

An-Najah National University
Faculty of Graduate Studies

Lifelong Learning and its Impact on the Palestinian Public Sector

By
Tasneem Akram Mosbah Dahboor

Supervisor
Dr. Aas Atrash

Co-Supervisor
Dr. Mohammad Buheji

**This Thesis is submitted in Partial Fulfillment of the Requirements for
the Degree of Master of Economic Policy Management, Faculty of
Graduate Studies, An-Najah National University, Nablus, Palestine.**

2018

Lifelong Learning and its Impact on the Palestinian Public Sector

By

Tasneem Akram Mosbah Dahboor

This Thesis was defended successfully on 18/2/ 2018, and approved by

Defense Committee Members

Signature

- | | |
|---|-------|
| – Dr. Aas Atrash / Supervisor | |
| – Dr. Mohammad Buheji / Co-supervisor | |
| – Dr. Khitam Shraim / External Examiner | |
| – Dr. Massoud Eghbarieh / Internal Examiner | |

Dedication

*To my mother and father, thank you for the support and love
you have given to me in both scientific and practical terms.*

To my husband (Rabeh) & my sons (Sohaib & Taim).

To my sister (Farah).

To my brothers (Oways & Waseem).

I love you.

Acknowledgement

First of all, I am very thankful to God, the Almighty, who provide me this opportunity and grant me the courage to complete this research successfully.

I am also very grateful to Dr. Aas Atrash, my supervisor ,and Dr. Mohammad Buheji , Co-supervisor for their support and help during this research. Their constructive suggestions and comments, valuable supervision, great efforts and assistance are appreciated.

I would like to express my deepest gratitude to my husband, for his motivation, support, and encouragement throughout this research period.

Finally, I would like also to thank all people who directly or indirectly supported me to complete this research.

الإقرار

أنا الموقعة أدناه، مقدمة الرسالة التي تحمل العنوان:

Lifelong Learning and its Impact on the Palestinian Public Sector

أقر بأن ما اشتملت عليه هذه الرسالة إنما هو نتاج جهدي الخاص، باستثناء ما تمت الإشارة إليه حيثما ورد، وأن هذه الرسالة كاملة، أو أي جزء منها لم يقدم من قبل لنيل أي درجة أو لقب علمي أو بحث يتبع أي مؤسسة تعليمية أو بحثية أخرى.

Declaration

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's name:

اسم الطالبة:

Signature:

التوقيع:

Date

التاريخ:

Table of Content

Dedication	III
Acknowledgement.....	IV
Declaration	V
Table of Content.....	VI
List of Tables.....	IX
List of Figures	XI
Abstract	XII
Chapter One.....	1
Introduction	1
1.1 Chapter Overview	1
1.2 Statement of the problem	3
1.3 Research Objectives	4
1.4 Importance of the study	4
Chapter Two.....	5
Literature Review	5
2.1 Chapter Overview	5
2.2 Historical roots of LLL	7
2.3 LLL motivations and outcomes	10
2.4 LLL and labor market development	13
2.5 Does Information and Communication Technology accelerate the development of LLL concept?	15
2.6 LLL as a mean for creativity and innovation.....	17
2.7 LLL experiences and initiatives worldwide.....	19
2.8 LLL competitiveness and economic performance.....	20
2.9 LLL and inspiration	22
2.10 Barriers to LLL	22
Chapter Three.....	26

VII

LLL in Palestine	26
3. 1 Chapter Overview	26
3.2The Higher Education system in Palestine	26
3.3LLL Strategy: the Palestinian Ministry of Education and Higher Education (MoEHE)	27
3.4 LLL and Industry-Academic partnership	28
3.5Palestinian National School for Administration	31
Chapter Four.....	33
Methodology approach.....	33
4.1 Overview	33
4.2 Research Population and Sample Size	33
4.2.1 Research population.....	33
4.2.2 Research Sample.....	35
4.3 Research methodology	36
4.3.1 Descriptive statistics	36
4.3.2 Econometric approach	37
4.4 Respondents' Characteristics.....	39
4.4.1 Respondents' Gender.....	39
4.4.2 The Respondents' Qualification.....	39
4.4.3 The Respondents' Experience	40
4.4.4: Respondents' Job description.....	41
4.4.5 Types of public institutions	41
Chapter Five	42
Data Analysis: Data Descriptive Analysis	42
5.1 Chapter Overview	42
5.2 Validity and credibility	42
5.2.1 Validity	43
5.2.2 Validity by Pearson product-moment correlation	43

VIII

5.3 Reliability.....	53
5.4 The descriptive statistics for LLL factors	57
5.4.1 Awareness of LLL	58
Chapter Six.....	65
Results of the Econometrics Analysis.....	65
6.1 Chapter Overview	65
6.2 The impact of LLL at the employee level.....	65
6.3 Types of obstacles hampering LLL in public institutions	69
6.4 The determinants of LLL capacity at the institutional level.....	72
Chapter Seven	77
Discussion	77
Chapter Eight.....	86
Conclusions and Recommendations	86
8.1 Conclusions	86
8.2 Recommendations	88
References	91
Appendices	100
الملخص	ب

List of Tables

Table 4.1: The sample selection process from 27 public institutions	34
Table 4.2: Scaling Degrees.....	36
Table 4.3: The sex of respondents	39
Table 4.4: The scientific qualifications of public employee.....	46
Table 4.5: The distribution of years of experience in the Palestinian public sector	47
Table 4.6: The job description for the respondents	47
Table 5.1: Pearson product moment correlation for the awareness about LLL.....	44
Table 5.2: Pearson product moment correlation for the role of technology in LLL	44
Table 5.3: Pearson product moment correlation for LLL supporting factors	45
Table 5.4: Pearson product moment correlation for the role of universities in LLL.....	46
Table 5.5: Pearson product moment correlation for the impact of LLL at the employee level	47
Table 5.6: Pearson product moment correlation for the impact of LLL at the institution level.....	48
Table 5.7: Pearson product moment correlation for the obstacles of LLL in laws and regulation	49
Table 5.8: Pearson product moment correlation for the obstacles of LLL at the institution level.....	49
Table 5.9: Pearson product moment correlation for the obstacles of LLL at the employee itself	50
Table 5.10: Pearson product moment correlation for the obstacles of LLL at the content of LLL programs	51
Table 5.10: Pearson product	

moment correlation for the obstacles of LLL at the content of LLL programs	51
Table 5.11: Cronbach's Alpha for Reliability Test	51
Table 5.12: Cronbach's Alpha Coefficient of the Questionnaire	51
Table 5.13: The average mean and standard deviation for the LLL elements	51
Table 6.1: OLS regression result for the determinants of the employees' LLL capacity	66
Table 6.2: GLM regression analysis for the determinant of LLL capacity at the employees level	68
Table 6.3: Wald test for the joint significance of insignificant variables ...	69
Table 6.4: OLS regression result for the determinants of the institution LLLcapacity	73
Table 6.5: Robust OLS regression for the determinants of the institution's LLL capacity	74

List of Figures

Figure 5.1:	56
-------------------	----

Lifelong Learning and its Impact on the Palestinian Public Sector

By

Tasneem Akram Mosbah Dahboor

Supervisor

Dr. Aas Atrash

Co-Supervisor

Dr. Mohammad Buheji

Abstract

The Palestinian public sector must accommodate the socio-economic needs of the Palestinians, and globalization`s requirements. Upgraded services and developed human resources in the public sector, could be achieved through a training and learning process known as "lifelong learning" (LLL) which extends beyond basic education, college or university certificate.

The major research question is to find the LLL elements which create the desirability for learning and acquiring new skills.

It investigates the role of LLL in improving the performance of public sector employees' meta-cognitive and self-directed learning skills.

Descriptive statistics and an econometric approach are utilized. The target population is public institutions in the West Bank. A random sample of 350 public employees was collected from 27 public institutions of different types.

The research finds:

1. An increasing discussion on LLL from policy makers and stakeholders, and most of the discussion came under other concepts such as vocational education, non-formal education, and adult education.

XIII

2. Universities play the most important role in increasing the impact of LLL practices and skills on the performance of public employees.
3. Support for LLL programs from public institutions, has positive influence on the performance of the public employees.
4. Obstacles of LLL related to the nature of LLL practices and programs.
5. The availability of support for LLL is considered the corner stone in elevating public institutions' performance and increasing the satisfaction of the Palestinian citizens with the quality of public services.
6. Public institutions' awareness of the importance of LLL increasing likelihood for them to be involved in LLL activities.
7. LLL activities positively affect the performance of public institutions positively.
8. Challenges or obstacles related to the nature of LLL practices and programs negatively affect the performance of public institutions.
9. Challenges of LLL levied by the public institutions positively affect the performance of public institutions.

For improving the performance of LLL practices in the Palestinian public sector. The study calls for:

1. An increase in the awareness of LLL ,among public employees.
2. It recommends urgent improvements in ICT infrastructure in public institutions.

XIV

3. The Palestinian government needs to allocate budgets for LLL projects through the National School of Public Administration.
4. Job development in the public sector should be based on the ability of public employees to enhance their LLL skills.
5. LLL practices and training programs should be compulsory for public employees.
6. In upgrading a new LLL skills ,a public allocation for external trainers, experts, and attending professional conference ,must be provided.

Chapter One

Introduction

1.1 Chapter Overview

Globalization has brought forth significant changes, mainly communication technology (ICT) and the fast growth of information.

According to report published by the OECD (1996), knowledge-based economy is highly connected with a learning-economy, which emphasizes the need for workers to acquire skills and continuously adopt them, and the need for continuous learning. Therefore, workers require both formal education and new theoretical and additional knowledge, and are paid not only for their manual work, but mainly for their codified and tacit knowledge.

The report added that education is the center of the knowledge-based economy, and learning is to be the main tool for skill development of both individual and organizational levels. The learning process extends beyond the formal education to include training, and non-formal and self-directed learning. Organizations also need to become learning organizations through continuously adopting new skills and competences, management approaches, and interactive learning, involving both producer and consumer.

Lifelong Learning LLL requires that learning should extend beyond formal education to include training, informal self-directed learning and continuing education that leads to skills, academic and personal developments.

The European Commission (2001), defines LLL as “All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective

The South African Qualifications Authority (SAQA) (2015) defines LLL as an interconnected process that involves different forms of education models.

Hyde and Phillipson (2014) indicate that LLL encompasses anything from everyday activities, such as reading a newspaper, to more demanding activities, such as studying for a degree. Three broad types of lifelong learning can be identified: formal learning, non-formal learning and informal learning, with the evidences indicating that people aged 50 and over are more likely to engage in the last two.

The traditional view of Lifelong Learning (LLL) as a human need and a right for each citizen has changed significantly. Today, LLL is discussed in an economic context. Many countries deal with it as a tool to increase economic growth and enhance the efficiency of labor force which is likely to positively affect their performance, and consequently the economic performance of different economic sectors. LLL is now an efficient tool in the hand of policy makers in many countries to face domestic and global

socio-economic challenges, such as, local market needs, labor force mobility rising competition with international firms, free trade.

The reform of the public sector accommodate socio-economic needs of people in Palestine, and globalization requirements of, requires upgrading services and developing human resources in the public sector through sustainable training, lifelong learning, which extends beyond non-formal education. Many present public employees in Palestine have been working in the public sector since the establishment of the Palestinian authority in 1993. Consequently, the public services are enhanced, progress towards high quality of life standards for citizens is achieved and the ability of Palestinian economy to compete and grow in this dynamic and competitive world is increased.

1.2 Statement of the problem

Globalization increases international competitiveness, society development, and citizens' needs. Government is to begin for public sector reform for dealing with economic and social challenges, and make public services more elastic of scarce public resources, more efficient, more competitive and more customer-focused, and reduce the cost-burden of the traditional public sector on the economy which crowds-out the private sector.

The main research question is to find the LLL elements which created desirability for learning and acquiring new skills and competencies in the Palestinian public sector. It addresses whether LLL practices improve the

performance of the public sector employees in the Palestinian West Bank context.

1.3 Research Objectives

This study intends to provide a theoretical frame work for building a learning culture or a learning organization in the public sector in Palestine, based on Lifelong Learning (LLL). It investigates the role of LLL in improving the performance of public sector employees' meta-cognitive and self-directed learning skills.

1.4 Importance of the study

This study is important because of:

- 1) It deals with the role of Lifelong Learning in modern economies, especially in countries with limited resources and everlasting constraints such as Palestine.
- 2) It introduces internal solutions for the inefficient public sector in Palestine.

Chapter Two

Literature Review

2.1 Chapter Overview

The idea of transforming formal education to be compatible with the global challenges dates back to 1980s and 1990s when a global movement emerged calling for a new model of learning (Collins, 2004). It is often accepted that new skills and competences are required to be integrated with current models of learning and education such as critical thinking, problem solving skills, effective communication between the learning parties, and innovation in education. The, LLL manifested in learning throughout the lifecycle, from early childhood to retirement, having different forms (formal, informal, and non-formal), now is situated in the core of recent debate on the modernization of learning models. It includes both recent and expected employees in all economic sectors including the public and private sectors, non-governmental organizations (NGOs) and personal or individual careers.

Recent literature on this topic mostly argues that there is a need to change the pedagogy of learning to address the future learning challenges of and to identify the new competencies that today's learners need to develop. The 'transmission' or lecture model is highly ineffective for teaching 21st century competencies and skills, and therefore supports the transforming pedagogy to better support acquisition of 21st century skills, changing the learning environments that may contribute to the development

and mastery of 21st century competencies and skills, and advance the quality of learning.

Collins (2004) confirms that in LLL, learning should be applicable to the learner's work or to other responsibilities valued by the learner, and the instructor should know the learner's needs and design learning activities that are relevant to those needs. The learner should be actively involved in learning, with the instructor acting as a facilitator. The instructor should recognize that adults have different learning styles and should tailor instructions to the characteristic ways adults prefer to learn.

Guay et al. (2014) classify LLL into cognition, skills, and affection. Cognition is vital for understanding lifelong learning and promoting human quality; enhancing the relationship between social progress and national competitiveness, realizing the necessity and influence of lifelong learning, and presenting accurate cognition for constant learning. Skills include self-learning skills, career planning, communication abilities, critical thinking, information collection, resource application, problem solving, and obstacle removal. Moreover, they include basic living skills, and the ability to promote specialty, create responses, transform data into knowledge and intelligence as well as being able to proceed learning activities and share and exchange alone or cooperate with others and present relative outcomes. Also, there is affection, being able to cultivate motivation and induce drive, being glad to learn and enjoy learning, presenting independent willingness and strong interests, presenting active attitudes towards knowledge acquisition, accepting, being brave in facing learning frustration,

participating in study activities, constantly applying learning outcomes to review and improve, and delivering the importance of lifelong learning to others.

2.2 Historical roots of LLL

Lifelong learning itself is not a new idea, Ancient societies have emphasized the need to learn from the cradle to the grave.

The ancient Greeks did not consider so called ‘terminal’ or ‘front end’ education adequate for a whole life time and advocated different kinds of education for different stages (Martin, 2011). Bernstein (1973) considers that all people are lifelong learners and they are biologically designed to learn even before birth, from their environment and experience.

The dominant debates on Lifelong Learning are overwhelmingly political as opposed to an educational discourse. Politicians serve different ends and hold different values on the function of education (Martin, 2003). Martin has remarked that ‘Most of us did not really need Paulo Freire to tell us that education is political’ (2003).

Although the idea of Lifelong Learning precedes the conception of a learning society, and is intimately connected, in recent history the development of theory and research into the learning society comes before the renewed interest in through life learning.

Since the sixties, international literature has been writing about learning and education along with conferences and policy studies. It was adopted by the Council of Europe, the Organization for Economic Co-operation and

Development (OECD) and UNESCO (Faure, 1972; OECD, 1973 and Lengrand, 1975). It is important to notice that much of the early discussion was about lifelong education rather than learning. During the nineties, the concept of LLL witnessed a remarkable revival by different international association like UNESCO and OECD.

By the end of the 1990's LLL had the sharpest and clearest agenda and policy focus (Boshier, 1998 and Field, 2001). It was developed mainly in Sweden, and taken up and disseminated through the Centre for Educational Research and Innovation (CERI) of OECD. Then it was tested by many countries who participated in (CERI) projects, as an approach towards dispersing formal education across the lifespan alternating with employment and other activities, and as a more fitting response to changing conditions and knowledge requirements.

During the last 20 years, LLL has been discussed to develop an economic analysis of recurrent education, mostly confined to face value analysis of return-on-investment over the post-study span of working life (Duke, 2001).

Higher levels of unemployment and micro-electronic driven jobs have shifted the attention to training for literacy, training of the long-term unemployed, even training for 'reserve labor stock, and has brought out again the more humane and more radical implications for both learning and education of technological, economic and social changes. While LLL was connected with other strands of research and analysis that had to do with the learning organization (Senge, 1990), new forms of organization and networking (Alter and Hage, 1993) and the ever-swelling tide of debate on

new technology rolling into both globalization and more specifically internationalization.

At regional levels, in the UK, the term LLL is not new; it has been used since 1919 by the Adult Education Committee of the Ministry of Reconstruction and by writers such as Basil Yaxlee (1921, 1927) in response to the economic crisis and labor unrest following the war (Field, 2000).

