

إقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

Role of Human Resource Development In Achieving Quality
In Contracting Companies In the Gaza Strip
دور تنمية الموارد البشرية في تحقيق الجودة في شركات المقاولات في
قطاع غزة

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

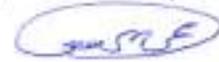
DECLARATION

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 الطالب/ة: محمد مسلم

Signature:

التوقيع: 

Date:

التاريخ: 29 يوليو 2015

The Islamic University Gaza
Graduate Deanery
Faculty of Engineering
Civil Engineering Department
Engineering Projects Management



الجامعة الإسلامية - غزة
عمادة الدراسات العليا
كلية الهندسة
قسم الهندسة المدنية
إدارة المشروعات الهندسية

Role of Human Resource Development In Achieving Quality
In Contracting Companies In the Gaza Strip
دور تنمية الموارد البشرية في تحقيق الجودة في شركات المقاولات في
قطاع غزة

Submitted by:

Eng. Mohammed Musalam

Supervised by:

Associate Prof./ Dr. Nabil El-Sawalhi

*This Thesis is Partial Fulfillment of the Requirement for the Degree of Master
of Science in Engineering Projects Management*

Gaza, Palestine

June, 2015



مكتب نائب الرئيس للبحث العلمي والدراسات العليا هاتف داخلي 1150

الرقم 735/ع ج س

Date 2015/06/30 التاريخ

نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة شئون البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحث/ محمد تيسير أحمد مسلم لنيل درجة الماجستير في كلية الهندسة قسم الهندسة المدنية- إدارة المشروعات الهندسية وموضوعها:

دور تنمية الموارد البشرية في تحقيق الجودة في شركات المقاولات في قطاع غزة
Role of human resource development in achieving quality in contracting companies in the Gaza Strip

وبعد المناقشة العلنية التي تمت اليوم الثلاثاء 13 رمضان 1436هـ، الموافق 2015/06/30م الساعة

العاشرة صباحاً بمبنى القدس، اجتمعت لجنة الحكم على الأطروحة والمكونة من:

| | | |
|-------|-----------------|-----------------------------|
| | مشرفاً و رئيساً | د. نبيل إبراهيم الصوالحي |
| | مناقشاً داخلياً | د. علاء الدين داوود الجماصي |
| | مناقشاً خارجياً | د. علي إبراهيم تايه |

وبعد المداولة أوصت اللجنة بمنح الباحث درجة الماجستير في كلية الهندسة/ قسم الهندسة المدنية-

إدارة المشروعات الهندسية.

واللجنة إذ تمنحه هذه الدرجة فإنها توصيه بتقوى الله ولزوم طاعته وأن يسخر علمه في خدمة دينه ووطنه.

والله ولي التوفيق،،،

مبايع نائب الرئيس للبحث العلمي والدراسات العليا

د. فؤاد علي العاجز



Dedication

- ❖ To my loving *parents* whose words of support and push for tenacity ring in my ears.
- ❖ To my *wife* whose constant dedication and love enlightened me.
- ❖ A special feeling to my son *Ahmed*.
- ❖ To all my *brothers, sisters, colleagues* and *friends* for their endless support and help.

Mohammed T. Musallam

June, 2015

Acknowledgments

- *All thanks goes to Almighty, Allah who bestowed me the awareness, perseverance, mercy and help to make this accomplishment possible.*
- *I am grateful to my supervisor Dr. Nabil El Sawalhi for his professional advice, useful guidance, and excellent support through all stages of preparing this thesis. Dr Sawalhi careful check and useful response have made a great contribution to the production of this thesis in its final form.*
- *A special thanks goes to Engineering Projects Management Staff at the Islamic University of Gaza for their academic and scientific support throughout my study of MSc.*
- *A special thanks to Deanery of Graduate Studies at Engineering Faculty for their administrative and academic support.*
- *Careful acknowledgment to my colleague Mohammed Mansour for his advices during the study.*
- *My grateful thanks to all contractors who participated in filling questionnaires and provided important information for this study.*
- *A special thanks goes to Palestinian Contractors Union for data supply about Palestinian contractors to filling the questionnaire.*

Abstract

Human resource is considered the most important asset in construction industry, it has the highest influence to achieve quality. Therefore, contracting companies must keep and develop their employees. Human resource development gives the company a competitive edge. Any company, which ignores their human resource development harm their future reputation. Quality in turn is a function of knowledge and experience background, training programs and the overall health of the employees.

This study aimed to investigate the role of human resource development in achieving quality in contracting companies in the Gaza Strip and to provide mechanisms and guidelines for contractors to develop human resources in their companies. It also enhance work quality through comprehensive developing a policy framework. Qualitative and quantitative methods used to achieve the research objectives. A Structured interview used to assess the current situation of human resource development in contracting companies in the Gaza strip. A questionnaire method used to investigate the factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip, and to investigate the barriers factors to implement the human resource development in contracting companies in Gaza Strip.

This study indicated that most important three factors that affecting and leading to development of human resource that achieving quality in contracting companies in Gaza Strip are implement efficiency criteria for employee selection to work with company, trainers efficiency and criteria's for selection training team and hold training courses to develop knowledge and theoretical capabilities of employees. Also the study indicated that most important three factors that barring implementation of human resource development programs in contracting companies in Gaza Strip are discontinuous of companies work, human resource development programs cost and lack of job security of employees because of temporary contract.

This study recommended that contracting companies must take high attention for human resource management main practices and establishing comprehensive training programs for all employees in company based on internal and external changes influencing at human resource performance.

ملخص البحث

يعتبر العنصر البشري من أهم الموارد الموجودة في قطاع صناعة الإنشاءات والأكثر تأثيراً في تحقيق الجودة ، لذا يتوجب على شركات المقاولات الحفاظ والعمل على تنمية العاملين لديها كما أن تنمية الموارد البشرية تعطي الشركة ميزة تنافسية وأى شركة تهمل تنمية مواردها البشرية تضر بسمعة الشركة المستقبلية والجودة هي نتاج الخلفية النظرية والعملية لدى العاملين ووجود برامج تدريبية والصحة العامة للعاملين .

تهدف هذه الدراسة إلى التحقق من دور تنمية الموارد البشرية في تحقيق الجودة في شركات المقاولات في قطاع غزة و لتزويد المقاولين بالآليات والمبادئ التوجيهية لتنمية مواردهم البشرية من خلال مراجعة شاملة للدراسات السابقة واقتراح إطار لتنمية الموارد البشرية .

تم استعمال الطريقة الكيفية والكمية لتحقيق أهداف الدراسة ، حيث تم استخدام المقابلة لتقييم واقع تنمية الموارد البشرية في شركات المقاولات في قطاع غزة وقد تم استخدام الاستبيان للتحقق من العوامل التي تؤدي لتنمية الموارد البشرية لتحقيق الجودة في شركات المقاولات في قطاع غزة وأيضاً التحقق من معوقات تطبيق تنمية الموارد البشرية في شركات المقاولات في قطاع غزة .

هذه الدراسة أشارت إلى أن أهم ثلاث عوامل تؤثر وتؤدي لتنمية الموارد البشرية في شركات المقاولات في قطاع غزة هي تطبيق معيار الكفاءة لاختيار الموظفين للعمل بالشركة وكفاءة المدربين ومعايير اختيار فريق التدريب وعقد دورات تدريبية لتنمية القدرات النظرية والعملية للعاملين وأيضاً الدراسة أشارت إلى أهم ثلاث عوامل تعيق تطبيق برامج تنمية الموارد البشرية في قطاع غزة هي عدم تواصل عمل الشركات وتكلفة برامج تنمية الموارد البشرية وعدم وجود أمان وظيفي لدى العاملين بسبب التعاقد المؤقت مع الشركة .

هذه الدراسة أوصت بأنه يجب على شركات المقاولات أن تولي اهتمام شديد للممارسات الرئيسية لإدارة الموارد البشرية وإنشاء برامج تدريبية شاملة لجميع العاملين في الشركة بناء على التغيرات الداخلية والخارجية التي تؤثر على أداء الموارد البشرية .

List of contents

| | |
|--|-----------|
| Dedication..... | I |
| Acknowledgments..... | II |
| Abstract..... | III |
| List of contents..... | V |
| List of Abbreviations..... | IX |
| List of Tables..... | X |
| List of Figures..... | XII |
| Chapter one :Introduction..... | 1 |
| 1.1Research rationale..... | 1 |
| 1.2 The nature of the construction industry..... | 2 |
| 1.3 The importance of construction industry..... | 3 |
| 1.4 Construction industry in Gaza Strip..... | 3 |
| 1.5 Construction industry effect on economy in Palestine..... | 4 |
| 1.6 Importance of human resource in construction industry..... | 5 |
| 1.7 Research problem..... | 5 |
| 1.8 Research aim and objectives..... | 6 |
| 1.9 Methodology outline..... | 6 |
| 1.10 Thesis contents..... | 7 |
| 1.11 Research limitations..... | 8 |
| Chapter two: Literature Review..... | 9 |
| 2.1 Human resources definition..... | 9 |
| 2.2 Human resource management..... | 9 |
| 2.3 Construction personnel..... | 11 |
| 2.4 Human resource management practices..... | 11 |
| 2.4.1 Staffing..... | 12 |
| 2.4.2 Training and development..... | 12 |
| 2.4.3 Performance appraisal..... | 13 |
| 2.4.4 Compensation and benefits systems..... | 14 |
| 2.4.5 Employee health..... | 15 |
| 2.5 Human resource management and organization performance..... | 15 |
| 2.6 Job satisfaction and performance..... | 19 |

| | |
|--|----|
| 2.7 Customer satisfaction..... | 19 |
| 2.8 Human resource development..... | 20 |
| 2.9 Strategic for human resource development..... | 22 |
| 2.9.1 HR strategies definition..... | 22 |
| 2.9.2 Strategic priorities..... | 22 |
| 2.9.3 Specific HR strategies..... | 22 |
| 2.10 Human resource development in construction companies..... | 23 |
| 2.11 Employee performance..... | 24 |
| 2.12 Problems of human resource development..... | 25 |
| 2.13 Purpose of human resource development..... | 25 |
| 2.14 Extensions of human resource development..... | 26 |
| 2.14.1 Training..... | 26 |
| 2.14.2 Training and development..... | 33 |
| 2.14.3 Employee development..... | 34 |
| 2.14.4 Organizational learning..... | 35 |
| 2.15 Human resource development in developed countries..... | 35 |
| 2.16 Human resource development in developing countries..... | 36 |
| 2.17 Barriers to human resource development in construction companies..... | 36 |
| 2.18 Quality in construction industry..... | 38 |
| 2.19 Human resource (HR) participation for quality performance..... | 40 |
| 2.20 Chapter Summary..... | 41 |
| Chapter three :Methodology..... | 42 |
| 3.1 Introduction..... | 42 |
| 3.2 Research strategy..... | 42 |
| 3.3 Research design..... | 43 |
| 3.4 Research population and sample size..... | 46 |
| 3.4.1 Research population..... | 46 |
| 3.4.2 Sample size..... | 46 |
| 3.5 Data collection..... | 47 |
| 3.5.1 Primary data..... | 47 |
| 3.5.2 Secondary data..... | 47 |
| 3.6 Research location..... | 48 |
| 3.7 A questionnaire method..... | 48 |

| | |
|--|----|
| 3.8 Questionnaire design..... | 48 |
| 3.8.1 Components of questionnaire..... | 48 |
| 3.8.2 Measurement scale..... | 49 |
| 3.9 Pilot study..... | 50 |
| 3.10 Questionnaire validity..... | 52 |
| 3.10.1 Content validity of the questionnaire..... | 52 |
| 3.10.2 Statistical Validity of the Questionnaire..... | 52 |
| 3.11 Questionnaire reliability..... | 60 |
| 3.12 Questionnaire distribution and collection..... | 62 |
| 3.13 Statistical methods used..... | 63 |
| 3.14 Interview method..... | 63 |
| 3.14.1 Types of interviews..... | 63 |
| 3.14.2 Structured interview design..... | 64 |
| 3.14.3 Structured interview content..... | 65 |
| Chapter four : Results and discussion..... | 66 |
| 4.1 Introduction..... | 66 |
| 4.2 Structured interview results..... | 66 |
| 4.3 Normality distribution test..... | 75 |
| 4.4 Study population characteristics..... | 75 |
| 4.4.1 Differences of responses due to job description..... | 77 |
| 4.4.2 Differences of responses due to experience years in construction industry..... | 77 |
| 4.4.3 Average of projects value that executed annually for last five years... | 77 |
| 4.4.4 Number of total employees in company..... | 77 |
| 4.4.5 Number of permanent employees in company..... | 78 |
| 4.4.6 Number of employees that company attract them annually..... | 78 |
| 4.4.7 Number of employees that leave or lay off from company annually... | 78 |
| 4.5 Study fields analysis..... | 79 |
| 4.6 Means and ranks..... | 79 |
| 4.6.1 First group: Factors related to main practices for human resource management..... | 80 |
| 4.6.2 Second group: Factors related to training | 83 |
| 4.6.3 Third group : Factors resulted from training programs..... | 86 |

| | |
|--|-----|
| 4.6.4 Fourth group: Factors related to work market changes (Materials / equipments and machines /workers)..... | 88 |
| 4.6.5 Fifth group : Factors related to who carry out of employees evaluation | 90 |
| 4.6.6 Sixth group : Others factors..... | 92 |
| 4.6.7 Seventh group : consist of factors that barring implementation of human resource development in contracting companies in the Gaza Strip..... | 94 |
| 4.7 The most important factors related to factors that affecting and leading to development of human resource that achieving quality in contracting companies in Gaza Strip..... | 97 |
| 4.8 The most important factors related factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip..... | 101 |
| 4.9 Groups rank in part two: groups that leading to human resource development to achieve quality in contracting companies..... | 103 |
| 4.10 Hypothesis Testing..... | 104 |
| Chapter five : Development of framework..... | 109 |
| 5.1 Introduction..... | 109 |
| 5.2 Purpose of Framework..... | 109 |
| 5.3 Scope of Framework..... | 110 |
| 5.4 Motivation for framework..... | 110 |
| 5.5 Success factors for policy framework..... | 110 |
| 5.6 Description of Framework..... | 111 |
| Chapter six : Conclusion and recommendations..... | 117 |
| 6.1 Conclusion..... | 117 |
| 6.2 Recommendations..... | 118 |
| 6.2.1 Recommendations for contracting companies..... | 119 |
| 6.2.2 Recommendations for contractors union..... | 120 |
| 6.2.3 Recommendations for owners..... | 120 |
| References | 121 |
| Appendix : Questionnaire..... | 128 |

List of Abbreviations

| | |
|------|------------------------------------|
| GDP | Gross Domestic Product |
| HR | Human Resource |
| HRD | Human Resource Development |
| HRIS | Human Resource Information System |
| HRM | Human Resource Management |
| HRP | Human Resource Practices |
| PCU | Palestinian Contractors Union |
| QM | Quality Management |
| QMS | Quality Management System |
| SME | Small and Medium-Sized Enterprises |
| WBGS | West Bank and Gaza Strip |

List of Tables

| | |
|--|-----------|
| Table 3.1 : Likert scale..... | 49 |
| Table 3.2 : Modifications at questionnaire factors during pilot study stage..... | 51 |
| Table 3.3: Internal consistency for Group 1..... | 53 |
| Table 3.4 : Internal consistency for Group 2..... | 54 |
| Table 3.5: Internal consistency for Group 3..... | 55 |
| Table 3.6 : Internal consistency for Group 4..... | 56 |
| Table 3.7 : Internal consistency for Group 5..... | 57 |
| Table 3.8 : Internal consistency for Group 6..... | 57 |
| Table 3.9 : Internal consistency for Group 7..... | 59 |
| Table 3.10: Structure validity of the questionnaire..... | 60 |
| Table 3.11 : Cronbach's Alpha for Reliability..... | 62 |
| Table 4.1 : Assessment of current situation of human resource development in construction companies in the Gaza Strip..... | 73 |
| Table 4.2 : One sample Kolmogrov-Smirnov test..... | 75 |
| Table 4.3: The profile of respondents..... | 76 |
| Table 4.4 :One-Sample T test mean and P-value (sig.) of the first group..... | 80 |
| Table 4.5 : One-Sample T test mean and P-value (sig.) of the second group..... | 83 |
| Table 4.6 : One-Sample T test mean and P-value (sig.) of the third group..... | 86 |
| Table 4.7 :One-Sample T test mean and P-value (sig.) of the fourth group..... | 88 |
| Table 4.8 : One-Sample T test mean and P-value (sig.) of the fifth group..... | 90 |
| Table 4.9 : One-Sample T test mean and P-value (sig.) of the sixth group..... | 92 |
| Table 4.10 : One-Sample T test mean and P-value (sig.) of the seventh group..... | 94 |

| | |
|--|------------|
| Table 4.11 : The most important factors related to factors that leading to development of human resource..... | 97 |
| Table 4.12 : The most important factors that barring implementation of human resource development in contracting companies in Gaza Strip..... | 101 |
| Table 4.13 : One-Sample T test mean and P-value (sig.) of the overall Groups in part 1... | 103 |
| Table 4.14 : The correlation coefficient for part 1..... | 105 |
| Table 4.15 : The correlation coefficient for part 2 | 105 |
| Table 4.16 :One-Way ANOVA Test for testing the differences due to job description..... | 106 |
| Table 4.17 : One-Way ANOVA Test for testing the differences due to the experience..... | 107 |
| Table 4.18 :One-Way ANOVA Test for testing the differences due to Average of projects value that executed annually for last five years (Dollar)..... | 108 |
| Table 4.19:One-Way ANOVA Test for testing the differences due to the No of employees. | 108 |

List of Figures

| | |
|---|-----|
| Figure 2.1: The effectiveness behavior gap (Swart et al., 2005)..... | 28 |
| Figure 2.2: Bramley’s individual model of training (Swart et al., 2005).... | 28 |
| Figure 3.1: The methodology flow chart | 45 |
| Figure 5.1 :Policy framework for human resources development in contracting companies in Gaza Strip..... | 112 |

Chapter 1

Introduction

1.1 Research rationale

The complexity of today's project environments has created an even greater need to ensure that construction organizations have effective career development programs to fill project management roles with the 'right' people for successful delivery. To meet this need, organizations have looked to supplement established programs with impartial methods to profiling employee characteristics (Mader et al., 2011).

Human resource development, as an academic discipline, is now defined the development of learning including knowledge and expertise and the improvement of performance. It considers a multi-level concept in that it focuses on individual, group, and organization issues. As a discipline, it relies on theories that describe the process of training and theories of organizational learning and changes. However, human resource development is still considered with formless and penetrable boundaries (Tabassi et al., 2011).

The concept of human resource development has emerged as strategy to enhance the capacity of available employees in organizations for performance. Studies have shown that the success of an organization is highly dependent on the skills, knowledge and experience of its employees, which is a direct product of adequate human resource development capability of that particular organization. The success and progress of an organization depend on its ability to maximally explore the talent and potentials of its workforce. This is more likely to be achieved through the purposeful human resource development capability of an organization (Gberevbie, 2012).

On the other side, the researchers emphasized performance outcomes paradigms which concentrated on developing employees to enhance and improve organizational performance outcomes (Tabassi et al., 2011).

To achieve world class quality, it is imperative that a company empowers its workers. Companies must develop and realize the full potential of their workforce and maintain an environment conducive to full participation, personal and organizational growth. This can be achieved through creating the appropriate human resource development through training, employee participation and involvement, building quality awareness among employees, and motivating employees (Shahraki et al., 2011).

The manpower in the construction industry in Gaza strip is not given attention neither from the construction companies nor from the concerned governmental authorities. Studying the availability of skilled workers, training, quality, mode of payment and future strategies to develop the construction workforce is essential and justified for success of the projects. The number of workers taking career in the construction industry is on the rise and this industry involves around 16 % of total work force in different Palestinian industrial sectors (PCBS, 2004).

1.2 The nature of the construction industry

Nowadays construction industry suffers from competitiveness. Sustainable competitive advantage is built by firms only through efficiency and effectiveness. Efficient companies mean success to all construction players. So, firms having sufficient power with qualified and superior resources are able to perform more efficiently. Main parties of construction industry; client, designer, and contractor may pay no attention to efficiency which affect all parties. So, companies are under stress to find ways to improve their performance to survive and sustain their competitive position in the local construction market (Al-Shammari, 1999).

Also construction industry is fragmented and loosely structured system. The skills, loyalty and orientation of professionals and practitioners in the industry have developed in an environment of specialization, differing traditions and often opposing interests. Attempts at integration, if any, are presently weak. In addition, the short-term nature of construction projects does not help to development (Pheng and Ke-Wei, 1996).

The dynamic nature of the labor market, including high labor mobility between companies , wide range of remuneration levels, and issues of seasonality further complicate the matter leading to planning difficulties (Liu and Wall, 2005).

Contracting companies are facing increased competition due to globalization, changes in technology, political and economic environments and therefore prompting these organizations to develop their employees as one of the ways to prepare them to the increases above and thus enhance their performance (Nassazi, 2013).

1.3 The importance of construction industry

Construction industry sector always considered as one of the most important sectors in the economies of all countries for its broad and intense linkages with other sectors which stimulate economic development in the country as a whole is a major generator of jobs and constitutes an important component of gross domestic product (GDP). However, added-value. The industry becoming increasingly more complex partly because the complexity of the construction process itself, and the large number of parties involved including clients, users, designers, regulators, contractors, suppliers and others. The industry's fortunes tend to fluctuate with the general economy, and it has a cyclical nature and quick response to the changes in the economy (Elnamrouty, 2012).

Construction sector plays a major role in the economic development of any nation compared with other sectors (Ikediashi et al., 2012).

1.4 Construction industry in Gaza Strip

The Gaza Strip is one of the most densely populated places on earth, with a total area of 365 km² and a population of approximately 1.8 million (UNDP, 2014). Since, the emersion of the Palestinian National Authority in 1994, the construction sector has witnessed remarkable activities, which resulted in revival of construction sector, support industries and emigrant capital investments. Construction industry is one of the most vibrant industries in Gaza Strip. It includes general contractors, builders, subcontractors, specialty trades and suppliers. Construction works include activities related to construct of residential building, schools, offices, roads, bridges, pipelines, airports, harbors, drainage, power plants, water supply, railways, irrigation projects, maintenance and repair works (UNDP, 2014).

Construction sector has played a crucial role in extending job opportunities for Palestinian labor force. Expansion of the construction activity in the West Bank and Gaza Strip (WBGS) has generated a lot of jobs for skilled, semiskilled and unskilled construction workers (PECDAR, 2015).

The construction sector was the biggest industry sector of Gaza, with 100,000 people either directly or indirectly employed in the sector before the blockade. (Oxfam, 2010).

The construction sector was damaged in 2007 due to the prevent needed construction materials enter including cement, steel, and aggregates. By the end of November 2007,

all remaining stock of construction material in the Gaza Strip had been consumed. All construction factories had shut down, causing the loss of 3,500 jobs (Pal-Think, 2012). Consequently, many infrastructure projects, including roads and sewage systems, have been suspended (PCHR, 2007).

1.5 Construction industry effect on economy in Palestine

The construction industry is a powerful engine to the Palestine economy in general and especially in Gaza Strip (PCU, 2014).

The 1993 Oslo Accords practically preserved Israeli occupation domination over the West Bank and Gaza Strip, and that it would only serve a purely functional-consumerist purpose without having the fundamentals for standing on its own feet, being lacking in sovereignty. This protocol did not transfer economic decision-making to the Palestinian side, and did not even make the latter a partner in decision-making related to the Palestinian economy (AL-Zaytouna, 2013).

Palestine is almost totally dependent on the economy of Israeli occupation. Palestine experiences a trade deficit with Israel because, after years of neglect, it lacks a broad, competitive industrial and agricultural base. This situation is further compounded by Israeli restrictions on the volume, destination and sources of Palestinian trade (PECDAR, 2007).

The economic situation in the Gaza Strip has severely deteriorated since the closure imposed on it after mid-June 2007, which has almost completely restricted commercial movement at Gaza's crossing points. The closure resulted in a massively negative impact on the local private sector in Gaza Strip. The long duration of the closure has introduced a need to identify opportunities for the private sector in the Gaza Strip to cope with the current complicated business environment through identifying business alternatives. This is especially true as the political conflict and imposed closures have had a damaging impact on the private sector (NDEP, 2009).

1.6 Importance of human resource in construction industry

Human resources are considered the most important asset of an organization, but very few companies are able to fully utilization its potential (Ahmad and Schroeder, 2002).

Many factors contribute to the success of any organization, these include capital, equipment, and workforce etc. The most significant of these is the human factor, since it is the people that will put the other resources to good and effective use. The human factor remains the most sensitive and volatile of all factors in production (Uzundu, 2013).

Companies should also attain their competitive advantage through effective and efficient use of these resources. Effective implementation of human resource practices (HRPs) is seen to be crucial for an organization to achieve its goals and objectives (Ahmed and Akhtar, 2012).

1.7 Research problem

The discontinuous work in construction industry and stoppage of work in the construction sector in Gaza strip, mainly for the years 2007 – 2010, has caused construction workers either to remain unemployed or to seek employment in other sectors outside of their work and hence not utilizing their skills. As a result, they have been forced to perform unskilled jobs leading to loss of skills. In addition, no new workers have been trained to acquire new skills. With the relative ease of restriction on imports through the Gaza crossing with occupation, the construction sector was forced to work with available workforce given their skill level and is finding it more difficult to hire needed skilled workers. There is expectation for increasing demand on skilled work to meet the employment needs for the reconstruction and development of Gaza (CPR/SEM , 2013).

This research is an attempt to study the current situation of human resource development in construction industry in Gaza Strip. An attempt is carried out to put guidelines for the development of the human resources in construction contracting companies to achieve required quality.

1.8 Research aim and objectives

Aim

To provide guidelines to develop human resource that enhance quality of work in construction companies in Gaza Strip.

Objectives

1. To assess the current situation of human resource development in contracting companies in the Gaza Strip.
2. Identify the factors of development of human resources in contracting companies that leads to improve quality.
3. Identify the barriers to implement the human resource development in contracting companies in the Gaza Strip.
4. To establish proposed policy / framework for human resource development in contracting companies in the Gaza Strip.

Hypothesis

- There is a relation between quality and the development of employees skills in construction industry.
- There are many barriers to implement human resource development in contracting companies in Gaza Strip.
- It's no statistical significance difference between respondents based on Job description, Experience years, Executed projects annually (\$) and Total number of employees.

1.9 Methodology outline

In thesis research the following methodology will be used in order to a achieve research objectives.

Stage 1: Literature research

A comprehensive review of the relevant literature will be undertaken in order to develop an understanding of previous work in the field of human resource development.

Stage 2: Pilot study

Data collection will take the form of a structured interview and questionnaire. However, an initial pilot study will be conducted to test the validity of the questionnaire.

