hypotheses and employees' innovation. Data also featured more explanation to the questions and to the correlated factors that impact the innovation of the employees.

The coming section is about interviews questions and their analysis. The first five questions were about the five hypotheses; Table 7 shows interview questions and hypotheses by percentage.

Table 7: Interview Questions and Hypotheses by Percentage

Question	Hypotheses	Level of agreement	Percentage
Q1	1	Agree	50%
Q2	2	S Agree	66.60%
Q3	3	S Agree	50%
Q4	4	S Agree	50%
Q5	5	S Agree	50%

Figure 18: Interview questions and hypotheses by percentage



Question 1: Transformational leadership style influences employees' innovation?

The first question was about hypothesis 1 and its relationship with innovation. Responses (in Table 7) showed interviewees agreement to question 1. Similarly, data of the quantitative research showed that 47.14 % of the survey respondents agreed to the same hypothesis which asserted that "transformation leadership style influences employees' innovation".

All interviewees agreed that transformational leadership style enhances employees' innovation but one interviewee who is a healthcare branch manager, asserted that relationship with some conditions by stating that: "Transformational leadership is a great style of leadership that a leader should follow but to relate it to innovation, employee himself should be innovative then I as a leader will increase this ability by giving more training to my staff to help them being more innovative. But

we have a problem in Egypt; we make the good employee bad one and we don't help those who need improvement".

Other opinion by one of the interviewees who is an Otolaryngologist consultant, justified this relationship by: "there is a relationship between leadership style and innovation, it is proportion to age because the older the age, the more experience in dealing with employees and knowing the best way to foster their innovation".

A third explanation was by a third interviewee was "I completely agree to hypothesis 1 only if the employees are innovative and the leader will help them. If the leader is not helpful, employees will not come up with any new idea".

Question 2: Do you think increasing collaboration and teamwork between employees lead to a better level of innovation?

The second question was about hypothesis 2 and research predicted a positive relationship with the innovation of the employees, and interviewees' data (shown in Table 7) asserted this relationship as it showed the highest percentage for hypothesis 2, strongly agreed to "increasing collaboration and teamwork between employees lead to a better level of innovation". This relationship was supported by the percentage of the quantitative research which had also the highest percentage among other hypotheses with 55.71% strong agreement. Interviewees had almost the same explanation, but interviewee number 5 who is an Ophthalmologist in a middle management position argued that: "In order to succeed in enriching levels of innovation at your organization, work should be collective and participative between employees and their direct leader because they complete each other. So, for the

success of this organization, it's not only the leadership style but also the participation of every member."

Interviewee number 6 who is a Surgeon and in a supervisory level, added a reason behind boosting employees' level of innovation: "Increasing collaboration and teamwork between employees leads to a better level of innovation when these employees are on the same working level and have a homogeneous way of thinking to complete the mission till the end"

Question 3: From you own point of view, do you think the more support given by the line manager to individuals, the higher innovation measured?

The third question was about hypothesis 3 and research anticipated a positive relationship between line manager support to individuals and the high innovation level. Table 7 showed that interviewees' responses stated this relationship with a strong agreement. Five interviewees had the same opinion but the fourth interviewee, who was a dentist and a department manager, stated that: "Yes, a line manager's support through intellectual stimulation is more effective in innovation but it needs empowerment at the same time; meaning to authorize employees, let them make their own decisions without hesitation without being afraid to be punished".

Another interviewee expressed his related view by adding: "When the line manager supports individuals, this makes them able to make critical decisions freely without being afraid of punishment. This support could be via affording learning environment and supplying suitable resources which will enable employees to have eagerness to innovate and elevate any problem because the manager is backing them"

Question 4: There is an important relationship between a leader as a role model and employees' innovation?

The fourth question was about hypothesis 4. An effective relationship was proposed between hypothesis 4 and employees' innovation. While asking interviewees, all agreed to "there is an important relationship between a leader as a role model and employees' innovation?" Interviewees supported this relationship with strong agreement shown in Table 7. The logical explanation for this kind of relationship comes from the fact that innovation is a multi-level process including generating, developing and implementing new thoughts and useful behavior or idea. Leader as a role model is necessary for every step in the innovation process (Xiaomeng, 2005).

For hypothesis 4, the overall responses of the interviewees showed agreement. One interviewee noted: "when leader is a wise role model, this urges employees to innovate also it develops their performance. He added, a role model leader does not mean to put high standards for yourself, but it means to lead by doing, by being a point of reference for solving problems, by exchanging practical ideas and by guiding employees through their ideas to come real"

Question 5: Employees' innovation is a direct response to the intellectual inspiration they find at work?

The fifth question was about hypothesis 5. This research anticipated a relationship between hypothesis 5 and employees' innovation. Answer choices revealed a good relationship and data in Table 7 reported a strong agreement and this relationship was ascertained by the quantitative data as well.

The explanation for this was supported by interviewee no. 6 who was a surgeon in a supervisory level, strengthened this relationship as he said "Get the best use of the employees' energy and innovative employees' thoughts and ideas in addition to increasing intellectual inspiration, stopping nepotism, motivating the most efficient not the relatives, increasing support and teamwork, are very helpful points for enhancing innovation in any organization".

Another interviewee, who was a dentist, added to this point "Line manager's support through intellectual stimulation is more effective in innovation level but it needs empowerment at the same time".

One of the interviewees, an Otolaryngologist consultant, expressed his opinion about hypothesis 5 and reinforced the need for recognition and motivation:

"Transformational leadership style is an interesting style. Through my experience, I noticed that intellectual support should be accompanied with spiritual recognition or financial rewards to let employees feel being valued because there is a clear relation between giving employees rewards or recognition and innovative performance.

Moreover, interviewees' responses supported the following three sub-questions of the research with strong agreement (shown in Table 8). These sub questions are:

1. To what extent levels of empowerment are associated with employee's innovation?
2. To what extent the levels of motivation are associated with employee's innovation.
3. Does "being valued" increase "being innovative?"

**Table 8: Characteristics of Interviewees' Responses to the
Research Sub questions**

		%	Total
Sub Question # 1			
Disagree	2	33.30%	
Agree	1	16.66%	
Strongly Agree	3	50%	100%
Sub Question # 2			
Agree	3	50%	
Strongly Agree	3	50%	100%
Sub Question # 3			
Disagree	1	16.66%	
Agree	2	33.30%	
Strongly Agree	3	50%	100%

Based on the discussion with the interviewees, they mostly asserted that there is a direct link between the factors "levels of empowerment", "motivation" and "being valued" and increasing the level of employees' innovation. Asserted by one of the interviewees, he noted: "level of empowerment gives employees free space to move as they want and to make decision which helps the innovation levels". Second opinion was about motivation where interviewees agreed to it and one confirmed that "moral motivation and appreciation motivates more than the material one because it gives you enough courage to come up with new ideas and exert your best effort. Also, materialistic motivation is very important such as promotion or salary increase or reward, makes your feel satisfied and urges you not to hide any useful ideas". Additionally, upon conversation with interviewees, one concluded that: "As long as the direct leader is a good one with clear vision, empowering employees, motivate them and value their thoughts, hospital and the employees will be progressing highly

and vice versa if the leader is not a good leader, this is enough for any hospital to go backward because this leader does not stimulate your innovation, does not motivate you, he/she is not able to show the innovation of his/her employees. This is considered a weak leadership because leader should have a good personality, should be able to make powerful decisions and should be eager to take the risk, then all this combination will definitely boost level of employees' innovation".