However, at that time, it failed to make any serious impact on educational policies in the UK or abroad. It wasn't until the 1990's, and with the clear impact of major social and economic transformations coupled with an interest in the learning society and the growth of the knowledge economy, that the idea of a through life education started to be considered seriously (OECD, 1996). Thus, in the 1990s, LLL in Britain became a central policy preoccupation. The UK broadly typified debate elsewhere in Europe, which was drawn together through a series of European Union (EU) policy documents (Duke, 2001). The policy debate became increasingly influenced by emergent theories of social capital set against human capital theory, and by concerns on equal opportunity and social exclusion. Learning was thus located in the arena of citizenship and civic education, equity and social integration (Duke, 2001).

The EU's 1993 'Growth, Competitiveness and Employment' white paper was followed by another on 'Education and Training towards the Learning Society', and recently by the Lisbon LLL initiative (Duke, 2001). Running through this evolution was a shift from individually focused to socially contextualized notions of learning. Learning was no longer equated with

classroom instructions; even there the notion of a managed learning environment gained support, alongside workplace pedagogic practices. The shift to workplace learning as well as the use of new IT raised questions on new inequalities of access to do with the unemployed and self-employed, and around the digital divide. Taiwan nominated 1998 as its year of lifelong learning, opening its education system to scrutiny that year (Duke, 2001).

Finally, since 2010, LLL has become a policy imperative and a look for every new form of educational provision, used to justify any modest change to the status quo. Within the wider and more popular use of the term, values and philosophical bases continue to be disputed (Duke, 2001).

2.3 LLL motivations and outcomes

(Martin, 2005) LLL and motivation are interrelated; learning is the practice of obtaining knowledge and skills facilitated and accelerated through goal directed or motivated behaviour. The motivation behind LLL varies according to the purpose of engagement in continual education. Rikowski (2007) introduces two approaches to understand the motivation behind LLL. The first is the instrumental approach which sees LLL as a mean to improve the employment opportunity and to compete in the global economy. The second is the humanist view which considers that LLL as a personal issue provides the learner with enjoyment, and personal development or for the ‘critical appraisal of society’ (Rikowski, 2007).

There is an increasing empirical literature on LLL and its implications or interactions with societal and economic factors. An OECD (2003) report

stresses the importance of LLL in generating and accelerating the stock of human capital, upgrading labor force skills to be competitive in the knowledge-based economy, providing learning competences for present and new coming labor forces upon the initial education and safeguarding the skills for those who are out of the labor force.

Laal (2011) found that LLL improves the participation rate and the influence of citizens in social, cultural and economic issues.

Ryan (2002) assesses the outcome of LLL in terms of three criteria: efficiency, equity, and personal and social development. Efficiency is concerned with the economic value and social return created by LLL. For example, if the social rate of return for LLL is greater than some social discount rate, then it is efficient to invest in LLL. The equity criteria is concerned with the disproportionate participation in adult learning; the participation of more skilled people in adult learning is widely interpreted as an indicator for unequal access and unfairness (Béret and Dupray, 2001). In order to decrease the existing “learning divide”, adults should be given “second chances” than “second helpings” (Béret and Dupray, 2001). Ryan (1991) and Layard et al. (1995) criticize the high focus of public support on post-compulsory youth education and training or for the minority that enters higher education institutions, meanwhile little subsidy is available for the least advantaged members of the age cohort. Personal development lies in the core of liberal education, and it focuses on personal autonomy, independence, and critical thinking. The adult education path was historically fuelled by liberal values. Social development levels, Lifelong

Learning will improve the socio-political involvement, democratic government and political stability (McMahon, 1998). McGivney (1993) adds that community decay manifesting in several advanced economies, is associated with low skills, unemployment, benefit dependency, drug abuse and crime. Thus, LLL is encouraged to involve adult learners more in their communities.

(Jafari and Lafi, 2004) try bridge the gap between graduates and the requirements of the job market, a number of measures are taken by the public and private sectors and Palestinian institutions of higher education. Also, they have concluded that:

- 1) The administration of higher education institutions should tap the expertise of public and private sector leaders in order to develop academic courses and programs.
- 2) The feedback from employed graduates can identify the skills and abilities required by students on graduation to enable them to integrate into the local job market.
- 3) Higher education institutions should develop curricula, programs and courses more closely linked with the labor market and local environment. These will be adaptable, offering training and applied courses to students.
- 4) Those in authority should work with university administrators to reconsider the goals of education in accordance with existing and future needs.

- 5) Educational policy must be linked to economic development by maintaining a balance between vocational and academic specializations and increasing graduate employment in the manufacturing and services sectors.
- 6) Policies need to be able to ensure the availability of high quality graduates of different levels in vocational and academic specializations to meet the needs of the economy.
- 7) The relevant bodies must look at incentives to encourage students to join vocational institutions in order to redress the existing imbalance in the distribution of students joining higher education institutions.

2.4 LLL and labor market development

One of the most important challenges for the LLL is the gap between educational institutions and the labor market. There is a major disconnection between educational systems (universities, high schools, ministries of education) and the labor market. Educational system outcomes are not used in a systematic, institutionalized manner to support learning that contributes to sustainable employment.

(Accenture, 2015) found that LLL helps agencies to understand the future demands of the labor market and analyzes the existing supply and the future supply that will come out of educational and training institutions, and reveal how education can support labor market development. Moreover, LLL can help agencies to understand the skills and preferences of the present and future workforce (e.g. upcoming graduates). What are

their capabilities? Where can interventions help bridge any skill gaps? Predictive analytics can be used to detect and predict skill gaps in certain regions and industries, and forecast career options in other regions, in higher-qualified jobs and across industries.

Guay et al. (2014) refer to the following three main skills and learning that LLL can deliver and have positive impact on labor development: .

1. Cognition, which is important to promote human quality, achieve effective problem-solving, enhance the relationship between social progress and national competitiveness, realize the necessity and influence of lifelong learning, and present accurate cognition of constant learning.
2. Skills which include self-learning, career planning, communication abilities, critical thinking, information collection, resource application, problem solving, and obstacle removal, in addition to basic living skills, and being able to promote specialty, create responses, transform data into knowledge and intelligence as well as being able to proceed with learning activities and share and exchange alone or cooperate with others to present relative outcomes.
3. Affection which is crucial for cultivating motivation and inducing drive. It leads the person to enjoy learning, presents independent willingness and strong interests, present active attitudes towards knowledge acquisition, accepts and be brave in facing learning frustration, participates in study activities, constantly apply learning

outcomes to review and improve, and delivers the importance of lifelong learning to others.

In regards to the public sector, Accenture (2015) confirms that to deliver public services for the future, public employment services must move beyond one-off, project-based data exploitation. It is important to exploit the LLL practices to help workers find long-term employment, and help employers find long-term employees. Hjort (2008) affirms that competence development in the public sector has been closely related to LLL, new public management, market orientation and decentralization. Competence development is supposed to promote professionalism, understood as knowledge creation, self-management and the ethical commitment of civil servants.

2.5 Does Information and Communication Technology accelerate the development of LLL concept?

ICT is also used as a tool to support LLL. Laal (2001) confirms that information and communication technology (ICT) is an empowerment and enhancement of creativity and support for LLL. In other words, current technology on our desktop, in our homes and in our community provides a powerful toolbox for the support of LLL.

Tindall (2005) discussed that technology-assisted LLL aims at harnessing technology to support excellence in teaching, learning and research. Research and consultancy are undertaken on e-learning and technical projects, and high quality learning solutions are developed. The challenges

of knowledge transfer in teaching and learning, collaboration ,dissemination of information can be faced by the Internet.

Information and communication technologies (ICTs) have invaded our societies and communities; meanwhile globalization has produced outcomes and processes which make the learning of new skills and competencies of vital importance. Knowledge is now recognized as the driver of productivity and economic growth, leading to a new focus on the role of information, technology and learning in economic performance.

Bouraoui et al. (2011) confirm that ICT, has not only become an important tool in education, but it also has the potential to become a key instrument for lifelong learning, innovation and learner-centered forms of education. Knowledge-based economy is highly connected with a learning-economy, which emphasizes the need for workers to acquire a range of skills and to continuously adopt these skills, and the need for continuous learning of both tacit knowledge and codified information that are reflected by the competencies to use this information. Therefore, workers will require both formal education in addition to new theoretical and additional knowledge (OECD, 1996), and will be paid not only for their manual work but mainly for their codified and tacit knowledge. Añonuevo et al. (2001) stress that it is no longer enough to have the same living and working skills one had five years ago. Learning to learn, problem solving, critical understanding and anticipatory learning are only a few of the core skills and competencies needed for all.

(OECD, 1996) Since the last decade, education became the center of the knowledge-based economy, and learning became the main tool for the development of both individual and organization skills and competences. The learning process extended beyond formal education; training, non-formal and self-directed learning became more common, and are facilitated by technological innovation; basically information and communication technology. Organizations are required to become learning organizations, continuously adopting new skills and competences, management approaches, and interactive learning involving both producer and consumer.

Koper, et al. (2005) found that learning networks (LNs) are being developed based on ICT networks. These networks support seamless, ubiquitous access to LLL facilities at home, at work, in schools and universities, and envision a learner-centered, learner-controlled model of distributed LLL. This implies the development of new ways for organizing learning delivery that goes beyond course and program-centric models.

2.6 LLL as a mean for creativity and innovation

Bouraoui et al. (2011) discussed that in most developed and developing countries, innovation has become one of the main engines for long-term economic growth and is highly linked with learning and the knowledge society. They conclude that modern economy requires a broad creative skill base, involving the whole population, thus research and innovation should be put at the heart of business.

In recent decades, the concept of innovation has broadened to encompass non-technological and social innovations in both public and private services. Therefore, the skills needed for innovation tend to be contextual and soft skills and require learning to learn and create problem solving skills.

Frith (2011) suggests investment in innovative and qualitative learning tools, mainly through mainstreaming the best lifelong learning practices on social cohesion. This is based on policy evidence with a long-term perspective, investing in the professional development of teachers, social or youth workers and volunteers, supporting a learner-centered perspective that allows learners to set up their own educational/learning pathway as well as opportunities to acquire knowledge, skills and competences, promoting the use of creative learning methods to motivate all kinds of learners and encourage inter-generational learning and applying the full potential of new communication and technologies (ICT) to reach vulnerable groups.

In Europe, knowledge and innovation are at the Centre of the revised Lisbon agenda for growth and jobs. Strengthening the links between education and innovation is a vital pre-requisite for innovation (EU, 2008). Education provides the appropriate skills and competences for innovation and creates new knowledge within the "knowledge triangle" of education, research and innovation.

From the perspective of LLL, knowledge and innovation there are two representative models that are relevant to the reform of both higher

education within the Bologna process and enhancing research at the level of the European Union: The Double Helix of “Learning and Work” put forward by Malitza (2000) and developed by Giarini and Malitza (2003), and the Triple Helix of “University-Industry-Government” put forward by Etzkowitz (1995) and developed through the contribution of Etzkowitz and Leydesdorff (1998). The two models have the same dominant logic, presenting a series of common complementary features between educational institutions and other institutions in the economy (public or private).

2.7 LLL experiences and initiatives worldwide

The literature on LLL gives examples of important initiatives based on informal education and LLL. Rubenson, (2001) discussed the Swedish Adult Education Initiative for 1997-2002. It represents the largest ever investment in adult education in Sweden. According to him the initiative aims at providing those in greatest need with an opportunity to gain new skills and knowledge. It primarily targeted unemployed people who completely or partially lacked three-year upper secondary school qualifications. It also aimed at reforming and developing the adult education sector in Sweden. Around 800,000 people raised their educational level to an average level corresponding to one year of upper secondary levels. The initiative had four perspectives: the renewal of labor market and education policies, more equitable distribution and increased economic growth. Rubensen confirms that during the years of the AEI, the government annually financed an average of 100,000 places in municipal

adult education and 10,000 places at folk high schools. The Swedish government and parliament made it possible for a number of new folk high schools to get up and run.

2.8 LLL competitiveness and economic performance

LLL is widely regarded in the literature as playing a key role in building the skills and competences of labor forces and enhancing economic performance, in both developing and developed countries.

An OECD (2003) report stresses the importance of LLL in developing and regenerating the stock of human capital, upgrading labor force skills to be competitive in the knowledge-based economy, providing labor force learning competences upon the initial education and preventing those out of the labor force from skill depreciation.

Akkoyun and Erkan (2014) stress the importance of LLL in increasing the competitiveness of local economy in Turkey at the international environment through the modification of LLL strategies at both public and private levels to achieve alignment with sustainability. Empirically, Akkoyun and Erkan (2014) studied the LLL strategy in the center and rural area offices of social security institutions finding that, in order for the business process management approach to achieve positive results, it should be supported with the LLL approach.

In his article on the changing public services and the challenges of LLL, Straussman (2007) points out that the service sector in New York State (NYS) faces several challenges which require the adoption of LLL strategy

to be aligned with globalization and the revolution of information and communication technology. These challenges include the significant turnover of the public sector at the middle and senior ranks as the “baby boomers” retire, the impact of information technology on the way work is organized in the public sector, globalization which affects many aspects or facets at national and international levels, and finally the fluidity across the three sectors public, private, and nonprofit.

Using the data of National Child Development Study (NCDS)¹, Jenkins (2004) found that LLL enabled 72% of 1,443 unemployed women in the NCDS , to be employed between 1991 and 2000. He confirms that LLL prevented skill depreciation of women who were in a long break from paid employment, and those who didn’t get their basic or initial education. To estimate the impact of lifelong learning correctly, Jenkins controlled other factors that might influence the transition of women to the labor force like health status, prior education, and the presence of a partner.

Collins (2004) confirms that many aspects of effective teaching are applicable to both adults and pre-adults (adolescents), but this does not exclude the need for special approaches in adult learning. Adults have more life experiences, different motivations for learning or know well why they should learn something new. They are self-directed and self-initiated in learning.

¹The NCDS is a continuing longitudinal survey of people living in Great Britain who were born in the first week of March 1958. Members of the NCDS cohort have been interviewed on a number of occasions over the course of their lives so far, with the most recent surveys having taken place in 1991 when cohort members were 33 years old and in 2000 when they had reached the age of 42.

Hyde and Phillipson (2014) state that there has been growing pressure to increase the skill levels across the UK economy to ensure that, as the population ages, people are able to remain both healthy and productive. Providing support and opportunities for people to continue learning and training throughout life will be critical to the success of current policies that emphasize extended or fuller working lives. Encouraging and supporting lifelong learning will be an important component in this process

2.9 LLL and inspiration

Bahzad et al. (2015) investigated the relationship between LLL and demographic dimensions in relation to Bahraini women from different working sectors, age groups and working status. They found a strong and significant relationship between most cases of LLL and demographic dimensions. They also found that LLL is an important source of influence for women in Bahrain regardless of women's working conditions and age group.

2.10 Barriers to LLL

In many countries, the initiatives of LLL face some obstacles or barriers either at micro or macro levels, which impede the LLL process and outcome. Cross (1981) identifies three main categories of barriers for LLL: situational barriers, institutional barriers and dispositional barriers. This taxonomy was also adopted by McGivney (1993). In the case of situational barriers, McGivney points out that lack of time for participation in

education and financial costs of participating in education are the most prominent barriers.

In the case of institutional barriers, he highlights that the unresponsiveness of the educational system to the needs of LLL from teaching methods and strategies, as well as the lack of adequate information and publicity regarding learning opportunities are some of the main issues which prevent adults from participating in adult learning. Regarding dispositional barriers, McGivney includes individuals' perceptions of inappropriateness and lack of relevance, lack of awareness of learning needs, hostility towards school, the belief that one is too old to learn, as well as the lack of confidence in one's ability to learn. In a similar work, Malhotra et al. (2007) found that cost of books and tuition, the lack of time, and strict attendance requirements are the most common barriers to LLL.

There are three main types of barriers that might prevent someone from undertaking Lifelong Learning: Attitudinal, situational and institutional that often operate in concert. Older respondents reported that they are less likely to want work-related training, and that they are also less likely to expect to be offered it. However, situational barriers such as financial and time constraints have been consistently shown to be the most important reasons preventing people from participating in learning and/or training later in life. The report states that there are socio-economic inequalities in rates of participation. Those with higher levels of education, higher incomes and those in full-time work were more likely to participate in learning and

training activities. Institutional factors, such as the availability of workplace training, also stand as important barriers to LLL.

According to the UK Commission's Employer Skills Survey of 2013 (Winterbotham et al., 2014), the majority of employers offered some form of training, but the amount of training offered declined substantially over the period 2011 to 2013. This was equivalent to 2 million fewer training days being available for employees of all age groups.

Titmus (1999) argues that one of the most significant obstacles of LLL is the division between initial education and adult education. Initial education is characterized by fundamental elements such as compulsion, authoritarian teacher taught relationships, curricula which are restricted to what sponsors want rather than what learners wish. On the other hand, adult (lifelong) learning requires flexibility in content, teaching methods and administration, and needs to be designed to meet the wishes of learners, providers and sponsors. However, Titmus insists that most adult education programs, especially those offered by higher education institutions, are still subject to the traditions and rigidities of the initial education system, which discourages adults from participating in lifelong education.

Referring to the lack of opportunities for adult education in the era of globalization and knowledge-based economy, Jarvis (2006) argues that knowledge economy mainly requires certain types of workers who satisfy the demands of the labor market. This means that some adults might end up not finding educational programs that fit their current needs, thus discouraging them from participating in education and training. In Poland,

Grzeškowiak (2014) points out that most adults who were surveyed believed that LLL activities were not needed for their work, or that re-skilling at their age did not make sense to them. Other criticized that the previous courses or training gave them little benefits or satisfaction.