Stage 3: Main survey questionnaire

The feedback from the pilot study should assist in finalizing the questionnaire and prepare the ground for the main survey. The questions will meet the areas mentioned in the objectives.

Stage 4: Writing up

This stage involves writing up the content of the dissertation and should cover the chapters proposed in the following section.

1.10 Thesis contents

Chapter 1 :-Introduction

This chapter will give an introduction about the research, it will include: introduction about the topic, problem statement, research hypothesis, aim and objectives, limitation, methodology and thesis content.

Chapter 2 :-Literature review

This chapter includes literature review about human resource development, applying quality in contracting companies, mechanism of human resource needs assessment related development and methods and tools lead to human resource development to apply quality.

Chapter 3 :-Methodology

This chapter will show the research design, research period and location, population, sample size, data collection, questionnaire design, pilot study, case study selection, interviews questions design and data measurement and analysis, testing of validity and reliability.

Chapter 4 :- Result and discussion

This chapter will present the statistical questionnaire analysis and results, interviews results, discussion and interpretation of the results.

Chapter 5 :- Development of Framework

This chapter will present a framework for effective implementation of human resource development to achieving quality in contracting companies in Gaza Strip

based on findings draw up from the literature review, current situation, interview and questionnaire survey.

Chapter 6 :-Conclusion and recommendations

This chapter will summarize the research results and conclusion, also it will give some recommendations.

1.11 Research limitation

The study is limited to Gaza strip contracting companies. The research investigate the role of human resource development in achieving quality in contracting companies in the Gaza Strip, were a lot of contracting companies stopped at work or work weakly in the previous ten years specially in period 2007-2010.

Chapter 2

Literature Review

2.1 Human resources definition

Human resources of an organization consists of the people who work there and on whom the success of the business depends. Human resources has been defined by Bontis et al (1999) as follows: ‘Human resources represents the human factor in the organization; the combined intelligence, skills and expertise that gives the organization its distinctive character. The human elements of the organization are those that are capable of learning, changing, innovating and providing the creative thrust which if properly motivated can ensure the long-term survival of the organization (Armstrong, 2006).

Based on human resource-based view, in order for a resource to qualify as a source of a sustained competitive advantages, the resource must add value to the firm, it must be rare, it must be inimitable, and there must be no adequate substitute for the resource (Wright et al., 1993).

2.2 Human resource management

human resources management (HRM) is best understood as the “process of managing human talents to achieve organization’s objective”. The process of managing human talents is said to include the process of recruitment and selection, compensation and benefits, labor and industrial relations and also the management of employees’ safety and health in organizations (Haslinda, 2009). Edwin Flippo defines human resource management as “planning, organizing, directing, controlling of procurement, development, compensation, integration, maintenance and separation of human resources to the end that individual, organizational and social objectives are achieved (Islam, 2012).

HRM also defined as the practices and policies required to carry out the “people” or human resource aspect of a management position, including career planning, compensation, performance appraisal, training, job definition, selection, and encouraging employee participation in decision making (Arumugam et al., 2011).

From another side, human resource management is identified as a process for the attitude of the individuals and the development of abilities, leading to personal growth and self actualization which enables the individual to contribute towards organizational objectives (Arumugam et al., 2011). The HRM is represented by the seven factors including employee participation, training, job description, career planning system, compensation system, selection system, and performance appraisal system. These factors influence at job satisfaction and performance (Selvam, 2013).

HRM is connected with all the managerial functions engaged in planning for rewarding, utilizing, developing, selecting, recruiting, and maximizing the potential of the human resources in an organization (Arumugam et al., 2011).

The HR practices of recruitment, selection, training, performance, performance appraisal, compensation and reward system are affected by the economic conditions, environmental uncertainty and political instability (Bibi et al, 2012).

Human Resource Management therefore involves the acquisition of employee of the right caliber, improving of employees skill, guiding them to maximize their performance and ensuring employees commitment keep continue for the organization (Islam, 2012).

(Harel., 1996) argued that HRM practices improve employees knowledge, skills and abilities (selection and training), through enhanced motivation (compensation and reward). Studies established that HRM practices aimed at acquisition and development of employees is essential investments that develop valuable and rare human assets.

Human Resource Management involves the management of the human resources needed by an organization and also being certain that human resource is acquired and maintained for purposes of promoting the organization's vision, strategy and objectives. In other words, HRM focuses on securing, maintaining, and utilizing an effective work force, which organizations require for both their short and long term survival in the market (Nassazi, 2013).

(Purcell at al., 2003; Lepak et al., 2006) suggests that according to the AMO perspective the HRM system of employees' "ability to perform" (e.g., selection, training, performance appraisal) influences their "skills" (competence, including cooperation), the HRM system of employees' "motivation to perform" (e.g., compensation, promotion, incentives) influences their "attitudes" (motivation,

commitment, satisfaction), and the HRM system of employees' "opportunity to perform" (work design, participation, involvement, communication) influences their "behavior" (retention, presence).

2.3 Construction personnel

The technical personnel comprises foremen of different trade sections, specialist and general foremen, structural engineers, electrical engineers, laboratory technicians construction engineers and plant and equipment superintendents. Others are cost accountants, estimators or quantity surveyors and land surveyors (Ikediashi, 2012). They are therefore expected to be properly trained on the use of management techniques to effectively and efficiently manage resources to deliver optimum performance. They often go by the job titles; programs manager, constructor, construction manager, project engineer, project manager, construction supervisor, or similar designations (World Bank, 2006).

Two types of labor are used by construction companies : power work remains (of the company) as the core labor and employment outsource (outside the company) as an additional power (complement). While Outsource workforce is based on a specific time employment agreement, the workers who work on the company to do certain work for a wage, which is based on the employment agreement for a specified time and or completion of a specific job (Irawan and Halim, 2013).

The strategy is an effective pattern of outsourcing and in accordance with the characteristics of the contractor concerned. From the research it can be concluded that the trend of outsourcing to contractors pattern based more on quantity rather than quality factor, and the main obstacle to the contractor because of difficulty in terms of the provision of the amount of resources and qualified workforce gaps remain (Irawan and Halim, 2013).

2.4 Human resource management practices

Briscoe's (1995) core HRM functions namely staffing, training and development, performance appraisal, compensation and benefits, and finally union and employee relations and health and safety.

2.4.1 Staffing

Staffing involves identifying the nature of the job and implementing a recruitment and selection process to ensure a correct match within the organization. This ensures that the right people are available at the right time in the right place. . In other words, the function of staffing involves hiring the required people, selection amongst the available pool the persons most suitable for the job in question, and sometimes retrenching or firing (Nassazi, 2013).

For any company it must plan for human resources in any future period, to achieve the aim of good performance and productivity and to sustain its goals and objectives. the manager must know the type and volume of business for the period. From this point of view, one can determine the required number of employees at any point in time (Uzondu, 2013).

2.4.2 Training and development

In any company employee is a blood stream. The accomplishment or disaster of the firm depends on its employee performance. Hence, top management realized the importance of investing in training and development for the sake of improving employee performance (Elnaga and Imran, 2013).

Training is generally described as being a systematic and planned effort to develop knowledge, attitudes, abilities and skills through learning-experiences, to attain effective performance in an activity or a range of activities. Many definitions and interpretations of training and development can be found within the HRD literature. For instance, defined training and development as identifying, assuring and helping to develop key competencies that enable individuals to perform current or future jobs (Tabassi, 2011).

Proper human resource planning, training and development needs to be considered at a strategic level in the business, but also and perhaps more challenging, that employees need to change their business strategies to focus on quality rather than cost (Uzondu, 2013).

2.4.3 Performance appraisal

Performance appraisal is a process that is carried out to enable both the individual and the organization to analyze, examine and evaluate the performance of specified objectives over a period of time. This process can take up formal and informal forms. The purposes of performance appraisal have been classified into two groups that is the developmental and administrative purposes (Nassazi, 2013).

On the other hand, administrative under the developmental purposes are purposes of performance appraisal include but are not limited to documenting personal decisions, determining promotion candidates, determining transfers and assignments, identifying poor performance, deciding layoffs, validating selection criteria, meeting legal requirements to mention a few (Nassazi, 2013).

There are a number of alternative sources of appraisal and these include (Nassazi, 2013).

1. Manager and/or supervisor;
2. Self-appraisal performance;
3. Subordinate appraisal;
4. Peer appraisal;
5. Team appraisal;
6. Customer appraisal.

The above practices aims to evaluating the current and the past performance of the employees based on the performance standards with the view ‘to improve performance. It ensures that the employees ‘stay focused on effective performance’ and may be used to reward the individuals whose performance is better than others. Thus, it evaluates the work of the employees as well as motivates them to improve their future performance. This provides an opportunity to the employees to identify the skills that they need to acquire in order to progress within the organization (Ahmed and Akhtar, 2012).

Performance appraisal is important as it is an integral part of an organization’s performance management process. In order to manage this process well, it is

important to conduct performance appraisal every six to twelve months (Ahmed and Akhtar, 2012).

2.4.4 Compensation and benefits systems

Pay or rewards in all forms that companies give to employees in exchange of their services and works are referred to as compensation and benefits. Compensation is the activity of HRM function through which employees get every type of reward in return of performing the tasks assigned by the administration. There is precedence of various employees being paid variably for the same job. This variance appears judicious in terms of individual differences in experience, skills, and performance as well as expectations that seniority, higher performance, or both deserve higher pay (Ahmed, 2012).

Because of the traditional values of a high level of collectivism, together with the need to maintain harmonious relations within the organization, compensation tends to be egalitarian. However, facing competitive pressures from the market, organizations have adopted various policies, including merit pay, or pay for performance (Chow, 2004).

They continue by explaining that this is so in such a way that while employees typically depend on wages, salaries, and so forth to provide a large share of their income and on benefits to provide income and health security. For employers, compensation decisions influence their cost of doing business and thus, their ability to sell at a competitive price in the product market (Nassazi, 2013).

The most basic elements are compensation and benefits that affect at employee performance as well as overall organization performance. It is a reward or an incentives of pay that can stimulate individuals to join, retain and perform well in the long run (Nadarajah et al., 2012).

Leaders and managers are advised to use a system that identifies and rewards workers who do a good job. To encourage worker participation, For example, construction workers can receive a financial bonus for attending to the training programs, developing the company's performances and identifying ways to improve the quality of their company's operations (Tabassi et al., 2011).

2.4.5 Employee health

Health is one of the important and integral parts of human development in any country (Bibi et al., 2012).

Health and safety is important since the well-being of employees is important. Depending on the country's labor policy, there may be some rules set with regards to safety and health of employees (Nassazi, 2013).

All those working on site must also be trained in health and safety, with special attention paid to training of workers' health and safety representatives (Ikediashi et al., 2012).

In creating a healthy work climate, both management and workers unions should have a united hand and in the well-being of the organizational employees. Unionizations improve the industrial relations in instances where the management allows free participation of employees in trade unions. Management and trade unions will negotiate through collective bargaining processes the conditions of workers employment (Nassazi, 2013).

2.5 Human resource management and organization performance

Performance management is considered to be an important step towards developing human resources and improving its performance. A performance evaluation system, well established, works to support human resource activities to maximize competitiveness (Izverciana et al., 2014).

The impact of HRM practices on organizational performance is very important in the fields of HRM, industrial relations and industrial and organizational psychology. Recruiting procedures that provide a large pool of qualified applicants, with reliable and valid selection methods will have a substantial influence over the quality and type of skills new employees possess (Uzundu, 2013).

The success of any organization mainly depends on its employees performance. The firms, whose employees are performing in its full efficiency level, are working as comparative advantages. Employees of an organization play the key role for performing better and better. Actually employees are responsible for organizational performance (Islam, 2012).

There are many factors, employee performance, compensation practices, performance evaluation, promotion practices, tenure which have a great impact on the performance of organization but the contribution of human resource is the most important . Hence, in the present competitive world, organizations are giving more emphasize on the improvement of employee performance (Islam, 2012).

Kokkaew and Koompai (2012) concluded six independent factors from their study relating to HRM activities influencing the performance of the companies are (1) human resource management strategy, (2) leadership, (3) team management, (4) communication, (5) motivation, and (6) ethical treatment of workers.

Influence of human resource management practices on organizational performance has been a significant area of research in past 25 years indicating positive relationship between human resource management practices and organizational performance (Selvam, 2013; Kanter, 1982; Pavett and Lau, 1983).

The impact of HR practices on organizational performance were resulted in their study where HR practices were linked to information technology, employees' training, and incentives and improved on the work skills and behaviors of the workers (Mohamad et al., 2009).

Mudor and Tooksoon (2011) conducted study clearly explains three variables of HRM practices namely supervision, job training and pay practices are positively associated with job satisfaction and performance, it obviously shows that job satisfaction is negatively associated with turnover.

HR planning is the process of ensuring that the HR requirements of an organization are identified and plans are made for satisfying those requirements, it includes creating an employer brand, retention strategy, absence management strategy ,flexibility strategy, recruitment and selection strategy. The purpose of HR planning is to ensure the best fit between employees and jobs while avoiding manpower shortages or surpluses (Uzondu, 2013).

According to Gaurav Akrani (2011) steps in the HR planning process

1. Review of organization's objectives: The human resource manager first studies the organization. Then he prepares a list of all the activities (jobs) that are required to achieve the objectives. He also does job analysis.

2. Estimation of manpower resources: The HR manager then estimates the manpower requirement of the organization. That is, he finds out how many people (manager and employers) will be required to do all the jobs in the organization. Estimation of manpower requirements must be made in terms of quality and quantity.
3. Estimation of manpower supply: The HR manager then estimates the manpower supply. That is, he finds out how many managers and employers are available in the organization.
4. Comparison of manpower: The HR manager then compares the manpower requirements and manpower supply.
5. In case of no difference: If there is no difference between the manpower requirements and the manpower supply, then the HR manager does not take any action. This is because manpower requirements are equal to the manpower supply.
6. In case of difference: If there is a difference between the manpower requirements and the manpower supply, the HR manager takes the following actions
 - a. Manpower surplus: If the manpower requirements are less than the manpower supply then there is a surplus. During manpower surplus, the HR manager make termination i.e. removal of staff, layoff and voluntary retirement.
 - b. Manpower shortage: If the manpower requirements are greater than the manpower supply then there is manpower shortage. During manpower shortage, the HR manager takes the following actions: promotions, overtime, training to improve quality, hire staff from outside etc.
7. Motivation of manpower: HRP also motivates the employers and managers by providing financial and non financial incentives.
8. Monitoring manpower requirements: The HR manager must continuously monitor the manpower requirements. This is because many employees and managers leave the organization by resignation; retirement etc. and new work force must take their place and fill the manpower gap. This helps in uninterrupted functioning of the organization.

High involvement HRM practices have positive relationship with corporate performance, productivity, work attachment, and financial performance. Also confirmed that selective staffing; compensation and incentive, and training had positive influence on performance of organization (Nadarajah, 2012).

The contributions in the theories of Herzberg's and Maslow hierarchy of needs are employee security is given importance and gives employee the motivation and incentive to stay in an organization. Employees feel satisfied and comfortable when the employer can provide a safe and happy workplace.

Besides, it also helps in building trust between them and their employer which more likely can lead to more cooperation and encourages people to look at a long term perspective on the organization performance and their jobs.

According to Maslow's theory, human needs fall from the category of basics physiological needs to the needs for self-actualization. The satisfaction of higher needs increase as the basic needs are met. Therefore, compensation, training and development and selective hiring are one of the components of needs (Nadarajah et al., 2012).

Employee performance is higher in happy and satisfied workers and the management find it easy to motivate high performers to attain firm targets (Elnaga and Imran, 2013).

A term typical to the human resource field, employee performance is everything about the performance of employees in a firm or a company or an organization. It involves all aspects which directly or indirectly affect and relate to the work of the employees" - employee performance, website (Elnaga and Imra, 2013) .

Employee's performance important for the company to make every effort to help low performers. Performance is classified into five elements : Planning, monitoring, developing, rating and rewarding (Elnaga and Imra, 2013).

Employee performance is also effected by some environmental factors such as corporate culture, organizational structure, job design, performance appraisal systems, power and politics prevailing in the firm and the group dynamics. If the above mentioned problems exist in the firm, employee performance decreases not due to lack

of relevant knowledge, skills and attitude, but because of above mentioned hurdles (Elnaga and Imra, 2013).

Organizational performance may be defined as the comparison of the value produced by a company with the value owners expected to receive from the company. Performance can also be defined in terms of HR-related outcomes, such as turnover, absenteeism, job satisfaction, commitment, and others, or even organizational outcomes, including productivity, quality, service, efficiencies, customer satisfaction, and others (Darwish and Singh, 2013).

2.6 Job satisfaction and performance

Job satisfaction defined as “pleasurable or positive emotional state resulting from an appraisal of one’s job or job experiences”(Sahinidis and Bouris, 2008). Job satisfaction and performance are basically related by which job satisfaction has directly effect on the performance (Selvam, 2013).

There are plentiful of job satisfaction research that often in two different types of variable which effect on job satisfaction. First, individual characteristics define as race, gender, educational level and age. On the other hand, in the second place in most studies are work environment (Mudor and Tooksoon, 2011).

Understanding how each element is related to employee's effective commitment to the organization and their job satisfaction may help fostering employee motivation and improve the effeteness of human resource practices (Alniaçık et al., 2012).

Training offered to employees, may help them reduce their anxiety or frustration, brought on by work demands, that they are not familiar with, and they are lacking the skills to handle effectively. Although there has been no direct link in the literature between training and job satisfaction, propose that training may be used as a tool to increase job satisfaction (Sahinidis and Bouris, 2008).

2.7 Customer satisfaction

Skill shortages make it difficult for contractors to deliver the quality of products that more discerning customers require. This is an obvious problem in many developed countries and a growing problem in developing countries, particularly those with a significant group of middle- and upper-class clients (Geneva, 2001).

The ability of top management to establish a practice, and lead a long-term vision for the firm, driven by changing customer requirements. the roles of top management identified as: Establish quality policies, establish and deploy quality goals, provide resources, provide problem-oriented training, and improvement (Jaafreh and Al-abadallat, 2013).

Quality management is achieved through an integrated effort among personnel at all levels to increase customer satisfaction by continuously improving performance. Quality management focuses on process improvement, customer and supplier involvement, teamwork, and training and education in an effort to achieve customer satisfaction, cost effectiveness, and defect-free work (Arditi and Gunaydin, 1997).

2.8 Human resource development

Nadler and Nadler (1989) defined the term HRD as referring to “managed learning experiences provided by the employer, in a specified period for improving and increasing job performance and providing growth for individuals.

HRD as “a series of organized activities conducted within a specified time and designed to produce behavioral change” through training activities. For HRD was defined as “a set of systematic and planned activities designed by an organization to provide its members with the opportunities to learn necessary skills to meet current and future job demands”(Haslinda, 2009).

According to Rodrigues and Chincholkar (2005, pp. 6-20), “HRD is the process of enabling people to make things happen.” This means that without availability of capable employees (in terms of required skills, knowledge and experience) to make things happen in the area of quality products/service delivery and profit maximization, the enhanced goal attainment of that particular organization becomes a mirage.

Since the emergence of the term “HRD”, it has been widely used in various fields of studies on organizational structure and effectiveness. This has also, however, created a great deal of perplexity amongst different individuals, organizations and practitioners (Tabassi et al., 2011).

The process of defining HRD is made still more difficult by the evolving nature of HRD; for example, the term HRD started out as simply “training”, and then evolved into “training and development” (T&D), and then into HRD. Confusion also arises over the “purpose”, the “location” and the “intended beneficiary” of HRD (Khan et al., 2012).

HRD is the integration of individual, career and organization development roles in order to achieve maximum productivity, quality, opportunity and fulfillment of organizations members as they work to accomplish the goals of the organization (Nassazi, 2013).

Human resource development (HRD) policies concern the quality of the labor force and the regulation of the labor market. Quality in turn is a function of basic and higher education, training programmes and the overall health of the population. The quality and adaptability of the labour force is a key driver in creating a favorable environment for both domestic and foreign enterprises to grow through new investment and to adapt quickly to changing circumstances (OECD, 2012).

The development of people, their competencies [aspects of successful professional performance and the process development of the total organization are the main concerns of HRM. With rapid changes in technology, worker's needs, current market, and competitive environment, planning for human resources have become an important and challenging task for development. HR planning involves plans for future needs of employees, their required skills, acquisition of employees, and personnel development (Tabassi and Bakar, 2009).

HRD has gained increasing application as a goal, and as a process in the developmental field. As a goal it is equated with the development of human capacity and up-lift of human aspirations. In terms of process, HRD involves activities related to education, training, empowerment, awareness raising, skills enhancement, team building, community mobilization and development, organization development, entrepreneurship development, sensitization and conscientisation, human resources planning and policies (Khan et al., 2012).

As HRD practitioners and managers seek to facilitate and guide learning and development they can draw upon many concepts and ideas. Psychology, economics, systems thinking and ethics all provide ways of thinking about individual, team and organizational learning. It is widely agreed that effective performance in work roles requires the development and combination of three elements: cognitive capacities, capabilities and desired behaviors. Definitions of these are given in below (Gibb, 2011).

Cognitive capacities: the foundations of intelligence, conceptualized as the processing and possession of information in the brain and higher-order neurological abilities.

Capabilities: the practical abilities involved in work roles, either inherent in the person or developed through practice.

Desired behaviors: from motivation to ‘social skills’, enabling social interaction, mediated by the affective; can be conceptualized variously as attitudes, values or ‘emotional intelligence’ .

2.9 Strategic for human resource development

2.9.1 Human resource strategies definition

HR strategies set out what the organization intends to do about its human resource management policies and practices, and how they should be integrated with the business strategy and each other. The purpose of HR strategies is to guide development and implementation programs. They provide a means of communicating to all concerned the intentions of the organization about how its human resources will be managed. They enable the organization to measure progress and evaluate outcomes against objectives (London and Philadelphia, 2006).

2.9.2 Strategic priorities

The strategic priorities for human resource development as defined by Harrison (2005) are to:

1. raise awareness of the need for a learning culture that leads to continuous improvement;
2. develop the competence of managers to become actively involved in learning that leads to knowledge creation;
3. expand learning capacity throughout the organization;
4. focus on all the organization’s knowledge workers, not just the key personnel;
5. harness e-learning to knowledge sharing and knowledge creation (Izvercian et al., 2014).

2.9.3 Specific human resource strategies

Specific HR strategies set out what the organization intends to do in areas such as (London and Philadelphia, 2006).

Talent management – how the organization intends to ‘win the war for talent’;

Continuous improvement – providing for focused and continuous incremental innovation sustained over a period of time;

Knowledge management – creating, acquiring, capturing, sharing and using knowledge to enhance learning and performance;

Resourcing – attracting and retaining high-quality people;

Learning and developing – providing an environment in which employees are encouraged to learn and develop;

Reward – defining what the organization wants to do in the longer term to develop and implement reward policies, practices and processes that will further the achievement of its business goals and meet the needs of its stakeholders;

Employee relations – defining the intentions of the organization about what needs to be done and what needs to be changed in the ways in which the organization manages its relationships with employees and their trade unions.

2.10 Human resource development in construction companies

The most dynamic and complex industrial environments is construction industry. It is a “project-based” industry within which individual projects are usually built to client needs and specifications whilst the increasing use of external sources of workforces and subcontractors have allowed the main contractors (Tabassi et al., 2011).

Human resource development (HRD) system is a critical strategy for construction companies, as in the coming years, human capital plays a significant role in order to have a successful organization. HRD is concerned with the provision of learning and development opportunities that support achievement of business strategies and improvement of organizational, team and individual performance that improved by training and motivation (Tabassi et al., 2011).

The challenges of lack of skilled labour, heavy competition among firms, technological problems, low productivity and to mention but a few leads to a high rate of poor performance and poor product implementation while placing a serious limitation on product expansion and increase in productivity (Okoye and Ezejiofor, 2013).

To reduce the managing risks and attain better flexibility, it has also made the management of projects more complex, with a requirement for highly skilled and experienced HR managerial and developmental practices (Tabassi et al., 2011).

The quality of labour: where it is good or bad depends on several factors such as education and training, personal health, organization of labour work conditions, attitudes towards the work, relationship between the senior management and the low

level worker (Okoye and Ezejiofor, 2013). The HRD practice may be highly influenced by other human resource management (HRM) factors (Sparkes and Miyake, 2000).

2.11 Employee performance

Employee performance is defined as the outcome or contribution of employees to make them attain goals while performance may be used to define what an organization has accomplished with respect to the process, results, relevance and success (Nassazi, 2013).

Employee surveys in the construction industry should be useful to identify and handle day-to-day problems in industrial relations; to gather statistics relating to employee turnover, absenteeism, performance, and productivity to help the company plan its HR strategies (Ng et al., 2001).

Employee performance is looked at in terms of outcomes. However, it can also be looked at in terms of behavior stated that employee's performance is measured against the performance standards set by the organization. There are a number of measures that can be taken into consideration when measuring performance for example using of productivity, efficiency, effectiveness, quality and profitability measures (Nassazi, 2013).

In this sense, there is a mutual reinforcing tendency between a better quality of companies and increasing investments in human resources (Costantini and Monni, 2007).

Despite such progress, HRD as a concept, model, approach discourse or set of practices remains unclear. A number of dimensions do however emerge from an analysis of the literature, specifically: HRD is intrinsically related to overall business strategy and competitive advantage (Garavan et al., 1999).

- 1.HRD is conceptualized as an investment in human resources capability rather than an employment cost.
- 2.HRD is concerned with change at all levels both organizational and personal.
- 3.HRD views the employee in a ``holistic" sense.
- 4.HRD is concerned with identifying and enhancing the core competencies required at each level to meet its present and future objectives.

5.HRD focuses on the management and delivery of training activities within the organization.

6.HRD concerns itself with selecting the best delivery systems designed to enhance human resource competencies.

7.HRD is concerned with organizational and individual learning.

8.HRD consists of a set of generic activities associated with learning HRD is a social and discursive construct.

9.HRD is concerned with how well human resource development strategies are reinforced by and reinforce other HR strategies.

Increasing competition has prompted many firms to review their training efforts, specific factors may act as the most significant triggers. Technological and product/market changes may lead to recognition of a skill-gap within the organization. Other factors include external and internal labour market changes, the changing skill requirements within industry and the availability of skilled workers from outside the organization. Political and cultural factors within the organization as they relate to training also appear to play a role (Garavan et al., 1999).

2.12 Problems of human resource development

- a. The ability of most construction companies to manage their resources effectively;
- b. Many constraints impeding the implementation of such programs;
- c. High rate of absenteeism and high labor turnover which is a factor of poor service conditions and poor management development programs;
- d. Inadequate supply of materials and spare parts for the servicing and maintenance of equipments most of which are old, obsolete and even need changing;
- e. Lack of motivation (Okoye and Ezejiofor, 2013) .