CHAPTER FIVE

Conclusion and Recommendations

5.1 Introduction

According to Jeevan (2015), innovation is generating novel and valuable ideas and thoughts regarding procedures, services, product and processes in the organization. Innovation also means to use the employees' different experience, knowledge, skills, views and abilities to create new ideas to finish the task efficiently, to help in solving the faced problem and in making decision in the best way.

Because innovation is an essential mean for improving business practices, for competing in the market, for achieving tasks in the best way and for keeping customers satisfaction, the main objective of this research is to investigate the transformational leadership style and its role in promoting innovation of the healthcare employees of the public sector in Egypt.

In doing so, five hypotheses were proposed (1) The transformational leadership style and its effect on the employees' innovation (2) Collaboration and team work between employees lead to a better level of innovation (3) Line manager support and employees' innovation (4) Leader as a role model and employees' innovation and (5) Intellectual inspiration and employees' innovation and tested.

This chapter provides a summary of the research results and conclusions followed by a discussion, policy recommendations and some suggestions for future research.

5.2 Summary of Results and Conclusions

Quantitative and qualitative data showed that the sample majority strongly agreed to the five hypotheses have positive influential relationship with employees' innovation with the existence of correlation with some factors. This supports the main question of the research which was "To what extent does transformational leadership style influence promoting the employees' innovation of the public sector in Egypt?"

Also, interviewees' responses supported the following three sub-questions of the research with a majority of a strong agreement:

1. To what extent levels of empowerment are associated with employee's innovation?
2. To what extent the levels of motivation are associated with employee's innovation.
3. Does "being valued" increase "being innovative?"

Qualitative results reported a direct link between level of (empowerment, motivation and "being valued") and the level of employees' motivation. Interviewees agreed to empowerment as a dominating factor with the existence of a line manager support. To explain, when a line manager supports his/her employees through intellectual stimulation this would be more effective in innovation if he/she gives empowerment at the same time; meaning to authorize employees, let them make their own decisions without hesitation without being afraid to be punished. This coincided with David (2007) who mentioned empowerment as a knowledge sharing, collective influence to enhance organizational innovation and performance.

Interviewees' results also confirmed "motivation" and "being valued" as positive factors for employees' innovation with strong agreement of sample respondents assuring that there is a clear relation between "giving employees rewards or recognition" and "better innovation". The explanation was mentioned in Jeevan (2015) that transformational leaders can positively lead innovation levels of employees through individualized consideration, intellectual stimulation, inspirational motivation and idealized influence.

5.3 Conclusion:

Findings strongly supported the main question of the research. Transformational leadership style is proven to have a relationship and an effective role in promoting employees' level of innovation. Results also showed that the sub-questions of this research supported the adopted framework.

Accordingly, the five hypotheses were proven to be effective in promoting employees' innovation with some external factors such as: "clear vision and mission", "lead by doing rather by telling", "innovative leader", "empowerment", "motivation" and "to be valued".

This research investigated the relationship between transformational leadership and employees' innovation in two ways: (1) In line with Gumusluoğlu (2009), transformational style was found to have a positive significant impact on employees' innovation (2) This research has recognized a positive impact on employees' innovation in healthcare public hospitals.

According to Lowe (1996), Keller (1992) claims that a transactional style works better for incremental work, the results of this research showed that transformational style is essential for developmental work. Though one of the interviewees,

Gynecologist consultant in the gynecology department, said "We have no relationship with innovation in our profession" I mean some specialization does not need innovation". Interestingly, data of the interviewees (including her) showed 100% of strong agreement when the managers were asked "If you had the chance to be the leader to your organization, would you use the transformational leadership style to increase innovation rate?" which also ascertain the positive relationship between transformational style and leadership.

5.4 Research Implications

Results of this research offered managerial and theoretical implications which are useful for researchers as it tackled a new area of transformational leadership style and employees' level of innovation in the field of public healthcare organizations in Egypt because in most of the developing countries, organizations generally neglect innovation and it's not of high priority (Gumusluoğlu and Ilsev, 2009). The reason behind this is the public organizations are known with their bureaucracy where regulations are used to hinder employees from innovating or implementing new ideas. The explanation is that managers think following regulations in public organizations is more useful than offering services or goods with high quality. Therefore, researcher recommends that policy makers of public organizations should develop new strategies and regulations like incentive motivation in order to stimulate employees' innovation.

This research found that transformational leadership style is an essential determinant of employees' innovation. Therefore, according to the some opinions of the interviewees, leaders should follow transformational style to promote employees' innovation as leaders should (1) stimulate subordinates intellectually through

encouraging them to solve old problems in a modern way and to broaden employees interests (2) leaders should consider employees skills and needs, also customize individual relationship with their subordinates, and (3) leaders should convey their vision clearly, motivate and inspire employees to work hard in order to achieve this vision.

This research investigated and linked between transformational leadership style and employees' innovation in public sector in a developing country, so it can indicate more understanding of employees' innovation in similar countries with same: conditions, institutions and structures. These countries need to be innovative to be able to compete successfully in the universal arena. As long as this research proved the positive impact of transformational leadership on employees' innovation in developing country, researcher highly suggests that transformational leadership to be a training program subject for managers in developing countries. Furthermore, policy makers of developing countries should develop and implement new policies in countries that lack commitment or shared vision with stakeholders in order to build a public innovation system.

5.5 Policy Recommendations

Based on research findings and results, the following policy recommendations are proposed for academics and policy planners. In order to raise the level of employees' innovation at the organization, innovative leaders should make plans and follow them in a way that facilitates an environment of innovation in the organization which will help individuals achieving their goals and organizational goals.

In doing so:

1. Leaders should be aware of the innovative practices and the transformational style so that they can equip their employees with the suitable tool in order to reach the highest innovation levels.
2. Leaders should increase collaboration and team work between employees because it leads to better levels of innovation.
3. Leaders should support individuals to increase employees' innovation
4. Leaders should act as innovative role models for their subordinates.
5. Leaders should support subordinates via intellectual inspiration.
6. Leaders should consider the coming aspects as very essential aspects of innovation; such as eagerness to change, culture of the leader to make change, employees training in addition to empowerment, motivation and value.
7. Leaders should follow several leadership styles and use the one that suites organizational environment.
8. Leaders should be able to create a self-learning environment for employees where they learn by themselves and share this experience on intra- and interdepartmental levels.

9. Leaders should motivate employees with learning environment through proposing new ideas of completing tasks, clarifying needed target and supplying enough appropriate resources to reach this target, developing employee's points of strength and assigning achievable projects that match employees' capabilities.
10. Transformational leadership training should be giving to team leaders or supervisors in order to learn how to promote employees' innovation.
11. Leaders should clearly stating their vision and communicate with their employees in a transparent manners with to be able to convert their visions into achievable goals then supply employees with enhancing learning environment to successfully pursuing the aimed goals.

5.6 Future Research

Hoping this research motivates other researchers to exert effort and spend time replicating preceding research. This research is different from the majority of other research as it linked between transformational leadership style and employees' innovation in healthcare public sector of a developing country and it investigated the leadership style as an evaluation of the leaders by their subordinates.