Chapman et al. (2006) identify five main types of barriers that impede the participation of adults in lifelong learning. First, personal and societal barriers like lack of information, lack of confidence, lack of resources, personal histories that cause people to be cautious about formal education, and the influence of family members and friends in reinforcing this reserve towards education. Second, financial barriers which are built on the fact that income, as well as employment status play a major role in the ability of individuals to fund their ongoing education. Third, geographical barriers, mainly when there is a long distance people need to travel to reach the nearest educational center. Fourth, the education providers, who might lack many management techniques such as planning, accountability, staffing, clerical and compliance issues. The final barrier is the conceptual one, being strongly connected to understanding the real purpose of lifelong learning. While most people believe that adult education represents a chance for making the transition from an economic, educational, social or personal disadvantage, there is a need to define more clearly, measure and report the other economic, educational and social impacts of lifelong learning, in order to make people more interested and determined to participate in education throughout their lifetime.

Chapter Three

LLL in Palestine

3.1 Chapter Overview

Palestine has been suffering from occupation, political instability, severe shortage of natural resources and financial capital, mainly human and social capital which represent the wealth and strategic stock of the Palestinian society. LLL is becoming an increasing necessity in Palestine. It is expected to contribute to both human and social capital, improve the economic performance, and foster social inclusion. For most people as well as institutions in Palestine, basic skills and key competencies are now recognized as a vital need. Consequently, they should be taken fully into policy and resource calculations based on the needs of the society and individuals.

In this section, the research sheds light on the leading Palestinian experiences related to LLL. This would enable to build a vision or concept on the framework of LLL in Palestine, and to determine a focal point for the analysis and discussion in the upcoming parts of data analysis.

3.2 The Higher Education system in Palestine

The Palestinian higher education system has developed significantly in the last two decades, which is reflected in the number of higher education institutions and the high number of enrolled students. The number of higher education institutions in Palestine was 52 in the 2015 statistics; 33 in the

West Bank and 18 in Gaza (Palestinian Ministry of Education and Higher Education, 2015)², distributed among 14 classical universities, one open university, 19 university colleges and 18 community colleges. Around 221,000 students were enrolled in the higher education institutions in 2015; 133,000 females and 88,000 males (Palestinian Ministry of Education and Higher Education, 2015). Around 40,000 students graduated in 2015(Palestinian Ministry of Education and Higher Education, 2015).

One of the main challenges facing higher education institutions in Palestine is the issue of quality and relevance the link of educational programs with the needs of the labor market is weak. This is mainly attributed to the traditional tools still being used in the education process which are associated with formal education approaches. Non-formal education tools are rarely used and are still not integrated within the education system in most higher education institutions.

3.3LLL Strategy: the Palestinian Ministry of Education and Higher Education (MoEHE)

Between 2001 -2017, MoEHE has accelerated its efforts to come up with a national strategic plan for the development of the human educational cadre in Palestine in cooperation between Higher Education institutions, and local and international partner organizations from both private and non-private sectors. The main objective of this plan is to bridge the gap between methodologies of teacher training programs, in adopting policies that

²<http://www.mohe.pna.ps/Higher-Education/Institutions/>

upgrade the teaching profession through teacher training and qualification programs (MoEHE, 2008).

The Palestinian MoEHE adopted LLL to develop the skills and knowledge of its cadre. In its 2007-2011 strategic plan, MoEHE developed the pre-service teacher training programs at the Higher Education institutions, and in-service continuing training programs in the development of teaching profession (MoEHE, 2008).

Since the appointment of Dr. Sabri Saidam as the Minister of Education and higher education in 2015, the concern LLL and TVET has sharply increased. His role is crucial in order to bridge the gap between academia and labor market needs. Especially when he emphasizes the importance of using IT in the teaching-learning process and encourages promising teachers and students to bring a transformation of learning to classrooms (Darras, 2016).

3.4 LLL and Industry-Academic partnership

(Tumuti et al., 2013) discussions on Lifelong Learning are increasing in the context of industry-academia partnerships or collaboration, is becoming a key aspect or feature of LLL. Recently, Higher Education institutions across the world consider collaboration with the industrial sector a high priority in their agenda and strategic plans. This has been accelerated with the development of a knowledge-based economy which highlights the idea that knowledge comes through higher education institutions in the development of modern economies, and the importance of bridging gaps

between this knowledge and the requirements of the various productive sectors.

Through the linkages with the industrial sector, the role of universities are expected to become catalysts in the development of modern economies and confined to human capital development, technology transfer and innovation. Scharfetter et al. (2002) define three main roles for universities in enabling this partnership. First, affect the technological frontier of the industrial sector over the long-run through intensifying both basic and applied scientific research. Secondly, focus on the production of applied knowledge which is directly employed in the production process (prototypes, new processes etc.). Thirdly, provide the industrial sector with the human resources that can accelerate the innovation process, which comes through innovative and entrepreneurial graduates who are research-oriented or through personnel mobility from universities to firms. This requires universities and higher education institutions to incorporate the university-industry collaborations and partnerships into their programs, and also modify their academic structures to be aligned with the needs of the industrial sector in the view of knowledge economy, and to respond to the global competition and change (Gumpert & Snyderman, 2002).

In Palestine, the gap between knowledge and skills that the graduates obtain through the educational system and the labor market needs is large. It leads to high unemployment and weak entrepreneurship and innovative capabilities of the Palestinian economy. This has deepened the discussion during the last few years on the importance of industry-university

collaboration and the need to insert radical changes to the curriculum and learning processes in universities and Higher Education institutions in order to provide the labor market with needed skills and knowledge which are needed in the productive sectors.

Abu Hanieh et al. (2015) discuss the reality of industry-academia partnership in Palestine in relevance to engineering education. In order to bridge the gap between academia and industry, they suggest a set of improvements on the curricula by including sustainability concepts and new teaching methods. They found that the partnership with local market and industry will help in opening new opportunities for students and graduates in their future career. Meanwhile, they suggest a “curricula based partnership” with the private sector, where the university students spend a period of time in the workplace supervised by both industrial supervisors and academic staff. This will help the student to live real life experiences, and obtain new concepts and practical knowledge.

In the context of LLL, Abu Hanieh et al. (2015) confirm the crucial role that LLL plays in modern economies, and illustrate how it contributes to building the capacity of engineers and technicians working in the local industry in Palestine with new skills and updated knowledge. They recommend that LLL should be monitored by Higher Education institutions, and the Government is required to lay out rules and measures for the implementation of LLL in the context of industry-academia partnership.

3.5 Palestinian National School for Administration

Since 1993, it has been necessary to allocate high efforts and resources to enhance the efficiency and effectiveness of government institutions by modernizing and reforming of public administration and its related service management systems in order to decrease bureaucracy, enhance professionalism and highlight the principle of the separation of powers.

In 2010, the Palestinian Authority (PA) submitted a reform plan for the public administrations based on training and building the capacity of public employees. Therefore, it established a directorate of training development in cooperation with the Palestinian General Personnel Council (GPC). The main objective was to develop a civil service leadership development program for senior officials at the GPC as well as other public institutions. The outcome of this program is very important to ensure that senior civil servants are provided with the necessary skills and competencies to carry out their roles effectively in support of the overall national development goals of the PA.

In order to formalize and systemize the different activities of the civil service leadership development program, in 2016, GPC instituted the Palestinian National School of Administration (PNSA), which is considered the only public institute responsible for training and building the capacity of public servants in Palestine. The main objective is to build a capacity of around 600 directors in different public administrations in Palestine. It included a wide set of training programs which are crucial to face the local and international challenges related to public administration

and governance. The training programs included both theoretical and practical skills and competences provides by mainly local experts from the Palestinian universities, private and public sector, and also NGO's. PNSA is a national need due to the fact that a significant part of the Palestinian civil servants lack the professional skills and basic knowledge needed to perform efficiently and to meet the challenges of knowledge, economy and globalization

Chapter Four

Methodology approach

4.1 Overview

Research in common parlance refers to the search for knowledge. Kothari (2004) defines research as an art of scientific investigation. This chapter discusses the research design and the participants in the study. It explains method used in designing the questionnaire, sampling calculations, collecting data, and interviews as an instruments used for data collection, along with analysis methods.

4.2 Research Population and Sample Size

This part of the study introduces the targeted population and the sample size, taking into account different public institutions (cluster sample).

4.2.1 Research population

The target population is the public institutions in the West Bank of Jordan. According to the Palestinian Central Bureau of Statistics, the Palestinian public sector accounted for 45 institutions or establishments including ministries, authorities like energy and water, bureau of statistics. A random sample of 350 public employees was selected from 27 public different type institutions , as seen in table 4.1:

Table 4.1: The sample selection process from 27 public institutions

Institution type	Frequency	Percentage
Ministry of Telecommunication and information technology	12	%3
Palestinian Center Bureau of Statistics (PCBS)	6	%2
Ministry of Public Work and Housing	20	%6
Ministry of Information	4	%1
Ministry of National Economy	19	%5
Ministry of Planning and Administrative Development	4	%1
Ministry of education	30	%9
Ministry of higher education	24	%7
Ministry of culture	8	%2
Ministry of local governance	9	%3
General Personnel Council	7	%2
Ministry of Agriculture	23	%7
Ministry of Tourism & Antiquities	8	%2
Ministry of Social Affaires	25	%7
Ministry of Foreign Affairs	11	%3
Ministry of Health	28	%8
Ministry of Justice	6	%2
Ministry of Labor	16	%5
Ministry of Finance	20	%6
Ministry of Transportation	21	%6
Palestinian Broadcasting Corporation	20	%6
State Audit & Administrative Control Bureau	5	%1
Palestinian Energy an Natural Resources Authority	4	%1
Palestinian Water Authority	8	%2
Environment Authority	6	%2
Women Affaires	3	%1
Palestinian Standard Institution	3	%1
Total	350	%100

4.2.2 Research Sample

For determining the sample size for this research, the researcher applied the following equations (Kapoor, 2010):

$$n = ss / (1 + (ss - 1) / N)$$

Where:

- n = correction for limited population (the final sample size)
- N = population
- ss = sample size

to calculate the value of ss , the following equation is used:

$$ss = (z^2 * p * (1 - p)) / \epsilon^2$$

Where:

- z = Z value (e.g. if the confidence level = 95%, the Z value is 1.96)
- p = percentage picking a choice (0.5 used)
- ϵ = maximum error (0.05)

Thus,

$$ss = (1.96)^2 * 0.5 * (1 - 0.5) / (0.05)^2 = 384$$

if the number of public employees in the related ministries are 4255, then the sample size as following:

$$n = ss / (1 + (ss - 1) / N)$$

$$n = 350$$

4.3 Research methodology

To measure the impact of the LLL indicators and practices on the performance of both public employees and the public institution, a quantitative survey approach using a researcher-developed scale is employed. The survey targets a sample of 350 public employees in different public institutions in Palestine. The sample is a cluster sample selected randomly, where each public institution is represented. Statistical analysis relies on descriptive statistics and econometric approaches.

4.3.1 Descriptive statistics

In descriptive statistics, means and frequencies are mainly used. The mean is used to show the average satisfaction of the respondents with the LLL factors. While, frequencies measure the percentage of each answer at the five points Likert scale.

The research classified the response average mean into five levels, each related to an interval as shown in table 4.26 below:

Table 4.2: Scaling Degrees

Interval	Degree
1.00-1.80	Very low
> 1.80-2.60	Low
> 2.60-3.40	Moderate
> 3.40-4.20	High
> 4.20-5.00	Very High

The interval length is calculated by dividing the response range by the number of intervals, $\text{interval length} = (5-1) / 5 = 0.8$. The response range = 5 (which presents a very great extent) minus 1 (which presents not at all).

4.3.2 Econometric approach

The questions ,econometrics approach is employed to empirically estimate the relationship, particularly the multiple linear regression analysis.

The regression model for the estimation equation is as following:

$$Y_i = B_0 + B_1X_{1i} + B_2X_{2i} + B_3X_{3i} + B_4X_{4i} + B_5X_{5i} + B_6X_{6i} + B_7X_{7i} + B_8X_{8i} + U_i$$

The dependent variable Y_i represents the performance indicator. It consists of two types or two levels- at the public employee level, and at the public institution level. Each level is analyzed separately using the same independent variables. It is important to denote that the performance of the public employee is a proxy for a set of indicators like job satisfaction, motivation for work, knowledge and skills, experience and efficiency, ICT skills, and capacity to find innovative solutions. Also, the performance of the public institution is a proxy for a set of indicators like the quality of public services, the confidence of people in public services, capacity of public institutions to find innovative solutions, responsiveness rate for the increasing demand on public services, impression that people have about public institutions, and cost of public services.

The independent variables denote a set of LLL indicators as follows:

X_1 : *The awareness of the public institution of the importance of LLL*

X_2 : *The university's role in developing LLL practices for the public institutions*

X_3 : *The availability of technological infrastructure necessary to perform LLL*

X_4 : *The challenges or obstacles of LLL which are related to the employee*

X_5 : *The challenges or obstacles of LLL which are related to the nature of LLL practices and programs*

X₆: The challenges or obstacles of LLL which are levied by the public institutions.

X₇: The inspiration element possessed by the public employee

X₈: The availability of support for LLL in the public institutions.

The mathematics behind regression makes certain assumptions that should be met before it is possible to obtain unbiased estimates of the coefficients and therefore to draw any conclusions regarding the population based upon the sample used for the regression. (Chatterjee & Hadi, 2012; Cohen, et al., 2003) asserts that serious assumption violations can lead to biased estimates of relationships, over or under-confident estimates of the precision of regression coefficients. These assumptions include zero conditional mean of errors, independence of errors, homoscedasticity (constant variance) of errors, normal distribution of errors, and no exact multicollinearity among the independent variables.

The focus here is on two important violations that will probably appear in the regression analysis- the assumption of normality and the assumption of homoscedasticity. In the assumption of normally distributed errors, it may be assumed that errors are normally distributed for any combination of values on the predictor variables. (Cohen et al., 2003) indicate that this assumption is required for trustworthy significance tests and confidence intervals in small samples. The larger the sample, the less the importance of this assumption. In the assumption of homoscedasticity, we assume that the models have an unknown but finite variance that is constant across all levels of the predictor variables. (Weisberg, 2005) claims that if the errors have a variance that is finite but not constant across different levels of the predictor/s (i.e., heteroscedasticity is present), ordinary least squares

estimates will be unbiased and consistent as long as the errors are independent, but will not be efficient.

4.4 Respondents' Characteristics

This section analyzes the demographic variables including sex, education, qualifications, and experience.

4.4.1 Respondents' Gender

Table 4.3 below shows that 71% of the respondents are males, whereas 29% are females.

Table 4.3: The sex of respondents

Gender	Frequency	Percentage
Male	248	%71
Female	102	%29
Total	350	%100

4.4.2 The Respondents' Qualification

Table 4.4 below shows that the majority of public employees hold a bachelor's degree with a 68.3%. Following are those who hold a master's degree with 21.7%. Those with a diploma come third with 9.1%, while employees holding a doctoral degree represent less than 1%. This percentage is normal and represents the distribution of scientific certificates in Palestine.

Table 4.4: The scientific qualifications of public employees

Education	Frequency	Percentage
Diploma	32	%9.1
Bachelor	239	%68.3
Master	76	%21.7
PhD	1	%0.3
Else	2	%0.6
Total	350	%100.0

4.4.3 The Respondents' Experience

According to work experience, 35% of public employees have from 5-10 years of experience, 24% have less than 5 years of experience, 15% between 11-15 years, 15% between 16-20 years and only 10% have more than 20 years. This is consistent with the novelty of most of the public administrations which were instituted following the Oslo Accords in 1993. Table 4.5 below shows that most public employees are still in their first or medium years of experience. This may denote that it is important that the public employee invests in LLL programs which are expected to have a high impact at the medium and long-run.

Table 4.5: The distribution of years of experience in the Palestinian public sector

Years of Experience	Frequency	Percentage
Less than 5 years	85	%24
5-10 years	122	%35
11-15 years	54	%15
16-20 years	54	%15
More than 20 years	35	%10
Total	350	%100

4.4.4: Respondents' Job description

Table 4.6 below shows that 42% of the respondents are employees, 26% managers, 25% heads of departments, and 3% general directors and higher managers.

Table 4.6: The job description for the respondents

Job Description	Frequency	Percentage
Employee	147	%42
Manager	90	%26
Head of Department	89	%25
General director and higher manager	11	%3
Else	13	%4
Total	350	%100

4.4.5 Types of public institutions

According to the representation of the different public administrations in the sample, the Ministry of Education and Higher Education has the highest representation in the sample with 16%, followed by the Ministry of Health with 8%, then Ministry of Social Affairs and the ministry of Agriculture with 7%.

Chapter Five

Data Analysis: Data Descriptive Analysis

5.1 Chapter Overview

This chapter provides the descriptive analysis of analyzed data. This includes the analysis of all questionnaire questions starting with the respondent characteristics related to sex, education, experience, etc. Then the LLL awareness question, LLL technology tools, LLL supporting practices, and LLL methods. Then the role of universities and higher education institution in supporting LLL practices is introduced. Following is the sources of funding for LLL programs in the public institutions. The impact of LLL will be discussed at both employee level and institutional level. Then, the obstacles of LLL practices will be discussed using four pillars: laws and regulations, public institutions, employees, and the LLL programs or content. Finally, the inspiration elements and how much the public employees possess them are discussed. Frequencies and percentages which give more obvious descriptions for answers are used.