2.13 Purpose of human resource development

HRD is about adult human beings functioning in productive systems. The purpose of HRD is to focus on the resource that humans bring to the success equation- both personal success and organizational success. The two core threads of HRD are (Swanson and Holton III, 2001).

- 1.individual and organizational learning and (2) individual and organizational performance

2.14 Extensions of human resource development

The realms of career development, quality, and performance improvement are important extensions of HRD theory and practice.

The HRD profession is large and widely recognized. As with any applied field that exists in a large number and variety of organizations, HRD can take on a variety of names and roles. This can be confusing to those outside the profession and even sometimes confusing to those in the profession. We take the position that this variation is not always bad. HRD, embracing the thinking underlying (Swanson and Holton III, 2001).

- training,
- training and development,
- employee development,
- technical training,
- management development,
- executive and leadership development,
- human performance technology,
- organization development, and
- organizational learning.

2.14.1 Training

Training is defined in this study “as the planned intervention that is designed to enhance the determinants of individual job performance. Training is related to the skills deemed necessary by the management of an organization, that must be acquired by the members of that organization, in order to improve the probability of achievement of its goals (Sahinidis and Bouris, 2008).

The effectiveness of training an increasingly heterogeneous workforce in the construction industry is a critical human resource (HR) issue today (Ng et al., 2001). Thus, HR managers develop training programs to impart skills needed by the employees for better performance. The managers also develop strategies on how to restructure the departments, how to recruit the most competent personnel, and how to outsource various services or skills to cut costs. Through monitoring and continuous improvement of these strategies, an organization can efficiently manage its human resources (Wicks and Media, 2014) .

In the construction environment, effective training is governed by a number of HR

management issues. Motivation, employee involvement in career development, job design, and other issues are involved in effective training, and human resource information system (HRISs) can be the best source of data for addressing these issues (Ng et al., 2001).

High levels of managerial commitment to training and development are frequently reported to encourage staff retention. From a business point of view human resource development can therefore be seen as a powerful tool for creating sustainable competitive advantage (Raidén et al., 2004).

On the practice side, socio-cultural, technological, economic, and political pressures have all combined to force modern organizations to take a closer look at their human capital in general, and training in particular (Salas and Cannon-Bowers, 2001) .

Training develops self efficacy and results in superior performance on job, by replacing the traditional weak practices by efficient and effective work related practices (Elnaga and Imran, 2013).

Workers are reluctant to invest in their own training because of insecurity of employment and high levels of unemployment; contractors are reluctant to invest because there is a good chance they will lose trained workers to other firms (or other countries). The contractors' reluctance is also based on the fact that training costs money (Geneva, 2001).

The underlying logic of the individual model of training dictates that the organization should recognize that its employees are not effective and a change should be attempted in their knowledge, attitudes and skills. This shortfall in the individual performance may occur for various reasons. For instance, employees may not feel motivated anymore to apply their skills, they may be afraid in doing so, or they may believe that there may be a conflict of interest with the organization, when a change is about to take place. All the above factors should be taken into account by the organization in order for it to adopt the most suitable training intervention, which will fulfill specific needs, enhance employee willingness to participate and meet their expectations (Sahinidis and Bouris, 2008).

In theory, learning (triggered by training) is a variable that may have a positive effect on organizational performance and is considered to be a key element to the attainment of organizational goals. Nevertheless, adopting a training activity as a solution to lagging performance presupposes that this performance problem, i.e. this gap between

the desired and the actual performance, is due to lack of training. This is illustrated better in Figure 2.1 (Swart et al., 2005).

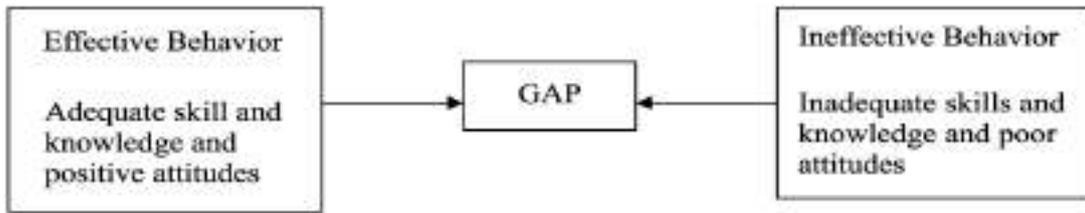


Figure 2.1:-The effectiveness behavior gap (Swart et al., 2005).

The organization management ought to adopt training interventions to bridge this gap. Bridging the performance gap involves adopting a particular training intervention aiming at changing specific skills and attitudes of the employees. This becomes clearer by examining Bramley’s individual model of training in Figure 2.2 (Swart et al., 2005).

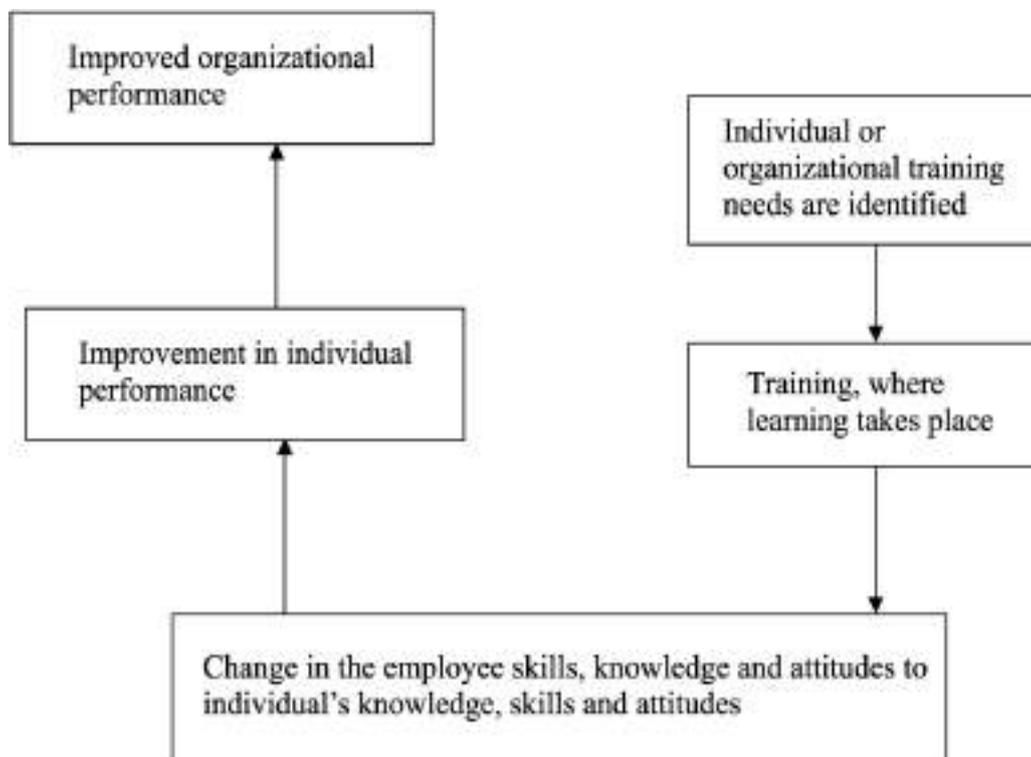


Figure 2.2:- Bramley’s individual model of training (Swart et al., 2005).

According to Swart et al. (2005) an individual improvement will be contingent on the quality of the training program, the motivation of the individual and the individual's needs. The model in general assumes that employee knowledge, skills and attitudes will change by the adoption of a training program, but this does not always end in that way. If the employee believes, there is an improvement in his knowledge and skills, it may be safe to also assume that, there will be an increase in the person's individual performance. Through training the person's competencies will be reinforced and will enable him or her to execute the tasks assigned effectively and efficiently. As a result, according to the model, there will be an increase in the overall performance of the organization (Sahinidis and Bouris, 2008).

In general, it can be argued that the effect of training on employee outcomes (motivation, job satisfaction and commitment) has not received as much attention as it deserves. Few studies have been carried out that test the possibility that firms can affect their employees' attitudes by implementing training interventions (Sahinidis and Bouris, 2008).

Training is a necessity in the workplace. Without it, employees don't have a firm grasp on their responsibilities or duties. Employee training refers to programs that provide workers with information, new skills, or professional development opportunities (Elnaga and Imran, 2013).

The general benefits received from employee training are: increased job satisfaction and morale, increased motivation, increased efficiencies in processes, resulting in financial gain, increased capacity to adopt new technologies and methods, increased innovation in strategies and products and reduced employee turnover (Elnaga and Imran, 2013).

Training effectiveness is usually measured by the degree to which trainees are able to apply the knowledge, skills, and attitudes gained in a training context to the work context. In other words, training is effective when transfer of training is achieved (Barnard et al., 2001).

Furthermore, training plays a critical role in increasing workers' adaptability and flexibility, which employers have found is becoming increasingly important. Thus, it is fundamental to an organization to maintain a necessary competence in its employees through adequate training (Tabassi and Abu Bakar, 2011).

Motivation for training

Motivation is defined as “variability in behavior not attributable to stable individual differences (for example, cognitive ability) or strong situational coercion” (Tabassi et al., 2011).

In a training context, motivation can influence the willingness of an employee to attend the training programme, to exert energy toward the programme and to transfer what they learn in the programme onto the job. Thereby, it is likely that employees cannot obtain all benefits of training without considering training motivation (Tabassi et al., 2011).

Their integrative narrative and met analytic review suggest that training motivation is multifaceted and influenced by a set of individual (e.g. cognitive ability, self-efficacy, anxiety, age, conscientiousness) and situational (e.g. climate) characteristics. This effort provides the beginnings of an integrative theory of training motivation - a much needed synthesis and organization (Salas and Cannon-Bowers, 2001).

The key to motivating employees is to find proper ways to satisfy their needs. Each individual has different needs. These needs can be broken down into a few basic categories: workers participation, recognition, and team belonging (Tabassi and Bakar, 2009).

- 1.To encourage worker participation, managers are advised to use a system that identifies and rewards workers who do a good job.
- 2.Recognition, aside from financial inducements, is also regarded as a powerful means to inspire enthusiasm among employees.
- 3.Finally, team belonging is another powerful motivator in construction workers.

Method of Training

The effective methods can be used for training construction workers are (Tabassi et al., 2011).

On-the-job training

On-the-job training method given to organizational employees while conducting their regular work at the same working venues ,It is about getting the job done and developing “best practices (Ikediashi et al., 2012).

Off-the-job training

Off-the-job training method involves taking employees away from their usual work environments and therefore all concentration is left out to the training, It about learning basic facts and skills and developing “knowledge” (Ikediashi et al., 2012).

Distance education techniques

Methods of distance education could be effective where there is a learning relationship established on-the-job between the learner and the trainer such that both use the distance learning materials to structure activities, to access content knowledge, and to determine sequence and progression of learning (Tabassi et al., 2011).

Job rotation and transfers

Job rotation and transfers as a way of developing employee skills within organization involves movements of employees from one official responsibility to another for example taking on higher rank position within the organization, and one branch of the organization to another. For transfers for example, it could involve movement of employees from one country to another (Nassazi, 2013).

Coaching and/or mentoring

Coaching is a method of development and a great improver of effectiveness. Employees need knowledge of their strengths and consequently the areas where they can improve to be able to develop in the best possible manner. Another important way for developing talent is mentoring, a manager builds self esteem in the high-potential employee by offering praise, encouragement and support by believing in the employee’s ability to achieve above everyone’s expectations (Al-Awamleh, 2009).

Orientation

This is yet another training and development method. This involves getting new employees familiarized and trained on the new job within an organization. During this process, they are exposed to different undertakings for example the nature of their new work, how to take on their identified tasks and responsibilities and what is generally expected of the employees by the organization (Nassazi, 2013).

Conferences and Workshops

Are for professional peers and superiors to rub minds, interact and share ideas on developments within a profession or industry and Higher (Ikediashi et al., 2012).

Benefits of training

The main purpose of training is to acquire and improve knowledge, skills and attitudes towards work related tasks (Nassazi, 2013). There are so many benefits associated with training. Cole (2001) summarizes these benefits as below:

- 1) High morale- employees who receive training have increased confidence and motivations;
- 2) Lower cost of production- training eliminates risks because trained personnel are able to make better and economic use of material and equipment thereby reducing and avoiding waste;
- 3) Lower turnover - training brings a sense of security at the workplace which in turn reduces labor turnover and absenteeism is avoided;
- 4) Change management- training helps to manage change by increasing the understanding and involvement of employees in the change process and also provides the skills and abilities needed to adjust to new situations;
- 5) Provide recognition, enhanced responsibility and the possibility of increased pay and promotion;
- 6) Help to improve the availability and quality of staff.

Training need analysis

It is well acknowledged that one of the most important steps in training development is conducting a training needs analysis. This first step in training development focuses on the process of deciding who and what should be trained. A training needs analysis is primarily conducted to determine where training is needed, what needs to be taught, and who needs to be trained (Salas and Cannon-Bowers, 2001).

There are three categories of identifying training and development needs. These include: resolving problems, this focuses on workers' performance, improving

certain working practices, this focuses on improvement regardless of the performance problems and changing or renewing the organization situation, which may arise because of innovations or changes in strategy (Nassazi, 2013).

2.14.2 Training and development

Swanson and Holton (2001) defined training and development as a process of systematically developing “work related knowledge” and “expertise” in employees for improving job assignments. Training is also needed to have effective ways and methods for developing employees and making improvements on companies' fulfillments. Accordingly, training and development should be perceived as essential elements of employee development practices by companies.

Regarding the dynamics and complexity of the construction industry's environment, it is also accepted that construction firms are faced with many difficulties in training and developing their labour and staff. Therefore, managers, executives and supervisors can have a significant constructive impact on transfer of training (Tabassi And Abu Bakar, 2011).

Comprehensive training and development programs have been proven to be important ingredients of efficient performance (Ahmed and Akhtar, 2012).

The benefits of training and development include improved morale, employee satisfaction, lower turnover, higher retention, improved hiring and better bottom line. All these benefits can satisfy employees, increase commitment and motivation, thus improve the overall competence and performance of an employee. Training and development can be affected by different factors (Nadarajah et al., 2012).

- i. Top management support;
- ii. Technology advances;
- iii. World complexity;
- iv. Other human resources function.

Firms can develop and enhance the quality of the current employees by providing comprehensive training and development. Training is essential not only to increase productivity but also to motivate and inspire workers by letting them know how important their jobs are and giving them all the information they need to perform those jobs (Elnaga and Imran, 2013).

2.14.3 Employee development

Employee development refers to the development of the abilities and capabilities of the organization and the individual employees. Employee development flourishes the organization and increases the performance of employees. The employee development and the employee performance are directly related. More employee development leads to the more committed and more satisfied employees and results in better performance. The employee development depends on the factors such as the top management attitude, the promotion opportunities and the organization culture (Bibi et al, 2012).

Steps in manpower development

One of the most valuable resources that you have as a business owner is your employees. When you hire employees, they're rarely fully developed as workers. Over the course of time, it's up to you, the employer, to develop your employees. The area of manpower development or human resources development deals with improving your employees over the long term. If you can help your employees grow, it may also help your business become more profitable overall. The following are five steps for developing manpower (Arthur and Media, 2014).

Step 1 :- Develop a human resources strategy or plan. Look at the big picture in relation to your business. Determine how your employees fit into the overall plan for your company. Figure out which areas of your business need the most talented people. Set up a strategy to help individuals develop to fill those roles. For example, set up a mentor program so that your high-level employees can mentor newer employees. Conduct regular performance evaluations so that your employees know what they need to improve on.

Step 2:- Train new employees as they're hired. Employees tend to struggle when they don't know exactly what they're supposed to do. If you take the time to train them either through a seminar, class or other method, it can improve the quality of their work. Focus on getting new employees integrated into the system and working independently within a short period of time.

Step 3:- Identify employees who have the best chance to move up. Not every employee you hire will end up in a management role. Once you identify the right employees, you can begin grooming them for other roles in the company. Look for qualities such as

leadership, integrity, self-discipline and the desire to excel. Look at past work history to make sure that the employees know how to do their jobs and that they follow through with their work.

Step 4:- Encourage managers to develop their employees. It's up to each manager to ensure that employees develop at the appropriate rate. This may involve regular performance evaluations, meetings or training sessions.

Step 5:- Focus on continuing education for your employees. This may include sending your employees to seminars or offering tuition reimbursement. If you put an emphasis on helping your employees develop, they'll most likely be more loyal toward the company, and you'll be able to retain them more easily.

2.14.4 Organizational learning

Understanding factors that contribute to organizational learning and the transfer of knowledge to the workplace environment are essential to human resource development (HRD). The culture and environment of an organization can influence the types and numbers of learning-related events and employee job satisfaction as well as employee motivation to transmit newly acquired knowledge to the workplace context (Khan et al., 2012).

2.15 Human resource development in developed countries

The area of concern to most developed countries is greater investment in human resources which promises to produce the workforce for the 21st century. The increasing global competition in the industry coupled with wide disparity in the current level of human resources development between the developed and developing countries make it imperative for all the stakeholders in the industry to develop their human capital (Uzundu, 2013).

It is interesting to note that information technology, employees training, and incentives showed a strong and significant relationship with organizational performance. This could be due to the fact that in most developing countries, the employees are not as highly paid as those workers in developed countries, thus the workers are more concerned with HR practices which could subsequently increase their earnings (Mohamad, 2009).

2.16 Human resource development in developing countries

Selvam (2013) demonstrated that Success in today's competitive market depends on advantages associated with speed and adaptability, patents and access to capital and innovation, technology, and economies of scale. Organizational performance and Competitive advantages are largely derived from organizational human resources and high involvement of human resource management practices. Although in most of the developing countries, the main impediment of organizational growth and profitability is the lethargic use of professional HRM practices but struggle is going on to find out best ways to utilize these practices optimally.

There are some constrains of HR in developing countries: poorly paid remuneration, lack of positive performance standards, no mentionable incentives for outstanding performance, unskilled workers are ignored because of employment criteria, in case of promotion seniority gets priority than merit according to the promotion guidelines of the organization, favoritism in promotion, no extra payment for hard work, incapable and unskilled top management and small number of motivational activities (Cohen et al., 1997)

Budhwar and Debrah (2001) mentioned that traditional human resource management systems are still followed by developing countries, as a result they face lots of difficulties for development in their organizations. This outdated systems are the obstacles for developing countries. At present, there are lots of books, journals and articles written on HRM systems describes the importance of managerial and administrative capacity and significance of human resources (Islam, 2012).

Gunawardena (1998) who argue that there is an absence of manpower planning and development among construction companies in developing countries resulting in poor quality, high wastage and long term productivity decline in the industry.

2.17 Barriers to human resource development in construction companies

Lange et al.(2000) conducted study about barriers to skills development that they reach to the most important barriers and can be sub-divided into four simplified categories which are as follow:

- (1) Cultural barriers which include primarily attitudes towards skills development.
- (2) Financial barriers which refer to those barriers directly relating to the cost or perceived cost of training and learning.

(3) Access and provision barriers, referring to problems which either prevent interested parties from accessing skills development opportunities or manifest themselves in the lack of suitable provision of learning where It is commonly acknowledged that workers in small and medium-sized enterprises (SMEs) are, on average, less likely to benefit from accessing training than their counterparts in larger organizations. and can be sub-divided into two aspects: access to and appropriate provision of training programs.

(4) Awareness barriers which relate to the knowledge of learning opportunities.

Sambrook (2002) conducted study about factors influencing development in work and the result of his study that the main barriers factors at human development as follow 1.

A Lack of Motivation to development.

- the lack of time (due to the organization of work and work pressures);
- the lack of reward for learning (at the organizational and HR functional level);
- the lack of enthusiasm in the concept of the learning organization or training and development in general; and
- the lack of self-confidence to learn and/or take responsibility for learning (at a personal level).

2. A Lack of Clarity role development.

It is no clear training systems, procedures or policy and a widely shared understanding of the importance of learning and personal development.

3. A Lack of Learning Culture Impedes development.

4. A Lack of Resources for development.

Brown and McCracken (2009) classified the development barriers into two categories intrinsic/individually oriented and extrinsic/organizational or industry oriented factors discussed previously.

The intrinsic factors included:

- perceptual, or the perceived value of training;
- emotional, including insecurity and fear of failure;
- motivational, or desire to participate in training; and
- cognitive, or extent to which previous learning experiences affect likelihood to pursue future training activities.

The extrinsic variables of the model were:

- organizational culture, or the trainee's overall perception of the organizational environment;

- management development culture, or specifically views concerning development opportunities, access and support for training; and physical pressure, or work life pressures such as time and location of the training that could determine participation.

2.18 Quality in construction industry

Today's highly competitive environment forces enterprises to pay attention to quality and human resources needs in order to be sustainable (Izvercian et al., 2014)..

Time, cost and quality are the three factors that play important roles in planning and controlling of construction projects. The project success is reflected by meeting time, quality output standards, and budget objectives (Sarker et al., 2012).

However, due to the complexity in nature, the construction environment face crucial problems such as delays in completion dates during the construction stage, budget was exceeded, poor image, low productivity, wastage in construction materials, shortage of manpower and the quality was not always up to the expectation (Janipha and Ismail, 2013).

It is argued that there must be enough employees with the required skills, experience and knowledge to do all the necessary work for the benefit of the organization with a quality strategy pay extensive attention to training and development in order to stimulate co-operation and obtain the continuous improvement that quality implies (Katou, 2008).

Low and Peh (1996) states that the quality of construction work is dependent to a large extend on the attitudes of the contractors. Hence, the quality of the products is adversely affected if the parties to the contract do not carry out their duties properly. It is very importance to have a good coordination flow and improved teamwork to achieve the project quality objectives. Through this they are able to compete aggressively in an environment where the quality requirement is always rising (Janipha and Ismail, 2013).

Contractors play a major role in meeting the required quality within the targeted cost and time. Unfortunately, contractors rarely have a realistic idea of how much profit they are losing by not attaining an acceptable level of quality. Turk (2006) stated that quality may sometimes be ignored in the construction industry to cut the costs and shorten the project duration. However, it is believed that the benefits of higher customer satisfaction, better quality products and higher market share are often

obtained following the adoption of quality standards by construction companies (Sweis et al., 2014).

According to Said et al. (2009), there are three main factors affecting the construction quality; lack of management commitment, inconclusive interpretation of standard requirements and training policies. By implementing the quality in the construction environment, several advantages have been identified (Janipha and Ismail, 2013).

Human resource (HR) elements are present in fulfilling needs of customers, leadership of top management, and continuous learning, training, and education of employees. Participation in quality management (QM) sustains improvement at all levels and in all activities in the organization (Ebert et al., 1996).

A little attention was given to unskilled workers in construction sectors. Therefore, it seems human resources, particularly in the area of skilled labour, play a crucial role in the quality of construction projects. In addition to other organizational HR functions where these are intended to foster learning capacity at all levels of the organization, to integrate learning culture into its overall business strategy and to promote the organizations efforts to achieve high quality performance” (Tabassi and Bakar, 2009).

Ebert et al., (1996) delineate some 16 forms of participation that foster quality by employees, from top to bottom in the organization (e.g., quality improvement teams, quality circles, process reviews, planning own work, job rotation).

When employees perceive strong organizational commitment to quality, employee work quality improves , and customer satisfaction increases, gaining employee commitment to quality is critical, and that commitment might be gained by developing positive attitudes about management's commitment to quality (Howard and Foster, 1999).

Creating quality depends upon many factors, none of which is more salient than human resources. Yet, the importance of HR in the quality process is misunderstood and HR is underutilized (Ebert and Tanner, 1996).

The uplifting of construction quality requires a change of mindset among all industry participants so that everybody is committed to achieve excellence rather than merely to meet the minimum acceptable standards (Tam and Le, 2007).

The lack of qualified personnel is a major barrier in the compliant implementation of quality systems, quality negligence produces many negative effects to construction companies achieving the desired levels of quality and additionally and low quality

process implementation leads to the often ultimate poor quality of projects (Ahmed and Akhtar, 2012).

Employees will feel empowered to affect improved quality in their work. Acting in a workplace climate that reflects concern for the quality of their work lives, they will be more likely to perceive that the organization and its leaders are committed to quality (Howard and Foster, 1999).

Nowadays, organizations are faced with accelerating and unpredictable rates of changes in areas such as technology, demography market preference, patterns of work and legislation, in which it will only survive if its employees are effectively trained and fully committed to its growth and development (Tam and Le, 2007).

The construction industry shows a rapid pace in 21st century. Construction companies have recognized something new; the culture of quality. They have opened their doors to Quality Management Systems (QMS) (ztas et al., 2007).

Sweis et al. (2014) conducted study factors affecting quality in the Jordanian housing sector from perspective of architect and contractor, the main factor affecting at quality from contractor perspective are: process management, strategic management, leadership, customer satisfaction, construction-specific factors, supplier management, quality management systems, top management commitment, human resource management, uses of technology.

2.19 Human resource participation for quality performance

Quality implementation experiences offer considerable evidence, both anecdotal and formal, for the central role of human resources. Garvin's (1983) found that companies having best quality also had high involvement of employees at all levels.

The human resource indicated which includes employee training and employee relation was positively related to quality improvement (Jaafreh and Al-abedallat, 2012).

It found that measurement scales which include worker involvement in problem solving, worker skill level, involvement in teamwork, information feedback on quality, and top management encouragement of employee involvement in the production process were significantly and positively correlated with both objective and perceptual measures of quality performance (Ebert and Tanner, 1996).

The factors affecting performance measurement in different research studies are based on one, or a combination of some criteria like finance, operations, quality, safety, personnel and customer satisfaction (Rezaei et al., 2011).

2.20 Chapter Summary

The studies in literature review illustrated the many definitions for human resource development and relationship nature between human resource development and human resource management, various human resource development factors that achieving quality in contracting companies and barriers of human resource development in contracting companies.

After studying many researches and papers in this chapter, the factors of human resource development can inserted below the following groups

- Factors related to main practices for human resource management.
- Factors related to training.
- Factors resulted from training programs.
- Factors related to work market changes (Materials / equipments and machines /workers).
- Factors related to who carry out of employees evaluation.
- Other factors.

In addition to illustrated factors that barring implementation of human resource development in contracting companies.

Chapter 3

Methodology

3.1 Introduction

This chapter describes the methodology of this research. It provides the information about the research strategy, research design, population, sample size, data collection, questionnaire design, questionnaire content, instrument validity, pilot study, and validity content, and reliability.