This research examined the direct relationship between transformational leadership and employees' innovation and researcher proposes if future research investigates some mediating factors such as employees' commitment, job satisfaction and organizational support. Or conduct research in both private and public sector to reveal the effectiveness and performance of their employees.

This research focused on healthcare public sector in Egypt; hence, findings and results may not fit Egyptian private sector. To add, there is an obvious shortage of studies regarding the relationship and impact of transformational leadership style on employees' innovation in Egypt as studies deal with leadership and innovation as two separate entities whereas this research proved that they are integrated.

This research emphasized on transformational style while most research compare transformational to transactional leadership style. As a result, researcher suggests future research to investigate both styles to judge which one will be more effective on employees' innovation.

Finally, researcher highly recommends other variables to be used in the future research such as nature of the assignments, size of the organization and the leaders participation of training programs regarding different leadership styles and their impact on employees' innovation.

References

- Abdurrahman , K. & Maha Ateeq, M. (2010). Leadership and Innovation, paper prepared to the British university in Dubai, Dubai.
- Ali, A. J., Taqi, A. A., & Krishnan, K. (1997). Individualism, collectivism, and decision styles of managers in Kuwait. *The Journal of Social Psychology*,137(5), 629-637.
- Ali, A. Y. S., & Ibrahim, I. H. (2014). The Impact of Leadership Style on Corporate Innovation: Survey from Telecommunication Industry in Somalia. *International Journal of Academic Research in Management*.Vol.3, No.3, pp.233-241.
- Amaratunga, D., Baldry, D. Sarshar, M., and Newton, R. (2002). Quantitative and Qualitative Research in the Built Environment: Application of Mixed Research Approach. *Work Study Journal*, 51(1): 17-31.
- Arnold, J, Arad, S, Rhoades, J, & Drasgow, F. (2001). The empowering leadership questionnaire: the construction and validation of a new scale for measuring leader behaviors. *Journal of management* 17, New York, Pg. no. 3: 57-65
- Avery, G. *Understanding Leadership: Paradigms and Cases*, Sage, London, 2004, Pg. 26.
- B Roshan (2009). Justifications for Qualitative Research in Organisations: A Step Forward By B Roshan. *The Journal of Online Education*, New York, 06 January 2009. Retrieved from:
<http://www.nyu.edu/classes/keefe/waoe/deeprosh2.pdf>
- Barczak, G. and Wilemon, D. (2003), "Team member experiences in new product development: views from the trenches", *R&D Management*, Vol. 33 No. 5, p. 463. [CrossRef], [ISI] [Infotrieve]
- Bass, B, Avolio, B, & Goodheim, L. Biography and the assessment of transformational leadership at the world class level. *Journal of Management*, London, 1987, Pg.13, no. 1: 7-19.
- Bass, B. and Avolio, B. Potential biases in leadership measures: How prototypes, leniency, & general satisfaction relate to ratings & rankings of transformational & transactional leadership constructs. *Educational & Psychological Measurement*, Dubai, 1989, Pg. 49: 509-527.
- Bass, B. *Leadership & Performance beyond Expectations*, Free Press, New York, 1985, Pg. 8
- Beck, J. & Yeager, N. *The leader's Window: Mastering the four styles of leadership to build high performing teams*, Davies-Black Publishing, California, 2001, Pgs. 23-34.

- Bill Hogg (November 5, 2015). 10 Characteristics of Transformational Leaders.
- Björn, M, & Ralf, K, (2010) "Shedding light on followers' innovation implementation behavior: The role of transformational leadership, commitment to change, and climate for initiative", *Journal of Managerial Psychology*, Vol. 25 Iss: 4, pp.408 – 429. Retrieved from:
<http://www.emeraldinsight.com/doi/full/10.1108/02683941011035304>
- Bland, T., Bruk, B., Kim, D., & Lee, K. T. (2010). Enhancing public sector innovation: Examining the network-innovation relationship. *The Innovation Journal: The Public Sector Innovation Journal*, 15(3), 1-17.
- Blomberg, J., Giacomi, J., Mosher, A., & Swenton-Wall, P. (1993). Ethnographic field methods and their relation to design. *Participatory design: Principles and practices*, 123-155.
- Boxall, P. (1998). Achieving Competitive Advantage Through Human Resource Strategy: Towards a Theory of Industry Dynamics. *Human Resources Management Review*, 8(3): 265-288.
- Bradley et al. (April 2012). Pulling the levers: Transformational leadership, public service motivation, and mission valence. *Public Administration Review*, Vol. 72, Iss. 2, pp. 206–215.
- Burns, J.M. (1978). *Leadership*. New York: Harper & Row.
- Carlgren, L. (2013). Design Thinking as an Enabler of Innovation: Exploring the concept and its relation to building innovation capabilities. Chalmers University of Technology. Retrieved from:
<http://publications.lib.chalmers.se/records/fulltext/185362/185362.pdf>
- Chemer, M. (1997), *An integrative theory of leadership*. Lawrence Erlbaum Associates. Mahwah, New Delhi, 1997, Pg. 67.
- Choudhary, A. I., Akhtar, S. A., & Zaheer, A. (2013). Impact of transformational and servant leadership on organizational performance: A comparative analysis. *Journal of Bbusiness Eethics*, 116(2), 433-440.
- Claudia A. Sacramento, M.-W. Sophie Chang, Michael A. West (2006), Team Innovation through Collaboration, in Michael M. Beyerlein, Susan T. Beyerlein, Frances A. Kennedy (ed.) *Innovation through Collaboration (Advances in Interdisciplinary Studies of Work Teams, Volume 12)* Emerald Group Publishing Limited, pp.81 - 112
- Conti, B, & Kleiner, B. (1997), How to increase teamwork in organizations?. *London, Training for quality*, 5, 1997, no. 1: 26-29

- Creswell, J. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2nd ed). Los Angeles: SAGE Publications.
- Crouch, C. (2004, March). Complementarity and Innovation. In *Workshop on Complementarity at Max Plank Institute for Study of Societies, Cologne, Germany* (pp. 26-7).
- David Cromb, (2007) "Empowerment and Innovation: Managers, Principles and Reflective Practice", *Leadership & Organization Development Journal*, Vol. 28(1), Iss: 1, pp.98 – 99.
- Day, G. S., Gold, B., & Kuczmarski, T. D. (1994). Significant issues for the future of product innovation. *Journal of Product Innovation Management*, 11(1), 69-75.
- Denti, L., & Hemlin, S. (2012). Leadership and innovation in organizations: A systematic review of factors that mediate or moderate the relationship. *International Journal of Innovation Management*, 16(03), 1240007.
- Deschamps, J. P. (2005). Different leadership skills for different innovation strategies. *Strategy & Leadership*, 33(5), 31-38.
- Didier, C. & Jose, C. (June 2013). *Transformational Leadership Background Literature Review*. Retrieved from: https://www.imd.org/uupload/IMD.WebSite/BoardCenter/Web/213/Literature%20Review_Transformational%20Leadership.pdf
- Dolores, M. and Tongco, C. (2007). Purposive Sampling as a Tool for Informant Selection. *Journal of Ethnobotany Research and Application*, 5:147–158. Accessed on April 13, 2016. Retrieved from: <http://hdl.handle.net/10125/227>
- Drath, W. (2001), *The Deep Blue Sea: Rethinking the Source of Leadership*. Jossey Bass, San Francisco, 2001, Pg. 34.
- Florida, R. (2002a), "The Rise of the Creative Class", New York: Basic Books.
- Ford, D, and Harris, J. (1992), The elusive definition of creativity. *Journal of Creativity*, Berlin, 1992, 26(, no. 3): 186-98.
- Garcia, R., & Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: a literature review. *Journal of product innovation management*, 19(2), 110-132.
- Geib, P., and Swenson, J. (2013). *China: Transformational Leadership for Policy and Product Innovation*. *Advances in Management*, 6 (5), 3-10.
- Godard, A. and Lenhardt, V. (2000), *Transformational leadership: Shared dreams to succeed*. Palgrave, New York, 2000, Pg.30.