5.2 Validity and credibility

Assessing the validity of the research instrument is one of the major quality assurance tests to measure the reliability and validity of tools. This section determines the validity and reliability of the questionnaire which was designed as an instrument to collect data to measure LLL in the Palestinian

public sector and its impact on public employees performance, and on the development of public institutions.

5.2.1 Validity

(Leung, 2015) asserts that validity is arguably the most important criteria for the quality of a test. The term validity refers to whether or not the test measures what it claims to measure. A test with high validity will have items closely linked to the test's intended focus.

There are several types of validity tests:

1. Face validity
2. Content-Related Validity
3. Construct-related validity
4. Validity by Pearson product-moment correlation

5.2.2 Validity by Pearson product-moment correlation

Validity using Pearson product moment correlations is done by correlating scores of each questionnaire item with the total score. The higher the correlation, the stronger the validity. Item-item questionnaire significantly correlates with the total score of the five points Likert scale for the eleven LLL indicators as follows:

I. Pearson product moment correlation for the awareness of LLL.

Table 5.1 below shows a high and significant relationship between each of the items and the total score of items, which denotes a high validity for the awareness of LLL items.

Table 5.1: Pearson product moment correlation for the awareness about LLL

The Awareness about the importance of LLL	Pearson Correlation Coefficient	Significance level
LLL, building capacity and informal education are well-known practices in your institution	0.80***	0.00
there is a determined strategy for LLL in your institution	0.85**	0.00
LLL practices are included within the strategic plan in your institution	0.8***	0.00
LLL practices are systematic and managed through a specific department or person	0.78***	0.00
New employees are encouraged to raise their skills through the trainings and informal education	0.71***	0.00
Higher management and directors ensure that employees gain LLL practices	0.84***	0.00
The selection process of new hiring based on their skills on informal education	0.71***	0.00

II. Pearson product moment correlation for the role of technology in LLL

Table 5.2 below shows a high and significant relationship between each of the items and the total score of items, which denotes a high validity for the items included in the role of technology in LLL.

Table 5.2: Pearson product moment correlation for the role of technology in LLL

The role of technology in supporting LLL	Pearson Correlation Coefficient	Significance level
LLL practices are connected with ICT tools	0.75***	0.00
Social networks are employed to support LLL practices	0.8***	0.00
Computer software like PowerPoint, words and excel are used to support LLL practices	9.73***	0.00
Internet websites like YouTube and Google are used in LLL	0.74***	0.00
Professional software like statistical analysis programs, project management, quality assurance are used to support LLL	0.75***	0.00
Smart applications are used to support LLL	0.81***	0.00
Video conference and Skype are used to support distance workshops concerned with LLL	0.79***	0.00
E-government practices contribute to and encourage LLL	0.72***	0.00

III. Pearson product moment correlation for LLL supporting factors

Table 5.3 below shows a high and significant relationship between each of the items and the total score of items, which denotes a high validity for the items included in the supporting factors for LLL.

Table 5.3: Pearson product moment correlation for LLL supporting factors

LLL supporting practices within the institution	Pearson Correlation Coefficient	Significance level
Your institution provide non-financial incentives to the employee in order to improve their LLL skills	0.8***	0.00
The job development in your institution depends on the ability of the employee to enhance his LLL skills	0.8***	0.00
Employees are encouraged to join intra-organization (internal) LLL training and building capacity programs	0.82***	0.00
Employees are encouraged to join external LLL training and building capacity programs	0.84***	0.00
Most of LLL practices and training programs are compulsory for the employees	0.76***	0.00
The institution encourages the exchange of knowledge and skills among employees in different departments	0.81***	0.00
The institution encourages the exchange of knowledge and skills with other organizations	0.8***	0.00
The institution search for LLL training opportunities for its employees	0.85***	0.00

IV. Pearson product moment correlation for the role of universities in LLL.

Table 5.4 below shows a high and significant relationship between each of the items and the total score of items, which denotes a high validity for the items included in the role of universities in LLL.

Table 5.4: Pearson product moment correlation for the role of universities in LLL

The role of universities and higher education institution in supporting LLL practices	Pearson Correlation Coefficient	Significance level
The registration of public employees in the master programs enable them to gain LLL practices	0.65***	0.00
Universities develop master programs which in role in LLL practices	0.69***	0.00
Universities are involved in the development of strategic plan of the public institutions	0.77***	0.00
Many of LLL programs and trainings are run by faculty members of the local universities	0.73***	0.00
There is significant improvement In the quality of new graduates	0.68***	0.00
New hiring employees have more ability to find innovative solutions	0.71***	0.00
New hiring employees have more ability in using ICT tools	0.61***	0.00

V. Pearson product moment correlation for the impact of LLL at the employee level.

Table 5.5 below shows a high and significant relationship between each of the items and the total score of items, which denotes a high validity for the items included in the impact of LLL at the employee level

Table 5.5: Pearson product moment correlation for the impact of LLL at the employee level

The impact of LLL on the employees	Pearson Correlation Coefficient	Significance level
Enhance the job satisfaction level	0.82***	0.00
Increase the motivation to work	0.84***	0.00
Decrease the deficiencies of introducing the public services	0.81***	0.00
Increase the knowledge and competences	0.84***	0.00
New skills in using ICT tools	0.83***	0.00
Increase the experience and efficiency	0.84***	0.00
Increase the demand of employees for knowledge and skills	0.85***	0.00
Provide the knowledge and skills that is needed to enter the knowledge society	0.87***	0.00
Increase the satisfaction of local citizens	0.84***	0.00
equal LLL training opportunities among employees	0.81***	0.00
Increase the capacity of employees to find innovative solutions	0.83***	0.00
Increase the level of inspiration	0.83***	0.00

VI. Pearson product moment correlation for the impact of LLL at the institutional level.

Table 5.6 below shows a high and significant relationship between each of the items and the total score of items, which denotes a high validity for the items included in the impact of LLL at the institutional level.

Table 5.6: Pearson product moment correlation for the impact of LLL at the institution level

The impact of LLL at the institution level	Pearson Correlation Coefficient	Significance level
The increasing in the institution performance	0.86***	0.00
The increase of public service quality	0.85***	0.00
The increase of people confidence in public institution	0.88***	0.00
Decrease the bureaucracy level	0.77***	0.00
The change of negative impression that people feel about public institutions	0.85***	0.00
Increase the responsiveness rate for the increasing demand on public services	0.84***	0.00
equal LLL training opportunities among employees	0.85***	0.00
Increase the capacity of public institution to find innovative solution	0.86***	0.00
Decrease the cost of public services	0.82***	0.00

VII. Pearson product moment correlation for the obstacles of LLL in laws and regulations.

Table 5.7 below shows a high and significant relationship between each of the items and the total score of items, except for the last item, which means that it is not consistent with the other items and does not measure what it claims or what we want it to measure, therefore it is recommended to delete it.

Table 5.7: Pearson product moment correlation for the obstacles of LLL in laws and regulation

Obstacles related with laws and institutions	Pearson Correlation Coefficient	Significance level
In the Palestinian law, the LLL and training programs are right to each employee	0.72***	0.00
The laws and instructions inside the institution support the training and building capacity programs	0.81***	0.00
The institution support and the training programs outside workplace	0.76***	0.00
The job upgrading is directly related with the ability of employee to develop his skills and competences	0.76***	0.00
The early retirement system does not motivate the employee to follow LLL programs	0.43	0.18

VIII. Pearson product moment correlation for the obstacles of LLL at the institutional level.

Table 5.8 below shows a high and significant relationship between each of the items and the total score of items, except for the second item, which means that it is not consistent with the other items and does not measure what it claims or what we want it to measure, therefore it is recommended to delete it.

Table 5.8: Pearson product moment correlation for the obstacles of LLL at the institution level

Obstacles related to the institution itself	Pearson Correlation Coefficient	Significance level
The work pressures and limited time limit the enrollment in LLL programs	0.64***	0.00
The nature of public jobs and needed skills doesn't require LLL training programs	0.29	0.34
The higher management doesn't support and encourage LLL programs	0.77***	0.00
The bureaucracy inside the institution doesn't help the enrollment in LLL programs	0.79***	0.00
LLL programs are not connected with nonfinancial motives and rewards	0.8***	0.00
LLL programs are not connected with financial rewards	0.73***	0.00

IX. Pearson product moment correlation for the obstacles of LLL at the employee level.

Table 5.9 below shows a high and significant relationship between each of the items and the total score of items, which denotes a high validity for the items included in the obstacles of LLL at the employee level.

Table 5.9: Pearson product moment correlation for the obstacles of LLL at the employee itself

Obstacles related to the employee itself	Pearson Correlation Coefficient	Significance level
Public employees lack the motivation for LLL	0.69***	0.00
The LLL programs exceed the employees absorptive capacity	0.74***	0.00
There is no consistency between the job requirements and LLL programs introduced	0.72***	0.00
Public employees are not serious toward LLL programs	0.82***	0.00
Public employees are not committed with LLL on the long-run or for long period	0.78***	0.00
The rise of average wage for most of the employees hampers the enrollment on LLL practices	0.7***	0.00

X. Pearson product moment correlation for the obstacles of LLL at the content of LLL programs.

Table 5.10 below shows a high and significant relationship between each of the items and the total score of items, except for the last item, which means that it is not consistent with the other items and does not measure what it claims or what we want it to measure, therefore it is recommended to delete it.

Table 5.10: Pearson product moment correlation for the obstacles of LLL at the content of LLL programs.

The obstacles related with the training and LLL programs	Pearson Correlation Coefficient	Significance level
The content of LLL programs is weak and insufficient	0.73***	0.00
LLL programs are frequent and unnecessary	0.79***	0.00
LLL programs are not consistent with job needs	0.81***	0.00
LLL trainers lack experience and skills	0.80***	0.00
The training materials are insufficient	0.82***	0.00
Some of required LLL programs lack local experts to perform	0.64***	0.00

5.3 Reliability

The reliability of an instrument is an indication of the extent to which the test measures a single topic such as the awareness of LLL. Measures of internal consistency indicate how well the questions on the test consistently and collectively address a common topic or construction. Reliability results are characterized by repeativeness (Psarou and Zafiropoulos, 2004) and these results are not connected to measurement errors (Zafiropoulos, 2005). Data are reliable if the testing processes are repeated with a group of test takers, essentially the same results would be obtained. There are several methods for computing test reliability including test-retest reliability, parallel forms reliability, decision consistency, internal consistency, and inter-rater reliability.

5.3.1 Internal consistency

For many criterion-referenced tests, internal consistency is one of the most used tests for reliability. (Terwee et al. 2007) internal consistency is a measure of the extent to which items in a questionnaire (sub)scale are correlated (homogeneous), thus measuring the same concept. It is a very important tool for the reliability of the questionnaire which measures how we construct one concept using multiple items.

Cronbach's alpha is considered an adequate measure of internal consistency. The index alpha (α) is the most important index of internal consistency and is attributed as the mean of correlations for all the variables, and it does not depend on their arrangement (Anastasiadou, 2006). It is based on the number of the variables/items of the questionnaire, as well as on the correlations between the variables (Nunnally, 1978). A low Cronbach's alpha indicates a lack of correlation between the items on a scale, which makes summarizing the items unjustified. Cronbach's coefficient alpha value (α) ranges between 0 to 1 (Burns and Grove, 2011), and is divided into a group of intervals, each interval is classified as in table 5.11 below. A positive rating for internal consistency is given when factor analysis is applied and Cronbach's alpha is between 0.70 and 0.95.

Table 5.11: Cronbach's Alpha for Reliability Test

Cronbach's Alpha (α)	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

(Farrell, 2012)

5.3.2 Confirmatory factor analysis for LLL factors or scales.

This research will not perform the confirmatory factor analysis for a part of the questionnaire, for example, on the items related to the obstacles of LLL. The researcher classified the obstacles into 4 groups in the questionnaire: obstacles related to regulations laws, obstacles related to public institution, obstacles related to the public employees, and obstacles related to the content of LLL programs.

Figure 5. 1 shows that most of the correlation coefficients between the items in each factor are greater than 0.6 which is good. This denotes that the internal consistency is relevant, and the items in each factor form only one overall scale (dimension).

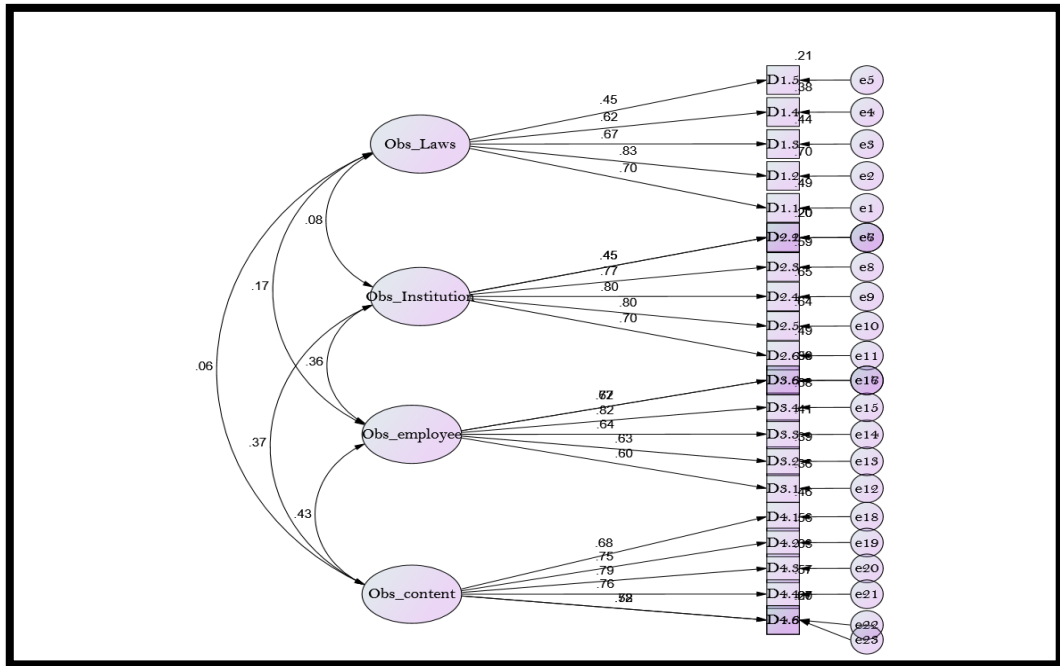


Figure 5.1:

5.3.3 Cronbach's alpha for the LLL factors or scales

Table 5.12 below shows the Cronbach's alpha results for the 11 LLL indicators of the questionnaire following the 5 point of likert scale. The results show a high value of Cronbach's alpha, which denotes a high degree of internal consistency among the items included in each of the LLL indicators, therefore a high degree of reliability.

Table 5.12: Cronbach's Alpha Coefficient of the Questionnaire

Item	Number of Items	Cronbach's Alpha coefficient (α)	Internal Consistency
The Awareness about the importance of LLL	7	0.898	Good
The role of technology in supporting LLL	8	0.896	Good
LLL supporting practices within the institution	8	0.924	Excellent
The role of universities and higher education institution in supporting LLL practices	7	0.818	Good
The impact of LLL on the employees	10	0.959	Excellent
The impact of LLL at the institution level	9	0.948	Excellent
Obstacles related with laws and institutions	5	0.791	Acceptable
Obstacles related to the institution itself	6	0.822	Good
Obstacles related to the employee itself	6	0.836	Good
The obstacles related with the training and LLL programs	6	0.859	Good
Inspiration of the public employee	9	0.938	Excellent

5.4 The descriptive statistics for LLL factors

This section introduces the descriptive statistics of the LLL factors including LLL awareness, LLL technology tools, LLL supporting practices, and LLL methods, LLL obstacles and impact, etc.

5.4.1 Awareness of LLL

Table 5.13 below shows the mean, standard deviation and the application degree of the LLL indicators used in this study. The result of the table below shows that the overall awareness of LLL in the Palestinian public sector is moderate (around 3.14). A low percentage of public employees think that there is a determined strategy for LLL in their institutions. They do not believe that LLL practices are included within the strategic plan within their institutions. The role of technology in supporting LLL practices in the Palestinian public sector is moderate. A significant percentage of respondents (57%) said that LLL practices in the work place are connected with ICT tools, and 61% consider that computer software like PowerPoint, word and excel are used in their work place to support LLL practices. However, smart applications are still not highly employed in LLL.

Table 5.13: The average mean and standard deviation for the LLL elements

Rank	Element	Mean	S.D	Application Degree
1	The Awareness about the importance of LLL	3.14	1.125	Moderate
2	The role of technology in supporting LLL	3.20	1.155	Moderate
3	LLL supporting practices within the institution	2.97	1.15	Moderate
4	The role of universities and higher education institution in supporting LLL practices	3.4	1.02	High
5	The impact of LLL on the employees	3.52	0.95	High
6	The impact of LLL at the institution level	3.44	0.97	High
7	Obstacles of LLL related with laws and regulations	3.3	1.06	Moderate
8	Obstacles of LLL related to the institution itself	3.64	0.94	High
9	Obstacles of LLL related to the employee itself	3.43	1.03	High
10	The obstacles of LLL related with the LLL programs and trainings	3.42	1	High
11	Inspiration of the public employee toward LLL	4.15	0.8	High

Most public employees considered that LLL support from their institutions is still not high. Only 32% think that job development for the employee is based on his/her ability to enhance LLL skills. Additionally, only 37% answered that their institution provides non-financial incentives to the employee in order to improve LLL skills. The public employees expressed a good level of satisfaction with encouragement from their institution for exchange of knowledge and skills among employees in different departments within the same institution, and with other public and private institutions.