3.2 Research strategy

Research strategy has been defined as a generalized plan for a problem which includes structure, desired solution in terms objectives of research and an outline of planned devices necessary to implement the strategy. The research strategy is a part of a larger development scheme of research approach (singh, 2006). The strategy research field borrows from different normative, interpretative, analytic, positive, empirical and the quantitative-qualitative research approaches, among others. The study and research of strategic management is eclectic in nature, theory based and empirical research (Leon and Valdez, 2011). Quantitative and qualitative methods refers to the type of data being collected, quantitative data involve numeric scores, metrics, and so on, while qualitative data includes interviews, observations, and so forth and analyzed i.e., using quantitative techniques such as regression or qualitative techniques such as coding (Bhattacharjee, 2012). Quantitative research is often regarded as being purely scientific, justifiable, precise and based on facts often reflected in exact figures. Conversely, qualitative research is often regarded as ‘messaging around’, being ‘vague’, not scientific and not following a structured plan. Whoever conducts quantitative research adheres to tradition, works on distinct matters and produces reliable figures. On the other hand, anyone who informs his tutor about his intention to conduct qualitative research is likely to face criticism (Jonker and Pennink, 2010). Quantitative analysis also allows researchers to test specific hypotheses, in contrast to qualitative research, which is more exploratory (Crossman, 2013). The quantitative approach will be the main strategy of research used to collect the data and perspectives of the respondents. Data may take the form of narrative information (qualitative data) or numerical values (quantitative data). The people who provide information to the researchers are referred to as subjects, study participants, or respondents in quantitative

research or as study participants or informants in qualitative research. In this thesis, a quantitative and qualitative approach is used to understand the role of human resource development in achieving quality in contracting companies in Gaza Strip. Qualitative approach is used to study and recognize the current situation for human resource development in contracting companies in Gaza strip by using structured interview, while Quantitative approach is used to study the human resource development factors that influencing at achieving quality in contracting companies in Gaza Strip.

3.3 Research design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data (Kothari, 2004). Bhattacharjee (2012) defined research design as a comprehensive plan for data collection in an empirical research project. It is a “blueprint” for empirical research aimed at answering specific research questions or testing specific hypotheses, and must specify at least three processes: (1) the data collection process, (2) the instrument development process, and (3) the sampling process. The function of a research design is to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible.

Characteristics of good research design

In a general sense we could answer the question (what makes for good research design) with such statements as the design should be appropriate for the hypotheses or the design should be feasible within the limits of available resources. The following are the specific characteristics of a good research design (singh, 2006):

1. It should be free from bias or learning's.
2. It should be free from confounding effect. A good research design eliminates confounding of variables or kept it to a minimum so the results can be interpreted separately. There should be a statistical precision. The hypotheses can be tested by employing most appropriate statistical technique. There should be enough scope to impose the control over the situation.

There are basically four ways by which control can be enhanced :

- (a) Through the method of randomization.
- (b) Holding conditions or factors constant.
- (c) Building conditions or factors into the design as independent variables.
- (d) Statistical adjustment.

This research was carried out in various phases that were undertaken to achieve the overall research objectives. These phases as follow and shown in figure 3.1

First phase:- Proposal formulation and approval for identifying and defining the problems and establishment of the objectives of the study and development of research plan.

Second phase:- Includes literature review of role of human resource development in achieving quality in contracting companies in the Gaza Strip, in addition to review human resource condition in construction industry in Gaza Strip environment.

Third phase:- This phase was included a field survey and developing the questionnaire and structured interview in addition to conducting a trial run through a pilot study to ensure the effectiveness and test the technique of data collection in order to achieve the proposed objectives. The questionnaire was used in this research as a quantitative approach to gain insights, attitudes and perspectives of the respondents and structured interview as qualitative approach to assess the current situation for human resource development in construction companies in Gaza Strip.

Fourth phase: Questionnaire distribution and structured interview execution to obtain the required data.

Fifth phase:- This phase consist of data analysis and discussion of the results. Analysis actions based on the Statistical Package for the Social Sciences (SPSS).

Sixth phase:- This phase consist of frame work development and check of frame work validity and feedback of modification to final frame work.

Seventh phase:- Included the conclusion and recommendation in addition to references used within thesis.

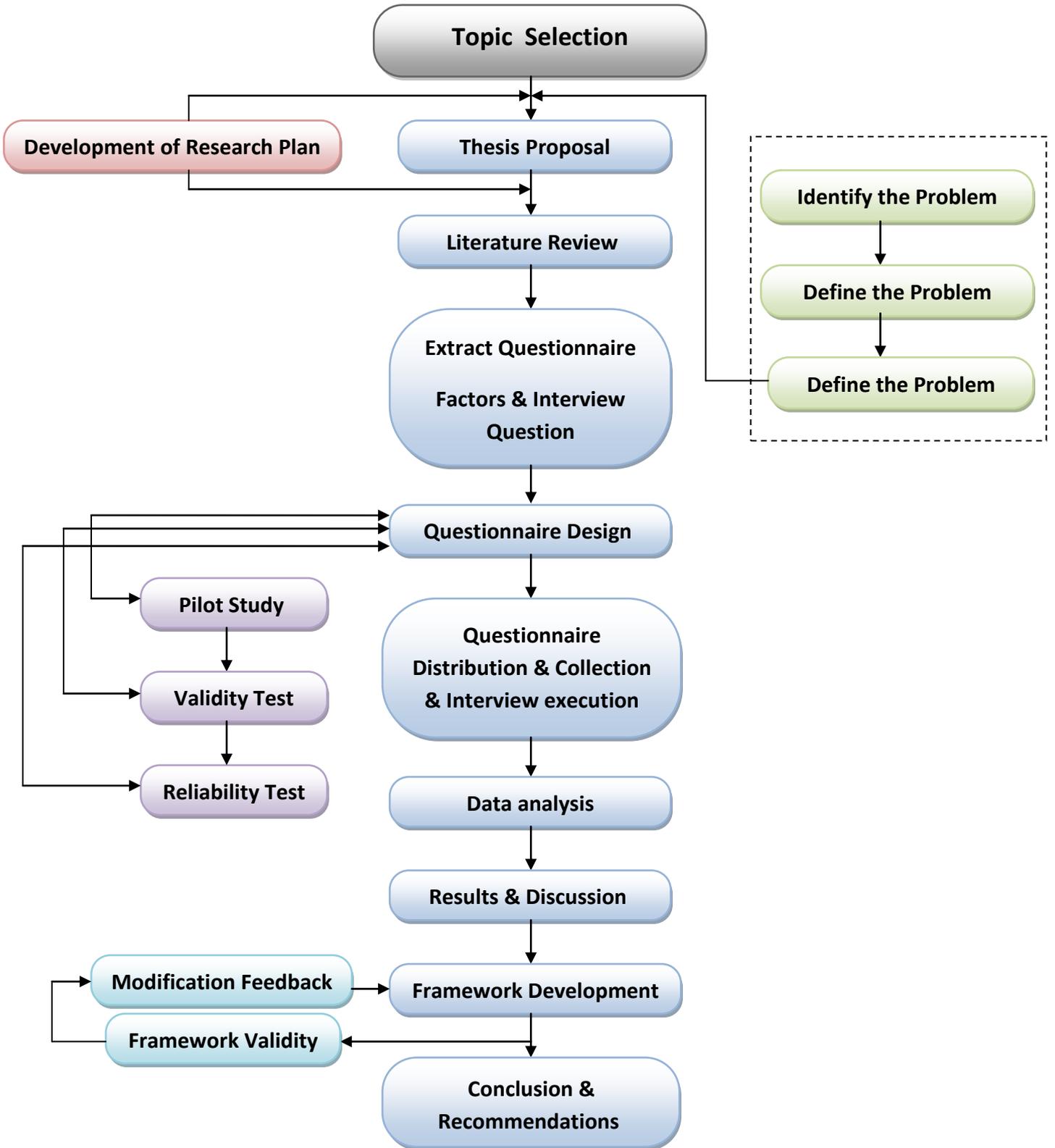


Figure 3.1:- The methodology flow chart

3.4 Research population and sample size

3.4.1 Research population

The contractors who have a valid registration in Palestinian contractors union until 15/3/2015 are 217 companies in different specializations such as buildings, roads, water & sewage, electro mechanics, building rehabilitation, metallic constructions, wells digging and general works, were the companies able to be classified in one or more specialization and the classification in each specialization from first degree to fifth degree and the first degree divided to A and B (PCU, 2015).

The population of this research included contractors are classified in roads and building together and at least in one specialization not exceed third degree. The companies that achieve this criteria are 159 and the other was neglected due to the limited practical and management experience.

3.4.2 Sample size

Fellows and Liu, (2008) defined the sample as a part of total population that represents this population. To determine the sample size for population of contractors, Kish (1965) equation was used

$$n = \frac{n'}{1 + \frac{n'}{N}} \dots\dots\dots (3.1)$$

n' is the sample size from infinite population, which can be calculated from this formula [$n' = \frac{S^2}{V^2}$]. The definitions of all variable can be defined as the following:

- n : sample size from finite population.
- N : Total population (159 contractors)
- V : Standard error of sample population equal 0.05 for the confidence level 95%, $t = 1.96$.
- S^2 : Standard error variance of population elements, $S^2= P (1-P)$; maximum at $P= 0.5$

The sample size for the contractors' and subcontractors' population can be calculated from the previous equations as follows:

$$n' = \frac{S^2}{V^2} = \frac{(0.5)^2}{(0.05)^2} = 100$$

$$n_{contractor} = \frac{100}{1 + \frac{100}{159}} = 61 \text{ contractors}$$

Although the calculated sample size for contractors is 61, the questionnaire was distributed to 90 contractors to overcome the risk of not responding from the respondents and to reflect higher reliability and benefits for the study. Fortunately, number of questionnaire returned was 77 and the response rate was 85.5% for contractors

3.5 Data collection

The descriptive analytical approach was used in conducting the research. This presents the procedures conducted in this study. In order to achieve the objectives of the study, two sources of data were relied on:

3.5.1 Primary data

Primary data are to analyze the qualitative and quantitative characteristics' of the role of human resource development in achieving quality in contracting companies in the Gaza Strip. The primary data were collected through a questionnaire designed to collect data and information. The questionnaire is the main tool for the research and was distributed randomly to the study sample. Question in questionnaire formulated based on :-

- Literature review which it seeks systematic and comprehensive reading of previous information which is related to the area of study.
- Pilot study which involves testing, wordings, adding and deleting of questions.
- The experience of the researcher and some engineers in the field of construction management.

The data which collected from the questionnaire survey analyzed using descriptive statistical capabilities of SPSS (Statistical Package for Social Science) a program to calculate ratios and use appropriate statistical test in order to process data and to transfer them to useful information that can be interpreted to reach valuable indicators that support the subject of the study and to achieve the objectives expect the first objective achieved by personal objective.

3.5.2 Secondary data

Secondary data were collected from articles from various fields of study.

3.6 Research location

This research has been conducted in Gaza Strip. Gaza Strip is constituted of four governorates including Northern, Gaza, Middle, and Southern. Researcher was take very attention for survey distribution and data collection to cover all of these areas.

3.7 A questionnaire method

A questionnaire is a systematic compilation of questions that are submitted to a sampling of population from which information is desired, the questionnaire consists of a sense of questions or statements to which individuals are asked to respond the questions frequently asked for facts or the opinions, attitudes or preferences of the respondents (Singh, 2006).

The justification to adopt the questionnaire approach returned to the following reasons (Singh, 2006):

1. Among the major advantages of the questionnaire is that it permits wide coverage at a minimum expense of both money and effort. It affords wider geographical coverage it makes for greater validity in the results through promoting the selection of a large and more representative sample.

2. The validity of questionnaire data also depends in a crucial way on the validity and willingness of the respondent to provide the information requested. Research has shown that respondents are as a group of superior intelligence.

3.8 Questionnaire design

Good questionnaire design is a key to obtain good survey results and warranting a high rate of return (Chan and Chan, 2002, quoted from Zikmund, 2000).

This research focuses on the common factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip and the barriers factors to implement human resource development .

3.8.1 Components of questionnaire

The questionnaire is consist of three parts as following:

- 1. First part :Demographic Information**

This part consists of the general characteristics of the research sample and consists of general information about person who filling questionnaire which are:

- Job description.

- Experience years in construction industry.
 - Average of projects value that executed annually for last five years (Dollar)
 - Number of total employees in company.
 - Number of permanent employees in company.
 - Number of employees that company attract them annually.
 - Number of employees that leave or lay off from company annually.
- **Second part:** This part consists of (62) factors to collect information distributed on six main groups that covers the factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip that extracted from literature review as follows:
- Factors related to main practices for human resource management , consists of (12) statements.
 - Factors related to training, consists of (18) statements.
 - Factors resulted from training programs, consists of (9) statements.
 - Factors related to work market changes (Materials / equipments and machines /workers), consists of (4) statements.
 - Factors related to who carry out of employees evaluation consists of (5) statements.
 - Other factors, consists of (14) statements.
- **Third part:** Factors that barring implementation of human resource development in contracting companies in the Gaza Strip, consists of (16) statements.

3.8.2 Measurement scale

Five Likert scales have been chosen in order to expand the way the respondents would reply. The ordinal scale is a ranking or a rating data which normally uses integers in ascending or descending order. The numbers assigned to the agreement scale (1, 2, 3, 4, 5) do not indicate that the interval between the scales are equal, nor do they indicate absolute quantities. They are merely numerical labels. Based on Likert scale we have the following:

Table 3.1 : Likert scale

| Level | Low degree effect | Something effect | Moderate effect | Significant affect | Very Significant effect |
|-------|-------------------|------------------|-----------------|--------------------|-------------------------|
| Scale | 1 | 2 | 3 | 4 | 5 |

It based on the concepts and ideas concluded from the literature review related to research subject. The original questionnaire was designed in Arabic to be more understandable. English version was attached in. The questionnaire was provided with a covering letter which explains the purpose of the study, the aim of the research and the security of the information in order to encourage a high response.

3.9 Pilot study

The pilot study represents a trial run of the questionnaire which involves testing the wording of the questions, establishing the length of the questionnaire, avoiding ambiguous questions, suggestions for analyzing the data (Naoum, 2007).

A pilot study was done after modifying the questionnaire according to the notes of the supervisor and before collecting the final data from the whole sample. Ten copies of questionnaire were distributed for piloting, and selected experts to participate in the piloting process from contracting companies to achieve experience side and academic experts to achieve theoretical side. The process generated some questions about explanation of certain terms and requested to modify, delete, add, spilt and merge some wordings of the questionnaire mainly in part two that consist of seven group before piloting were one group merge to become six group and the modification at factors shown in Table 3.2 . At the end of this process new version of questionnaire became ready to distribution.

Table 3.2 : Modifications at questionnaire factors during pilot study stage

| Origin factors from literature | Correction action | Selected factors after pilot study |
|--|-------------------|--|
| | Added | Paying salaries and wages regularly and with fairly way and wages increase with according high cost of living |
| | added | Trainers efficiency and criteria for selection training team |
| | added | Employees training at required personal skills for work such as work coordination, communication skills, archiving and documentation |
| Implement special training programs to improve scientific and practical capabilities | Split | Usage company training in site method to increase practical experience at employees |
| | | Hold training courses to develop knowledge and theoretical capabilities of employees |
| Existence of special training for the use of machines and equipments | Modified | Existence special training for safe usage for machines and equipments and execute periodic maintenance for it |
| Laws and legislations in country | Modified | Laws and work legislation in the country and the existence of supervision at companies work quality |
| | Added | Existence permission with employees to enable them to make decisions |
| | Added | Respect company for employees personal life and understand the conditions and problems related them |
| Weather conditions during projects implementation | Deleted | |
| Relationship between project parties | Spilt | Nature of relationship between the employees in company |
| | | Nature of the relationship between the company and other parties such as the consultant and owner |
| | Added | Company dependence on subcontractors in implementation of projects |

3.10 Questionnaire validity

Polit and Hungler (1985) define Validity as ; " the degree to which an instrument measures what it is supposed to be measuring". Validity has a number of different aspects and assessment approaches. There are two ways to evaluate instrument validity: (1) content validity and (2) statistical validity, which include criterion-related validity and construct validity. Heffner (2004) give another definition as;" Validity refers to the extent in which the test truly measures what it purports to measure". High validity is the absence of systematic errors in the evaluating questionnaire. When a questionnaire is valid; it truly reflects the concept it is supposed to measure In order to ensure validity of the questionnaire three types of validity test were conducted as follow:-

3.10.1 Content validity of the questionnaire

The modified questionnaire was reviewed by the supervisor and ten experts from the contracting companies field that related to area of research and from academic field. The experts agreed that the questionnaire was valid and suitable enough to measure the purpose that the questionnaire designed for it.

3.10.2 Statistical Validity of the Questionnaire

To examine the validity of the questionnaire statistically; Two statistical tests were applied. The first test is criterion-related validity test (Pearson test), which measures the correlation coefficient between each item in the field and the whole field. The second test is structure validity test (test) that was used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one field and all the fields of the questionnaire that have the same level of similar scale.

Criterion related validity

Criterion-related is validity test (Spearman test) which measures the correlation coefficient between each factor in one field and the whole field. This test measures the internal consistency of the questionnaire .

Internal consistency for group 1

As shown in Table (3.3), the correlation coefficients between each item from the first field , whole field are located between (0.289) and (0.598) which are good enough to be valid. These correlation coefficients indicate the correlation significance at level (α

= 0.01) where all p-values are less than (0.01), so it can be said that the items of this field are consistent and valid to measure what they were set for.

Table 3.3: Internal consistency for Group 1

| No. | Item | Pearson coefficient | p-value (sig) |
|-----|---|---------------------|---------------|
| 1 | Methods and mechanisms for choosing and attract new employees | 0.289 | 0.011* |
| 2 | Implement efficiency criteria for employee selection | 0.598 | 0.000** |
| 3 | Existence financial compensation for employees when they are being affected or end of services | 0.316 | 0.005** |
| 4 | Clarity job description for employees | 0.574 | 0.000** |
| 5 | Attention with safety and health for employees | 0.565 | 0.000** |
| 6 | Existence job planning system and determination future needs for employees | 0.511 | 0.000** |
| 7 | Existence evaluation system for employees in company | 0.589 | 0.000** |
| 8 | Implement employees participant principle for decision making | 0.399 | 0.000** |
| 9 | Existence motivations and rewards system for employee | 0.593 | 0.000** |
| 10 | Company ability for management their resources with efficiency and effective way | 0.590 | 0.000** |
| 11 | Rate of employees absence and leaving company resulted from insufficient human resource management | 0.521 | 0.000** |
| 12 | Paying salaries and wages regularly and with fairly way and wages increase with according high cost of living | 0.555 | 0.000** |

** (Indicates Correlation Significance at $\alpha = 0.01$)

Internal consistency for group 2

As shown in Table (3.4), the correlation coefficients between each item from the second field, whole field are located between (0.360)and (0.656) which are high enough to be valid. These correlation coefficients indicate the correlation significance at level ($\alpha = 0.01$) where all p-values are less than (0.01), so it can be said that the items of this field are consistent and valid to measure what they were set for.

Table 3.4 : Internal consistency for Group 2

| No | item | Pearson coefficient | p-value (sig) |
|----|--|---------------------|---------------|
| 1 | Existence motivations for employees to obligate with training programs | 0.360 | 0.001** |
| 2 | Existence especial training for personal health and safety in wok site for employees | 0.591 | 0.000** |
| 3 | Employees training at technology usage that used in construction industry and adapt with it | 0.453 | 0.000** |
| 4 | Raise the company consciousness level at employees with training importance and spread training culture | 0.414 | 0.000** |
| 5 | Expansion training area to include all employees | 0.495 | 0.000** |
| 6 | Top management supporting in company for training programs | 0.423 | 0.000** |
| 7 | Influences of external environment for company (political-security-culture) at training programs | 0.481 | 0.000** |
| 8 | Level and employees efficiency to join and benefit from training programs | 0.492 | 0.000** |
| 9 | Discontinuous work in company and influence at training level | 0.387 | 0.000** |
| 10 | Trainers efficiency and criteria for selection training team | 0.513 | 0.000** |
| 11 | Employees training at required personal skills for work such as work coordination, communication skills, archiving and documentation | 0.507 | 0.000** |
| 12 | Existence special training for safe usage for machines and equipments and execute periodic maintenance | 0.504 | 0.000** |

Table 3.4 : Internal consistency for Group 2 - Cont

| No | item | Pearson coefficient | p-value (sig) |
|----|--|---------------------|---------------|
| 13 | Usage company training in site method to increase practical experience at employees | 0.411 | 0.001** |
| 14 | Hold training courses to develop knowledge and theoretical capabilities of employees | 0.554 | 0.000** |
| 15 | Implement company distance education techniques to increase efficiency of employees | 0.466 | 0.00** |
| 16 | Employees rotation in company to develop their skills | 0.656 | 0.000** |
| 17 | Implement conferences and workshops for employees | 0.463 | 0.000** |
| 18 | Experience exchange with local and foreign companies | 0.463 | 0.000** |

** (Indicates Correlation Significance at $\alpha = 0.01$)

Internal consistency for group 3

As shown in Table (3.5), the correlation coefficients between each item from the third field , whole field are located between (0.431)and (0.753) which are high enough to be valid. These correlation coefficients indicate the correlation significance at level ($\alpha = 0.01$) where all p-values are less than (0.01), so it can be said that the items of this field are consistent and valid to measure what they were set for.

Table 3.5: Internal consistency for Group 3

| No. | Item | Pearson coefficient | p-value (sig) |
|-----|--|---------------------|---------------|
| 1 | Job satisfaction increase for employees because there are training programs | 0.431 | 0.000** |
| 2 | Improve the financial situation of the company and reduce implementation costs as a result of the application of training programs | 0.640 | 0.000** |
| 3 | Raise the morale of employees and reduce anxiety and frustration for them | 0.654 | 0.000** |
| 4 | Increase employees adaption with new technology after implementation of training programs | 0.753 | 0.000** |

Table 3.5: Internal consistency for Group 3 - Cont

| No. | Item | Pearson coefficient | p-value (sig) |
|-----|---|---------------------|---------------|
| 5 | Decrease employees leaving from company after implementation of training programs | 0.676 | 0.000** |
| 6 | Increase efficiency and effective for employees | 0.734 | 0.000** |
| 7 | Increase belonging employees for company | 0.706 | 0.000** |
| 8 | Increase employees confidence in the ability for doing required work | 0.690 | 0.000** |
| 9 | Decrease work accident in sites work | 0.590 | 0.000** |

** (Indicates Correlation Significance at $\alpha = 0.01$)

Internal consistency for group 4

As shown in Table (3.6), the correlation coefficients between each item from the fourth field , whole field are located between (0.686)and (0.828) which are high enough to be valid. These correlation coefficients indicate the correlation significance at level ($\alpha = 0.05$) where all p-values are less than (0.05), so it can be said that the items of this field are consistent and valid to measure what they were set for.

Table 3.6 : Internal consistency for Group 4

| No. | Item | Pearson coefficient | p-value (sig) |
|-----|---|---------------------|---------------|
| 1 | Company follow-up for changing in materials, new equipment and machines that are put on the market | 0.686 | 0.000** |
| 2 | Company follow-up for external and internal changes in the labor market | 0.828 | 0.000** |
| 3 | Company follow- up for change in required skills for the industry and the extent of availability of skilled labor required for this change from outside the company | 0.770 | 0.000** |
| 4 | Inadequate supply for the used necessary materials and spare parts and lack of compatibility with existing labors | 0.700 | 0.000** |

** (Indicates Correlation Significance at $\alpha = 0.01$)

Internal consistency for group 5

As shown in Table (3.7), the correlation coefficients between each item from the fifth field , whole field are located between (0.654)and (0.849) which are high enough to be valid. These correlation coefficients indicate the correlation significance at level ($\alpha = 0.01$) where all p-values are less than (0.01), so it can be said that the items of this field are consistent and valid to measure what they were set for.

Table 3.7 : Internal consistency for Group 5

| No. | Item | Pearson coefficient | p-value (sig) |
|-----|--|---------------------|---------------|
| 1 | Follow the company appraisal the managers for their employees system | 0.654 | 0.000** |
| 2 | Follow the company peer appraisal system | 0.743 | 0.000** |
| 3 | Follow the company subordinate appraisal system | 0.786 | 0.000** |
| 4 | Follow the company self performance appraisal system | 0.849 | 0.000** |
| 5 | Follow the company team appraisal system | 0.813 | 0.000** |

** (Indicates Correlation Significance at $\alpha = 0.01$)

Internal consistency for group 6

As shown in Table (3.8), the correlation coefficients between each item from the sixth field, whole field are located between (0.378)and (0.754) which are high enough to be valid. These correlation coefficients indicate the correlation significance at level ($\alpha = 0.01$) where all p-values are less than (0.01), so it can be said that the items of this field are consistent and valid to measure what they were set for.

Table 3.8 : Internal consistency for Group 6

| No. | Item | Pearson coefficient | p-value (sig) |
|-----|---|---------------------|---------------|
| 1 | Type of contract with employees from were permanent or temporary | 0.387 | 0.001** |
| 2 | Existence supervision from company at employees to obligate with work and profession ethics | 0.678 | 0.000** |
| 3 | The company dissemination a culture of corporation between employees during work | 0.579 | 0.000** |

Table 3.8 : Internal consistency for Group 6 - Continued

| No. | Item | Pearson coefficient | p-value (sig) |
|-----|--|---------------------|---------------|
| 4 | Laws and work legislation in the country and the existence of supervision at companies work quality | 0.531 | 0.000** |
| 5 | Attention the company with individual characteristics required for each profession such as (Speed - Gender- educational level- age) and suitability to the nature of profession and work | 0.742 | 0.000** |
| 6 | Demographic change of the workforce in the construction industry | 0.744 | 0.000** |
| 7 | Improve the company for environment and general work conditions for employees and providing required needs from tools and services | 0.378 | 0.001** |
| 8 | Existence permission with employees to enable them to make decisions | 0.553 | 0.000** |
| 9 | Relationship between the top management and employees at the lower levels in the company | 0.531 | 0.000** |
| 10 | Cultural, political and religious factors in the company | 0.463 | 0.000** |
| 11 | Respect company for employees personal life and understand the conditions and problems related them | 0.611 | 0.000** |
| 12 | Nature of relationship between the employees in company | 0.754 | 0.000** |
| 13 | Nature of the relationship between the company and other parties such as the consultant and owner | 0.661 | 0.000** |
| 14 | Follow the company customer appraisal system | 0.491 | 0.000** |

** (Indicates Correlation Significance at $\alpha = 0.01$)

Internal consistency for group 7

As shown in Table (3.9), the correlation coefficients between each item from the sixth field , whole field are located between (0.383)and (0.707) which are high enough to be valid. These correlation coefficients indicate the correlation significance at level ($\alpha = 0.01$) where all p-values are less than (0.01), so it can be said that the items of this field are consistent and valid to measure what they were set for.