- Goleman, D. (2000), Leadership that gets results. *Harvard Business Review*, New York, 2000, (March/April).
- Gronn, P., Bush, T., Bell, L., & Middlewood, D. (2010). Where to next for educational leadership. *The principles of educational leadership and management*, 70-85.
- Gumusluoğlu, L., & Ilsev, A. (2009). Transformational Leadership and Organizational Innovation: The Roles of Internal and External Support for Innovation. *Journal of Product Innovation Management*, 26(3), 264-277.
- Harris, P. R., & Harris, K. G. (1996). Managing effectively through teams. *Team Performance Management: An International Journal*, 2(3), 23-36.
- Hartog, D, and Van Muijen, J. (1997), Transactional versus transformational leadership: An analysis of the MLQ. *Journal of Occupational and Organizational Psychology*, London, 1997, 70(, no.1): 19-35.
- Herbert, T. (1981), *Dimensions of Organizational Behavior*, (2nd ed.), Macmillan, New York, NY.
- Heung-Jun Jung , Yoon-Ho Kim , Heesang Yoon (2015), Low Investment in Contingent Workers and its Negative Impact on Society: The Case of South Korea, in Antti Kauhanen (ed.) *Advances in the Economic Analysis of Participatory & Labor-Managed Firms* (Advances in the Economic Analysis of Participatory & Labor-Managed Firms, Volume 16), Emerald Group Publishing Limited, pp.173 - 198
- House, R, and Aditya, R. (1997), The social scientific study of leadership: Quo Vadis? *Journal of Management*, 23(3), New York, 1997, no. 3: 409-473. 71
- Inkson, and Clinton, D. (2004) *Cultural intelligence: people skills for global business*. Berrett-Kiehl Publishers, San Francisco,.
- J Hall, J. (2007) *The Transformational leadership Report*. Retrieved from: <https://edis.ifas.ufl.edu/pdf/HR/HR02000.pdf>
- James T. Scarnati, James T. (2002) "Leaders as role models: 12 rules", *Career Development International*, 7(3):Vol. 7 Iss: 3, pp.181 – 189.
- Jeevan Jyoti , J., & Manisha Dev , M. (2015), "The impact of transformational leadership on employee creativity: the role of learning orientation", *Journal of Asia Business Studies*, 9(1):Vol. 9 Iss: 1, pp.78 – 98.
- Jung, D. I., Wu, A., & Chow, C. (2008). Towards understanding the direct and indirect effects of CEO's transformational leadership on firm innovation. *The Leadership Quarterly*, 19, 582.

- Kesting, P., Ulhøi, J. P., Song, L. J., & Niu, H. (2016). The impact of leadership styles on innovation-a review. *Journal of Innovation Management*, 3(4), 22-41. Retrieved from: <http://www.open-jim.org/article/view/68/146>
- Klein, G, and Pierce, L. (2001), Adaptive Teams: in Proceedings of the 6th International Command and Control Research and Technology Symposium, Berlin, 2001.
- Klimentova, S. (2014). Innovation in the public sector: Is it Measurable. *Performance Measurement and Management Control: Behavioral Implications and Human Actions (Studies in Managerial and Financial Accounting, Volume 28)* Emerald Group Publishing Limited, 28, 289-315.
- Langdon Morris (2013) Three Dimensions of Innovation *International Management Review*, 9(2) Vol. 9 No. 2 5 Innovation Labs, CA. USA. Retrieved from: <http://www.scholarspress.us/journals/IMR/pdf/IMR-2-2013/v9n213-art1.pdf>
- Larson, C, and LaFasto, M. (1998), *Teamwork: what must go right, what can go wrong?* Sage, New York., 1998, Pg.43
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7(3), 385-425.
- Maheshwari, B. (1980), *Decision Styles and Organizational Effectiveness*. Vikas Publishing, New Delhi., 1980, Pg. 35
- Manz, C, & Sims, P. (1991), Super leadership: Beyond the myth of heroic leadership. *Organizational Dynamics*, Brussels, 1991, 19(4), no. 4:18-35.
- Martinez-Fernandez, C., Soosay, C., Bjorkli, M., & Tremayne, K. (2004, September). Are Knowledge-Intensive Service Activities Enablers of Innovation Processes?- A Study of Australian Software Firms. In CINET Conference, 22nd-24th of September., Sydney.
- Millissa F.Y. Cheung, Chi-Sum Wong, (2011) "Transformational leadership, leader support, and employee creativity", *Leadership & Organization Development Journal*, 32(7):Vol. 32 Iss: 7, pp.656 - 672. Permanent link to this document: <http://dx.doi.org/10.1108/01437731111169988>
- Munshi, N., Oke, A., Stafylarakis, M., Puranam, P., Towells, S., Möslin, K., & Neely, A. (2005). Leading for innovation. AIM Executive briefings.
- Naim Nusair, Naim, Raed, Ababneh, Yun, Kyung Bae, (2012) "The impact of transformational leadership style on innovation as perceived by public employees in Jordan", *International Journal of Commerce and Management*, 22(3):, Vol. 22 Iss: 3, pp.182 – 201.

- Nurmi, R. (1996), Teamwork and team leadership. *Team performance management*, Washington, 2(1), 1996, no. 1.
- O'Donnell (2006) O'Donnell, O. (2006). Innovation in the Irish public sector. CPMR Discussion Paper. Retrieved from <http://edoc.vifapol.de/>
- Ogbonna, E, and Lloyd, C. (2000), Leadership style, organizational culture and performance: empirical evidence from UK companies. *International Journal of Human Resource Management*, London, 11(4), 2000, no.4: 766-788.
- Oke, A, Munshi, N, Wallumbwa, F. (2009), The Influence of Leadership on Innovation Processes and Activities Organizational Dynamics, 38(1):Vol. 38, No. 1, pp. 64–72., 2009. ScienceDirect
- Oke, A. (2002). 'Improving the Innovative Capability of a Service Company'. *Journal of Change Management*. 2(3):Vol. 2, No. 3, pp. 272-281.
- Oke, A. and Goffin, K. (2001). 'Innovation Management in the Service Sector'. *Management Focus*, Cranfield School of Management, UK, Summer Issue.
- Paarlberg, L. E. and Lavigna, B. (2010), Transformational Leadership and Public Service Motivation: Driving Individual and Organizational Performance. *Public Administration Review*, 70: 710–718. doi: 10.1111/j.1540-6210.2010.02199.x
- Pearce, C, & Sims, H. (2002), Vertical versus shared leadership as predictors of the effectiveness of change management terms: An examination of Aversive, Directive, Transactional, Transformational, and Empowering Leader behaviors. *Group Dynamics: Theory, Research and Practice*, New York, 6(2), 6. 2002, no. 2: 172-197. 72.
- Pittaway, L., Robertson, M., Munir, K., Denyer, D., & Neely, A. (2004). Networking and Innovation: A Systematic Review of the Evidence. *International Journal of Management Reviews*, 5/6(3&4): 137–168. <http://dx.doi.org/10.1111/j.1460-8545.2004.00101.x>
- Raelin, J. (2003), How to Bring out Leadership in Everyone. *Journal of Management*, Paris, 30(3)0, 2003, no. 3: 207-16.
- Rode, N. (2005). Translation of Measurement Instruments and their Reliability: An Example of Job-Related Affective Well-Being Scale. *Journal of Advances in Methodology and Statistics*, 2 (1): 15-26.
- Rouse, B, Cannon-Bowers, J, and Salas, E. (1992). The Role of Mental Models in Team Performance in Complex Systems. *IEEE Transactions on Systems, Man, and Cybernetics*, New York, 1992, 22: 1296-1308.