Regarding the methods and tools used to acquire LLL skills, the table below denotes that the majority of public employees (71%) depend on themselves in acquiring LLL skills. This might be due to a number of

factors. First is low financial and non-financial support from the work place as shown in the previous section. Due to the ICT revolution, LLL practices and skills have become widely available and easily accessible and do not require high costs to be obtained. The unavailability of systematic and sustainable plans and programs in many public institutions forces the employee to search for knowledge alone. Local workshops and conferences, as well as local training programs are also very interesting tools for LLL. However, these need be explained in the light of the financial and nonfinancial constraints (mainly Israeli constraints on traveling abroad and low funds for such programs). Palestinian institutions, during the years of the second Intifada (2000-2004) and following it have been trying to create their own expertise to decrease the dependence on international experts which will result in a decrease in the costs of LLL programs and increase their coverage. Results show that there are low connections between the public institutions themselves and between public institutions and other institutions. Only 23% of public employees confirmed that they have obtained their LLL practice through the exchange of knowledge and skills with other organizations.

Results in table 5.13 also shows that universities and higher education institutions play and can play a vital role in LLL in Palestine. A high percentage of respondents (around 70%) said that the universities and higher education institutions play an important role in enhancing their LLL skills and practices. The majority of public employees (71%) answered that the enrollment of public employees in master's programs is one of the most

important tools to gain LLL skills. This was also confirmed by 58% of the respondents who confirmed that the master's programs in Palestinian universities merge LLL practices in their plans and courses. Also 60% of the respondents believe that the reform of the educational system in the Palestinian universities to include LLL practices improves the capacity of new graduates which consequently influences the LLL skills for public employees. Another means of universities' support for LLL in the public institutions comes through the faculty staff who provide training programs or participate in designing public administrations strategic plans.

Most of the public employees denote that LLL skills are very important for them, and are necessary to enhance their knowledge and work skills, with an average answer of 3.52. For example, 61% said that LLL practices enable them to gain new skills mainly in using ICT, 60% of them confirmed that the LLL practices enable them to increase their experience and capacity, and 58% considered that LLL practices increase their knowledge and competences. Among the advantages of LLL, are its ability to provide the public employees with the knowledge and skills needed to enter the knowledge society, increasing the capacity of employees to find innovative solutions, and enhancing job satisfaction levels.

Descriptive statistics of the data also shows that around 69% of respondent employees believed that LLL has positive influence at the institutional level, with a 3.44 average mean. In this regard, 60% of the employees agree and strongly agree that LLL practices increase the institution's performance, 58% think that it increases the public service quality, and

55% believe that LLL will increase the trust of people in the public institutions. Also, 48% think that it decreases the average cost of public services

Many political, social and economic obstacles face the public employees in Palestine in their endeavor to enhance their LLL capacity. Obstacles are classified into three groups: obstacles related to laws and regulations, obstacles related to the institution itself, and obstacles related to the employee.

As to those related to laws and regulations in Palestine, most of the public employees think that their burden is low and they somehow support LLL programs. A low percentage of the public employees think that the Palestinian law discriminates between employees regarding the LLL programs they should acquire, i.e. around 66% of the public Palestinian employees believe that legally, the LLL and training programs are a right for the employees; only 55% think that the laws and instructions inside the institution support the training and building capacity programs. Only 36% of the employees believe that job upgrading inside their institutions is directly related to the ability of employees to develop their skills and competences.

From table 5.13 also, it can be concluded that the obstacles at the public institution level limit the ability of the public employees to obtain LLL practices with a 3.58 mean. More than 67% of the employees either agree or strongly agree that work pressures and time limitations restrict their ability to proceed in LLL programs either inside or outside the institution.

60% confirm that public institutions don't encourage or motivate them to attend LLL programs, while more than 61% attribute the lack of LLL skills to the bureaucracy inside the public institutions due to undertaken measures which harden the instructions and processes for attending LLL programs. Around 65% criticized the disconnection between LLL programs and non-financial incentives inside the institutions like promotions.

Moreover, the public employee himself/herself creates the obstacles which limit his/her desire towards LLL. This is confirmed by more than 70% of the respondents. 64% of the employees have no motivation towards LLL programs, and more than 61% of the employees criticize the mismatch between job requirements and LLL programs inside their institutions, whereas around 55% of the employees were not committed with LLL programs at the long-run. Also, around 49% of them find that the increase in the average wages for many of the public employees impedes their ability and desirability towards LLL programs, while 46% lack the absorptive capacity towards the presented LLL program inside their institutions.

A high percentage of the respondents criticize the content and nature of LLL programs as shown in the table below, with a 3.4 mean. 56% of the employees find that the content of LLL programs is weak and insufficient, and 54% find that the LLL programs or the content of training materials offered are frequent and not essential for their job requirements. 40% of the sample believe that public employees find that the problem the LLL training staff (trainers).

Inspiration is a great value for humans. It enables them to use their internal motivations, persistence, energy, power, norms and feelings to increase skills and improve career performance. Table 5.5 shows that the Palestinian human capital, in spite of hard political and economic situations, possesses inspiration employees need to proceed in and sustain their careers. All questions related to inspiration were given either a high or very high mean (4.15) for their answer, 87% of the public employees feel that they have the determination and persistence needed to develop work skills, and they don't give up when they face a work problem. 88% of them find that their behavior changes positively with more learning.

Chapter Six

Results of the Econometrics Analysis

6.1 Chapter Overview

In this section, the main results of the econometric model which measures the impact of LLL practices on the performance of both the public employees and institutions are illustrated. The outcomes of LLL in regards to their influences at both the employees and the institution levels are presented.

6.2 The impact of LLL at the employee level

The ordinary least square (OLS) regression analysis is applied. However the results showed that the residual violated two important assumptions for the multiple linear regression: normality of residuals and homoscedasticity of residuals or equal variance.

Table 6.1: OLS regression result for the determinants of the employees' LLL capacity

Dependent Variable: LLL_Impact				
Method: Ordinary Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.448190	0.324549	4.462167	0.0000
Awarene	0.124728	0.075383	1.654597	0.0989
Univ_Roll.	0.179056	0.072871	2.457158	0.0145
Tech_infra.	-0.080009	0.077772	-1.028752	0.3043
Chall_emplo.	-0.001398	0.060513	-0.023096	0.9816
Chall_train	-0.168936	0.057610	-2.932400	0.0036
Chall_instit.	0.169140	0.063090	2.680950	0.0077
Inspiration	0.237498	0.063361	3.748363	0.0002
LLL_supp	0.109213	0.065355	1.671061	0.0956
R-squared	0.21			
Adjusted R-squared	0.19			
Durbin-Watson stat	1.84			
Jarque-Bera	24	Probability (Jarque-Bera)		0.000
F-statistic (Breush-Pagan Godfrey test)	2.923765	Prob. F(8,341)		0.0036
F-statistic	11.48193			
Prob(F-statistic)	0.000000			

Table 6.1 shows that the probability of Jarque-Bera test is (0.000), therefore; the null hypothesis for the normality of the residuals is rejected. Also, the Breush-Pagan Godfrey test for heteroscedasticity also shows a very low value for the probability of F-statistics (0.000), therefore; the null hypothesis of the homoscedasticity of the residuals is rejected. This means that OLS is not the Best Linear Unbiased Estimator (BLUE), and so an alternative method for the regression analysis was used.

Generalized linear models (GLMs) may be regarded as an extension of classical linear regression when the usual assumptions of normality and constant variance do not apply. The generalized linear models have been referred to as the most significant advance in regression analysis in the past twenty years (Hoffman, 2004). A natural approach to estimating the coefficients in all generalized linear models is thus to appeal to the principle of maximum likelihood. They are essentially a generalization of nonlinear least squares, and as such are optimal for a nonlinear regression model, and have greater power to identify model effects as statistically significant when the data are not normally distributed. They are also appropriate for other types of data which exhibit intrinsic heteroskedasticity where there is a rationale for modeling the heteroskedasticity (Nelder and Wedderburn, 1972; Hilbe, 1994; Hoffman, 2004). Also, because they are in addressing a variety of statistical problems and the availability of software to fit the models, they are considered a valuable statistical tool and are widely used.

Table 6.2: GLM regression analysis for the determinant of LLL capacity at the employees level

Variables	Model 1	Model 2	Model 3
	Coefficient	Coefficient	Coefficient
C	1.44***	1.459***	1.447***
X1	0.12		0.150***
X2	0.179**	0.187***	0.179***
X3	-0.08		
X4	-0.001		
X5	-0.168***	-0.177***	-0.180***
X6	0.169***	0.177***	0.174***
X7	0.237***	0.238***	0.238***
X8	0.109	0.139***	
Akaike info criterion (AIC)	2.198	2.18	2.190
Hannan-Quinn criterion (HQ)	2.238	2.216	2.217
Schwarz criterion (SC)	2.298	2.256	2.257

Table 6.2 shows the regression analysis using the Generalized Linear Model (Quadratic Hill Climbing) for the determinants of LLL capacity at the employee level. Model 1 includes all the variables. In Model 2, X1, X3, and X4 were excluded from the regression equation in model 1, based on Wald test. Wald test here is used to test the joint significance of a subset of coefficients, knowing that the variables are individually insignificant based on t-tests with very high p values, i.e. before dropping the variables together, their joint significance is tested using Wald test.

Table 6.3 shows a 0.40 probability of F-statistics for model 2 which is more than 5% level of significance, therefore, the null hypothesis that $B_1=B_3=B_4=0$ is accepted. In model 3, X3, X4, and X8 were excluded. Wald test in table 2 also shows a 0.38 probability of F-statistics for model 2

which is more than 5% level of significance, therefore, the null hypothesis that $B_3=B_4=B_8=0$ is accepted.

Table 6.3: Wald test for the joint significance of insignificant variables

Wald Test for Model 2				Wald Test for Model 3			
Test Statistic	Value	Df	Probability	Test Statistic	Value	Df	Probability
F-statistic	0.96	(3, 341)	0.40	F-statistic	1.01	(3, 341)	0.38
Chi-square	2.89	3	0.40	Chi-square	3.04	3	0.38
Null Hypothesis: $C(2)=C(4)=C(5)=0$				Null Hypothesis: $C(4)=C(5)=C(9)=0$			

Table 6.3 shows that model 2 has the highest overall quality among the three models.

Among the LLL elements, it is found that the university plays the most important role in increasing the impact of LLL practices and skills on the performance of public employees. The availability of support for LLL programs from the public institution comes after the university's role, which also has positive influence on the performance of the public employees.

6.3 Types of obstacles hampering LLL in public institutions

Obstacles hampering LLL in the public institutions are divided into 3 types:

- Challenges related to the employee (X4):
- lacking the motivation and seriousness towards LLL programs, the obsolescence of knowledge and skills which weaken the absorptive capacity towards new LLL knowledge and programs, the high age average for most Palestinian public employees which negatively affects their ability and motivation for LLL programs, and the low commitment towards LLL on the long-run.
- The obstacles of LLL which are related to the nature of LLL practices and programs (X5). For example, the weak and insufficient content of LLL programs, the inconsistency between LLL programs and labor market needs, the trainers of LLL lack the sufficient experience and skills, and the repetition and duplication of the same LLL practices.
- The challenges and obstacles of LLL which are levied or imposed by the public institutions (X6). These include work pressures and time limitations that hamper the enrollment of employees in LLL programs, the nature of the routine work in the public institutions which does not require LLL practices, the lack of support or encouragement from higher managements in the public sector for LLL programs, the bureaucracy inside the institution doesn't encourage the enrollment in LLL programs, and the lack of financial and non-financial rewards for the employees who enroll in LLL programs.

Table 6.2 shows that the obstacles of LLL which are related to the nature of LLL practices and programs negatively affect the performance of public employees, thus the quality of public services provided. This confirms that any deficiency in the content or consistency of the LLL programs will hamper the ability of public employees to gain new skills and competences, which consequently negatively affect their performance and the quality of public services provided. This also confirms the importance of the acquisition of new knowledge and reforming the education and learning policy in order to overcome the challenges of the knowledge economy and the increasing demand for public services in Palestine.

In a contradictory result, it was found that the challenges and obstacles of LLL which were levied or imposed by the public institutions positively affect the performance of the public employee. This means that these kindsof obstacles inspire the public employee to gain LLL skills by all means (for example, from outside the work place, through self-learning, the enrollment in international certificates, master's programs or professional diploma) to overcome these obstacles. In the Palestinian case, most obstacles imposed by public institutions are mostly impeded by the political and economic instabilities in Palestine which negatively affect all aspects of life and also the ability of the Palestinian government to provide the financial resources needed to perform their activities. The political instability resulting from the Israeli occupation mostly inspires the Palestinian people to challenge it and express the will of life. Also, the job in the public sector in Palestine is considered unattractive for most of the young and university graduates due to the low average salary and the high bureaucracy in the public sector, yet it becomes an objective for them all

because of the high unemployment rate in Palestine and the lack of job security in most of the private enterprises. Many of the young public employees try to enhance their skills and knowledge regardless the existing obstacles, which qualify them to find a job with higher salary either in the large private firms or in the international firms, mainly in the Gulf countries.

In an expected and prompted result which is related to high spirit among the Palestinian people, the study found that the possession of inspiration elements by the employee is one of the most important factors that positively affect his/her performance and the quality of the service he/she provides. These inspiration elements include the determination and persistence to develop work skills, seeking to obtain new knowledge and skills in the workplace, motivation to work, and the search for any new knowledge to develop the work place and the country. This might be expected because inspiration awakens us to new possibilities by allowing us to transcend our ordinary experiences and limitations, and it propels a person from apathy to possibility, and transforms the way we perceive our own capabilities. This is consistent with the article by Kaufman (2011) who confirms that inspiration is the springboard for creativity; inspired people view themselves as more creative and show actual increase in self-ratings of creativity over time.

6.4 The determinants of LLL capacity at the institutional level

In this part, we investigate the LLL factors which are expected to influence the performance at the institutional level. First, the econometric model was regressed using the OLS as shown in table 6.4. It was found that the

probability of Jarque-Bera test is around 0.06 which is greater than 5% level of significance, and so the null hypothesis at which the residual is normally distributed is accepted. But, the Breush-Pagan Godfrey test for heteroscedasticity shows a very low value for the probability of F-statistics (0.000), therefore; the null hypothesis of the homoscedasticity or the equal variance of the residuals is rejected. This means that the OLS regression does not lead to a Best Linear Unbiased Estimator (BLUE).

Table 6.4: OLS regression result for the determinants of the institution LLL capacity

Dependent Variable: LLL_Impact				
Method: Ordinary Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.473436	0.318753	4.622502	0.0000
Awarene	0.177499	0.074037	2.397449	0.0170
Univ_Roll.	0.214056	0.071570	2.990862	0.0030
Tech_infra.	-0.175142	0.076384	-2.292920	0.0225
Chall_emplo.	-0.019381	0.059432	-0.326099	0.7445
Chall_train	-0.180222	0.056581	-3.185181	0.0016
Chall_instit.	0.169065	0.061963	2.728479	0.0067
Inspiration	0.167569	0.062229	2.692785	0.0074
LLL_supp	0.211485	0.064188	3.294765	0.0011
R-squared	0.25			
Adjusted R-squared	0.24			
Durbin-Watson stat	1.96			
Jarque-Bera	24	Probability (Jarque-Bera)		0.000
F-statistic (Breush-PagaGodfrey test)	3.9	Prob. F(8,341)		0.0002
F-statistic	5.5			
Prob(F-statistic)	0.06			

In order to deal with the problem of heteroscedasticity and to obtain BLUE estimations for the regression coefficient, the robust OLS is suggested. To clarify the argument, heteroskedasticity causes standard errors to be biased, and OLS assumes that errors are both independent and identically

distributed. Using robust standard error heteroskedasticity relaxes either or both of those assumptions. Hence, when heteroskedasticity is present, robust standard errors tend to be more trustworthy. It is important to know that the use of robust standard errors does not significantly change coefficient estimates, but (because the standard errors are changed) the test statistics will give reasonably accurate p values.

Results in table 6.5 below show the regression analysis using the robust OLS regression for the impact of LLL indicators on the performance of the Palestinian public institutions. Model 1 includes all the variables. In Model 2 X5 was excluded from the regression equation in model 1 based on the result of the Wald test which accepts the null hypothesis that the coefficient of X5 is zero. Model 2 provides more goodness of fit for the independent variables; this is clear from the value of both R^2 and adjusted- R^2 which is higher for model 2.

Table 6.5: Robust OLS regression for the determinants of the institution's LLL capacity

Variables	Model 1	Model 2
	Coefficient	Coefficient
C	1.35***	1.38***
X1	0.15**	0.16**
X2	0.20***	0.21***
X3	-0.18***	-0.18**
X4	0.02	
X5	-0.18***	-0.17***
X6	0.15**	0.15***
X7	0.18***	0.18***
X8	0.25***	0.25***
R^2	0.234	0.235
Adjusted- R^2	0.216	0.219

The results in table 6.5 don't change much from those in the previous section. The availability of support for LLL is considered the corner stone in the development of public institutions' performance and in increasing the satisfaction of the Palestinian citizens of the quality of public services. This confirms the results attained in the last section. Also, the role of the academic institutions (or the cooperation between the public and educational institutions) in developing the LLL practices in the public institutions has a very important impact on the performance of public institutions.