Table 3.9 : Internal consistency for Group 7

| No. | Item | Pearson coefficient | p-value (sig) |
|-----|---|---------------------|---------------|
| 1 | The company unable to cover human resource development programs costs | 0.427 | 0.000** |
| 2 | Doesn't immaturity of human resources development culture in companies | 0.656 | 0.000** |
| 3 | Small size of companies leads to the difficulty of implement of human resource development and skills development programs | 0.504 | 0.000** |
| 4 | Lack of awareness of importance of the implementation of human resource development programs in construction companies at employees and company's owner | 0.533 | 0.000** |
| 5 | Lack of incentives and rewards provided by the company for employees to participate in training programs | 0.439 | 0.000** |
| 6 | Lack of time and work pressure in companies | 0.707 | 0.000** |
| 7 | Weak effectiveness and lack of enthusiasm at employees to participate in the development of human resources programs | 0.522 | 0.000** |
| 8 | Poor self-confidence and fear from failure at employees to benefit from the skills development programs | 0.507 | 0.000** |
| 9 | Lack the necessary resources to implement human resource development programs | 0.577 | 0.000** |
| 10 | Level of scientific and practical capabilities of employees | 0.618 | 0.000** |
| 11 | Lack of job security at employees because of the temporary contract with the company | 0.509 | 0.000** |
| 12 | Indecision companies owner to implement training programs for employees because employees change continuously | 0.467 | 0.000** |
| 13 | Discontinuous of companies work and lack of continuity of work because of the external conditions of the company | 0.392 | 0.000** |
| 14 | The absence of laws and legislation that obligate companies to apply human resource development programs | 0.560 | 0.000** |
| 15 | weakness of the company's follow-up to the changes of the external market (skilled labor available and new materials that are put on the market) | 0.539 | 0.000** |
| 16 | Company dependence on subcontractors in implementation of projects | 0.383 | 0.001** |

** (Indicates Correlation Significance at $\alpha = 0.01$)

Structured validity

Structure validity is the second statistical analysis test that was used to evaluate the validity of the questionnaire structure and the agreeability of it to satisfy the study purpose and to achieve the research objective by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one field and all fields of the questionnaire that have the same level of a similar scale.

As shown in Table (3.10), the correlation coefficients between each field and the whole questionnaire are located between (0.541) and (0.810) which are high enough to be valid. These correlation coefficients indicate the correlation significance at level ($\alpha = 0.01$) where all p-values are less than (0.01), so it can be said that the fields of the questionnaire are consistent and valid to measure what they were set for to achieve the study objective.

Table 3.10 :- Structure validity of the questionnaire

| No. | Field | Pearson coefficient | p-value (sig) |
|-----|--|---------------------|---------------|
| 1 | Factors related to main practices for human resource management. | 0.541 | 0.000** |
| 2 | Factors related to training | 0.804 | 0.000** |
| 3 | Factors resulted from training programs | .0787 | 0.000** |
| 4 | Factors related to work market changes (Materials / equipments and machines /workers) | 0.691 | 0.000** |
| 5 | Factors related to who carry out of employees evaluation | 0.725 | 0.000** |
| 6 | Other factor | 0.810 | 0.000** |
| 7 | Factors that barring implementation of human resource development in contracting companies in the Gaza Strip | 0.704 | 0.000** |

** (Indicates Correlation Significance at $\alpha = 0.01$)

3.11 Questionnaire reliability

Reliability of a questionnaire is the degree of consistency in which it measures the level of consistency of the questionnaire results if it will be distributed several

times under the same conditions. In other words, questionnaire reliability means that the questionnaire will give the same results if it will be distributed several times to the study sample in specific time periods. The test is repeated to the same sample of people on two occasions and then compares the scores obtained by computing a reliability coefficient (Polit and Hunger, 1985). It is difficult to return the scouting sample of the questionnaire-that is used to measure the questionnaire validity to the same respondents due to the different work conditions to this sample. Therefore the Cronbach's Alpha statistical test was used to measure the questionnaire reliability.

The normal range of Chronbach.s coefficient alpha value between 0.0 and + 1.0. The closer the Alpha to 1, the greater the internal consistency of items in the instrument being assumed. The formula that determines alpha is fairly simple and makes use of the items (variables), k, in the scale and the average of the inter-item correlations, r.:

$$\alpha = kr/1 + (k - 1)r \dots\dots\dots (3.2)$$

As the number of items (variables) in the scale (k) increases the value alpha becomes large. Also, if the inter correlation between items is large, the corresponding alpha will also be large. Since the alpha value is inflated by a large number of variables then there is no set interpretation as to what is an acceptable alpha value. A rule of thumb that applies to must situations is:

0.9 ≤ α ≤ 1.0 Excellent

0.8 ≤ α < 0.9 Good

0.7 ≤ α < 0.8 Acceptable

0.6 ≤ α < 0.7 Questionable

0.5 ≤ α < 0.6 Poor

0.0 ≤ α < 0.5 Unacceptable

The Alpha values of each field and for all questionnaire items were calculated using Cronbach's Alpha test. As illustrated in Table (3.11), Cronbach's Alpha coefficients are located between (0.857) and (0.892) which are high enough to ensure the reliability of the questionnaire. In addition, the Cronbach's Alpha coefficient for all questionnaire items is (0.88) which also is high to ensure the reliability of the questionnaire.

Table 3.11 : Cronbach's Alpha for Reliability

| No. | Field | No. of item | P-value (sig) |
|-------------------------|--|-------------|---------------|
| 1 | Factors related to main practices for human resource management | 12 | 0.892 |
| 2 | Factors related to training | 18 | 0.857 |
| 3 | Factors resulted from training programs | 9 | 0.859 |
| 4 | Factors related to work market changes (Materials / equipments and machines /workers) | 4 | 0.871 |
| 5 | Factors related to who carry out of employees evaluation | 5 | 0.871 |
| 6 | Other factors | 14 | 0.857 |
| 7 | Factors that barring implementation of human resource development in contracting companies in the Gaza Strip | 18 | 0.872 |
| All questionnaire items | | 0.88 | |

It is clear from the previous analytical results that the questionnaire as shown in Appendix was valid and reliable to pursue distributing it among the study sample and to rely on it in answering the study questions and analyzing its hypothesis. From the Table 3.11 results, it can be figured out that the reliability is achieved.

3.12 Questionnaire distribution and collection

Number of questionnaires distributed randomly to the target group of this research were 90 copies which is higher than the calculated sample size to overcome the risk of non responding. Fortunately, the response rate was very high. The returned number of respondents were 77 with response rate equal to 85.5%. The high response rate is achieved because questionnaire distributed and collected by hand to contracting companies offices and all of respondents take enough time from three to five days to fill it and obtain accurate results.

3.13 Statistical methods used

The Statistical Package for Social Science (SPSS) software was used to analyze this research data. The following statistical tests were used to analyze the data and the study hypothesis:

- i. Frequencies, means and percentages to represent the collected data in meaningful figures.
- ii. Pearson Correlation Coefficient was used to measure the correlation between two variables, where it was applied to test the questionnaire validity.
- iii. Cronbach's Alpha coefficient was used to test the questionnaire reliability.
- iv. One Sample Kolmogorov-Smirnov test was used to identify if the study questionnaire data follows the normal distribution or not, this test is considered necessary in the case of testing hypotheses as most Parametric Tests stipulate data to be normally distributed.
- v. The One-Sample T test was used to determine the statistical mean of each item (question) in the questionnaire field and compare it with the neutrality degree of (3). This test was used to answer the study questions.
- vi. The Pearson Correlation Coefficient test was used to examine the correlation significance in testing the first main hypothesis.
- vii. The Two-independent samples T Test was used to determine if there are differences indicating statistical significance between the means of two groups of data .
- viii. The One-Way ANOVA test was used to determine if there are differences indicating statistical significance between the means in the case of three groups of data and more.

3.14 Interview method

The interview method of collecting data involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. This method can be used through personal interviews and, if possible, through telephone interviews (Singh, 2006).

3.14.1 Types of interviews

There are three main types of interviews: *structured interview*, *semi structured interviews*, and *unstructured interviews*.

structured interviews: are that a list of questions is asked the answers recorded on a standardized schedule. The content and procedures are organized in advance for questioning. The sequence and wording of the questions are determined by means of a schedule and the interviewer is not allowed to make any changes (Akbayrak, 2000).

The method of collecting information through personal interviews is usually carried out in a structured way. As such we call the interviews as *structured interviews* where output depends upon the ability of the interviewer to a large extent.. Thus, the interviewer in a structured interview follows a rigid procedure laid down, asking questions in a form and order prescribed (Kothari, 2004).

Semi-structured interview : This type is more flexible than structured interview. This form of interview uses ‘open’ and ‘closed-ended’ questioning but the questions are not asked in a specific order and no schedule is used. Interviewer task is to discover as much as possible about the specific issues related to subject area (Naoum, 2007).

Unstructured interview : The unstructured interviews, contrary the structured interview is an open situation and so having greater flexibility and freedom. Although research questions determine the questions to be asked, the in content, sequence and wording are entirely left to the interviewer. However, this does not mean that the unstructured interview is a more casual thing, and for in its own way it must be carefully planned (Akbayrak, 2000).

The method used in this thesis is structured interview because it appropriate for the following reasons:-

- Allow face to face contact with respondents, were easily contact face to face with contractors companies respondent.
- The respondents answers can be more accurate.

3.14.2 Structured interview design

In the early stages of designing the questions used in structured interview. A draft was prepared and reviewed with the supervisor. In the structured interview, the questions were designed to investigate and to assess the current situation of human resource development in construction companies in the Gaza Strip. The questions used were extracted from the literature review. Structured interview were developed and conducted with contractors in Arabic and translated to English in the thesis. This is much effective and easier to be understood to get more realistic results.

3.14.3 Structured interview content

The structured interview was conducted face to face with the selected contractors company managers by researcher. At the beginning of the interview the questions in the interview to assess the current situation of human resource development in construction companies in the Gaza Strip, were as follows:

1. Is there a special department for of human resources management in the company?
2. Are you perform efficiency criteria when attracting new employees to the company?
3. Are you paying financial compensation for employees when they are being affected or end of their services ?
4. Are you implement rewards and incentives system for employees in the company?
5. Are the employees in the company evaluated periodically, for example, annually ?
- 6 . Are the company evaluate future needs from employees ?
7. Are the company evaluate the employees needs from training and experience that need to work ?
- 8 . Are the company implement training programs and workshops for employees?
- 9 . Does the company follow up new products and materials related construction industry that are put on the market to train employees?
- 10 . Does the company follow up external changes at labor market and a shortage of skilled labor ?
11. Does the company obligate with the laws and regulations related to work laws?
12. Does the company commit to applying the principles of personal safety and health to employees?
13. What are the most obstacles impact on the implementation of training programs?

Chapter 4

Results and discussion

4.1 Introduction

This chapter introduces the survey results and the discussion of the structured interview output to assess the current situation of human resource development in construction companies in the Gaza Strip. The interview contained thirteen questions that were extracted from literature review. The interview of twenty persons from contracting companies was done. The chapter also introduces questionnaire results to achieve the research objectives. The questionnaire consists of three parts: the first part about respondents' profile, the second part consists of six groups to determine and identify the factors that lead to development of human resource that achieves quality in contracting companies in Gaza Strip and the third part contains factors that hinder implementation of human resource development in contracting companies in the Gaza Strip. The chapter also presents the tests for measuring the differences in responses according to the independent factors to conclude the comprehensive recommendations and establish proposed policy for human resource development in contracting companies in the Gaza Strip.

4.2 Structured interview results

Twenty persons from contracting companies participated in structured interview. The questions of interview were to assess the current situation of human resource development in construction companies in the Gaza Strip. The questions were extracted from literature review.

The results of structured interviews are as follows and summarized in table 4.1

1. Question one result :-

25% said that there exists a special department for human resources management in the company

75% said that there does not exist a special department for human resources management in the company

Most of companies in Gaza Strip do not have a special department for human resources management. That indicates low attention with human resources

management in contracting companies. Human resource development and training programs implementation is difficult without existing special human resource department.

2. Question two result :-

55% said that they implement efficiency criteria when attracting new employees to the company.

30% said that they sometime implement efficiency criteria when attracting new employees to the company.

15% said that they doesn't implement efficiency criteria when attracting new employees to the company.

The result related implementation efficiency criteria when attracting new employees to the company is not sufficient for contracting companies to implement training programs to develop their employees, were 45% doesn't implement or sometime implement efficiency criteria when attracting new employees to the company. The training programs output depend mainly on efficient of trainees, So the companies must take high care for employees selection and to be based on efficiency to success their training programs.

3. Question three result :-

100% said that company paying financial compensation for employees when they are being affected but when the employees end of their services 80% of contracting company paying financial compensation and 20% doesn't paying.

The result of paying financial compensation for employees when they are being affected is satisfy but the result of paying financial compensation for employees when they are end of their services should be improve to help the company to develop their employees and to feeling employees with future safety.

4. Question four result :-

35% of companies said that they implement rewards and incentives system for employees in the company.

50% of companies said that they sometimes implement rewards and incentives system for employees in the company.

15% of companies said that they doesn't implement rewards and incentives system for employees in the company.

The most of contracting companies in Gaza Strip doesn't implement reward and incentives system for employees, were 65% doesn't or some time implement rewards and incentives, that company must establish rewards and incentives system to success human resource development .

5. Question five result :-

40% said that they evaluate their employees periodically.

25% said that they sometime evaluate their employees not periodically.

35% said that they doesn't evaluate their employees periodically.

The result of employees evaluation in contracting companies in Gaza Strip is not satisfied and must be improved were 60% doesn't or sometime evaluate their employees, because evaluation of employees periodically knowing the companies about skills their employees have, were any training programs must precede by evaluation for employees.

6. Question six result :-

35 % said that they evaluate future needs from employees.

25% said that they sometime evaluate future needs from employees.

20% said that they doesn't evaluate future needs from employees.

Evaluate future needs from employees in contracting companies in Gaza Strip need to enhance, were 45% doesn't or sometime evaluate future needs from employees. That allow the company to know required skills for required future employees to design job description for each job and to insert required future employees skills in training programs.

7. Question seven result :-:-

40 % said that they evaluate the employees needs from training and experience that need to work.

15% said that they sometime evaluate the employees needs from training and experience that need to work.

45% said that they doesn't evaluate the employees needs from training and experience that need to work.

The previous results show that 60 % from contracting companies in Gaza Strip doesn't or sometime evaluate the employees needs from training and experience that need to work, This result indicate that contracting companies not take suitable attention for human resource development that there is important to know the company skill shortage with employees and to be consider in training programs design.

8. Question eight result :-

20% said that the company implement training programs and workshops for employees

15% said that the company sometimes implement training programs and workshops for employees

65% said that the company doesn't implement training programs and workshops for employees

The previous results, It show that 80 % from contracting companies in Gaza Strip doesn't or sometime implement training programs and workshops for employees. That percent is very high to cause lack of skills with employees in contracting companies, especially most of company doesn't select employees in efficiency criteria, So contracting companies must implement training programs and workshops to develop their employees skills.

9. Question nine result :-

35% said that the company follow up new products and materials related construction industry that are put on the market to train employees.

25% said that the company sometime follow up new products and materials related construction industry that are put on the market to train employees.

40% said that the company doesn't follow up new products and materials related construction industry that are put on the market to train employees.

The result of company follow up new products and materials related construction industry that are put on the market to train employees by contracting companies in

Gaza Strip is not satisfied were 65% from companies doesn't or sometime follow up new products and materials related construction industry that are put on the market to train employees, that percent consider high because companies cannot develop their employees skills without following up new products and materials related construction industry that are put on the market. This result can be interpreted that executed project in Gaza Strip is small and traditional.

10 . Question ten result :-

40% said that company follow up external changes at labor market and a shortage of skilled labor.

25% said that company sometime follow up external changes at labor market and a shortage of skilled labor.

35% said that company doesn't follow up external changes at labor market and a shortage of skilled labor.

The following up external changes at labor market and a shortage of skilled labor is very important for human resource development in contracting companies, 60% of contracting companies in Gaza Strip doesn't or some time following up external changes at labor market and a shortage of skilled labor that consider very high percent to barring companies and make problems for them when they demand labor based on required skills.

11. Question eleven result :-

70% said that their companies obligate with the laws and regulations related to work laws.

20% said that their companies doesn't obligate with the laws and regulations related to work laws.

10% said that their companies doesn't obligate with the laws and regulations related to work laws.

The company obligate with the laws and regulations related to work laws results shown that 30% of contracting companies in Gaza Strip doesn't or sometime obligate with the laws and regulations related to work laws. this mean that rights employees

sometime lost in contracting companies in Gaza Strip and this is represent obstacle to human resource companies in Gaza Strip.

12. Question twelve result :-

100% said that their companies committed to applying the principles of personal safety and health at employees.

The percent of committed companies to applying the principles of personal safety and health at employees is 100 % from contracting companies perspective, but in fact based on applying the principles of personal safety and health at employees from contracting companies in many work site illustrate that 100% is very high and the logic percent not exceed 70 %.

13. Question thirteen result :-

25% said that changing employees continuously is the most obstacle impact on the implementation of training programs.

15% said that high cost of training programs is the most obstacle impact on the implementation of training programs.

15% said that lack of stability sense from employees because of temporary contract with company is the most obstacle impact on the implementation of training programs

10% said that lack of time for training because of work pressure is the most obstacle impact on the implementation of training programs

35% said that discontinuous work of company is the most obstacle impact on the implementation of training programs

The most influence obstacle that impact on the implementation of training programs in contracting companies in Gaza Strip is discontinuous work of company that represent 35% and not allow the companies to implement training programs.

Lack of stability sense from employees because of temporary contract with company and high cost of training programs take the same influence degree for barring implementation of training programs from companies perspective in Gaza Strip.

From previous results, it is clear that human resource management and development must take more attention in contracting companies in Gaza Strip especially by establishing special department for human resources. The companies must evaluate the employees needs from training and experience that are need for work, conducting training courses and workshop, evaluate future needs from employees. The employees in the company must be evaluated periodically. Rewards and incentives system for employees in the company must be implemented and the companies must follow up external changes at labor market and a shortage of skilled labor.

From result of the most obstacles impact on the implementation of training programs, It is shown that (35%) of contracting companies saw that discontinuous work of company is the most obstacles impact on the implementation of training programs, (25%) of contracting companies saw that changing employees continuously, (15%) of contracting companies saw that high cost of training programs, (15%) of contracting companies saw that lack of stability. (10%) of contracting companies saw that lack of time for training because of work pressure is the most obstacles impact on the implementation of training programs.

Table (4.1) show that (45.0%) average percent for human resource development programs that implemented always, (18.46%) average percent for human resource development programs are implemented sometimes and (28.84%) average percent for human resources development programs that doesn't implemented.

The high average percent (47.30%) for human resource development programs are implemented sometimes or doesn't implemented must take very attention from contracting companies to correct current situation related human resource development.

Table 4.1 : Assessment of current situation of human resource development in construction companies in the Gaza Strip

| Assessment of current situation of human resource development in construction companies in the Gaza Strip | Yes | | Sometime | | No | |
|---|-----------|-----|-----------|-----|-----------|-----|
| | Frequency | (%) | Frequency | (%) | Frequency | (%) |
| Is there a special department for of human resources management in the company ? | 5 | 25 | 0 | 0 | 15 | 75 |
| Are you perform efficiency criteria when attracting new employees to the company ? | 11 | 55 | 6 | 30 | 3 | 15 |
| Are you paying financial compensation for employees when they are being affected or end of their services ? | 20 | 100 | 0 | 0 | 0 | 0 |
| Are you implement rewards and incentives system for employees in the company ? | 7 | 35 | 10 | 50 | 3 | 15 |
| Are the employees in the company evaluated periodically, for example, annually? | 8 | 40 | 5 | 25 | 7 | 35 |
| Are the company evaluate future needs from employees ? | 7 | 35 | 5 | 25 | 8 | 40 |
| Are the company evaluate the employees needs from training and experience that need to work ? | 8 | 40 | 3 | 15 | 9 | 45 |

Table 4.1 : Assessment of current situation of human resource development in construction companies in the Gaza Strip – continued

| | | | | | | |
|---|---|---------------|---|---------------|------------------|---------------|
| Are the company implement training programs and workshops for their employees ? | 4 | 20 | 3 | 15 | 13 | 65 |
| Does the company follow up new products and materials related construction industry that are put on the market to train employees ? | 7 | 35 | 5 | 25 | 8 | 40 |
| Does the company follow up external changes at labor market and a shortage of skilled labor ? | 8 | 40 | 5 | 25 | 7 | 35 |
| Does the company obligate with the laws and regulations related to work laws ? | 14 | 70 | 4 | 20 | 2 | 10 |
| Does the company commit to applying the principles of personal safety and health to employees? | 18 | 90 | 2 | 10 | 0 | 0 |
| All question assessment | | 45.00% | | 18.46% | | 28.84% |
| What are the most obstacles impact on the implementation of training programs ? | Obstacle | | | | Frequency | (%) |
| | Changing employees continuously | | | | 4 | 25 |
| | High cost of training programs | | | | 3 | 15 |
| | Lack of stability sense from employees because of temporary contract with company | | | | 3 | 15 |
| | Lack of time for training because of work pressure | | | | 4 | 10 |
| | Discontinuous work of company | | | | 6 | 35 |

4.3 Normality distribution test

One Sample Kolmogorov-Smirnov test was used to identify if the study questionnaire data follows the normal distribution or not, this test is considered necessary in the case of testing hypotheses as most Parametric Tests stipulate data to be normally distributed.

Table 4.2 : One sample Kolmogorov-Smirnov test

| No. | Field | No. of items | P – value (sig) |
|------------|--|--------------|-----------------|
| 1 | Factors related to main practices for Human resource management. | 12 | 0.22 |
| 2 | Factors related to training. | 18 | 0.20 |
| 3 | Factors resulted from training programs. | 9 | 0.81 |
| 4 | Factors related to work market changes (Materials / equipments and machines /workers) | 4 | 0.34 |
| 5 | Factors related to who carry out of employees evaluation. | 5 | 0.36 |
| 6 | Other factor | 14 | 0.55 |
| 7 | Factors that barring implementation of human resource development in contracting companies in the Gaza Strip | 16 | 0.43 |
| All fields | | 78 | 0.82 |

Table (4.2) clarifies that the calculated sig. (p-values) for the questionnaire fields were greater than the significance level at ($\alpha = 0.05$), (p-value > 0.05). This in turn indicated that the study data followed the normal distribution, and so the Parametric Tests were used in analyzing the study hypothesis and finding the appropriate answers for its Questions.

4.4 Study population characteristics

The general characteristics of the study population were investigated as shown in table (4.3). They include job description, experience years in construction industry, average of projects value that executed annually for last five years (Dollar), number of total employees in company, number of permanent employees in company, number of employees that company attract them annually , and number of employees that leave or lay off from company annually.

Table 4.3: The profile of respondents

| Population characteristics | Frequency | Percentage (%) |
|--|------------------|-----------------------|
| Job description | | |
| Company's owner | 27 | 35.06 |
| Company manager | 14 | 18.18 |
| Human resources department manager | 1 | 1.30 |
| Projects manager | 24 | 31.17 |
| Other | 11 | 14.29 |
| total | 77 | 100 |
| Experience years | | |
| Less than 3yrs | 5 | 6.5 |
| 3-Less than 5 yrs | 10 | 13.0 |
| 5-Less than 10 yrs | 12 | 15.6 |
| 10 yrs or more | 50 | 64.9 |
| total | 77 | 100 |
| Average value(dollar) | | |
| Less than 0.5 million | 7 | 9.09 |
| 0.5-Less than 1 million | 17 | 22.08 |
| 1 -Less than 2 million | 30 | 38.96 |
| 2 million or more | 23 | 29.87 |
| Total | 77 | 100 |
| Total employees | | |
| 15 person or less | 30 | 39.0 |
| 16-30 person | 24 | 31.2 |
| 31-50 person | 10 | 13.0 |
| More than 50 | 13 | 16.9 |
| total | 77 | 100 |
| Total permanent employees | | |
| 10 person or less | 51 | 66.23 |
| 11-20 person | 15 | 19.48 |
| 21 – 40 person | 6 | 7.79 |
| more than 40 person | 5 | 6.49 |
| total | 77 | 100 |
| Employees attracted annually | | |
| 5person or less | 26 | 33.77 |
| 6-20 person | 37 | 48.05 |
| 21 – 30 person | 11 | 14.29 |
| more than 30 person | 3 | 3.90 |
| total | 77 | 100 |
| employees that leave or lay off | | |
| 5person or less | 28 | 36.4 |
| 6-10 person | 26 | 33.8 |
| 11 – 20 person | 11 | 14.3 |
| more than 20 person | 12 | 15.6 |
| Total | 77 | 100 |

4.4.1 Differences of responses due to job description

From table 4.3 , it has been found that the survey included most job description is company's owner , where (35.06 %) of them are company's owner, while (31.17%) projects manager, (18.18%) company manager, (14.29%) other and (1.30%) are human resources manager. This indicates that the responses are restricted between company's owner and projects manager who they have the whole vision about human resource management in company and human resource department is the lowest percentage that take indication that contracting companies doesn't take enough attention for human resource management. The variety of work positions will be expected to enrich the research with different views and responses.

4.4.2 Differences of responses due to experience years in construction industry

Table 4.3 presents the work experience of respondents, where (64.9%) of them have high experience exceeds than 10 years, while (15.6%) have more than 5 to10 year experience, while (13%) have more than 3 to 5 year experience ,and (6.5%) have experience less than 3 years. This indicates that the greatest percentage of respondents have experience exceed 10 years in construction field which make them able to determine the role of human resource development in achieving quality in contracting companies in Gaza Strip.

4.4.3 Average of projects value that executed annually for last five years (Dollar)

Table 4.3 shows that (9.09%) of respondents executed average projects value annually less than 0.5 million dollars, during the last five years. (22.08%) of contracting companies executed projects with a value between 0.5 to less than 1 million dollars, and (38.96%) of contractors executed projects with a value between 1 to less than 2 million and, (29.87%) of contractors executed projects with a value more than 2 million dollars. This indicates that most of executed projects in last five years in Gaza Strip are small size because (70.13%) of companies executed projects less than 2 million annually .

4.4.4 Number of total employees in company

Table 4.3 shows that (39. 0%) of companies respondents employ 15 person or less as a total number of employees, (31.20%) of companies employ 16 -30 person, (13.0%) of companies employ 16 -30 person and (16.9%) of company employ more than 50 person in their companies as a total number of employees. From previous result it is concluded that (70.2%) of contracting companies in Gaza Strip employ 30 person or less as a total number of employees. This indicate that most of contracting companies in Gaza Strip are small size companies.

4.4.5 Number of permanent employees in company

Table 4.3 shows that (66.23%) of companies respondents employ 10 person or less as permanent employees, (19.48%) of them employ 11 -20 person, (7.79%) of them employ 21 - 40 person and (6.49%) of company employ more than 40 person in their companies as a permanent number of employees. From previous results it is concluded that (85.71%) of contracting companies in Gaza Strip employ 20 person or less as a total number of employees. This results support that most of contracting companies in Gaza Strip are small.

4.4.6 Number of employees that company attract them annually

Table 4.3 shows that (33.77%) of companies respondents attract and employ annually 5 person or less, (48.05%) of companies attract and employ 6 -20 person, (14.29%) of them attract and employ 21 - 30 person and (3.90%) of company attract and employ more than 30 person in their companies annually. from previous results (81.82%) of contracting companies in Gaza Strip attract and employ 20 person or less annually. The results support also that most of contracting companies in Gaza Strip are small.