- S. Høyrup, S. et al. (2012) Employee-Driven Innovation. Ch.1 Employee-Driven Innovation: A New Phenomenon, Concept and Mode of Innovation. Retrieved from: http://link.springer.com/chapter/10.1057/9781137014764_1#page-1
- Salam, S, Cox, J, & Sims, H. (1997), In the eye of the beholder: How leadership relates to 360 degree performance ratings. *Group and organizational management*, 7(2)7, Berlin, 1997, no. 2: 134-41.
- Salas, E, Bowers, C, and Edens, E. (2003), *Improving team work in organization: application or resources management training*. Rout ledge, New York, 2003.
- Schriesheim, C. A. (2015), The Leadership Quarterly Yearly Review for 2015: Advances in leadership theory and research. *Leadership Quarterly*, 26(6), 909. doi:10.1016/j.leaqua. 2015.10.005.
- Shalley C. E., Zhou J., and Oldham G. R. (2004). The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here? *Journal of Management*, 30(6): 933-958.
- Stogdill, R. (1974), *Handbook of Leadership: a survey of theory and research*. Free Press, New York, 1974.
- Tannenbaum, R. and Schmidt, W. (1958) How to Choose a Leadership Pattern. *Harvard Business Review*, 36.Vol. 36, 1958, p. 25.
- Tien, J. M. (2007). Services innovation: decision attributes, innovation enablers, and innovation drivers. In *Service Enterprise Integration* (pp. 39-76). Springer US.
- Tushman, M., & Nadler, D. (1986). Organizing for innovation. *California management review*, 28(3), 74-92.
- Wang, X. H. F., & Howell, J. M. (2010). Exploring the dual-level effects of transformational leadership on followers. *Journal of Applied Psychology*, 95(6), 1134.
- West, M, and Anderson, N. (1996) Innovation in top management teams. *Journal of applied psychology*, London, 1996, no. 6: 680-693.
- William M., & K. Trochim (2006), last reviewed 10/20/2006 *Research Methods Knowledge Base*. Retrieved from: <http://www.socialresearchmethods.net/kb/sampron.php>
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of management review*, 18(2), 293-321.
- Xiaomeng Zhang, Henry P. Sims (2005), Leadership, Collaborative Capital, and Innovation, in Michael M. Beyerlein, Susan T. Beyerlein, Frances A. Kennedy (ed.) *Collaborative Capital: Creating Intangible Value* (Advances in

Interdisciplinary Studies of Work Teams, Volume 11), Emerald Group Publishing Limited, pp.211 - 236

Yukl, G.A. (1994), Leadership in Organizations. Prentice-Hall, Englewood Cliffs, 1994.

Zhao & Jingyuan (2015). Organizational Innovation and IT Governance in Emerging Economies. Ch. 6. pp. 131-132. Retrieved from:
<https://books.google.com.eg/books?id=Che5BgAAQBAJ>

Appendices

Appendix A: Supporting Introductory Letter

Dear Sirs,

I am writing this introductory letter to introduce a pursuing study concerning the transformational leadership and the innovation. I pursue this study at the American University in Cairo and I believe it will be of interest to you and to the organization.

It is important for both academic researchers and practitioners to develop their understanding of the relationship between leadership style and innovation. This survey is an important part of a study that investigates the relationship between the transformational leadership style and innovation of the employees in many public hospitals in Egypt. The estimated time from you is approx. 15 to 20 min.

Please be acknowledged that results of the survey will be strictly confidential and the completed survey constitutes your agreement to participate with this study. As a part of the research, summary and only general results of the research will be provided but no individual or organization will be published.

Thank you for your time and attention you give to help me complete this study. My thesis wouldn't have finished without your support.

Sincerely,
Ragaa El Fiky
ragaafik@aucegypt.edu

Appendix B: Survey Questions

PART ONE: General Information

1. Gender:

Male Female

2. Age

21-25 26-30 31-35
 36-40 More than 40

3. Education

High School Diploma
 University Degree
 Master's Degree Ph.D.

4. Jobs

Top Management Middle Management
 Supervisory Others -----

5. Working years with the current organization

Less than 4 years 5-10 11-15
 16-20 More than 20

6. No of years in the current position

Less than 4 years 5-10 11-15
 16-20 More than 20

7. How many subordinates under your leadership or supervision? _____

8. How many employees work at the organization where you work? _____

PART TWO: Transformational Leadership (H1)

Transformational leadership is "Leaders and their followers raise one another to higher levels of morality and motivation" as defined by Burns (1978) in his book "Leadership".

Listed below are some statements concerning the relationship between transformational leadership and innovation, please choose your level of agreement or disagreement: (1= strongly disagree, 5= strongly agree) Adapted from Snell and Dean (1992)

Statement	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
Do you think					
1. There is a direct relationship between the transformational leadership style and innovation in any organization					
2. Transformational leader is capable of getting commitment of others concerning his future plans					
3. He clearly knows what to do and where to go					
4. He behaves in a kind manners towards employees' personal needs					
5. He has a clear vision and mission					
6. Transformational leader affects the innovation in any organization					
7. If you were given the opportunity to lead the organization, would you choose transformational leadership style to increase innovation rate?					

PART THREE: Increasing Collaboration & Team work (H 2)

Listed below are some statements concerning the relationship between increasing collaboration & teamwork and employees' innovation, please choose your level of agreement or disagreement: (1= strongly disagree, 5= strongly agree)

Adapted from Snell and Dean (1992)

Statement	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
8. Do you think increasing collaboration and team work inspires subordinates to be team players and more innovative					
9. Sharing same goals with the same group members helps being more innovative?					
10. With team collaboration, I solve new problems with new creative ways					
11. Working in team, makes me think out of the box to create innovate new ideas for the organization					
12. Working in team increases my level of innovation					
13. When the leader increases the collaboration and teamwork between employees, this lead to best level of innovation among departments					

PART FOUR: Line Manager Support (H 3)

Listed below are some statements about the relationship between the support given by the line manager to individuals and their innovation levels. Please choose your level of agreement or disagreement: (1= strongly disagree, 5= strongly agree)

Adapted from Snell and Dean (1992)

Statement	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
14. The more support given by the line manager to the individuals, the higher innovation measured					
15. Direct support let employees update their innovative knowledge					
16. Direct support makes employees seeking best innovative performance					
17. Direct support helps to find best way to finish tasks in innovative ways					
18. Direct support gives a clear vision where to go					
19. Direct support encourages to think creatively and independently					

PART FIVE: Leader as a Role Model (H 4)

Listed below are some statements about the relationship between the leader as a role model and employees' innovation. Please choose your level of agreement or disagreement: (1= strongly disagree, 5= strongly agree) Adapted from Snell and Dean (1992)

Statement	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
When the leader is a role model, he: 20. Should be followed to raise the innovation level of the employees					
21. Develops teamwork spirit and creative attitude among employees					
22. Leads employees by "example" helps in existing a creative environment					
23. Leads group by "doing" rather than by "telling"					
24. Always cares about goals achievement					
25. When my leader is a role model, I am committed to the organization's rules and policies					
26. There is an important relationship between the leader as a role model and innovation					

PART SIX: Intellectual Inspiration (H 5)

Intellectual inspiration is: when the leader helps you to increase your beliefs and assures your capabilities.