Opposing the results in the last section, it was found that the awareness of public institutions of the importance of LLL is very important for them to be involved in LLL activities which consequently positively affect the performance of public institutions. The awareness includes the availability of a specific strategy and plan for LLL, the fact that building capacity and informal education are well-known practices in the public institution, and making the hiring selection process based on LLL skills. The awareness creates better self-knowledge, makes adjustments and improvements, and accommodates for weaknesses, and allows the public institutions or employees to compare themselves to others and their feedback in a new way. Also, the use of technology in supporting or providing LLL programs negatively influences the performance of public institutions. This might be explained by the misuse of information and communication technology (ICTs) tools (internet, social media, Skype, YouTube, videoconferences, etc). Most public institutions have introduced ICTs in the work place as a

supportive tool for the public employees and as an important instrument for learning, but the negative sign here might denote that there is inefficient or misuse of ICTs which negatively affect the performance of public institutions, increase the cost of public services, increase the bureaucracy level, and decrease the citizens' confidence and satisfaction of public services.

In a very similar result to that in the previous section, the analysis revealed that the challenges or obstacles of LLL which are related to the nature of LLL practices and programs negatively affect the performance of public institutions, while the challenges of LLL which are levied by the public institutions positively affect the performance of public institutions. Also, the possession of inspiration elements by the employee is one of the most important factors that positively affect the performance of public institutions. This also confirms the importance of inspiration to sustain and survive in the light of the whole political, economic and social difficulties in Palestine.

Chapter Seven

Discussion

The aim of this study is to analyze the framework of LLL in Palestine, and to explore the role of LLL in improving the performance of public sector employees' meta-cognitive and self-directed learning skills. An additional objective is to examine the relation of LLL values, practices and programs with the dimension of inspiration represented by values, practices and programs in Palestine.

In order to formalize and systemize the different activities of the civil service leadership development program, the Palestinian General Personnel Council in 2016 instituted the Palestinian National School of Administration (PNSA), which is considered the only public institute responsible for training and building the capacity of LLL for the public employees in Palestine.

There is still low awareness of the importance of LLL in the Palestinian public sector, and a low percentage of the public employees think that there is a determined strategy for LLL exists at their institution. They do not believe that LLL practices are included within the strategic plans of their institution. This contradicts with the reality of LLL in other developed economies and OECD countries which have a clear agenda and policy focus for LLL (Senge, 1990; Alter and Hage, 1993; Boshier, 1998; Field, 2001 and Duke, 2001). This denotes that it is important to raise the awareness level of LLL as a first step towards adopting LLL as a long term

strategy for the public sector. Awareness creates positive influences on the attitude and motivation of the public employees towards LLL practices.

The definition of LLL in Palestine is consistent with that in other studies (Laal et al. 2013; Hyde and Phillipson, 2014; SAQA, 2015). LLL in Palestine include as others studies self-learning, informal education through training programs, workshops and exchange of knowledge and skills with others.

Martin (2005) confirms that LLL and motivation are inseparable, and that obtaining knowledge through LLL facilitates and accelerates through goal directed or motivated behavior. But this is not the case in Palestine, 64% of the public employees do not have any motivation towards LLL programs, and about 55% of the them are not committed to LLL programs at the long-run. This might be explained by the mismatch between LLL programs and day-by-day job practices or requirements.

Most of the previous studies either in developed or developing countries confirm the importance of LLL in generating and accelerating the stock of human capital, upgrading labor force skills to be competitive in the knowledge-based economy, providing learning competences for the present and the new coming labor force upon the initial education, and safeguarding skills for whom are out of the labor force (OECD, 2003; Laal, 2011; Akkoyun and Erkan, 2014; Guayet al., 2014). The results in this study are consistent with those studies. Most Palestinian public employees denote that the LLL skills are very important for them, and lead to enhancing their knowledge and work skills, 61% confirmed that LLL

practices enable them to gain new skills mainly in using ICT, 60% of them confirmed that the LLL practices enable them to increase their experience and capacity, and 58% considered LLL a way for increasing their knowledge and competences. Most of the public employees (69%) believe that LLL has positive influence at the institutional level and 60% agree and strongly agree that LLL practices increase the institution's performance.

Results show that universities and higher education institutions play and can play a vital role in LLL in Palestine. Around 70% of the public employees think that universities and higher education institutions play an important role in enhancing their LLL skills and practices, through the market-oriented master's programs, the reform of the educational system in Palestinian universities to include LLL practices and through the faculty staff who provide training programs or participate in the design of public administration strategic plans.

This is consistent with the study of Jafari and Lafi (2004) who confirm that the higher education institutions should develop curricula, and programs and courses which are more closely linked to the labor market and local environment, and that the feedback from employed graduates can identify the skills and abilities required by student's prior graduation to enable them to integrate into the local market. Also, it is consistent with the studies of Malitza (2000), Giarini and Malitza (2003), Etzkowitz (1995), and Etzkowitz and Leydesdorff (1998) which focus on the importance of collaboration between academia, government and the industrial sector to

develop new innovative ways for learning which leads to the development of new innovations.

From the perspective of LLL, knowledge and innovation, there are two representative models that are relevant both for the reform of higher education within the Bologna process and for enhancing research at the level of the European Union: The Double Helix of “Learning and Work” put forward by Malitza (2000) and developed by Giarini and Malitza (2003), and the Triple Helix of “University-Industry-Government” put forward by Etzkowitz (1995) and developed through the contribution of Etzkowitz and Leydesdorff (1998). The two models have the same dominant logic, presenting a series of common complementary features between educational institutions and other institutions in the economy (public or private).

Many of the previous studies confirm the role of technology in supporting LLL, knowledge transfers and dissemination, and high quality learning solutions (OECD, 1996; Tindall, 2005). Previous literature also confirms the role of ICT in providing a powerful toolbox for the support of LLL (Laal, 2004; Koper, et al., 2005). This is what this study confirms. For example, 57% of the public employees think that LLL practices in the work place are connected with ICT tools, and 61% consider that computer software like PowerPoint, word and excel are used in their work place to support LLL practices. But, smart applications are still not highly employed in LLL, which might be explained by the novelty of this technology and its need for internet connections which are still limited due

to Israeli constraints. Therefore, an important recommendation here is to intensively employ technology and ICTs in LLL, knowing that distant-learning and self-learning enabled by ICT's tools and globalization are becoming highly employed all over the world to obtain required knowledge and skills.

The study reveals a weak role played by the government institutions in supporting LLL practices or in implementing a comprehensive framework for LLL. Only 32% of respondent public employees believe that the government financially supports LLL activities in their work place, 32% think that their job development is based on their ability to enhance LLL skills. Only 37% think that their institutions provide non-financial incentives in order to improve their LLL skills. This shows that LLL programs are still not institutionalized or formalized in Palestine, and that Palestine is still lagging behind the efforts of other developing economies which have applied important initiatives for informal education and LLL. For example, the Swedish Adult Education Initiative (1997-2002) is one of these initiatives that represents the largest ever investment in adult education in Sweden (Rubenson, 2001).

This study is consistent with the previous studies (Bahzad, 2014, 2015) which found a strong and positive connection between inspiration and LLL. First, the study shows that most public employees have strong inspirational behaviors. For example, 87% of the public employees feel that they have the determination and persistence needed to develop work skills, and 88% of them find their behavior changing positively with more learning,

therefore they always seek to obtain new knowledge and skills to advance more in their jobs. Thus, the possession of inspiration elements by the public employees is one of the most important factors that positively affect their performance and the performance of their public institutions. This also confirms the importance of inspiration in being able to sustain and survive despite the political, economic and social difficulties citizens face in Palestine.

Palestine like other countries faces many obstacles or barriers standing in the way of LLL, mainly in the early stages of LLL's life cycle either at micro or macro levels, as many studies show (Cross, 1981; McGivney, 1993; Titmus, 1999; Jarvis, 2006; Malhotra et al., 2007; Winterbotham et al., 2014). The obstacles of LLL in Palestine are classified into three groups: obstacles related to laws and regulations, obstacles related to the institution itself, and obstacles related to the employee. Most of the public employees denote that the laws and regulations in Palestine as well as the systems inside their workplaces are the main obstacles of LLL practices. This is also consistent with the low indicators of awareness of LLL inside the public institutions.

As the studies of Jarvis (2006) and Grześkowiak (2014) state, the main obstacles of LLL are the lack of absorptive capacity for public employees towards LLL practices, and the inconsistency between the job requirements and LLL programs introduced. The knowledge economy mainly requires certain types of workers who satisfy the demands of the labor market. This means that some employees might end up not finding educational programs

that fit their current needs, thus discouraging them from participating in education and training.

Among the LLL elements, it is found that the university plays the most important role to increasing the impact of LLL practices and skills on the performance of public employees. This may be related to the important role that universities and academic institutions play to provide lifelong learning skills. For example, enrolling public employees in master's programs at universities enables them to gain LLL skills as research skills, presentation skills, critical and entrepreneurial thinking, and problem solving skills. Also, developing the curriculum to adapt with the requirements of LLL and informal education is vital for providing the new public employees with technical and non-technical skills they need to start their jobs, and to think in different and innovative ways. Many LLL and building capacity plans and programs need to be implemented by the university academic staffs.

Support for LLL programs from the public institution follows the university role in importance. It also has positive influence on the performance of the public employees. Support here might take several forms like the encouragement and facilitation of knowledge and skill sharing among the workers in different departments, providing financial and non-financial support to workers to join internal and external LLL training and building capacity programs, and considering LLL practices and training programs compulsory for employees. This means that the role of public institutions is crucial through the support and encouragement of LLL practices inside the workplace.

The results presented in table 6.5 don't differ from those in the previous section. It was found that the availability of support for LLL is considered a corner stone in the development of public institutions' performance and in the increase of satisfaction of the Palestinian citizens with the quality of public services. This confirms the results attained in the last section. Additionally, the results show that the role of the academic institutions (or the cooperation between the public and educational institutions) in developing LLL practices in the public institutions has a very important impact on the performance of those public institutions. The universities are the center of excellence which, in the knowledge-based economy, become responsible for providing the fresh graduates with LLL skills such as critical thinking, innovative and entrepreneurial thinking and ideas, problem-solving skills, etc. Also, Palestinian universities have adopted important steps in their endeavor to moderate the systems of education and to change the traditional teaching processes into informal education and LLL. This change reflected on the competences and skills of the graduates at both bachelor's and master's level.

Regarding the first model which measures the impact of LLL on the performance of public employees, the awareness of public institutions of the importance of LLL is important for them to be involved in LLL activities which positively affect their performance. The awareness includes the availability of a specific strategy and plan for LLL, the fact that building capacity and informal education are well-known practices in the public institution, and making the hiring selection process based on

LLL skills. Awareness creates better self-knowledge, makes adjustments and improvements, accommodates for weaknesses, and allows the public institutions or employees to compare themselves with others and with their feedback in a new way. However, the use of technology in supporting or providing LLL programs negatively influences the performance of public institutions. This might be explained by the misuse of information and communication technology (ICTs) tools (internet, social media, Skype, YouTube, videoconferences, etc). Most public institutions have introduced ICTs in the work place as a supportive tool for the public employees and as an important instrument for learning, but the negative sign here might denote that there is inefficient or a misuse of ICTs which negatively affects the performance of public institutions, increases the cost of public services, increases the bureaucracy levels, and decreases the citizens' confidence and satisfaction with public services.

Chapter Eight

Conclusions and Recommendations

8.1 Conclusions

This research empirically address the impact of LLL programs and practices on the performance and quality of public services as well as the performance of public employees' meta-cognitive and self-directed learning skills. It shows that there are increasing discussions on LLL from policy makers and stakeholders, noting that most of these discussions come under other concepts and frameworks like vocational education, non-formal education, reforming of education system, action against bureaucracy in the public sector, adult education, and woman inclusion in the labor market. Efforts and trials of LLL in Palestine are not reflected into clear benchmarks or outcomes, and its fruits are not brought to direct use in enhanced policy and good practice. The technical and vocational education (TVET) program, the Palestinian National School of Administration, and LLL programs by the Ministry of Education and Higher Education are examples of good LLL programs introduced in Palestine.

GLM analysis of the relationship between LLL indicators and the performance of public employees shows that universities play the most important role increasing the impact of LLL practices and skills on the performance of public employees. The availability of support for LLL programs from the public institution is next in line. It also shows that the obstacles of LLL, related to the nature of LLL practices and programs,

negatively affect the performance of public employees .In a contradictory result, the study reveals that challenges and obstacles of LLL imposed by the public institutions positively affect the performance of the public employee. The possession of inspiration elements by the employee is one of the most important factors that positively affect his/her performance and the quality of services provided.

Robust OLS of the relationship between LLL indicators and the performance of public institutions indicate that the availability of support for LLL is considered a corner stone in the development of public institutions' performance and increasing the satisfaction of the Palestinian citizens with the quality of public services.

The role of the academic institutions (or the cooperation between the public and educational institutions) in developing LLL practices in the public institutions has a very important impact on the performance of the institutions. Awareness of public institutions of the importance of LLL is important for them to be involved in LLL activities which consequently positively affect the performance of the institutions. The technology in supporting or providing LLL programs negatively influences the performance of public institutions. Challenges or obstacles of LLL which are related to the nature of LLL practices and programs negatively affect the performance of public institutions, while challenges of LLL levied by the public institutions have a positive effect on the performance of public institutions. Moreover, the possession of inspiration elements by the

employee is one of the most important factors that positively affect his/her performance.

8.2 Recommendations

Based on the data analysis, the research suggests a set of recommendations for improving the framework of lifelong learning in the Palestinian public sector and increases the impact of LLL practices on the performance of public employees.

1. It is essential to increase the awareness of LLL and its importance in increasing the performance of public employees. Assigning an independent department or person for designing LLL programs and practices is very important to increase the awareness of LLL. A strategic plan for LLL in public institutions should be adopted through strategic plans of the public institutions. Case studies and scientific research such as this study, must be taken into consideration
2. Improvement of ICT infrastructure in public institutions is needed, along with building the capacity of public employees regarding ICT and technology skills.
3. It is important that the Palestinian government allocates budgets for LLL projects. It needs to include more and more public employees in the capacity building programs through the National School of Public Administration. Job development in the public sector should be based on the ability of public employees to enhance LLL skills,

and LLL practices and training programs should be compulsory for public employees.

4. Thus it is important to systemize the LLL process through systematic and sustainable training programs either inside or outside the organization, which requires both financial and non-financial support from the Palestinian public sector. Outsourcing external trainers and experts, and attending international conferences is also important to access new LLL skills.
5. Universities and higher education institutions must include LLL, research-based learning, and project-based learning in the heart of the learning process. The collaboration between universities, government and private sector (triple helix model) is crucial to predetermine LLL knowledge and skills that the universities need to provide for both public and private sectors, and to bridge the knowledge gap between graduates and what the labor market needs.
6. More financial resources mainly from the Palestinian General Personnel Council for LLL activities must be allocated. The cooperation between the government and public sector is important for building the capacity of public employees which will be positively reflected in better public service quality and better performance for the private sector.
7. Public institutions must create incentive systems connected to the employee's job progress and salary with their ability to gain LLL practices and skills.

8. The public institutions must encourage their employees to enroll in LLL and building capacity programs. Thus, decreasing the degree of bureaucracy for admission in LLL programs should be a priority for the higher managements.
9. The public employees should set LLL skills as a major priority in their workplace; self-motivation and inspiration are very important in this endeavor. Choosing the fitting LLL programs which are consistent with the job requirements is important to boost the employees' motivation towards LLL.
10. The selection of the relevant LLL content is important to increase the impact of LLL programs. This
11. An independent department or committee inside public institutions to deal with labor needs and the necessary skills.
12. New knowledge and reforming the education and learning policy is must be performed for the challenges of the knowledge economy and the increasing demand for public services in Palestine.
13. Employ technology and ICTs in LLL, must be implemented because knowing that distant-learning and self-learning enabled by ICTs' tools and globalization are becoming highly employed all over.

References

1. Abu Hanieh A., AbdElall S., Krajnik P., and Hasan A., "**12th global conference on sustainable manufacturing**", Industry-Academic Partnership for sustainable development in Palestine,(2015).
2. Akkoyun Y., and Erkan T., "**Business Process Management in Social Security Operations**", Lifelong Learning Case Study from Turkish Public Sector,(2014).
3. Anastasiadou S., "*Factorial validity evaluation of a measurement through Principal Components Analysis and Implicative Statistical Analysis*". In D. X. Xatzidimou, K. Mpikos, P. A. Strabakou, K.D. Xatzidimou (Eds)κδ., E' Hellenic Conference of Pedagogy Company Greece, Thessaloniki, pp. 341- 348.(2006).
4. Alter C., and Hage J., "**Organizations working together**",(1993)
5. Añonuevo C. M., Ohsako T., MauCh W., "*Revisiting Lifelong Learning for the 21St Century*", UNESCO Institute for Education, (2001).
6. Bahzad H., Buheji M., Al-Hasan S., and Thomas B., "**A Study of Lifelong Learning in Relation to Inspiration in the Context of Bahraini Women**", Bahrain,(2015).
7. Bahzad H., "**Women Life Long Learning**", master thesis,(2014)
8. Béret P., and Dupray A., "**Qualifications et valorization salariale de la formation continue en France**", Academia Bruylant ,Belgium, (2001).