4.4.7 Number of employees that leave or lay off from company annually

Table 4.3 shows that (36.4%) of companies respondents lay off or leave employees from company annually 5 person or less, (33.8%) of companies lay off or leave employees annually from 6 -10 person, (14.3%) of them lay off or leave employees annually from 11 - 20 person and (15.6%) of companies lay off or leave employees annually more than 30 person. (70.2%) of contracting companies in Gaza Strip lay off or leave employees from company 10 person or less annually. This can be interpreted that the work of contacting companies are discontinues, existing weakness in human resource management in companies , lack of incentive and motivation for employees, existing weakness in salaries and wages for employees and waste of employees rights that lead employees to search for better work chance.

4.5 Study fields analysis

The research used One-Sample T test in analyzing the questionnaire fields. One-Sample T test was used to determine the statistical mean of each item (statement) in the field and compare it with the neutrality degree of (3). The result of this test determined if the response to an item of the questionnaire fields was equal to the neutrality degree of (3) or differed than it significantly.

Null Hypothesis: The tested item response mean is equal to (3) which is corresponding to the chosen neutrality degree on the used scale to answer the questionnaire items which is from (1) indicating the minimum degree of acceptance on the item content through (5) indicating the maximum degree of acceptance on the item content. This could be confirmed if the sig. (p-value) was greater than the significance level at ($\alpha = 0.05$). This implies that the response mean of the study sample approached the neutrality degree of (3). This result corresponds to accept the null hypothesis and reject the alternative one.

Alternative Hypothesis: The tested item response mean differs than (3) which is the chosen neutrality degree on the used scale to answer the questionnaire items. This could be confirmed if the sig. (p-value) was less than or equaled the significance level at ($\alpha = 0.05$). This implies that the response mean of the study sample differed significantly than the neutrality degree of (3). This result corresponds to reject the null hypothesis and accept the alternative one. In this case, the sign of One-Sample T test value determined whether the response mean was greater or less than the neutrality degree of (3) significantly. If the sign of One-Sample T test value was positive, this revealed that the response mean was greater than the neutrality degree of (3) and the opposite is correct.

The questionnaire were ranked in descending order according to the acceptance degree, where the rank (5) represents the field that has the highest acceptance degree

4.6 Means and ranks

The mean values were used in this study to rank the factors according to the agreement level of respondents about each factor. The factors were ranked due to its mean value in its groups and also due to the whole part. Likert scale was used for ranking factors that have an agreement levels. The respondents were asked to give their perceptions in group of

factors on five-point scale (1 for the low degree effect, 2 for something effect, 3 for moderate effect, 4 for significant affect and 5 for very significant effect).

4.6.1 First group: Factors related to main practices for human resource management

Table 4.4 : One-Sample T test mean and P-value (sig.) of the first group

| Item | Mean | P -value | Test value | Group1 rank | Part 2 rank |
|---|------|----------|------------|-------------|-------------|
| Implement efficiency criteria for employees selection | 4.74 | 0.00 | 2.9 | 1 | 1 |
| Paying salaries and wages regularly and with fairly way and wages increase with according high cost of living | 4.31 | 0.00 | 12.8 | 2 | 4 |
| Company ability for management their resources with efficiency and effective way | 4.18 | 0.00 | 11.2 | 3 | 10 |
| Existence motivations and rewards system for employee | 4.14 | 0.00 | 10.7 | 4 | 11 |
| Attention with safety and health for employees | 4.11 | 0.00 | 10.2 | 5 | 12 |
| Existence financial compensation for employees when they are being affected or end of services | 3.92 | 0.00 | 8.4 | 6 | 22 |
| Existence evaluation system for employees in company | 3.88 | 0.00 | 7.4 | 7 | 25 |
| Clarity job description for employees | 3.82 | 0.00 | 6.9 | 8 | 30 |
| Existence job planning system and determination future needs for employees | 3.77 | 0.00 | 5.8 | 9 | 34 |
| Rate of employees absence and leaving company resulted from insufficient human resource management | 3.71 | 0.00 | 4.9 | 10 | 39 |
| Methods and mechanisms for choosing and attract new employees | 3.56 | 0.00 | 4.1 | 11 | 46 |
| Implement employees participant principle for decision making | 3.02 | 0.11 | 1.5 | 12 | 57 |
| All the item of the group 1 | 3.93 | 0.00 | 11.5 | | |

(Statistical Significance at level $\alpha = 0.05$)

Table (4.4) shows the following results:

- The mean for highest item implement specific criteria for employees selection equals (4.74) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree with implement specific criteria for employees selection, and this item take first rank on first group which investigated factors related to main practices for human resource management. Also the first rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip and this result is logic because development of human resources mainly depend on selection criteria's and must be sound to form efficient staff. This result agree with Uzundu (2013) results.
- The mean for item paying salaries and wages regularly and with fairly way and wages increase with according high cost of living equals (4.31) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that paying salaries and wages regularly and with fairly way and wages increase with according high cost of living and this item take second rank at first group that investigated factors related to main practices for human resource management, also the forth rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. This result is sound because salaries and wages are considered form most motivation for employees to work efficiently and to develop their skills to improve their salaries.
- The mean for item company ability for management their resources with efficiency and effective way equals (4.18) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that company ability for management their resources with efficiency and effective way and this item take third rank on first group that investigated factors related to main practices for human resource management, also the tenth rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip and this result indicate that resources management in company must be efficiently and effectively used to develop the company employees skills. This result is similar with Okoye and Ezejiofor (2013) results.

- The mean for item existence motivations and rewards system for employee equals (4.14) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that existence motivations and rewards system for employees and this item take fourth rank on first group that investigated factors related to main practices for human resource management, also the eleventh rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. This result agree with Harel (1996) results.

- The mean for lowest item rank implement employees participant principle for decision making equals (3.02) and the sig. (p-value) equals (0.11), which not shows statistical significance and that the response level of this item is equal the neutrality degree of (3). This implies that the respondents not agree that implement employees participant principle for decision making and this item take last rank on first group related factors to main practices for human resource management and fifty seven rank on all group in part two related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip that mean this item is not important for development of human resources. This result disagree with Tabassi and Baker (2009), Selvam (2013) and Arumugam et al.(2011) results and that take indication that respondent prefer centralization principle in management.

In general, the mean for the whole group 1 “**Factors related to main practices for human resource management**” equals (3.93) and the sig. (p-value) equals (0.000) less than ($\alpha = 0.05$), which shows statistical significance and that the response level of this field is greater than the neutrality degree of (3). This indicates that the respondents agree with this field.

4.6.2 Second group: Factors related to training.

Table 4.5 : One-Sample T test mean and P-value (sig.) of the second group

| Item | Mean | P -value | Test value | Group2 rank | Part 2 rank |
|--|------|----------|------------|-------------|-------------|
| Trainers efficiency and criteria for selection training team. | 4.72 | 0.00 | 9.3 | 1 | 2 |
| Hold training courses to develop knowledge and theoretical capabilities of employees | 4.39 | 0.00 | 4.3 | 2 | 3 |
| Employees training at required personal skills for work such as work coordination, communication skills, archiving and documentation | 3.93 | 0.00 | 7.0 | 3 | 21 |
| Discontinuous work in company and influence at training level | 3.89 | 0.00 | 6.4 | 4 | 24 |
| Top management supporting in company for training programs | 3.84 | 0.00 | 7.0 | 5 | 28 |
| Expansion training area to include all employees | 3.79 | 0.00 | 6.7 | 6 | 32 |
| Existence motivations for employees to obligate with training programs | 3.76 | 0.00 | 9.1 | 7 | 35 |
| Level and employees efficiency to join and benefit from training programs | 3.75 | 0.00 | 6.7 | 8 | 36 |
| Experience exchange with local and foreign companies | 3.74 | 0.00 | 5.3 | 9 | 37 |
| Employees training at technology usage that used in construction industry and adapt with it | 3.70 | 0.00 | 7.1 | 10 | 40 |
| Raise the company consciousness level at employees with training importance and spread training culture | 3.58 | 0.00 | 6.1 | 11 | 44 |
| Existence especial training for personal health and safety in wok site for employees | 3.55 | 0.00 | 5.4 | 12 | 47 |

Table 4.5 : One-Sample T test mean and P-value (sig.) of the second group - Cont

| Item | Mean | P -value | Test value | Group2 rank | Part 2 rank |
|---|-------------|-------------|------------|-------------|-------------|
| Existence special training for safe usage for machines and equipments and execute periodic maintenance for it | 3.51 | 0.01 | 2.5 | 13 | 50 |
| Influences of external environment for company (political- security-culture) at training programs | 3.44 | 0.00 | 2.9 | 14 | 52 |
| Employees rotation in company to develop their skills | 3.35 | 0.07 | 1.8 | 15 | 54 |
| Usage company training in site method to increase practical experience at employees | 3.29 | 0.00 | 9.0 | 16 | 55 |
| Implement conferences and workshops for employees | 3.27 | 0.10 | 1.6 | 17 | 56 |
| Implement company distance education techniques to increase efficiency of employees | 3.21 | 0.15 | 1.4 | 18 | 57 |
| All the item of the group 2 | 3.71 | 0.00 | 8.1 | | |

(Statistical Significance at level $\alpha = 0.05$)

Table (4.5) shows the following results:

- The mean for highest item rank trainers efficiency and criteria for selection training team equals (4.72) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that trainers efficiency and criteria for selection training team, and this item take first rank at second group that investigated factors related to training and the second rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. This result is illustrates that the most important role in success of training program depend on efficiency of trainers staff and must chosen based on sound criteria.
- The mean for item hold training courses to develop knowledge and theoretical capabilities of employees equals (4.39) and the sig. (p-value) equals (0.00), which shows statistical

significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that hold training courses to develop knowledge and theoretical capabilities of employees and this item take second rank on second group that investigated factors related to training and the third rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. It can be concluded that the hold of training programs and courses increase efficiency and develop of employees staff skills and this result compatible with Gibb (2011) results.

- The mean for item employees training at required personal skills for work such as work coordination, communication skills, archiving and documentation equals (3.93) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that employees training at required personal skills for work such as work coordination, communication skills, archiving and documentation, and this item take third rank on second group that investigated factors related to training. This is support the importance of personal skills for all work fields to insure organized work.

- The mean for lowest item rank implement company distance education techniques to increase efficiency of employees equals (3.21) and the sig. (p-value) equals (0.15), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents not agree that implement company distance education techniques to increase efficiency of employees, and this item take last rank on second group that investigated factors related to training. This result disagree with Ikediashi et al. (2012) results. This result can be interpret that contracting companies are small size in Gaza Strip and they show that distance education techniques are not suitable as technique in training program in their companies.

In general, the mean for the whole field “**Factors related to training**” equals (3.71) and the sig. (p-value) equals (0.000) less than ($\alpha = 0.05$), which shows statistical significance and that the response level of this field is greater than the neutrality degree of (3). This indicates that the respondents agree with the field “**Factors related to training**”. And this group very important to human resource development in contracting companies in Gaza Strip to achieve quality.

4.6.3 Third group : Factors resulted from training programs.

Table 4.6 : One-Sample T test mean and P-value (sig.) of the third group

| Item | Mean | P -value | Test value | Group3 rank | Part 2 rank |
|--|------|----------|------------|-------------|-------------|
| Increase belonging employees for company | 4.25 | 0.00 | 12.5 | 1 | 5 |
| Decrease work accident in sites work | 4.24 | 0.00 | 10.3 | 2 | 6 |
| Increase employees confidence in the ability for doing required work | 4.02 | 0.00 | 9.5 | 3 | 14 |
| Increase efficiency and effective for employees | 3.99 | 0.00 | 10.1 | 4 | 15 |
| Job satisfaction increase for employees because there are training programs | 3.97 | 0.00 | 9.5 | 5 | 17 |
| Improve the financial situation of the company and reduce implementation costs as a result of the application of training programs | 3.96 | 0.00 | 10.7 | 6 | 18 |
| Raise the morale of employees and reduce anxiety and frustration for them | 3.91 | 0.00 | 8.6 | 7 | 23 |
| Increase employees adaption with new technology after implementation of training programs | 3.64 | 0.00 | 5.2 | 8 | 43 |
| Decrease employees leaving from company after implementation of training programs | 3.50 | 0.00 | 3.4 | 9 | 51 |
| All the item of the group 3 | 3.94 | 0.00 | 13.2 | | |

(Statistical Significance at level $\alpha = 0.05$)

Table (4.6) shows the following results:

- The mean for highest item increase belonging employees for company equals (4.25) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that increase belonging employees for company , and this item take first rank on third group that investigated factors resulted from training programs, and the fifth rank on all groups related to factors that leading to development of human

resource that achieving quality in contracting companies in Gaza Strip and this result is agree with Tabassi and Baker (2009) results. It can be conclude that arise employees belonging for company as resulted from training programs develop human resource in company and lead to quality achievement.

- The mean for item decrease work accident in sites work equals (4.24) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that decrease work accident in sites work and this item take second rank on third group that investigated factors resulted from training programs, and the sixth rank on all groups elated to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. And this factor is very important because training employees at safety skills develop the quality work and decrease work accidents and save human resource that consider the most important resources in construction industry.

- The mean for item increase employees confidence in the ability for doing required work equals (4.02) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that increase employees confidence in the ability for doing required work and this item take third rank on third group that investigated factors resulted from training programs, and the sixth rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip and this result is agree with Cole (2001) results. This result indicate that training programs improve employees efficiency and increase self confidence to doing work better.

- The mean for lowest item rank decrease employees leaving from company after implementation of training programs equals (3.50 and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is equal the neutrality degree of (3). This implies that the respondents agree that decrease employees leaving from company after implementation of training programs and this item take last rank on third group that investigated factors related to main practices for human resource management and fifty one rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip that mean that respondents are agree that this item is not resulted from development of

human resources and this result agree with Tabassi and Baker (2009), and it doesn't exist disagreement between factor in item decrease employees leaving from company after implementation of training programs result that take the lowest rank in third group and factor in item belonging employees for company results that take the highest rank in same group because the belonging appear in accomplishment of employee tasks and save company resources and the leaving employees from company based on search of employees at the best work chance .

- In general, the mean for the whole field “Factors resulted from training programs” equals (3.94 and the sig. (p-value) equals (0.00) less than ($\alpha = 0.05$), which shows statistical significance and that the response level of this field is greater than the neutrality degree of (3). This indicates that the respondents agree with the field “Factors resulted from training programs”. And resulted factor from training programs achieve quality in company.

4.6.4 Fourth group : Factors related to work market changes (Materials / equipments and machines /workers)

Table 4.7 :One-Sample T test mean and P-value (sig.) of the fourth group

| Item | Mean | P -value | Test value | Group4 rank | Part 2 rank |
|---|-------------|-----------------|-------------------|--------------------|--------------------|
| Company follow-up for changing in materials, new equipment and machines that are put on the market | 4.19 | 0.00 | 10.8 | 1 | 9 |
| Company follow-up for external and internal changes in the labor market | 3.95 | 0.00 | 8.2 | 2 | 19 |
| Inadequate supply for the used necessary materials and spare parts and lack of compatibility with existing labors | 3.83 | 0.00 | 6.6 | 3 | 29 |
| Company follow- up for change in required skills for the industry and the extent of availability of skilled labor required for this change from outside the company | 3.67 | 0.00 | 6.5 | 4 | 41 |
| All the item of the group 4 | 3.91 | 0.00 | 10.2 | | |

(Statistical Significance at level $\alpha = 0.05$)

Table (4.7) shows The following results:

- The mean for highest item company follow-up for changing in materials, new equipment and machines that are put on the market equals (4.19) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that company follow-up for changing in materials, new equipment and machines that are put on the market and this item take first rank on forth group that investigated factors related to work market changes (Materials / equipments and machines /workers), and the ninth rank on all group in part two related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip that mean the importance of follow-up for changing in materials, new equipment and machines that are put on the market by company to train employees and to be familiar with it and this result is agree with Garavan etal. (1999) results

- The mean for lowest item rank company follow- up for change in required skills for the industry and the extent of availability of skilled labor required for this change from outside the company equals (3.67) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is equal the neutrality degree of (3). This implies that the respondents agree that company follow- up for change in required skills for the industry and the extent of availability of skilled labor required for this change from outside the company , and this item take last rank on forth group that investigated factors related to work market changes (Materials / equipments and machines /workers) and forty one rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip that mean that respondents are agree that the influence of this item is weak at development of human resources and this result agree with Garavan etal. (1999) results , and this factor take the lowest rank because the small area of Gaza Strip and small of contracting companies and projects executed in Gaza Strip and the most project traditional that lead to weak importance for factor in item company follow- up for change in required skills for the industry and the extent of availability of skilled labor required for this change from outside the company. This indicate that change in required skills for the industry and the extent of availability of skilled labor required for this change from outside the company is weak influence at human resource development in contracting companies in Gaza Strip due to small of Gaza Strip area, technology progress delay in construction industry and

contracting companies at most deal with traditional and recurring projects that doesn't need change in required skills for construction industry.

- In general, the mean for the whole field “**Factors related to work market changes**” equals (3.91) and the sig. (p-value) equals (0.00) less than ($\alpha = 0.05$), which shows statistical significance and that the response level of this field is greater than the neutrality degree of (3). This indicates that the respondents agree with the field “**Factors related to work market changes**”.

4.6.5 Fifth group : Factors related to who carry out of employees evaluation.

Table 4.8 : One-Sample T test mean and P-value (sig.) of the fifth group

| Item | Mean | P -value | Test value | Group 5 rank | Part 2 rank |
|--|------|----------|------------|--------------|-------------|
| Follow the company managers appraisal for their employees system | 4.22 | 0.00 | 11.8 | 1 | 7 |
| Follow the company team appraisal system | 3.65 | 0.00 | 4.6 | 2 | 42 |
| Follow the company peer appraisal system | 3.57 | 0.00 | 4.0 | 3 | 45 |
| Follow the company subordinate appraisal system | 3.52 | 0.00 | 3.9 | 4 | 49 |
| Follow the company self performance appraisal system | 2.92 | 0.71 | 0.3 | 5 | 58 |
| All the item of the group 5 | 3.58 | 0.00 | 5.6 | | |

(Statistical Significance at level $\alpha = 0.05$)

Table (4.8) shows the following results:

- The mean for highest item follow the company managers appraisal for their employees system equals (4.22) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that follow the company managers appraisal for their employees system and this item take first rank on fifth group that investigated factors related to who carry out of employees evaluation, and the seventh rank on all groups related to factors that leading to development of human resource that

achieving quality in contracting companies in Gaza Strip that mean the importance of managers appraisal for employees because fair of managers appraisal in most condition compared with team appraisal and peer appraisal that influenced from competition and this result is agree with Nassazi (2013) results, and this result is sound because the managers known all details about efficiency and performance of their employees and contribution team in appraisal process for employee take indicate that appraisal is impartial

- The mean for lowest item rank follow the company self performance appraisal system equals (2.92) and the sig. (p-value) equals (0.71), which shows statistical significance and that the response level of this item is equal the neutrality degree of (3). This implies that the respondents not agree that follow the company self performance appraisal system and this item take last rank on fifth group that investigated related to who carry out of employees evaluation and fifty eight rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip and this result agree with Nassazi. (2013) results. This factor take the lowest rank because it doesn't exist confidence in self performance appraisal from perspective of contracting companies.

- In general, the statistical mean for the whole field “**Factors related to who carry out of employees evaluation**” equals (3.58), the weight mean equals (71.52%) and the sig. (p-value) equals (0.00) less than ($\alpha = 0.05$), which shows statistical significance and that the response level of this field is greater than the neutrality degree of (3). This indicates that the respondents agree with the field “**Factors related to who carry out of employees evaluation**”.

4.6.6 Sixth group : Others factors

Table 4.9 : One-Sample T test mean and P-value (sig.) of the sixth group

| Item | Mean | P -value | Test value | Group 6 rank | Part 2 rank |
|--|------|----------|------------|--------------|-------------|
| Existence supervision from company at employees to obligate with work and profession ethics | 4.21 | 0.00 | 11.9 | 1 | 8 |
| Improve the company for environment and general work conditions for employees and providing required needs from tools and services | 4.05 | 0.00 | 5.7 | 2 | 13 |
| Type of contract with employees from were permanent or temporary | 3.98 | 0.00 | 9.0 | 3 | 16 |
| The company dissemination a culture of corporation between employees during work | 3.94 | 0.00 | 8.7 | 4 | 20 |
| Respect company for employees personal life and understand the conditions and problems related them | 3.93 | 0.00 | 9.0 | 5 | 21 |
| Attention the company with individual characteristics required for each profession such as (Speed - Gender- educational level- age) and suitability to the nature of profession and work | 3.89 | 0.00 | 6.8 | 6 | 24 |
| Follow the company customer appraisal system | 3.87 | 0.00 | 5.2 | 7 | 26 |
| Laws and work legislation in the country and the existence of supervision at companies work quality | 3.85 | 0.00 | 7.7 | 8 | 27 |
| Nature of relationship between the employees in company | 3.83 | 0.00 | 9.2 | 9 | 29 |
| Nature of the relationship between the company and other parties such as the consultant and owner | 3.80 | 0.00 | 5.0 | 10 | 31 |
| Relationship between the top management and employees at the lower levels in the company | 3.78 | 0.00 | 6.4 | 11 | 33 |
| Existence permission with employees to enable them to make decisions | 3.73 | 0.00 | 5.7 | 12 | 38 |
| Cultural, political and religious factors in the company | 3.53 | 0.00 | 3.4 | 13 | 48 |
| Demographic change of the workforce in the construction industry | 3.41 | 0.00 | 10.5 | 14 | 53 |
| All the item of the group 6 | 3.84 | 0.00 | 12.5 | | |

(Statistical Significance at level $\alpha = 0.05$)

Table (4.9) shows the following results:

- The mean for highest rank item existence supervision from company at employees to obligate with work and profession ethics equals (4.21) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that existence supervision from company at employees to obligate with work and profession ethics and this item take first rank on sixth group that investigated other factors, and the eighth rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip that mean the development of human resource by supervision from company at employees to obligate with work and profession ethics achieve quality in contracting companies and decrease conflict between company and other parties in construction industry and this result is compatible with Kokkaew and Koompai (2012) results.
- The statistical mean for item improve the company for environment and general work conditions for employees and providing required needs from tools and services equals (4.05) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that improve the company for environment and general work conditions for employees and providing required needs from tools and services and this item take second rank on sixth group that investigated other factors, and the thirteen rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip that mean the development of human resource by improve the company for environment and general work conditions for employees and providing required needs from tools and services to achieve quality in contracting companies and this result agree mudor and Tooksoon (2011) results.
- The mean for item type of contract with employees from were permanent or temporary equals (3.98) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that type of contract with employees from were permanent or temporary and this item take third rank on sixth group that investigated other factors, and the sixteen rank on all groups related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip that mean that type of contract with employees influence at human resource

development were permanent contract increase influence of human resource development and this result agree with Irawan and Halim (2013).

The mean for lowest item rank demographic change of the workforce in the construction industry equals (3.41) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is equal the neutrality degree of (3). This implies that the respondents agree that demographic change of the workforce in the construction industry and this item take last rank on sixth group that investigated other factors and fifty three rank on all group in part two related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. The weakness influence of demographic change of the workforce in the construction industry at human resource development to achieve quality in contractor companies because the small of research location in Gaza Strip and this result disagree with Kokkaew and Koompai (2012) results.

In general, the statistical mean for the whole field “Others factors” equals (3.84) and the sig. (p-value) equals (0.00) less than ($\alpha = 0.05$), which shows statistical significance and that the response level of this field is greater than the neutrality degree of (3). This indicates that the respondents agree with the field “Others factors”

4.6.7 Seventh group : consist of factors that barring implementation of human resource development in contracting companies in the Gaza Strip

Table 4.10 : One-Sample T test mean and P-value (sig.) of the seventh group

| item | Mean | P -value | Test value | Group7 rank |
|--|------|----------|------------|-------------|
| Discontinuous of companies work and lack of continuity of work because of the external conditions of the company | 4.27 | 0.00 | 11.2 | 1 |
| The company unable to cover human resource development programs costs | 4.09 | 0.00 | 7.6 | 2 |
| Lack of job security at employees because of the temporary contract with the company | 4.03 | 0.00 | 9.9 | 3 |
| Company dependence on subcontractors in implementation of projects | 3.99 | 0.00 | 6.9 | 4 |

Table 4.10 : One-Sample T test mean and P-value (sig.) of the seventh group-Cont

| item | Mean | P -value | Test value | Group7 rank |
|---|------|----------|------------|-------------|
| Indecision companies owner to implement training programs for employees because employees change continuously | 3.97 | 0.00 | 7.8 | 5 |
| Lack of incentives and rewards provided by the company for employees to participate in training programs | 3.95 | 0.00 | 8.4 | 6 |
| weakness of the company's follow-up to the changes of the external market (skilled labor available and new materials that are put on the market) | 3.92 | 0.00 | 6.5 | 7 |
| Poor self-confidence and fear from failure at employees to benefit from the skills development programs | 3.90 | 0.00 | 5.7 | 8 |
| Small size of companies leads to the difficulty of implement of human resource development and skills development programs | 3.88 | 0.00 | 6.3 | 9 |
| The absence of laws and legislation that obligate companies to apply human resource development programs | 3.83 | 0.00 | 5.6 | 10 |
| Level of scientific and practical capabilities of employees | 3.81 | 0.00 | 9.9 | 11 |
| Lack of awareness of importance of the implementation of human resource development programs in construction companies at employees and company's owner | 3.80 | 0.00 | 7.2 | 12 |
| Lack the necessary resources to implement human resource development programs | 3.79 | 0.00 | 7.2 | 13 |
| Doesn't immaturity of human resources development culture in companies | 3.72 | 0.00 | 5.4 | 14 |
| Weak effectiveness and lack of enthusiasm at employees to participate in the development of human resources programs | 3.62 | 0.00 | 4.6 | 15 |
| Lack of time and work pressure in companies | 3.60 | 0.00 | 1.8 | 16 |
| All the item of the group 7 | 3.93 | 0.00 | 9.5 | |

(Statistical Significance at level $\alpha = 0.05$)

Table (4.10) shows following results:

The mean for highest item rank discontinuous of companies work and lack of continuity of work because of the external conditions of the company equals (4.27) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that most influence factor at barring human resource development in contracting companies is discontinuous of companies work and lack of continuity of work because of the external conditions of the company, and this item take first rank on seventh group that investigated factors that barring implementation of human resource development in contracting companies in the Gaza Strip because siege at Gaza and external condition especially in last year's. This result is sound because nature discontinuous work for contracting companies in Gaza Strip. that not allow companies to save fixed staff to develop them and the frustration at employees because discontinuous work barring human resource development

- The mean for item the company unable to cover human resource development programs costs equals (4.09) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that the company unable to cover human resource development programs costs and this item take second rank on seventh group that investigated factors that barring implementation of human resource development in contracting companies in the Gaza Strip. And this result indicate that development of human resource programs required cost and this cost consider high at contracting companies in Gaza Strip compared with weak financial condition for this companies and this results compatible with Lange et al. (2000)

- The mean for lowest item rank lack of time and work pressure in companies equals (3.60) and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is equal the neutrality degree of (3). This implies that the respondents agree that lack of time and work pressure in companies and this item take last rank on seventh group that investigated factors that barring implementation of human resource development in contracting companies in the Gaza Strip. And this result disagree with Sambrook (2002) results, because respondents deal at this factor based in availability of time in companies in last years that work are weak in companies generally, and if they respondent deal with factor in normal situation, It may be taken from the most factors that barring implementation of human resource development in contracting companies.