Listed below are some statements about the relationship between the intellectual inspiration that is given by the leader and the employees' innovation.

Please choose your level of agreement or disagreement: (1= strongly disagree, 5= strongly agree) Adapted from Snell and Dean (1992)

Statement	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
27. Employees innovation is a direct response to the intellectual inspiration they find at work					
28. Intellectual inspiration provides me with new ideas to relook at things that used to puzzle me					
29. My line manager assures my beliefs innovative ability and ideas					
30. Stimulates employees to achieve the organization's future plans in innovative ways					
31. Intellectual inspiration of the line manager helps you innovating new helpful ideas and thoughts					

Appendix C: Interview

Consists of 19 questions

Transformational leadership is "leaders and their followers raise one another to higher levels of morality and motivation" as defined by Burns (1978) in his book "Leadership"

The following questions are important part of a study that investigates the relationship between transformational leadership style and innovation in many public hospitals in Egypt. The estimated time is approx. approx. 15 to 20 min.

Please be acknowledged that results will be strictly confidential. As a part of the research, summary and only general results of the research will be provided but no individual or organization will be published.

The interview aims to investigate the following:

- The transformational leadership style and its effect on the employees' innovation
- Collaboration and team work between employees lead to a better level of innovation
- Line manager support and employees' innovation
- Leader as a role model and employees' innovation
- Intellectual inspiration and employees' innovation
- Levels of empowerment and employees' innovation
- Levels of motivation and employees' innovation
- Being valued and being innovative

PART ONE: General Information

1. Name (Optional):

2. Age

21-25 26-30 31-35

36-40 More than 40

3. Education

University Degree High Diploma

Master's Degree Ph.D.

4. Jobs

Top Management Middle Management

Senior Level (supervisory) Others -----

5. Working years with the current organization

Less than 4 years 5-10 11-15

16-20 More than 20

6. No of years in the current position

Less than 4 years 5-10 11-15

16-20 More than 20

7 How many subordinates under your leadership or supervision? _____

8. How many employees work at the organization where you work? _____

PART TWO: Interview questions:

(Adapted from Snell and Dean, 1992)

1. Transformational leadership style affects employees' innovation?

2. Do you think increasing collaboration and teamwork between employees lead to a better level of innovation?

3. From your own point of view, do you think the more support given by the line manager to individuals, the higher innovation measured?

4. There is an important relationship between leader as a role model and employees' innovation?

5. Employees' innovation is a direct response to the intellectual inspiration they find at work?

6. Do you think levels of empowerment associated with employee's innovation level?

7. Do you think levels of motivation are associated with employee's innovation?

8. Does "Being valued" increase "being innovative"?

9. If you had the chance to be the leader to your organization, would you use the transformational leadership style to increase innovation rate?

(Strongly Disagree) (Disagree) (Neutral) (Agree) (Strongly Agree)

10. What motivates you the most to be innovative at work? Please choose **ONLY** one:

- The transformational leadership style and its effect on the employees' innovation ()
- Collaboration and team work between employees lead to a better level of innovation ()
- Line manager support and employees' innovation ()
- Leader as a role model and employees' innovation ()
- Intellectual inspiration and employees' innovation ()
- Levels of empowerment and employees' innovation ()
- Levels of motivation and employees' innovation ()
- Being valued and being innovative ()

11. Do you need to add any more comment?

Thank you for your time and attention you gave to help me complete this study
My thesis wouldn't have finished without your support.

Appendix D

نموذج ١

استبيان عن العلاقة بين اسلوب القيادة التحويلية والابتكار

هذا الاستبيان هو جزء مهم من دراستي الاكاديميه في الجامعه الامريكيه للحصول علي درجه الماجستير في البحث عن العلاقة بين اسلوب القيادة التحويلية والابتكار عند الموظفين في الهيئات الحكوميه التابعين لقطاع الصحة بوجه خاص. فهذه الدراسه من الممكن ان تحقق العلاقة بين القيادة والابتكار وتعود بالنفع علي الموظف والمنشأه والمديرين.

هناك اساليب عديده تستخدم في القيادة ولا يمكن اعتبار ايا منهم اسلوبا صحيحا علي الاطلاق او خاطئا علي الاطلاق فكل اسلوب يعتمد علي ظروف واسباب محده. فيما يلي نستعرض اسلوب (القيادة التحويلية) وهو اسلوب قيادي حيث يقوم القاده واتباعهم برفع بعضهم البعض الي مستويات اعلي من الاخلاق والابتكار والتحفيز (من كتاب "القيادة" للخبير بيرنز سنه ١٩٧٨)

من المشاكل التي تواجه الباحثين العرب المعنيين باسلوب القيادة والابتكار من علماء ومديرين هي قلة الابحاث الميدانيه التي تهتم بهذا النوع من العلاقة، فهذه الدراسه ستزود الباحث بالمؤثرات الكافيه نحو طبيعه هذه العلاقة ومتطلبات التنميه لها ولذلك فإجابتك علي الأسئلة المرفقه ، ستساعد في سد هذا النقص في الدراسه الميدانيه وتعزز البحث العلمي والتحليل و يرجي العلم بأن البيانات ستكون في سريره تامه بحيث لا تتطلب معرفه اسماء اشخاص او مؤسسات ، ونتائج الدراسه سوف تكون بناء علي مجموعه الاجابات وليست علي الاجابات الفرديه.

برجاء التكرم باجابه الاسئله وإعطاء الجواب الصريح المناسب وبموضوعيه ثم اعاده الاستثمارات الي الباحث او من قام بتوزيعها. وشكرا لك علي وقتك واهتمامك بمساعدتي لاكمال الدراسه التي لن تنتهي دون دعمكم.

.... الباحث

Appendix E

نموذج ٢

الجزء الاول : يتناول معلومات شخصيه ومهنيه

١- النوع:

- أنثي
- ذكر

٢- السن؟

- ٢١ - ٢٥ سنة
- ٢٦ - ٣٠
- ٣١ - ٣٥
- ٣٦ - ٤٠
- ٤١ سنة فما فوق

٣- أعلى شهادة حصلت عليها ؟

- ثانوي
- تعليم متوسط
- الجامعة
- الدراسات العليا
- الدكتوراه

٤- ما هو مستوى وظيفتك التي تشغلها حاليا ؟

- إدارة عليا (مدير أو ما يعادلها وما فوقها) .
- إدارة وسطى (مدير إدارة / رئيس قسم)
- إدارة إشرافية (مشرف / رئيس شعبة)
- اخري :

٥- كم مضى على خدمتك في هذه المنشأة ؟

- أقل من ٤
- ٥ - ١٠ سنوات
- ١١ - ١٥ سنة
- ١٦ - ٢٠ سنة
- ٢١ سنة أو أكثر

٦- عدد السنين في المنصب الحالي ؟

- أقل من ٤
- ٥ - ١٠ سنوات
- ١١ - ١٥ سنة
- ١٦ - ٢٠ سنة
- ٢١ سنة أو أكثر .