9. Brandi, U., Iannone, R., **“Effective Lifelong Learning strategies and value creation at the enterprise level”** , Germany ,(2015).
10. Boshier, R. ,**”paper presented to Taiwan’s International Conference on Lifelong Learning”**, Running to Win: The Contest between Lifelong Learning and Education in Canada, Vancouver: UBC, (1998).
11. Chapman, J., McGilp, J., Cartwright, P., de Souza, M.,& Toomey, R. ,**”Overcoming Barriers that Impede Participation in Lifelong Learning”**, In Aspin, D., Chapman, J. (Eds.), Lifelong Learning, Participation and Equity (pp. 151-174). Netherlands: Springer,(2006).
12. Chatterjee, S., & Hadi, A. S.,**”Regression analysis by example”** ,(5th ed.),(2012).
13. Cohen, J., Cohen, P., West, S. G., & Aiken, L. S., **“Applied multiple regression/correlation analysis for the behavioral sciences”**, (3rd ed.),(2003).
14. Collins, J., **”Education techniques for lifelong learning: principles of adult learning”**,(2004).
15. Cross, K.P., **“Adults as Learners”**, San Francisco, Jossey-Bass, (1981).
16. CSEP. Glossary. Community & social enterprise partnership (CSEP), **“Supporting the Social Economy in Doncaster”**, Doncaster, UK ,(2011).
17. Darras, K., **“The Human behind Sabri Saidam”**, spreading hope for a brighter educational Era, This Week in Palestine,(2016).

18. Department of Education and Science .”**Learning for Life: White Paper on Adult Education**”, ©Government of Ireland ,(2000).
19. Duke, C., “**Lifelong Learning and Tertiary Education**”, The Learning University Revisited, pages 501-527 in D. Aspin et al (eds) International Handbook of Lifelong Learning. Dordrecht: Kluwer Academic Publishers.(2001).
20. Eu , ” **Lifelong Learning For Creativity And Innovation “**, A Background Paper, (2008).
21. European Commission, “**Communication on Making the European Area of Lifelong Learning a Reality**”,(2001).
22. Etzkowitz, H., & Leydesdorff, L., “*The Triple Helix University Industry Government Relations: A Laboratory for Knowledge*”, Based Economic Development. EASST Review(1995)
23. Faure, E. et al., “*Learning to Be: the world of education today and tomorrow*”, Paris, UNESCO, (1972).
24. Field, J., “**Lifelong Learning and the New Educational Order**”, Stoke on Trent, (2000).
25. Field, J. **Lifelong education. International Journal of Lifelong Education**.(2001)
26. Frith A., ”**Social Inclusion in Education and Training**”, 25 rue d’Arlon - 1050 Brussels – Belgium, EUCIS-LLL(2011)

27. Grześkowiak, A., ***“Barriers of Poles’ Participation in Lifelong Learning Process –A Multivariate Analytical Approach”***, **Journal of Educational and Social Research** 4(4), pp. 21-26. Rome, IT: MCSER Publishing. (2014).
28. Guay, F., Morin, A. J. S., Litalien, D., Valois, P., &Vallerand, R. J ., ***”Application of exploratory structural equation modeling to evaluate the academic motivation scale”***, **The Journal of Experimental Education**,(2014).
29. Gumport, P. J., &Snydman, S. K.,***”The formal organization of knowledge: an analysis of academic structure”***, **Journal of Higher Education**,(2002).
30. Hart, T.,***” Inspiration: Exploring the experience and its meaning”*** ,**Journal of Humanistic Psychology**,(1998).
31. Hilal, R., ***“12th UKFIET International Conference on Education and Development”***, Education and Development University of Oxford,(2013).
32. Hilbe, J., ***“Generalized linear models”*** ,American Statistical Association, (1994).
33. Hoffmann, J. P., ***“Generalized linear models: an applied approach”***, Pearson: Boston, (2004).
34. Hyde ,Martin & Phillipson, Chris ,***”How can lifelong learning, including continuous training within the labour market, be enabled and who will pay for this? Looking forward to 2025 and 2040 how might this evolve?”***,University of Manchester,(2014).

35. Jafari, M., and Lafi, D.,”**Matching Higher Education Graduates with Market Needs in the West Bank and Gaza strip**”,(2004).
36. Jarvis P.,” **Paper presented at the 36th Annual SCUTREA Conference**”, Trinity and All Saints College, Leeds, University of Surrey, UK,(2006)
37. Jenkins, A., “**Women, Lifelong Learning and Employment**”, Centre for the Economics of Education, London School of Economics and Political Science,(2004).
38. Kaufman , S., “**Why Inspiration Matters**”,. Harvard business review, ,Executive Education,(2011).
39. Koper, R. “***An Introduction to Learning Design***” ,In: R. Koper and C. Tattersall (Eds.). *Learning Design A Handbook on Modelling and Delivering Networked Education and Training* (pp. 3-20). Berlin Heidelberg: Springer-Verlag. (2005).
40. Kothari , R., “***Research Methodology*** ”, Former principal , college of commerce ,University of Rajasthan , Jaipur ,India,(2004).
41. Laal, M.,” **Impact of Technology on Lifelong Learning**”, Tehran University of Medical Sciences, Tehran , Iran,(2011).
42. Laal, M., “***Lifelong Learning and technology***”, **Procedia - Social and Behavioral Sciences**, 83, 980 – 984, (2013).
43. Layard, R., Robinson P., and Steedman, H., “**Lifelong learning**”, Occasional Paper 9, Centre for Economic Performance, London School of Economics,(1995).

44. Leung, Lawrence ,**”Validity, reliability, and generalizability in qualitative research”**, Department of Family Medicine and Centre of Studies in Primary Care, Queen’s University, Kingston, Ontario, Canada,(2015).
45. Malhotra, N.K., Shapero, M., Sizoo, S. & Munro, T.,**” Factor structure of deterrents to adult participation in higher education”**, **Journal Of College Teaching and Learning**, **4** (12) December, pp.81-90. (2007).
46. Martin, G., **”Biographies of motivation for lifelong learning”**, Eduline: www.leeds.ac.uk/educol/documents/156978.doc.,(2005).
47. Martin ,graeme. **”Understanding motivation for lifelong education”**, college of social sciences, university of Birmingham, (2011).
48. McGivney , V., **”Participation and non-participation”**: A review of the literature, in R. Edwards, S. Sieminski and D. Zeldin (eds). *Adult learners, education and Training*, Routledge, London. (1993).
49. McMahon, W.W., **”Conceptual framework for the analysis of the social benefits of lifelong learning”**, in *Education economics*, (1998).
50. MoEHE (Ministry of Education and Higher Education), **”Teacher Education Strategy in Palestine”**,(2008).
51. Nelder, J., and Wedderburn, R., **”Generalized linear models”** J. R. Statist. Soc. A,(1972).
52. Nunnally, C. J., **”Psychometric Theory”** ,New York: McGraw Hill Book Co, (1978).

53. OECD. **“Schooling, Lifelong learning, and the future”**, selected Insights from OECD analyses, Schooling for Tomorrow Poitiers Forum,(2003).
54. OECD, **“*The Knowledge-Based*”**, OECD, Paris,(1996).
55. OECD, **“*Beyond Rhetoric: Adult Learning Policies and Practices*”**, OECD, Paris,(2003).
56. Psarou M. K. & Zafiropoulos, C.,” Scietific Research: Theory and Applications in Social Sciences”, Athens, Tipothito, Dardanos, (2004).
57. Rikowski, G., **“Schools and the GATS Enigma, in: E Wayne Ross & R. Gibson (Eds.) Neoliberalism and Education Reform”**, Cresskill, NJ: Hampton Press,(2007).
58. Rubenson , K., **“The Swedish Adult Education Initiative”**: From Recurrent Education to Lifelong Learning. International Handbook of Lifelong Learning, PP 329-338, (2011).
59. Ryan, P., **“Lifelong learning: Potential and constraints with special reference to policies in the United Kingdom and Europe”**, University of Cambridge, (2002).
60. Ryan, P., **“Job training, individual opportunity and low pay”**, in A. Bowen and K. Mayhew (eds.), Improving incentives for the low paid, London, Macmillan,(1991).
61. SAQA The South African Qualifications Authourity. **“Lifelong Learning and Professional Development in Residential Universities”**. Implementing the White Paper for Post-School Education and Training, (2015).

62. Schartinger, D., Rammer, C., Fischer, M. M and Fröhlich, J.,
“Knowledge Interactions between Universities and Industry in Austria: Sectoral Patterns and Determinants, Research Policy”,(2002).
63. Senge,P.,” **The Art and Practice of the Learning Organization(Japanese)”**,The Fifth Discipline – Hardcover,(1990)
64. Terwee CB, Bot SD, de Boer MR, van der Windt DA, Knol DL, Dekker J, et al. **Quality criteria were proposed for measurement properties of health status questionnaires.** 2007
65. TeAchnology .**Letter L Teaching Terms.** The online teacher resource. New York, USA,(2010). from:
<http://www.teach-nology.com/glossary/terms/l/>.
66. Titmus ,C. , **“The scope and characteristics of educational provision for adults”**. In: Calder, J. (Ed.). *Disaffection and Diversity: Overcoming Barriers for Adult Learners*. London, Routledge, pp.68-83.(1993).
67. Tindall, S.,” **Technology-Assisted Lifelong Learning”**, Department for Continuing Education, University of Oxford, United Kingdom, (2005).
68. Tumuti , D., Wanderi, P., and Thoruwa, C., **“Benefits of University-Industry Partnerships: The Case of Kenyatta University and Equity Bank”**, **International Journal of Business and Social Science**,(2013).

69. **UNESCO** (United Nations Educational Scientific and Cultural Organizations), ***“Second International Congress on Technical and Vocational Education”***, final report, Seoul, South Korea, (1999).
70. Weisberg, S., ***“Applied linear regression”***. Hoboken, NJ: John Wiley & Sons .(2005).
71. WCPT. ***“Education - Appendix C ± Glossary. The World Confederation for Physical Therapy***. London , UK, (2009).
72. Winterbotham M, Vivian D, Shury J, Davies B and Kik G ***“UK Commission’s Employer Skills Survey 2013: UK Results*** , London: UK Commission for Employment and Skills”,(2014)
73. Zafiropoulos, K.,” ***How a scientific essay is done? Scientific research and essay writing”***, Athenhs, Greece, Ed, Kritiki,(2005).

Appendices

Appendix A : Research Tool - Questionnaire

السيدة/المحترم/ة

الموضوع: جمع بيانات لغرض البحث العلمي

تحية وبعد

تقوم الباحثة تسنيم أكرم مصباح دحبور بدراسة للحصول على شهادة الماجستير في إدارة السياسات الاقتصادية من جامعة النجاح الوطنية حول "التعلم مدى الحياة في القطاع العام الفلسطيني"، والاستبانة التي بين يديك هي أداة جمع البيانات في هذه الدراسة. إن تعاونكم بتعبئة هذه الاستبانة بموضوعية سينعكس إيجاباً على النتائج ومدى قبول توصيات الباحثة بهدف تطبيقها مستقبلاً.

نؤكد أن كافة البيانات ستستخدم لغرض البحث العلمي فقط.

وتفضلوا بقبول فائق الاحترام

الباحثة: تسنيم أكرم مصباح دحبور

القسم الأول: معلومات شخصية خاصة بالمبحوث

الرجاء الإجابة على الأسئلة التالية بوضع إشارة (✓) في مربع الإجابة التي تناسبك:

1. المؤهل العلمي:

<input type="checkbox"/>	دبلوم وأقل	<input type="checkbox"/>	بكالوريوس	<input type="checkbox"/>	ماجستير	<input type="checkbox"/>	دكتوراه
--------------------------	------------	--------------------------	-----------	--------------------------	---------	--------------------------	---------

2. عدد سنوات العمل داخل المؤسسة:

<input type="checkbox"/>	أقل من 5 سنوات	<input type="checkbox"/>	10-6 سنوات	<input type="checkbox"/>	15-10 سنة	<input type="checkbox"/>	20-15 سنة
<input type="checkbox"/>	20 سنة فأكثر						

3. مكان العمل:

<input type="checkbox"/>	الخليل	<input type="checkbox"/>	رام الله	<input type="checkbox"/>	نابلس	<input type="checkbox"/>	طولكرم
<input type="checkbox"/>	بيت لحم	<input type="checkbox"/>	جنين	<input type="checkbox"/>	القدس	<input type="checkbox"/>	غير ذلك

4. اسم المؤسسة أو الدائرة الحكومية التي تعمل بها:

5. المسمى الوظيفي المناسب لك:

<input type="checkbox"/>	موظف	<input type="checkbox"/>	مدير	<input type="checkbox"/>	رئيس قسم	<input type="checkbox"/>	مدير عام فأعلى
<input type="checkbox"/>	غير ذلك حدد: _____						

6. الجنس: ☐ ذكر ☐ انثى

A1: يهدف هذا الجزء إلى قياس مدى وجود ممارسات التعلم مدى الحياة داخل مؤسسات القطاع العاميشمل التعلم مدى الحياة أي نشاط تعليمي خارج نطاق التعليم الأكاديمي في الكليات أو الجامعات مثل التعليم الغير رسمي، برامج بناء القدرات، الدورات التدريبية، الشهادات المتخصصة، ورشات العمل والمؤتمرات، نقل الخبرات من خلال الأفراد أو المؤسسات، تطوير الأفكار الريادية والإبداعية، الخ.					
مدى وجود كل من الممارسات التالية داخل مؤسستكم	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
A11 يعتبر مصطلح التعلم مدى الحياة (Lifelong Learning) من الأمور المعروفة في مؤسستكم.					
A12 يوجد هناك استراتيجية خاصة بالتعلم مدى الحياة داخل مؤسستكم.					
A13 أصبحت ممارسات التعلم مدى الحياة توضع في الخطط الاستراتيجية للمؤسسة.					
A14 ممارسات التعلم مدى الحياة تتم بطريقة منظمة من خلال دائرة أو فرد خاص بذلك داخل المؤسسة.					
A15 تقوم المؤسسة بتشجيع الموظفين الجدد لتطوير مهاراتهم من خلال الالتحاق بدورات تدريبية واكتساب مهارات خارج التعليم الأكاديمي.					
A16 يتم التأكيد من خلال الإدارات العليا والمسؤولين داخل المؤسسة على أهمية اكتساب الموظفين لممارسات التعلم مدى الحياة.					
A17 إن أحد معايير اختيار الموظفين الجدد يعتمد على مدى اكتسابهم لمهارات خارج نطاق التعليم الرسمي.					
A2: ممارسات التعلم مدى الحياة المرتبطة بالتكنولوجيا					
ما مدى وجود كل من الممارسات التالية الخاصة بالتكنولوجيا في تطوير ممارسات التعلم مدى الحياة في مؤسستكم	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
A21 يتم ربط ممارسات التعلم مدى الحياة في مؤسستكم من خلال وسائل التكنولوجيا المتاحة.					
A22 يتم استخدام مواقع التواصل الاجتماعي في مؤسستكم من أجل دعم ممارسات التعلم مدى الحياة.					
A23 يتم استخدام برامج الحاسوب المختلفة (Words, Excel, PowerPoint) في مؤسستكم من أجل دعم ممارسات التعلم مدى الحياة.					
A24 يتم استخدام مواقع الإنترنت مثل اليوتيوب، ومحرك البحث جوجل.					
A25 يتم استخدام برامج الكمبيوتر في مؤسستكم مثل برامج التحليل الاحصائي، إدارة المشاريع، برامج ضمان الجودة، الخ.					
A26 يتم استخدام تطبيقات معينة خاصة بالأجهزة الذكية في مؤسستكم في تطبيق ممارسات التعلم مدى الحياة.					
A27 يتم تنظيم برامج تدريبية وورشات عمل عن بعد باستخدام مواقع الإنترنت الخاصة بذلك ، Skype أو عبر Video Conference.					
A28 ممارسات الحكومة الإلكترونية تساهم وتشجع في تطوير التعليم غير الرسمي.					
A3: يركز هذا الجزء على الوسائل والطرق المتبعة من قبل المؤسسة لتشجيع ممارسات التعلم مدى الحياة					
ما درجة موافقتك على كل مما يلي والخاص بتشجيع ممارسات التعلم مدى الحياة في مؤسستكم	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة

A31	تقدم المؤسسة حوافز غير مادية للعاملين من أجل تحسين مهاراتهم وخبراتهم من خلال ممارسات التعلم مدى الحياة.				
A32	إن عملية الترقية في المؤسسة ترتبط بشكل أو بآخر بقدرة الموظف على تطوير مهاراته من خلال ممارسات التعلم مدى الحياة.				
A33	تقوم المؤسسة بتشجيع الموظفين على الالتحاق ببرامج التدريب المختلفة وبناء القدرات داخل المؤسسة.				
A34	تقوم المؤسسة بتشجيع الموظفين على الالتحاق ببرامج التدريب المختلفة وبناء القدرات خارج المؤسسة.				
A35	تعتبر العديد من البرامج الخاصة بالتعلم مدى الحياة أو البرامج التدريبية إلزامية للموظفين.				
A36	تشجع المؤسسة على تبادل المعلومات والخبرات والمهارات مع الموظفين والأقسام الأخرى داخل المؤسسة.				
A37	تشجع المؤسسة على تبادل المعلومات والخبرات والمهارات مع المؤسسات الأخرى.				
A38	تقوم المؤسسة بالبحث عن الفرص الخاصة بممارسات التعلم مدى الحياة وتعرضها على الموظفين.				