In general, the mean for the whole field “Factors that barring implementation of human resource development” equals (3.93) and the sig. (p-value) equals (0.00) less than ($\alpha = 0.05$), which shows statistical significance and that the response level of this field is greater than the neutrality degree of (3). This indicates that the respondents agree with the field “Factors that barring implementation of human resource development”

4.7 The most important factors related to factors that affecting and leading to development of human resource that achieving quality in contracting companies in Gaza Strip

Table 4.11 : The most important factors related to factors that leading to development of human resource

| item | Mean | P -value | Test value | Group rank | Part 2 rank |
|---|------|----------|------------|------------|-------------|
| Implement efficiency criteria for employee selection | 4.74 | 0.00 | 2.9 | 1 | 1 |
| Trainers efficiency and criteria for selection training team. | 4.72 | 0.00 | 9.3 | 1 | 2 |
| Hold training courses to develop knowledge and theoretical capabilities of employees | 4.39 | 0.00 | 4.3 | 2 | 3 |
| Paying Salaries and wages regularly and with fairly way and wages increase with according high cost of living | 4.31 | 0.00 | 12.8 | 2 | 4 |
| Increase belonging employees for company | 4.25 | 0.00 | 12.5 | 1 | 5 |
| Decrease work accident in sites work | 4.24 | 0.00 | 10.3 | 2 | 6 |
| Follow the company appraisal the managers for their employees system | 4.22 | 0.00 | 11.8 | 1 | 7 |
| Existence supervision from company at employees to obligate with work and profession ethics | 4.21 | 0.00 | 11.9 | 1 | 8 |
| Company follow-up for changing in materials, new equipment and machines that are put on the market | 4.19 | 0.00 | 10.8 | 1 | 9 |
| Company ability for management their resources with efficiency and effective way | 4.18 | 0.00 | 11.2 | 3 | 10 |
| Highest ten items of the groups | 4.35 | | 9.76 | | |

- Table (4.11) shows that The most important factors related to factors that affecting and leading to development of human resource that achieving quality in contracting companies in Gaza Strip. Factors that take rank 1,2,5,7,8,9 in part two, each factor take the highest rank in each group and the factors that take rank 3, 4, 6 in part two take the second rank in second, first, third groups respectively and factor that take rank 10 at part two take the third rank in group one. From part two and their sub group results, it is illustrate that results are accurate because the most important factors in part two related to factors that affecting and leading to development of human resource that achieving quality in contracting companies in Gaza Strip also take the most important factors in their groups.
- The highest mean equals (4.74) for item implement efficiency criteria for employees selection related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). And this item take first rank on first group which investigated factors related to main practices for human resource management and this result is logic because development of human resources mainly depend on selection criteria's and must be sound to form efficient staff, And if employees selected without any consideration for efficiency. The output of human resource development and training programs certainly weak.
- The second highest mean equals (4.72) for item trainers efficiency and criteria for selection training team related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip and the sig. (p-value) equals (0.00), which shows statistical significance and that the response level of this item is greater than the neutrality degree of (3). This implies that the respondents agree that trainers efficiency and criteria for selection training team, and this item take first rank at second group that investigated factors related to training. This result is illustrates the importance role of trainers staff efficiency in success of training program and must chosen based on sound criteria not randomly or search for cheapest trainers.
- From previous results, the first factor rank implement specific criteria for employees selection and second factor rank trainers efficiency and criteria for selection training team related factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. This results conclude that trainers and trainees must be efficient and selection them based on sound criteria.

- The third highest mean equals (4.39) for item hold training courses to develop knowledge and theoretical capabilities of employees related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip, and the sig. (p-value) equals (0.00), This implies that the respondents agree that hold training courses to develop knowledge and theoretical capabilities of employees and this item take second rank on second group that investigated factors related to training. It can be concluded that the hold of training programs and courses increase efficiency and develop of employees staff skills and training programs must be cover all field work practical and theoretical and to include all employees in company.
- The fourth highest mean equals (4.31) for item paying salaries and wages regularly and with fairly way and wages increase with according high cost of living related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip, and this item take second rank at first group that investigated factors related to main practices for human resource management. This result is sound because salaries and wages are considered form most motivation for employees to work efficiently and to develop their skills to improve their salaries and any delay in paying salaries and wages influence at employees morale to joint with training programs.
- The fifth highest mean equals (4.25) for item increase belonging employees for company related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip, and this item take first rank on third group that investigated factors resulted from training programs. It can be conclude that arise employees belonging for company as resulted from training programs develop human resource in company and lead to quality achievement and improve employees accomplishment and save company resources.
- The sixth highest mean equals (4.24) for item decrease work accident in sites work related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. And this item take second rank on third group that investigated factors resulted from training programs. And this factor is very important because training employees at safety skills develop the quality work and decrease work accidents and save human resource that consider the most important resource in construction industry.

- The seventh highest mean equals (4.22) for item follow the company managers appraisal for their employees system related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. And this item take first rank on fifth group that investigated factors related to who carry out of employees evaluation. That mean the importance of managers appraisal for employees because fair of managers appraisal in most condition compared with team appraisal, peer appraisal and subordinate appraisal that influenced from competition and this result is sound because the managers known all details about efficiency and performance of their employees.

- The eighth highest mean equals (4.21) for item existence supervision from company at employees to obligate with work and profession ethics system related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. And this item take first rank on sixth group that investigated other factors. That mean the development of human resource by supervision from company at employees to obligate with work and profession ethics achieve quality in contracting companies and decrease conflict between company and other parties in construction industry.

- The ninth highest mean equals (4.19) for item company follow-up for changing in materials, new equipment and machines that are put on the market equals related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. And this item take first rank on forth group that investigated factors related to work market changes (Materials / equipments and machines /workers). That mean the importance of follow-up for changing in materials, new equipment and machines that are put on the market by company to train employees and to be familiar with it.

- The tenth highest mean equals (4.18) for item management their resources with efficiency and effective way related to factors that leading to development of human resource that achieving quality in contracting companies in Gaza Strip. And this item take third rank on first group that investigated factors related to main practices for human resource management. This result indicate that resources management in company must be efficiently and effectively used to develop the company employees skills.

From previous results for most important ten factors related to factors that affecting and leading to development of human resource that achieving quality in contracting companies in Gaza Strip. It is clear that mean values is very close to each other that illustrate that this factors is very important to implement it as one package to develop human resource in contracting companies in Gaza Strip.

4.8 The most important factors related factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip.

In contracting companies in Gaza Strip there are many obstacles and barriers to implement human resource development, were their exist many barriers in company internal environment and others barriers from external environment for company. Table 4.13 show the most important five factors related factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip.

Table 4.12 : The most important factors that barring implementation of human resource development in contracting companies in Gaza Strip.

| item | Mean | P -value | Test value | Group 7 rank | Part 2 rank |
|--|-------------|-----------------|-------------------|---------------------|--------------------|
| Discontinuous of companies work and lack of continuity of work because of the external conditions of the company | 4.27 | 0.00 | 11.2 | 1 | 1 |
| The company unable to cover human resource development programs costs | 4.09 | 0.00 | 7.6 | 2 | 2 |
| Lack of job security at employees because of the temporary contract with the company | 4.03 | 0.00 | 9.9 | 3 | 3 |
| Company dependence on subcontractors in implementation of projects | 3.99 | 0.00 | 6.9 | 4 | 4 |
| Indecision companies owner to implement training programs for employees because employees change continuously | 3.97 | 0.00 | 7.8 | 5 | 5 |
| Highest five items of the group | 4.07 | | 8.68 | | |

Table (4.12) shows that highest five factors affecting and barring implementation of human resource development in contracting companies in Gaza Strip. The discontinuous of companies work and lack of continuity of work because of the external conditions environment of the company take first rank at factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip. The discontinuity companies work in Gaza Strip especially in last year's because siege doesn't allow the company to save their staff to develop them and employees doesn't feel with job stability to develop their skills and they are feeling continuously with anxiety frustration.

Factor company unable to cover human resource development programs costs take second rank at factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip. And this result indicate that development of human resource programs required cost and this cost consider high at contracting companies in Gaza Strip compared with weak financial condition for this companies, but in fact the cost of human resource development considers very low compared with benefit of development for company.

Factor lack of job security at employees because of the temporary contract with the company take third rank at factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip. Because there is not motivation for employees to still in their job position. That lead to employees doesn't participate with company training programs or weak participation and doesn't develop their skills individually.

Factor company dependence on subcontractors in implementation of projects take fourth rank at factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip. Because company in this condition doesn't own sufficient staff to execute projects and they saw that development of subcontractor team for responsibility of their companies. And subcontractor doesn't fear at his company reputation because their company name doesn't appear clearly in projects.

Factor indecision companies owner to implement training programs for employees because employees change continuously take fifth rank at factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip. Because human resource development cost and fear of company from employees changes continuously put them in indecision condition. From this item the company must attract

efficient employees to solve problem, that they need simple development to decrease human resource development cost.

From most factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip results. It is shown that mean values very close to each other were mean value are limited from 4.27 to 3.97 for most five factors affecting and that barring implementation of human resource development that mean all factors influence at barring with convergent degrees to take it in consider.

4.9 Groups rank in part two: groups that leading to human resource development to achieve quality in contracting companies :

Table 4.13 : One-Sample T test mean and P-value (sig.) of the overall Groups in part 1

| Part two groups | Mean | P -value | Test value | Groups rank |
|---|-------------|-----------------|-------------------|--------------------|
| Factors resulted from training programs. | 3.94 | 0.00 | 13.2 | 1 |
| Factors related to main practices for Human resource management. | 3.93 | 0.00 | 11.5 | 2 |
| Factors related to work market changes (Materials / equipments and machines /workers) | 3.91 | 0.00 | 10.7 | 3 |
| Other factor | 3.84 | 0.00 | 12.5 | 4 |
| Factors related to training. | 3.71 | 0.00 | 8.1 | 5 |
| Factors related to who carry out of employees evaluation. | 3.58 | 0.00 | 5.6 | 6 |
| All the item of the group | 3.82 | 0.00 | 13.8 | |

(Statistical Significance at level $\alpha = 0.05$)

- Table (4.13) shows the respondents' opinions towards the overall groups in part two that contain factors of human resource development that leading to achieving quality in contracting companies in the Gaza Strip that consist of six groups as they are ranked in a descending order according to the acceptance degree, where the first rank represents the group related to factors resulted from training programs. That has the highest acceptance degree from companies respondents in condition of training programs

implementation, factors resulted from training programs achieved and lead to quality achievement in company.

- The second group rank at groups related factors of human resource development that leading to achieving quality in contracting companies in the Gaza Strip, represents group related factors to main practices for human resource management. That has the highest acceptance degree from companies respondents for this group. Because there is doesn't exit human resource development in any company or organization without sound implementation for human resource management main practices. It can be said that human resource management is foundation for human resource development.

- The third group rank at groups related factors of human resource development that leading to achieving quality in contracting companies in the Gaza Strip, represents factors in group related to work market changes materials, equipments, machines and workers. This indicate the importance of following up work marker changes related to materials, equipments, machine and workers by company to be able to design training programs and programs needs determination.

- The last group rank at groups related factors of human resource development that leading to achieving quality in contracting companies in the Gaza Strip, represents factors related to who carry out of employees evaluation. The last rank not mean that doesn't import factors, were the group mean equals (3.58) and highest group rank equals (3.94) that mean the difference between highest and lowest group is simple for part related factors of human resource development that leading to achieving quality in contracting companies in the Gaza Strip. Importance of appraisal process for employees and using different methods help company to identification current employees skills to determine training needs for employees.

4.10 Hypothesis Testing:

4.10.1 First Main Hypothesis Testing :

The Pearson Correlation Coefficient test was used to examine the correlation significance in testing the first main hypothesis via its subsidiary ones as the following:

Null Hypothesis: There is no significant statistical correlation at level ($\alpha = 0.05$) between the groups factors of human resource development and quality in contracting companies in the Gaza Strip.

Alternative Hypothesis: There is a significant statistical correlation at level ($\alpha = 0.05$) between the fields of Factors of human resource development and quality in contracting companies in the Gaza Strip.

If the sig. (p-value) was greater than the significance level at ($\alpha = 0.05$), then we could not reject the null hypothesis and this reveals that there does not exist a significant statistical correlation between the fields.

Table 4.14 : The correlation coefficient for part 1

| Factor | Pearson coefficient | P –value |
|-----------------------------|---------------------|----------|
| Human recourses development | 0.98 | 0.00 |

**** (Indicates Correlation Significance at $\alpha = 0.05$)**

Table (4.14) shows that the correlation coefficient between factors of human resource development and quality in contracting companies in the Gaza Strip equals (0.98), and the p-value (sig.) equals (0.00) which is less than ($\alpha = 0.05$). This result confirms a positive relation indicating a statistical significance between factors of human resource development and quality in contracting companies in the Gaza Strip.

4.10.2 Second main hypothesis :

Hypothesis Two: There is a significant statistical correlation at level ($\alpha = 0.05$) between the existence of many barriers to implement human resource development and quality in contracting companies in the Gaza Strip

Table 4.15 : The correlation coefficient for part 2

| factor | Pearson coefficient | P –value |
|----------|---------------------|----------|
| Barriers | 0.70 | 0.00 |

Table (4.15) shows that the correlation coefficient between the existence many barriers to implement human resource development and quality in contracting companies in the Gaza Strip equals (0.70), and the p value (sig.) equals (0.00) which is less than ($\alpha = 0.05$). This result confirms a positive relation indicating a statistical the existence of many barriers to implement human resource development and quality in contracting companies in the Gaza Strip.

4.10.3 Second main hypothesis testing and testing its sub-hypothesis:

Null Hypothesis: There are no significant statistical differences at level ($\alpha = 0.05$) among the respondents in their opinions about the impact of role of human resource development in achieving quality in contracting companies in the Gaza Strip attributed to their characteristic factors (job description and experience).

Alternative Hypothesis: There are significant statistical differences at level ($\alpha = 0.05$) among the respondents in their opinions about the impact of role of human resource development in achieving quality in contracting companies in the Gaza Strip attributed to their characteristic factors (job description and experience).

4.10.4 Sub-Hypothesis One Testing:

Sub-Hypothesis One

Table 4.16 :One-Way ANOVA Test for testing the differences due to job description

| No. | factor | Test value | P -value | Mean | | | | |
|-------------------|-----------------|-------------|-------------|------------|------------|------------|------------|------------|
| | | | | owner | C.manager | H.Rmanager | P.manager | other |
| 1 | Human recourses | 0.63 | 0.63 | 3.9 | 3.8 | 3.8 | 3.7 | 3.9 |
| 2 | barriers | 0.46 | 0.76 | 3.9 | 3.7 | 3.7 | 3.8 | 3.6 |
| All Groups | | 0.59 | 0.66 | 3.9 | 3.8 | 3.9 | 3.7 | 3.7 |

(Differences Denote Significance at Level $\alpha = 0.05$)

Table (4.16) shows that the study sample have a correspondent opinions over the study fields regardless of the job description , and this confirms that the job description does not influence the study sample opinions towards the study fields. That can be interpreted that respondents based on job description are close to each other in work scope and their knowledge about human resource development is convergent especially human resource development in contracting companies in Gaza Strip is not implemented in satisfied manner.

Sub-Hypothesis Two:

Table 4.17 : One-Way ANOVA Test for testing the differences due to the experience

| No. | field | Test value (f) | P -value | Mean | | | |
|-------------------|-----------------------------|----------------|-------------|----------------|-------------|---------------|-----------------|
| | | | | Less than 3 y. | 3-less 5 y. | 5- less 10 y. | More than 10 y. |
| 1 | Human recourses development | 0.82 | 0.48 | 3.7 | 3.8 | 3.6 | 3.8 |
| 2 | barriers | 1.11 | 0.34 | 3.7 | 3.6 | 3.5 | 3.9 |
| All fields | | 0.94 | 0.42 | 3.7 | 3.7 | 3.8 | 3.8 |

(Differences Denote Significance at Level $\alpha = 0.05$)

Table (4.17) shows that the study sample have a correspondent opinions over the study fields regardless of the experience , and this confirms that the experience does not influence the study sample opinions towards the study fields. That can be interpreted that doesn't exist tangible progress in human resource development in contracting companies in Gaza Strip, were the knowledge at employee about human resource development form at beginning of years work and 93.5% of respondent are more 3 years experience that lead to the experience does not influence the study sample opinions towards the study fields

Sub-Hypothesis Three:

Table 4.18 :One-Way ANOVA Test for testing the differences due to Average of projects value that executed annually for last five years (Dollar)

| No. | factor | Test value | P -value | Mean | | | |
|------------|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | | Less 0.5 | 0.5-less 1 | 1-less 2 | 2-more 2 |
| 1 | Human recourses dev | 0.851 | 0.471 | 3.867 | 3.645 | 3.907 | 3.744 |
| 2 | barriers | 1.487 | 0.225 | 3.862 | 3.500 | 4.035 | 3.814 |
| All fields | | 1.093 | 0.358 | 3.866 | 3.624 | 3.925 | 3.754 |

(Differences Denote Significance at Level $\alpha = 0.05$)

Table(4.18) shows that the study sample have a correspondent opinions over the study fields regardless of average of projects value that executed annually for last five years. This confirms that the differences due to the average of projects value that executed annually for last five years does not influence the study sample opinions towards the study fields.

Table 4.19:One-Way ANOVA Test for testing the differences due to the No of employees

| No. | factor | Test value | P -value | Mean | | | |
|------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | | 15 or less | 16-30 | 31-50 | More 50 |
| 1 | Human recourses | 0.221 | 0.882 | 3.751 | 3.724 | 3.780 | 3.860 |
| 2 | barriers | 0.244 | 0.865 | 3.829 | 3.703 | 3.788 | 3.909 |
| All fields | | 0.247 | 0.863 | 3.762 | 3.721 | 3.781 | 3.867 |

(Differences Denote Significance at Level $\alpha = 0.05$)

Table (4.19) shows that the study sample have a correspondent opinions over the study fields regardless of the number of employees , and this confirms that the number of employees does not influence the study sample opinions towards the study fields.

Chapter 5

Development of framework

5.1 Introduction

This chapter presents a framework for effective implementation of human resource development to achieving quality in contracting companies in Gaza Strip. The findings drawn up from the literature review, current situation, interview and questionnaire survey were triangulated to help in establishing the framework. By using this framework contracting companies can follow the procedures to development their human resources to achieve quality by taking high care to main human resource practices and holding training programs and courses for employees.

Frameworks are considered most useful, when used at new employees especially if they doesn't own practical experience and are recently graduated. However, frameworks are also useful for all employees in company. The new employees to expand their Knowledge and experience and the old employees to refresh and update their knowledge and experience , since the training programs must include all employees in company.

5.2 Purpose of Framework

The purpose of developed policy framework for HRD in contracting companies in Gaza Strip

- Define the processes that will be used to plan and implement HRD in contracting companies.
- Provide guidelines and direction for contractors to deal with HRD easily in their companies.
- Provide a system of HRD including best practices and standard operating procedures.

5.3 Scope of Framework

The framework addresses the process including the procedures for HRD implementation and management in contracting companies in Gaza Strip.

5.4 Motivation for framework

Framework is a useful tools to demonstrate integrated, systematic planning in relation to the achievement of goals and expected outcomes. The graphic features of the framework serve to depict the relationships among the components of the HRD process. The framework will also be an effective tool in communicating the desired results. It represents a vision of how staff and employees involved in HRD process, intend to produce anticipated results through resources and training program activities. Furthermore, the HRD framework is helpful in focusing activities and in clarifying how each is expected to contribute to the stated outcomes. Through linking HRD process stages in framework, companies can implement programs better and able to monitor at direction training regarding the most important company objectives. The systematic framework encourage practical learning and development in addition with theoretical and knowledge side. It is acknowledged that the framework is not static; hence there is a need for continuous review and improvement. The intention is to transform the framework into a dynamic tool that will assist the companies to implement HRD programs.

5.5 Success factors for policy framework

A number of conditions are required for the successful implementation of the human resource development policy framework:

1. **Gradual implementation of HRD training programs** - Developing standards and procedures for the HRD policy frame work takes time, and the employees involved in this process require time to become familiar with training program and to be in their culture. Through promotion and use of the framework, it will become an integral part of the employees development and lead to capacity building in company, so the implementation of programs should to be gradual.
2. **Employees Involvement** - Employees involvement is critical for its success. The framework takes time to become include all employee to ensure integral the efficiency in company.

3. **Effective Mechanisms for Coordination** - The framework is an instrument or a tool which unifies the educational and development system, and therefore needs mechanisms for coordination and supervision, for pooling the interests of employees and for managing the dynamic processes in its development and implementation.

4. **Flexibility** - The framework should be flexible to accommodate different types of learning and development process.

5.6 Description of Framework

The framework focuses on the process of HRD and training programs implementation and their stages must to followed to achieve the training programs goals.

Training programs process and human resource development are not separated at main functions and practices of human resource management. There are interlock with each other. The human resource management main practices influence at human resource development in contracting companies to achieve quality as resulted from questionnaire analysis and the main factors from human resource management influence at HRD are:-

1. Employees must chosen based on efficiency criteria to work in company,
2. Paying salaries and wages regularly and fairly between employees,
3. Establishment reward and motivation system in company,
4. Company must take high attention for safety and employees health.

So the company must take high care when dealing with previous functions and factors. If the implementation of training program are done without taking companies high attention for previous factors, The results from training programs will be weak. The training programs consist of four stages as shown in figure 5.1 :

Stage 1: Assessment stage.

Stage 2: Training programs design stage.

Stage 3: Implementation stage.

Stage 4: Evaluation stage.

Policy framework for HRD

Before implementation HRD training program company must take high care for follow

- Employees must chosen based on efficiency criteria to work in company
- Paying salaries and wages regularly and fairly between employees
- Establishment reward and motivation system in company
- Company must take high attention for safety and employees health

Stages of human resource development training programs

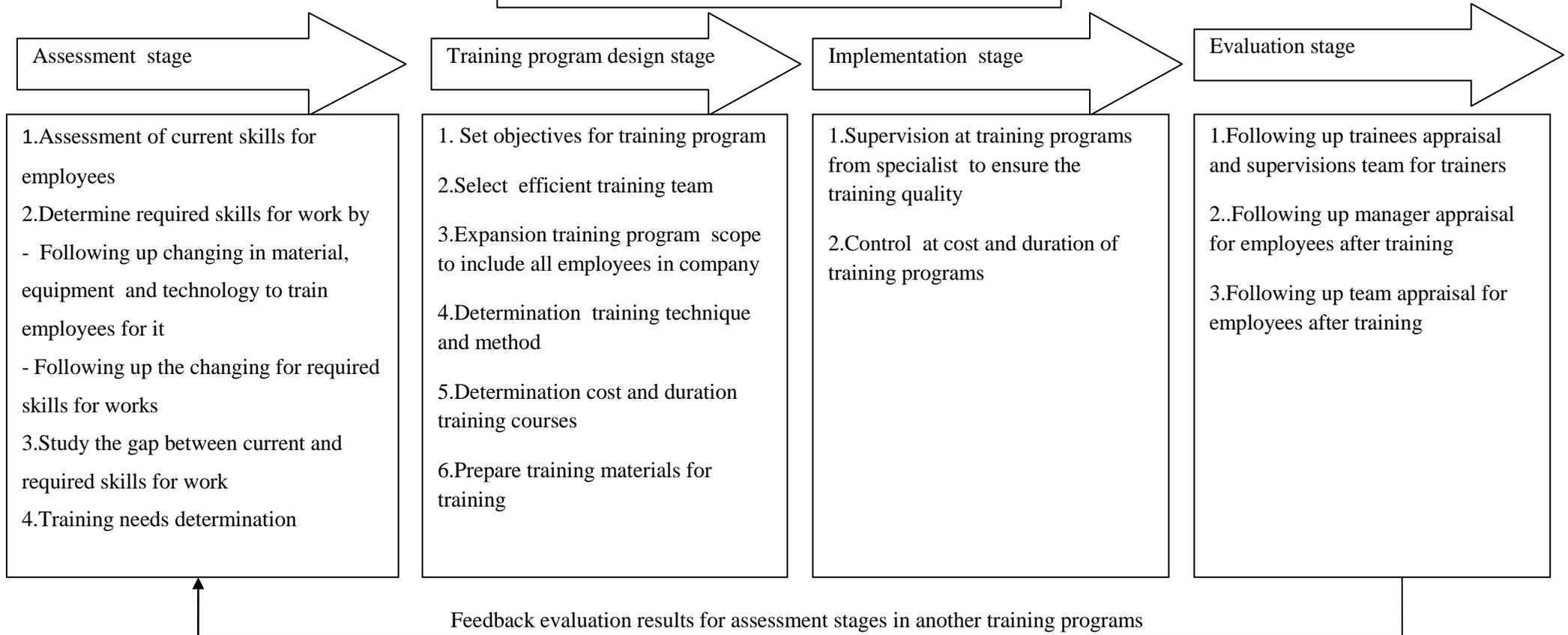


Figure 5.1 : Policy framework for human resources development in contracting companies in Gaza Strip

Stage 1: Assessment stage

This is the first stages of training program for human resource development in contracting companies to take picture for current situation in company and existing skills to start at implementation of training programs, and this stage is considered an important stage and consist of:

1. Assessment of current skills for employees

This is the first step of assessment stage to know the company employees skills and this step can consider diagnostic stage to know the company where it is.

2. Determine required skills for work

This is the second step of assessment stage, were this step achieved by knowing nature and scope of work for company and other issue help to determine required skills for work as follow:-

- Following up changing in material, equipment and technology to train employees for it
- Following up the changing for required skills for works

It represent to company where it will go.

3. Study the gap between current employees skills and required skills for work

This is the third step for assessment stage, were study the gap between current employees skills and required skills for work to empower the company for determining the training needs and in sometimes it required from company to attract new employees to work in company because the required skills not existing in company.

9. Training needs determination

It is the final step from assessment stage. The output of training needs determination depend in high degree to accuracy in previous steps in assessment stage.