٧- كم عدد العاملين تحت إشرافك أو إدارتك ؟

٨- عدد العاملين في المنشأة التي تعمل بها

الجزء الثاني : مدي تأثير (القيادة التحويلية) علي عمليه الابتكار عند الموظفين

القيادة التحويلية هو اسلوب قيادي حيث يقوم القاده واتباعهم برفع بعضهم البعض الي مستويات اعلي من الاخلاق والابتكار والتحفيز (من كتاب "القيادة" للخبير بيرنز سنة ١٩٧٨)

يرجى اختيار الرقم المناسب لرأيك والذي يدل علي مدي اتفاقك او اختلافك مع هذه العبارات

لا اوافق بشده = ١ ، اوافق بشده = ٥

العبارات	لا اوافق بشده ١	لا اوافق ٢	لم اقرر ٣	اوافق ٤	اوافق بشده ٥
هل تعتقد ١ . هناك علاقه مباشره بين اسلوب القيادة التحويلية والابتكار في اي منشأه					
٢ . المدير الذي يتبع اسلوب القيادة التحويلية قادر علي الزام الموظفين باتباع خطته المستقبليه؟					
٣ . القيادة التحويلية تجعل القائد يعرف جيدا ما يجب القيام به وكيف الوصول اليه					
٤ . القيادة التحويلية تجعل القائد يتصرف بطريقه مهذبه و يلبي الاحتياجات الشخصيه للموظف					
٥ . القيادة التحويلية تجعل المدير لديه رؤيه ومهمه واضحه					
٦ . القيادة التحويلية تؤثر علي عمليه الابتكار في اي منشأه؟					
٧ . اذا ما اتاحت لك الفرصه لقيادة المنشأه ، هل ستنتبع اسلوب القيادة التحويلية					

الجزء الثالث : زيادة التعاون والعمل الجماعي بين الموظفين وتأثيره علي ارتفاع مستويات عملية الابتكار

يرجى اختيار الرقم المناسب لرأيك والذي يدل علي مدى اتفاقك او اختلافك مع هذه العبارات

لا اوافق بشده = ١ ، اوافق بشده = ٥

العبارة	لا اوافق بشده ١	لا اوافق ٢	لم اقرر ٣	اوافق ٤	اوافق بشده ٥
هل تعتقد ٨. ان هناك علاقه مباشره بين زيادة التعاون والعمل الجماعي بين الموظفين يؤدي الي مستويات اعلي في الابتكار					
٩. تقاسم نفس الأهداف مع أعضاء المجموعة يساعد الموظف أن يكون أكثر ابتكاراً؟					
١٠. التعاون وفريق العمل يساعد علي حل المشاكل بوسائل مبتكرة جديدة					
١١. العمل من خلال فريق، يجعلني أفكر خارج الصندوق لابتكار أفكار جديدة للمنشأة					
١٢. العمل في فريق يزيد مستواي في الابتكار					
١٣. زيادة التعاون والعمل الجماعي بين الموظفين يؤدي إلى أفضل مستوى من الابتكار بين الإدارات					

الجزء الرابع : هل زيادة دعم الافراد من قبل المدير المباشر، يقابل زياده ملحوظه في عملية الابتكار لدي الموظفين؟

يرجى اختيار الرقم المناسب لرأيك والذي يدل علي مدى اتفاقك او اختلافك مع هذه العبارات

لا اوافق بشده = ١ ، اوافق بشده = ٥

العبارة	لا اوافق بشده ١	لا اوافق ٢	لم اقرر ٣	اوافق ٤	اوافق بشده ٥
١٤. زيادة دعم الافراد من قبل المدير المباشر، يقابل زياده ملحوظه في عملية الابتكار لدي الموظفين؟					
١٥. دعم المدير المباشر للموظفين يحفزهم علي زياده معلوماتهم المبتكره					
١٦. دعم المدير المباشر يحفز الموظفين علي احسن اداء واحسن ابتكار					
١٧. دعم المدير المباشر يساعد علي ايجاد افضل طريقه لإنهاء المهام بطرق مبتكره					
١٨. دعم المدير المباشر يعطي رؤية واضحة تؤدي الي الابتكار					
١٩. دعم المدير المباشر يشجع علي التفكير بطريقه مستقله ومبتكره					

الجزء الخامس : هل هناك علاقه هامه بين "القائد كقدوه حسنه" وزيادة الابتكار لدي الموظفين؟

يرجى اختيار الرقم المناسب لرأيك والذي يدل علي مدي اتفاقك او اختلافك مع هذه العبارات

لا اوافق بشده = ١ ، اوافق بشده = ٥

العبارة	لا اوافق بشده ١	لا اوافق ٢	لم اقرر ٣	اوافق ٤	اوافق بشده ٥
القائد هو من: ٢٠. يكون قدوه حسنه واجب اتباعها لزياده معدلات الابتكار لدي الموظفين					
٢١. يطور روح العمل الجماعي بين الموظفين مما يؤدي الي زياده الابتكار					
٢٢. يتبع اسلوب القيادة ب ان يكون "مثال يحتذي به" فذلك يساعد علي ابتكار افكار جديده					
٢٣. يقود المجموعه "بالعمل" وليس "بالقول فقط"					
٢٤. يهتم دائما بتحقيق اهداف المنشأه					
٢٥. يكون قدوه حسنه في الالتزام بقواعد وسياسات المنشأه					
٢٦. هناك علاقه هامه بين "القائد كقدوه حسنه" وزيادة الابتكار لدي الموظفين					

الجزء السادس : الابتكار هو رد فعل مباشر لما يتوفر للموظفين من دعم للالهام الفكري

الالهام الفكري هو مساعده قادتك لك لتعزيز قدراتك الفكرية وزيادة معتقداتك وابتكاراتك وعدم التقليل من شأنهم

يرجى اختيار الرقم المناسب لرأيك والذي يدل علي مدي اتفاقك او اختلافك مع هذه العبارات

لا اوافق بشده = ١ ، اوافق بشده = ٥

العبارة	لا اوافق بشده ١	لا اوافق ٢	لم اقرر ٣	اوافق ٤	اوافق بشده ٥
٢٧. الابتكار هو رد فعل مباشر لما يتوفر للموظفين من دعم للالهام الفكري					
دعم الفكري من قبل القائد : ٢٨. يمدني ب افكار جديده تساعدني في حل المشاكل التي تمثل عقبه في حلها					
٢٩. الدعم الفكري من القائد يؤكد علي افكاري وقدراتي الابتكارية					
٣٠. الدعم الفكري يحفز الموظفين لتحقيق الاهداف المستقبلية للمنشأه بطريقه ابتكارية جديده					
٣١. الدعم الفكري يساعد الموظفين علي ابتكار طرق وافكار جديده للمنشأه					

Appendix F

نموذج ٣

نموذج دليل المقابلات ويتكون من ١٩ سؤال

هذه الأسئلة هي جزء مهم من بحث لدراسة العلاقة بين أسلوب القيادة التحويلية والابتكار عند الموظفين في الهيئات الحكومية التابعين لقطاع الصحة بوجه خاص و الوقت المقدر تقريبا ساعة واحدة.