B: يختص هذا الجزء بطرق ووسائل الحصول على التعلم مدى الحياة

B1: ما هي أبرز طرق الحصول على ممارسات التعلم مدى الحياة داخل مؤسستكم؟ (بإمكانك الإجابة على أكثر من خيار)

B11	الموظف نفسه وبجهود فردية من خلال التعلم الذاتي	B18	استقطاب مدربين وكفاءات من خارج المؤسسة
B12	استقطاب مدربين وكفاءات من داخل المؤسسة	B19	برامج تدريبية خارج فلسطين
B13	من خلال نشرات وتقارير يتم توزيعها على العاملين	B20	ورشات عمل ومؤتمرات داخل المؤسسة
B14	برامج تدريبية داخل فلسطين	B112	ورشات عمل ومؤتمرات خارج فلسطين
B15	ورشات عمل ومؤتمرات داخل فلسطين	B113	التنقلات الوظيفية بين مؤسسة وأخرى
B16	تبادل المعلومات والخبرات مع المؤسسات الأخرى	B114	برامج تدريبية خارج فلسطين
B17	غير ذلك حدد:		

B2: يقيس هذا الجزء دور الجامعات والمؤسسات الأكاديمية في دعم وتشجيع ممارسات التعلم مدى الحياة

مامدى رضاك عن الدور الذي تلعبه الجامعات ومؤسسات التعليم العالي في دعم ممارسات التعلم مدى الحياة					موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
B21	يساعد التحاق الموظفين ببرامج الماجستير في الجامعات المختلفة في تعلم ممارسات التعلم مدى الحياة.								
B22	تقوم الجامعات بتطوير برامج ماجستير أو دبلوم متخصص من أجل تعزيز ممارسات التعلم مدى الحياة.								
B23	يتم إشراك الجامعات في تطوير الخطط الاستراتيجية وبناء القدرات لدى المؤسسات العامة.								
B24	العديد من البرامج التدريبية وبرامج بناء القدرات في المؤسسة يتم تقديمها بواسطة أعضاء الهيئات التدريسية في الجامعات.								
B25	هناك تحسن ملموس في نوعية الموظفين الجدد حديثي التخرج من ناحية المهارة والمعرفة.								
B26	الموظفين الجدد حديثي التخرج لهم قدرة أكبر على إيجاد الحلول الإبداعية.								
B27	الموظفين الجدد حديثي التخرج يملكون خبرة أكبر في استخدام التكنولوجيا.	/							

B3: ما هو مصدر التمويل لممارسات التعلم مدى الحياة؟ (بالإمكان الإجابة على أكثر من سؤال)

B31	تمويل ذاتي من المؤسسة أو الوزارة	B35	المؤسسات محلية غير الهادفة للربح (Local NGO's)
B32	تمويل من قبل الحكومة (ديوان الموظفين)	B36	المؤسسات غير الحكومية دولية (International NGO's)

B33	مؤسسات القطاع الخاص	B37	غير ذلك:
B34	ليس بحاجة إلى تمويل لأنني أحصل عليه بشكل مجاني من خلال الإنترنت أو الكتب و الدورات.		

C: هذا الجزء يقيس تأثير وفاعلية ممارسات التعلم مدى الحياة على كل من المؤسسة وأداء الموظفين

C1: على مستوى العاملين						
ما مدى مساهمة ممارسات التعلم مدى الحياة على مستوى العاملين في المؤسسة	عالية جدا	عالية	متوسط	منخفضة	منخفضة جدا	
C11						زيادة درجة الرضا لدى الموظفين.
C12						تشجيع وتحفيز الموظفين
C13						تقليل درجة المخاطرة في تنفيذ الخدمات للمواطنين.
C14.						زيادة مستوى المعرفة لدى الموظفين
C15						توفير وتجديد المهارات الخاصة باستخدام وسائل التكنولوجيا المختلفة.
C16						زيادة الخبرة والكفاءة لدى الموظفين.
C17						زيادة الطلب على المعرفة والخبرات من قبل الموظفين الآخرين.
C18						توفير وتجديد المهارات اللازمة من أجل الاندماج في مجتمع المعرفة.
C19						زيادة رضا المواطنين.
C20						توفير فرص متساوية لجميع الموظفين من أجل تعليم ممارسات التعلم مدى الحياة.
C111						زيادة قدرة الموظفين على إيجاد الحلول الابداعية للمشاكل المختلفة التي تواجههم في مكان العمل
C112						زيادة درجة الإلهام لدى الموظفين من أجل الارتقاء بالمؤسسة والخدمات العامة
C2: على مستوى المؤسسة						
ما مدى مساهمة ممارسات التعلم مدى الحياة على مستوى المؤسسة	عالية جدا	عالية	متوسطة	منخفضة	منخفضة جدا	
C21						زيادة إنتاجية المؤسسات العامة
C22						زيادة نوعية وجودة الخدمات التي تقدمها مؤسسات القطاع العام
C23						زيادة درجة الثقة في المؤسسات العامة من قبل المواطنين
C24						خفض مستوى البيروقراطية داخل المؤسسة
C25						تغيير في النظرة السلبية لدى المواطنين عن مؤسسات القطاع العام
C26						زيادة درجة الاستجابة للطلب المتزايد على الخدمات العامة
C27						توفير فرص متساوية لجميع الموظفين من أجل تعليم ممارسات التعلم مدى الحياة
C28						زيادة قدرة المؤسسة على ابتكار الحلول المناسبة للمشاكل والتحديات التي تواجهها
C29						تقليل التكلفة اللازمة لتوفير الخدمات العامة للمواطنين
D: هذا الجزء يقيس العقبات أو التحديات أمام تطبيق ممارسات التعلم مدى الحياة						
D1	التحديات المتعلقة بالقوانين والتشريعات					
	موافق	موافق	محايد	غير	غير	

				بشدة	موافق	موافق بشدة
D11	يعتبر القانون الخاص بديوان الموظفين التدريب حق لكل موظف					
D12	القوانين والتشريعات داخل المؤسسة تدعم بشكل كبير برامج التدريب والتطوير المهني					
D13	تقوم المؤسسة بتغطية البرامج التدريبية الخارجية كدورات اللغة والخ					
D14	الترقية الوظيفية مرتبطة بشكل رئيسي بمدى قدرة الموظف على تطوير نفسه من خلال التعليم غير الرسمي					
D15	نظام التقاعد المبكر لا يحفز الموظف على التقدم لبرامج التعلم مدى الحياة					
D2	يهدف هذا الجزء إلى المعينات على مستوى المؤسسة	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
D21	ضغوط العمل وضيق الوقت يحد من التقدم لبرامج التعلم مدى الحياة					
D22	طبيعة الوظيفة والمهارات التي تحتاجه لا تتطلب لمثل هذه البرامج					
D23	لا يوجد تحفيز وتشجيع من الإدارات العليا للتقدم لهذه البرامج					
D24	البيروقراطية داخل المؤسسات لا تساعد على التقدم لبرامج التعلم مدى الحياة					
D25	برامج التدريب مدى الحياة لا ترتبط عادة بالحوافز غير المادية مثل الترقيات					
D26	برامج التدريب مدى الحياة لا ترتبط في العادة بحوافز مادية					
D3	عوانق متعلقة بالموظف نفسه	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
D31	لا يوجد حافز ذاتي لدى عدد كبير من الموظفين للتقدم لبرامج التعلم مدى الحياة					
D32	مستوى التدريبات في بعض الأحيان يفوق قدرات الموظف على استيعابها					
D33	عدم وجود انسجام مع متطلبات الموظف التدريبية وما يتم عرضه من دورات					
D34	لا يوجد جدية لدى الموظفين في ما يخص أهمية برامج التعلم مدى الحياة					
D35	الموظفين لا يلتزمون ببرامج التدريب مدى الحياة لفترة طويلة					
D36	ارتفاع معدل أعمار الموظفين يعتبر عائق أمام تطوير مهارات التعلم مدى الحياة					
D4	خاص ببرامج التدريب ومحتواها	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
D41	البرامج نفسها غير كافية ومحتواها ضعيف					
D42	معظم برامج التدريب مكررة وغير ضرورية					
D43	برامج التدريب لا تتسجم مع متطلبات الوظيفة					
D44	عادة يتم الاستعانة بمدرسين ذو كفاءة منخفضة					
D45	المحتوى التدريبي غير كافي					
D46	هناك العديد من البرامج التدريبية التي لا يوجد كفاءات محلية					

					خاصة بتدريبيها	
E : هذا القسم يتعلق بمدى وجود الإلهام عند العاملين في القطاع العام						
			موافق بشدة	موافق	محاييد	غير موافق بشدة
E11						أشعر أنيأمتلك العزيمة والاصرار اللازمين لتطوير مهاراتي في العمل
E12						عندما تواجهني مشكلة متعلقة بالعمل فإنني لا استسلم بسهولة بل استمر في المحاولة حتى أقوم بحلها
E13						أنا دائماً ما أوجه نفسي باتجاه اكتساب مهارات ومعرفة جديدة أحتاجها في مكان العمل
E14						أجد أنني كلما تعلمت أكثر كلما تغير سلوكي بشكل أفضل
E15						أنا أؤمن أنه بالرغم من المشاكل والتحديات في مكان العمل فإن روح العمل الجماعية تبقى حاضرة وتتصرف كعائلة واحدة
E16						أنا أبحث باستمرار على ما هو جديد للارتقاء بالمؤسسة والوطن
E17						أستطيع القول أنني أتخذ قراراتي المتعلقة بمكان العمل بمسؤولية عالية
E18						أقوم دائماً بعملية التحفيز الذاتي من أجل تطوير مكان العمل
E19						لا أخاف من الفشل بل أتعلم من الفشل من أجل تحقيق النجاح فيما بعد

جامعة النجاح الوطنية
كلية الدراسات العليا

التعلم مدى الحياة وأثره على القطاع العام الفلسطيني

إعداد

تسليم أكرم مصباح دحبور

إشراف

د. عاص أطرش

د. محمد بوحجي

قدمت هذه الأطروحة استكمالاً لمتطلبات الحصول على درجة الماجستير في إدارة السياسة
الإقتصادية بكلية الدراسات العليا، جامعة النجاح الوطنية، نابلس، فلسطين.

2018

ب

التعلم مدى الحياة وأثره على القطاع العام الفلسطيني

إعداد

تسنيم أكرم مصباح دحبور

إشراف

د. عاص أطرش

د. محمد بوحجي

الملخص

يحتاج القطاع العام الفلسطيني إلى الإصلاح من أجل أن يتماشى مع المتطلبات الاجتماعية والاقتصادية للفلسطينيين؛ ولكي يتواءم مع متطلبات العولمة. وهو يتطلب تقديم الخدمات والمحسنة والمصادر البشرية المطورة على مستوى القطاع العام، ويتم تحقيقه من خلال عملية التدريب والتعلم المستدامة والمعروفة باسم "التعلم مدى الحياة"، والذي يتعدى التعليم الأساسي أو الشهادة الجامعية. وجوهر هذا الإصلاح يكمن في أيدي الحكومة الفلسطينية. فعلى الحكومة أن تشجع أو تتبنى "التعلم مدى الحياة" كخطة طموحة وإستراتيجية لتحقيق برامجها، وكوسيلة إلهام للموظفين الحكوميين. والنتيجة ستكون تطوير الخدمات العامة ورفع قدرة الاقتصاد الفلسطيني وجعله قادرا على المنافسة والنمو في هذا العالم الديناميكي التنافسي.

السؤال الرئيس لهذه الدراسة يدور حول تحديد عناصر "التعلم مدى الحياة" التيخلق رغبة للتعلم واكتساب المهارات والقدرات الجديدة، مع الأخذ بعين الاعتبار القيود الاقتصادية السياسية التي تؤثر على مكان العمل في فلسطين. أي أن الدراسة تبحث إن كان "التعلم مدى الحياة" قادرا على خلق الإبداع مع التركيز على موظفي القطاع العام في فلسطين.

ويقدم هذا العمل هيكلًا لبناء ثقافة تعليمية أو منظومة تعليمية في القطاع العام الفلسطيني مبنية على التعلم مدى الحياة. فهو يبحث في دور "التعلم مدى الحياة" في تطوير مهارات موظفي القطاع العام التعليمية الإدراكية والموجهة ذاتيا. كما أن الدراسة تستكشف العلاقة ما بين قيم وبرامج "التعلم مدى الحياة".

أما منهجية البحث فتجمع ما بين الإحصاءات الوصفية والاقتصاد القياسي. حيث تقوم الإحصاءات الوصفية بتحليل بعدي "التعلم مدى الحياة" والإلهام وإلى أي درجة هي موجودة في المؤسسات الفلسطينية. أما في الاقتصاد القياسي، فقد تم اعتماد نموذج الانحدار الخطي والنماذج الخطية المعممة من أجل التقدير عمليا العلاقة ما بين "التعلم مدى الحياة"، ومستوى أداء الموظف الحكومي ونوعية الخدمات العامة. أما الفئة المستهدفة فهي المؤسسات العامة في الضفة الغربية.

و بناء على الجهاز المركزي الفلسطيني للإحصاء فإن القطاع العام الفلسطيني يتكون من 45 مؤسسة وهيئة بما في ذلك وزارات وهيئات مثل المياه والطاقة ومركز الإحصاء... الخ.

وقد تم استثناء موظفي قطاع غزة بسبب الظروف السياسية والانقسام مما يعيق جمع المعلومات. وقد تم أخذ عينة عشوائية من 350 موظفا حكومي موزعين على 27 مؤسسة حكومية.

هذا وقد وجدت الدراسة أن الحوار حول "التعلم مدى الحياة" متزايد بين أوساط صناعات القرار وأصحاب الأسهم، حتى وإن كان أغلب الحوار يأتي تحت مسميات أخرى مثل التعليم المهني، والتعليم غير الرسمي، وإصلاح النظام التعليمي، والتحرك ضد البيروقراطية في القطاع العام، وتعلم الكبار وإشراك المرأة في سوق العمل.

وقد أظهرت تحليلات النماذج الخطية المعممة للعلاقة ما بين "التعلم مدى الحياة" وأداء الموظفين الحكوميين أن الجامعات تلعب الدور الأساسي في زيادة تأثير "التعلم مدى الحياة" على أداء الموظفين الحكوميين. وقد جاء بعد ذلك توفر الدعم لبرامج "التعلم مدى الحياة" من قبل المؤسسات العامة فقد أظهرت التحليلات أن له تأثيرا إيجابيا على أداء الموظفين. ووجد أيضا أن العوائق التي تقف في وجه "التعلم مدى الحياة" وبرامجه تؤثر سلبا على أداء الموظف الحكومي، وبالتالي على جودة الخدمات العامة المقدمة.

وفي نتيجة معاكسة وجد أن المعوقات والتحديات التي تفرضها المؤسسة على الموظف الحكومي قد أثرت إيجابا على أدائه. وكان امتلاك الموظفين لحافز الإلهام من أهم العوامل التي أثرت إيجابا على أداء الموظفين و على جودة الخدمات التي يقدمونها.

معامل الانحدار للعلاقة ما بين مؤشرات "التعلم مدى الحياة" و أداء الموظفين الحكوميين أكد أن توفر الدعم هو حجر الأساس في تطوير أداء المؤسسات العامة زيادة رضا المواطن الفلسطيني

ث

بجودة الخدمات المقدمة له. علاوة على ذلك، فإن المؤسسات الأكاديمية (أو التعاون ما بين القطاع العام والمؤسسات التعليمية) لها دور كبير في تطوير "التعلم مدى الحياة" في المؤسسات العامة. كما أن إدراك المؤسسات العامة لمدى أهمية "التعلم مدى الحياة" ضروري جدا حتى يشاركوا في برامجهم فيكون لهم تأثير إيجابي وفعال في أداء المؤسسات العامة. أما التكنولوجيا فقد كان لها تأثير سلبي على تطور "التعلم مدى الحياة".

هذا وقد قدمت الدراسة مجموعة من التوصيات من أجل تطوير "التعلم مدى الحياة"، وتحسين دوره في رفع مستوى أداء المؤسسات العامة في فلسطين. وقد أوصت الدراسة بضرورة زيادة الوعي العام بأهمية "التعلم مدى الحياة" وتحسين أداء الموظفين وخدماتهم، و بضرورة إدخال تحسينات طارئة إلى البنية التحتية التكنولوجية إضافة إلى تطوير المهارات التكنولوجية للموظفين. كما يتوجب على الحكومة أن تضع ميزانية خاصة بمشاريع "التعلم مدى الحياة"، وأن تستوعب المزيد من الموظفين في برامج بناء القدرات من خلال المدرسة الوطنية للإدارة العامة. أما تطوير الوظائف في القطاع العام فيجب أن يكون مبنيا على قدرة الموظفين على تطوير قدراتهم، وجعل "التعلم مدى الحياة" وبرامجه التدريبية إجبارية.

وأخيرا فإن الاستعانة بمدرّبين وخبراء من الخارج وحضور المؤتمرات الدولية يعد من الضرورات للوصول إلى كل ما هو جديد.