فيما يلي نستعرض اسلوب (القيادة التحويلية) وهو اسلوب قيادي حيث يقوم القادة واتباعهم برفع بعضهم البعض الي مستويات اعلي من الاخلاق والابتكار والتحفيز (من كتاب "القيادة" للخبير بيرنز سنة ١٩٧٨).
الالهام الفكري يعني مساعده قادتك لك للتأكيد علي قدراتك وزيادة معتقداتك وذلك يتحقق من خلال:

- مساعدة القادة لتعزيز قدرات الموظف الابتكاريه
- تأكيد القادة لاراء ومعتقدات الموظفين وعدم التقليل من شأنهم
- الاستخدام الامثل للقدرات العقلية للموظف (من ذكاء و فطنه وافكار جديده فعاله) من قبل القادة

يرجي العلم بأن البيانات ستكون في سرية تامه بحيث لا تتطلب معرفه اسماء اشخاص او مؤسسات ونتائج الدراسه سوف تكون بناء علي مجموعه الاجابات وليست علي الاجابات الفرديه.

وتهدف المقابلة إلى التحقيق مما يلي:

- تأثير اسلوب القيادة التحويلية في المنشأه علي قدره الموظفين علي الابتكار
- زيادة التعاون والعمل الجماعي بين الموظفين يؤدي الي مستويات اعلي في الابتكار
- زياده دعم الافراد من قبل القادة يقابل زياده ملحوظه في مجال الابتكار
- هناك علاقه هامه بين القائد "كفدوه حسنه" والابتكار لدي الموظفين
- الالهام الفكري يعني مساعده قادتك لك للتأكيد علي قدراتك وزيادة معتقداتك
- يتوقف مستوي الابتكار عند الموظف علي مدي اعطاءه الصلاحيه والثقه لاتخاذ القرارات
- يرتبط الابتكار بمستوي التحفيز (المادي او المعنوي أو كلاهما معا) من قبل القادة
- هناك علاقه بين زياده تقدير قادتك لك وزياده الابتكار لديك

الجزء الاول : يتناول معلومات شخصيه ومهنيه

١- الاسم (اختياري) : _____

٢- السن؟

- ٢١ - ٢٥ سنة
 ٢٦ - ٣٠
 ٣١ - ٣٥
 ٣٦ - ٤٠
 ٤١ سنة فما فوق

٣- أعلى شهادة حصلت عليها؟

- الجامعة
 الدراسات العليا
 الدكتوراه

٤- ما هو مستوى وظيفتك التي تشغلها حاليا؟

- إدارة عليا (مدير أو ما يعادلها وما فوقها) .
 إدارة وسطى (مدير إدارة / رئيس قسم)
 إدارة إشرافية (مشرف / رئيس شعبة)
 اخرى :

٥- كم مضى على خدمتك في هذه المنشأة؟

- أقل من ٤
 ٥ - ١٠ سنوات
 ١١ - ١٥ سنة
 ١٦ - ٢٠ سنة
 ٢١ سنة أو أكثر

٦- عدد السنين في المنصب الحالي؟

- أقل من ٤
 ٥ - ١٠ سنوات
 ١١ - ١٥ سنة
 ١٦ - ٢٠ سنة
 ٢١ سنة أو أكثر .

٧- كم عدد العاملين تحت إشرافك أو إدارتك؟

٨- عدد العاملين في المنشأة التي تعمل بها

الجزء الثاني : يتناول اسئلة المقابلة

١ - هل تعتقد اتباع اسلوب القيادة التحويلية في المنشأ يؤثر علي قدره الموظفين علي ابتكار افكار واساليب جديده

٢ - زيادة التعاون والعمل الجماعي بين الموظفين يؤدي الي مستويات اعلي في الابتكار

٣- زيادة دعم الافراد من قبل القاده المباشرين يقابل زيادة ملحوظه في مجال الابتكار

٤ - هناك علاقه هامه بين كون القائد "قدوه حسنه" وبين ارتفاع مستوي الابتكار لدي الموظفين

٥- هناك علاقه مباشرة بين مستوي الابتكار عند الموظف و دعمه فكريا من قبل المنشأة

٦- يتوقف مستوي الابتكار عند الموظف علي مدي اعطاءه الصلاحيه والثقه لاتخاذ القرارات

٧- يرتبط الابتكار بمستوي التحفيز (المادي او المعنوي أو كلاهما معا) من قبل القاده

٨ - هناك علاقه بين "زيادة تقديرك" من قبل قادتك لك و "زيادة الابتكار" لديك

٩- اذا ما اتاحت لك الفرصه لتفود المنشأ، هل ستتبع اسلوب القيادة التحويلية ؟

(لا اوافق بشده) (لا اوافق) (لم اقرر) (اوافق) (اوافق بشده)

١٠ - برجاء اختيار اكثر عامل (واحد فقط مما يلي) يحفزك علي القيام بمهامك وتحفيز قدرتك علي الابتكار :

- اسلوب قياده التحويلييه في المنشأه
- زياده التعاون والعمل الجماعي بين الموظفين
- زياده دعم الافراد من قبل القاده يقابل زياده ملحوظه في مجال الابتكار
- هناك علاقه هامه بين القائد "كقوده حسنه" والابتكار لدي الموظفين
- الالهام الفكري يعني مساعده قادتك لك للتأكيد علي قدراتك وزياده معتقداتك
- يتوقف مستوي الابتكار عند الموظف علي مدي اعطاءه الصلاحيه والثقه لاتخاذ القرارات
- يرتبط الابتكار بمستوي التحفيز (المادي او المعنوي أو كلاهما معا) من قبل القاده
- هناك علاقه بين زياده تقدير قادتك لك وزياده الابتكار لديك

١١ - هل تريد ان تضيف اي رأي اضافي

وشكرا لك علي وقتك واهتمامك بمساعدتي لاكمال الدراسه التي لن تنتهي دون دعمكم

Appendix G: Approval of Institutional Review Board

CASE #2015-2016-120



To: Ragaa Elfiky
Cc: Mariez Wasfi
From: Atta Gebril, Chair of the IRB
Date: March 18 , 2016
Re: Approval of study

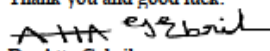
This is to inform you that I reviewed your revised research proposal entitled "LEADERSHIP STYLE AND INNOVATION OF THE PUBLIC SECTOR EMPLOYEES IN EGYPT" and determined that it required consultation with the IRB under the "expedited" heading. As you are aware, the members of the IRB suggested certain revisions to the original proposal, but your new version addresses these concerns successfully. The revised proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

This approval letter was issued under the assumption that you have not started data collection for your research project. Any data collected before receiving this letter could not be used since this is a violation of the IRB policy.

Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Amr Salama. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.


Dr. Atta Gebril
IRB chair, The American University in Cairo
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T: 02-26151919
Email: agebril@aucegypt.edu



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