Stage 2: Training programs design stage

It is the second stage of training programs for human resource development in contracting companies and this stage consist of :-

1. Set objectives for training programs

Objectives of training program must be clear and set it from initial to be reference scale for achievement percentage after end of training programs , and help company that programs training is not to deviate from its path

2. Select efficient training team

It is the important factor when dealing with design of training programs to development human resource, where training team have intense relationship with training output and development of human resource development in contracting companies. Therefore, selecting training team must have high attention to be efficient team.

3. Expansion training program scope to include all employees in company

Design of training programs must include all employees in all department in company to occurs integral development in company.

4. Determination training techniques and methods

Method of training and techniques determination to fit with required skills for work

5. Determination cost and duration training courses

Determination cost and duration training courses is important to allow the company know if they can cover this cost or not and to control it at implementation stage.

6. Prepare training materials for training

Preparing training materials is important point in this stage and it must done by experts in the field of training programs.

Stage 3: Implementation stage

Implementation stage consist of the following steps to insure correct implementation for training programs:

1. Supervision at training programs

Supervision at training programs from specialists is very important to ensure the training quality. The issues that help the company to supervise for training program

- ❖ determination coordinator for each training courses from group to be contact between group and company,

- ❖ determination inspection team for training program whether internal from company or from consultant firm,
- ❖ preparing training programs reports continuously and periodically,
- ❖ Following up trainees appraisal and supervisions team for trainers from company.

2. Control at cost and duration of training programs

This is important point in implementation stage to ensure that actual cost and duration of training programs do not exceed the planned cost. The duration can be determined in second stage of training programs design stage. This must continuously done to discover any problem in this point and take corrective action in the suitable time.

Stage 4: Evaluation stage

Evaluation stage consist of three type of appraisal to evaluate to what extent the employees benefit from training programs and the result of evaluation can use to feedback to assessment stage to use it in another training programs and three type as follow:

1. Following up trainees appraisal and supervisions team for trainers

Following up trainees appraisal and supervisions team for trainers may take indication about benefit of trainees from training programs and take vision for company to deal with trainers in another training programs. This appraisal done after finishing of training course directly.

2. Following up manager appraisal for employees after training.

It is the second method for training programs evaluation and to what extent employees benefit from training because the managers known all details about efficiency and performance of their employees. This appraisal must done after sufficient period e.g. after month to be the company able to compare between employees performance before and after training implementation.

3. Following up team appraisal for employees after training

It is the third method for training programs evaluation and to what extent employees benefit from training because contribution team in appraisal process for employee take

indicate that appraisal is impartial. This appraisal must be done after a sufficient period such as manager appraisal to be the company able to compare between employees performance before and after training implementation.

5.7 Frame work validation

The proposed frame work revised by supervisor and put some notes and modification, then it was distributed at three experts from contracting companies in Gaza Strip to check the validation of proposed frame work and to suggest any notes and modifications to improve it and the final framework picture shown in figure 5.1

The following modification suggested from expert:-

1. Adding following up the changing for required skills for works to help the company to determine required skills for work in assessment stage.
2. Adding prepare training materials for training in training program design stage.
3. Omit prepare required reports from implementation stage because it included in supervision at training programs from specialist to ensure the training quality.
4. Feedback evaluation results for assessment stages to use it in another training programs was suggested

After the previous modification implemented at frame work, the experts agreed that the frame work was valid and suitable enough to implement at employees in contracting companies in Gaza Strip.

Chapter 6

Conclusion and recommendations

This chapter introduces the research conclusion and recommendations that may contribute in serving the titled objectives of the research and benefit from this thesis in practical way. The aim of this research is to provide guidelines for contractor to develop human resource in their companies that enhance quality of work in construction industry in Gaza strip.

6.1 Conclusion

Many definition for human resource development was mentioned in literature review. The most acceptable definition is “human resource development is a set of systematic and planned activities designed by an organization to provide its members with the opportunities to learn necessary skills to meet current and future job demands”. Human resource development is one of human resource management main practices, so companies must take high care for main human resource management practices. Contractors must consider human resource as important resources in company which need to be kept and developed. Human resource development is the integration of individual, career and organization development roles in order to achieve maximum productivity, quality, opportunity and fulfillment of organizations members as they work to accomplish the goals of the organization. Quality in turn is a function of knowledge and experience background, training programs and the overall health of the employees. The quality and adaptability of the labor force is a key driver in creating a favorable environment for both domestic and foreign enterprises to grow through new investment and to adapt quickly to changing circumstances. Human resource development gives the company a competitive edge. Any company, which ignores human resource development, is doing itself a disservice.

Structured interview was done with twenty persons from contracting companies to achieve the assessment of the current situation of human resource development in construction companies in the Gaza Strip. A questionnaire was distributed for 90 contracting companies in Gaza Strip and response rate was 85.5%.

The results of the study clearly indicate that human resources development in contracting companies in Gaza Strip doesn't take sufficient attention as shown in table (4.1) and human resources management main practices doesn't implemented correctly and in effective way. And resulted number of related critical factors that affecting and leading to

development of human resource that achieving quality in contracting companies in Gaza Strip, the most important factors as follow:

- Implement efficiency criteria for employees selection to work in company.
- Trainers efficiency and criteria for selection training team.
- Hold training courses to develop knowledge and theoretical capabilities of employees.
- Paying salaries and wages regularly and with fairly way and wages increase with according high cost of living.
- Increase belonging employees for company.
- Decrease work accident in sites work.
- Follow the company appraisal the managers for their employees system.
- Existence supervision from company at employees to obligate with work and profession ethics.
- Company follow-up for changing in materials, new equipment and machines that are put on the market.
- Company ability for management their resources with efficiency and effective.

And the results show that most five important factors related factors affecting and that barring implementation of human resource development in contracting companies in Gaza Strip.

- Discontinuous of companies work and lack of continuity of work because of the external conditions of the company.
- The company unable to cover human resource development programs costs.
- Lack of job security at employees because of the temporary contract with the company.
- Company dependence on subcontractors in implementation of projects.
- Indecision companies owner to implement training programs for employees because employees change continuously.

6.2 Recommendations

There are many practical recommendations for many parts such as contracting companies, contractors union and owner in Gaza Strip and the main part are contracting companies to help them to develop their employees to achieve work quality.

6.2.1 Recommendations for contracting companies

1. Employees must be chosen based on efficiency criteria to work in contracting companies in Gaza Strip.
2. Contracting companies must take high care when choosing trainers or training team.
3. Training programs implementation must be in organized manner and represent from general policies for contracting companies. It must start with training programs design and determine their objectives. It must include all employees in company.
4. Contracting companies must have fair salaries and wages system. Salaries should be increased according with cost of living.
5. Special training for employees in health and safety must be included in contracting companies training programs.
6. Employees in contracting companies must be evaluated periodically based on comprehensive system. It should be clear for employees and following managers and team appraisal for employees.
7. Contracting companies must take high attention for employees obligation with work and profession ethics and existence supervision for encroachment from employees.
8. Contracting companies must follow up the changing in materials, equipment, machines and new technology related construction industry that are put on the market to consider it in training programs for employees.
9. Rewards and motivations system must be established in contracting companies to develop their human resources.
10. The contracting companies have to follow the right management principles to be efficiently and effectively help in employees developing.
11. Improving the companies for work environment and general work conditions for employees and providing them for required needs from tool and services.
12. Exchange the contracting companies in Gaza Strip for experience with local and foreign companies.
13. Reduce employees changing in company as much as possible by improving of their general conditions.

6.2.2 Recommendations for contractors union

1. Contractors union should hold meetings and workshops for contractors to spread human resource development culture and mechanisms and talking about importance of training programs for contracting companies.
2. The contractors unions should supervise at implementation of human resource management and development.
3. The contractors union should include the training programs and teams efficiency in the requirements for contractors classification.
4. Contractors union should establish a special training center to serve registered contracting companies and include all workers in contracting companies such as managers, engineers, accountants, technicians and skilled labor.

6.2.3 Recommendations for owners

1. Awarding must be based on multi criteria's system such as efficiency of contractor staff, contractor reputation and existing training program in company and not based on lowest bid price to encourage the contractors to develop their employees.
2. Contractor technical team required for any project must be qualified and suitable with project nature.

References

- Abu-Doleh, J., 2012. Human resource management and total quality management linkage –rhetoric and reality. *International Journal of Commerce and Management*, Vol. 22, No. 3, pp. 219 - 234
- Ahmad, S. and Schroeder, R., 2003. The impact of human resource management practices on operational performance: recognizing country and industry differences. *Journal of Operations Management*, Vol. 21, pp. 19-43
- Ahmed, Sh. and Akhtar, M., 2012. Development of scale to assess effective execution of human resource practices for general public sector universities. *International Journal of Applied Science and Technology*, Vol. 2 No. 7, pp. 211-223
- Al-abadallat, A., 2013. The effect of quality management practices on organizational performance in Jordan: An empirical study. *International Journal of Financial Research*, Vol. 4, No. 1, pp. 93-109
- Alniacik, U., Alniacik, E., Akcin, K. and Erat, S., 2012. Relationships between career motivation, affective commitment and job satisfaction, *Procedia - Social and Behavioral Sciences*, Vol. 58, pp. 355 – 362
- Arditi, D. and Gunaydin, H., 1997. Total quality management in the construction process. *International Journal of Project Management*, Vol. 15, No. 4, pp. 235-243
- Arumugam, V., Mojtahedzadeh, R., Asefi, S. and Mehrizi, A., 2011. The impact of human resource management practices on financial performance of Malaysian industries. *Australian Journal of Basic and Applied Sciences*, Vol. 5, No. 10, pp. 951-955
- Barnard, Y., Veldhuis, G. and Rooij, J., 2001. Evaluation in practice : Identifying factors for improving transfer of training in technical domains, *Studies in Educational Evaluation*, Vol. 27, pp. 269-290
- Bibi, A., Lanrong, Y. and Sharma, T., 2001. Human resource management and job satisfaction of the employees of the Pakistani universities, *Universal Journal of Management and Social Sciences*, Vol. 2, No. 5, pp. 8-21

- Canning, R., 1996. Enhancing the quality of learning in human resource development. *Journal of European Industrial Training*, Vol. 20 , No. 2 , pp. 3 - 10
- Chow, I., 2004. The impact of institutional context on human resource management in three Chinese societies. *Employee Relations*, Vol. 26, No. 6, pp. 626 – 642
- Christopher, Ch. and Chan, Ch., 2008. Human resource practices, organizational commitment and intention to stay. *International Journal of Manpower*, Vol. 29, No. 6, pp. 503 - 522
- Costantini, V. and Monni, V., 2008. Environment, human development and economic growth. *Ecological Economics*, Vol. 64, pp. 867–880
- Craven, B. and McNulty, M., 1994. Management Training and Development Expenditures. *Managerial Auditing Journal*, Vol. 9, No.6, pp. 3 - 9
- Darwish, T. and Singh, S., 2013. Does strategic human resource involvement and devolvement enhance organizational performance?, *International Journal of Manpower*, Vol. 34, No. 6, pp. 674 – 692
- Ebert, R., Tanner, G. and Tuturea, M.,1996. Coaligning market requirements, quality capabilities, and human resource management: how will eastern europe compete in manufacturing?. *Journal of Quality Management*, Vol. 1, No. 2, pp. 243-264
- Elnaga, A. and Imran, A., 2013. The effect of training on employee performance. *Journal of Surveying, European Journal of Business and Management*, Vol. 5, No. 4, pp. 137-147
- Garavan, Sh., Heraty, N. and Barnicle, B., 1999. Human resource development literature: current issues, priorities and dilemmas, *Journal of European Industrial Training*, Vol. 23, No. 4, pp. 169-179
- Garavan, Th., Morley, M., Gunnigle, P. and Collins, E., 2001. Human capital accumulation: the role of human resource development. *Journal of European Industrial Training*, Vol. 25, No. 2, pp. 48 - 68

- Gberevbie, D., 2012. Impact of human resource development and organizational commitment on financial sector employees in Nigeria. *Scientific Annals of the „Alexandru Ioan Cuza” University of Iași Economic Sciences*, Vol. 59, No. 2, pp. 29-41
- Giran, H., Amin, A. and Abdul Halim, B., 2014. The impact of self-efficacy towards training motivation at KolejPoly-Tech MARA Kuantan, Malaysia. *Asian Social Science*, Vol. 10, No. 19, pp. 69- 76
- Haslinda, A., 2009. Evolving terms of human resource management and development, *The Journal of International Social Research*, Vol. 2, No. 9, pp. 180-186
- Heravitorbati, A., Coffey, V. and Trigunarsyah, B., 2011. Assessment of requirements for establishment of a framework to enhance implementation of quality practices in building projects, *International Journal of Innovation, Management and Technology*, Vol. 2, No. 6, pp. 465-470
- Howard, L. and Foster, S., 1999. The influence of human resource practices on empowerment and employee perceptions of management commitment to quality, *Journal of Quality Management*, Vol. 4, No. 1, pp. 5-22
- Ikediashi, D., Ogunlana, S., Awodele, O. and Okwuashi, O., 2012. An evaluation of personnel training policies of construction companies in Nigeria. *J Hum Ecol*, Vol. 40, No. 3, pp. 229-238
- Izvercian, M., Radu, A., Ivascu, L. and Ardelean, B., 2014. The impact of human resources and total quality management on the enterprise, *Procedia - Social and Behavioral Sciences*, Vol. 124, pp. 27 – 33
- Janipha, N. and Ismail, F., 2000. Conceptualization of quality issues in Malaysian construction environment. *Procedia - Social and Behavioral Sciences*, Vol. 101, pp. 53 – 61
- Katou, A., 2008. Measuring the impact of HRM on organizational performance. *Journal of Industrial Engineering and management*, Vol 1, No. 2, pp. 119-142
- Khan, M., Khan, N. and Mahmood, Kh., 2012. An organizational concept of human resource development – How human resource management scholars view

'HRD'(Literature Review). *Universal Journal of Management and Social Sciences*, Vol. 2, No.5, pp. 36 - 47

Kokkaew, N. and Koompai, S., 2012. Current practices of human resource management (HRM) in Thai construction industry: A risk and opportunity perspective, *Review Integrative Business Economics*, Vol. 1, No. 1

Kumar, R., 2012. Human resource management and total quality management – an important aspect in the bank., *Global Journal of Interdisciplinary Social Science*, Vol. 1, No. 1, pp. 14-20

Liu, A.and Wall, G., 2005. Human resources development in china. *Annals of Tourism Research*, Vol. 32, No. 3, pp. 689–710, 2005

M. Pournader, et al., 2014. A three-step design science approach to develop a novel human resource-planning framework in projects: the cases of construction. *International Journal of Projects Management*. accessed on 09.12.2014

Madter, N., Bower, D. and Aritua, B., 2012. Projects and personalities: A framework for individualising project management career development in the construction industry, *International Journal of Project Management*, Vol. 30, pp. 273–281

Marques, G., Moreno, M. and Maria, L., 2013. Driving human resources towards quality and innovation in a highly competitive environment. *International Journal of Manpower*, Vol. 34, No. 8, pp. 839-860

Mohamad, A., Lo, M. and LA, M., 2009. Human resource practices and organizational performance. Incentives as moderator. *Journal of Academic Research In Economic*, Vol. 1, No. 2, pp. 229-244

Mudor, H. and Tooksoon, Ph., 2011. Conceptual framework on the relationship between human resource management practices, job satisfaction, and turnover, *Journal of Economics and Behavioral Studies*, Vol. 2, No. 2, pp. 41- 49

Nadarajah, SH., Kadiresan, V., Kumar, R., Kamil, N. and Yusoff, Y., 2012. The relationship of HR practices and job performance of academicians towards career development in

Malaysian private higher institutions. *Procedia - Social and Behavioral Sciences*, Vol. 57, pp. 102 – 118

Ng, S., Skitmore, R. and Haseeb, M., 2012. Towards a human resource information system for Australian construction companies. *Engineering, Construction and Architectural Management*, , Vol. 8, No. 4, pp. 238-249

Okoye, P. and Ezejiolor, R., 2013. The effect of human resources development on organizational productivity. *International Journal of Academic Research in Business and Social Sciences*, Vol. 3, No. 10 , pp. 250-268

Oztas, A., Guzelsoy, S. and Tekinkus, M., 2007. Development of quality matrix to measure the effectiveness of quality management systems in Turkish construction industry. *Building and Environment*, Vol. 42, PP. 1219–1228

Pant, I. and Baroudi, B., 2008. Project management education: The human skills imperative. *International Journal of Project Management*, Vol. 26, pp. 124-128

Quazi, H. and Jacobs, R., 2004. Impact of ISO 9000 certification on training and development activities. *International Journal of Quality & Reliability Management*, Vol. 21, No. 5, pp. 497-517

Raiden, A., Dainty, A. and Neale, R., 2004. Current barriers and possible solutions to effective project team formation and deployment within a large construction organisation. *International Journal of Project Management*, Vol. 22 , pp. 309–316

Raiden, A., Dainty, A. and Neale, R., 2004. Exemplary human resource development (HRD) within a large contractor. 20th Annual ARCOM Conference, 1-3 September 2004, Heriot Watt University. *Association of Researchers in Construction Management*, Vol. 1, pp. 457-467

Ramstad, E., 2009. Promoting performance and the quality of working life simultaneously. *International Journal of Productivity and Performance Management*, Vol. 58, No. 5, pp. 423-436

- Rezaei, A., Celik, T. and Baalousha, Y., 2011. Performance measurement in a quality management system. *Scientia Iranica Transactions E: Industrial Engineering*, Vol. 18, No. 3, pp. 742-752
- Riman, A., Irawan, D. and Abdul Halim, A., 2013. The measurement model for outsourcing worker performance by middle and big class contractor to improve the quality of building. *International Journal of Research in Engineering and Technology*, Vol. 2, No. 12, pp. 562-568
- Sahinidis, A. and Bouris, J., 2007. Employee perceived training effectiveness relationship to employee attitudes, *Journal of European Industrial Training*, Vol. 32, No. 1, pp. 63-76
- Selvam, N., 2013. The impact of human resource management in state bank of India, Chennai. *Indian Streams Research Journal*, Vol. 2, Issue.12
- Serpell, A., 1999. Integrating quality systems in construction projects: the Chilean Case. *International Journal of Project Management*, Vol. 17, No. 5, pp. 317-322
- Shahraki, A., Konarizadeh, M., Paghaleh, M. and Zarei, M., 2011. HRM effects on TQM. *Business Management Dynamics*, Vol.1, No.3, pp.01-12
- Sparkes, J. and Miyake, M., 2000. Knowledge transfer and human resource development practices: Japanese firms in Brazil and Mexico. *International Business Review*, Vol. 9, pp. 599-612
- Sweis, R., Shanak, R., Abu El Samen, A. and Suifan, T., 2014. Factors affecting quality in the Jordanian housing sector. *International Journal of Housing Markets and Analysis*, Vol. 7, No. 2, pp. 175 -188
- Tabassi, A., Ramli, M. and Abu Bakar, A., 2012. Effects of training and motivation practices on teamwork improvement and task efficiency: The case of construction firms, *International Journal of Project Management*, Vol. 30, pp. 213-224
- Tabassi, A. and Abu Bakar, A., 2009. Training, motivation, and performance: The case of human resource management in construction projects in Mashhad, Iran. *International Journal of Project Management*, Vol. 27, pp. 471-480

Tabassi, A., Ramli, M. and Abu Bakar, A., 2011. Training, motivation and teamwork improvement: The case of construction firms. *African Journal of Business Management*, Vol. 5, No. 14, pp. 5627-5636

Tam, V. and Le, Kh., 2007. Quality improvement in construction by using a Vandermonde interpolation technique. *International Journal of Project Management*, Vol. 25, pp.815–823

Uzondu, Ch., 2013. Evaluation of human resource management practices on the productivity and performance of transport organizations in Nigeria. *IOSR Journal of Business and Management*, Vol. 12, No. 1, pp. 59-70

Wadalkar, Sh. and Pimplikar, S., 2012. Effective training program for gap closing in construction industry. *IOSR Journal of Mechanical and Civil Engineering (IOSRJMCE)*, Vol. 1, No. 3 , PP. 31-38

Wirahadikusumah, R. and Pribadi, K., 2011. Licensing construction workforce. *Engineering Construction and Architectural Management*, Vol. 18, No. 5, pp. 431 – 443

The Islamic University – Gaza

Higher Education Deanship

Faculty of Engineering



الجامعة الإسلامية – غزة

عمادة الدراسات العليا

كلية الهندسة

Questionnaire about :-

**Role of human resource development in achieving quality in contracting companies
in the Gaza Strip**

Dear/ contractors.

We thank your cooperation and your contribution to filling this questionnaire which consider partial fulfillment of the requirement for degree of Master of Science in Civil Engineering / Engineering Projects Management which aim to determine role of human resource development in achieving quality in contracting companies in the Gaza Strip.

Questionnaire components

9- **First part** : General information about the respondent

10- **Second part** : Consist of factors of human resource development that leading to achieving quality in contracting companies in the Gaza Strip that consist of six groups.

- **Factors related to main practices for human resource management.**
- **Factors related to training.**
- **Factors resulted from training programs.**
- **Factors related to work market changes (Materials / equipments and machines /workers)**
- **Factors related to who carry out of employees evaluation.**
- **Others factors**

11- **Third part** : Consist of factors that barring implementation of human resource development in contracting companies in the Gaza Strip

And I appreciate your effort and your responses to the questions in the questionnaire, and we affirm that the information in this questionnaire will be used for the purposes of scientific research with the full commitment to maintain absolute confidentiality of information about you.

Researcher

Mohammed Musallam

Supervisor

Dr. Nabil El Sawalhi

First part :- General information about respondent

1. Job description

- Company's owner Company manager Human resources department manager
 Projects manager Other

2. Experience years in construction industry

- Less than 3yrs 3- Less than 5 yrs 5 -Less than 10 yrs 10 yrs or more

3. Average of projects value that executed annually for last five years (Dollar)

- Less than 0.5 million 0.5-Less than1 million 1 - Less than2 million 2 million or more

4. Number of total employees in company :

- 15 person or less 16-30 person 31 – 50 person more than 50 person

5. Number of permanent employees in company :

- 10 person or less 11-20 person 21 – 40 person more than 40 person

6. Number of employees that company attract them annually :

- 5person or less 6-20 person 21 – 30 person more than 30 person

7. Number of employees that leave or lay off from company annually :

- 5 person or less 6-10 person 11 – 20 person more than 20 person

Second part:- Factors of human resource development that leading to achieving quality in contracting companies

To what extent influence follow human resource development factors for achieving quality in contracting companies

1.low degree effect 2. Something effect 3.moderately effect 4. Significantly affect 5. Very Significantly effect.

First group:- Factors related to main practices for human resource management

| No | Factors related to main practices for Human resource management | low degree effect | Something effect | moderately effect | Significantly affect | Very Significantly effect |
|------|---|-------------------|------------------|-------------------|----------------------|---------------------------|
| 1 | | 1 | 2 | 3 | 4 | 5 |
| 1.1 | Methods and mechanisms for choosing and attract new employees | | | | | |
| 1.2 | Implement efficiency criteria for employee selection | | | | | |
| 1.3 | Existence financial compensation for employees when they are being affected or end of services | | | | | |
| 1.4 | Clarity job description for employees | | | | | |
| 1.5 | Attention with safety and health for employees | | | | | |
| 1.6 | Existence job planning system and determination future needs for employees | | | | | |
| 1.7 | Existence evaluation system for employees in company | | | | | |
| 1.8 | Implement employees participant principle for decision making | | | | | |
| 1.9 | Existence motivations and rewards system for employee | | | | | |
| 1.10 | Company ability for management their resources with efficiency and effective way | | | | | |
| 1.11 | Rate of employees absence and leaving company resulted from insufficient human resource management | | | | | |
| 1.12 | Paying Salaries and wages regularly and with fairly way and wages increase with according high cost of living | | | | | |

Second group:- Factors related to training

| No | Factors related to training | low degree effect | Something effect | moderately effect | Significantly affect | Very Significantly effect |
|------|--|-------------------|------------------|-------------------|----------------------|---------------------------|
| 2 | | 1 | 2 | 3 | 4 | 5 |
| 2.1 | Existence motivations for employees to obligate with training programs | | | | | |
| 2.2 | Existence especial training for personal health and safety in wok site for employees | | | | | |
| 2.3 | Employees training at technology usage that used in construction industry and adapt with it | | | | | |
| 2.4 | Raise the company consciousness level at employees with training importance and spread training culture | | | | | |
| 2.5 | Expansion training area to include all employees | | | | | |
| 2.6 | Top management supporting in company for training programs | | | | | |
| 2.7 | Influences of external environment for company (political-security-culture) at training programs | | | | | |
| 2.8 | Level and employees efficiency to join and benefit from training programs | | | | | |
| 2.9 | Discontinuous work in company and influence at training level | | | | | |
| 2.10 | Trainers efficiency and criteria for selection training team. | | | | | |
| 2.11 | Employees training at required personal skills for work such as work coordination, communication skills, archiving and documentation | | | | | |
| 2.12 | Existence special training for safe usage for machines and equipments and execute periodic maintenance for it | | | | | |
| 2.13 | Usage company training in site method to increase practical experience at employees | | | | | |
| 2.14 | Hold training courses to develop knowledge and theoretical capabilities of employees | | | | | |
| 2.15 | Implement company distance education techniques to increase efficiency of employees | | | | | |
| 2.16 | Employees rotation in company to develop their skills | | | | | |
| 2.17 | Implement conferences and workshops for employees | | | | | |
| 2.18 | Experience exchange with local and foreign companies | | | | | |

Third group :- Factors resulted from training programs

| No | Factors resulted from training programs | low degree effect | Something effect | moderately effect | Significantly affect | Very Significantly effect |
|-----|--|-------------------|------------------|-------------------|----------------------|---------------------------|
| 3 | | 1 | 2 | 3 | 4 | 5 |
| 3.1 | Job satisfaction increase for employees because there are training programs | | | | | |
| 3.2 | Improve the financial situation of the company and reduce implementation costs as a result of the application of training programs | | | | | |
| 3.3 | Raise the morale of employees and reduce anxiety and frustration for them | | | | | |
| 3.4 | Increase employees adaption with new technology after implementation of training programs | | | | | |
| 3.5 | Decrease employees leaving from company after implementation of training programs | | | | | |
| 3.6 | Increase efficiency and effective for employees | | | | | |
| 3.7 | Increase belonging employees for company | | | | | |
| 3.8 | Increase employees confidence in the ability for doing required work | | | | | |
| 3.9 | Decrease work accident in sites work | | | | | |

Forth group :- Factors related to work market changes (Materials / equipments and machines /workers)

| No | Factors related to work market changes (Materials / equipments and machines /workers) | low degree effect | Something effect | moderately effect | Significantly affect | Very Significantly effect |
|-----|---|-------------------|------------------|-------------------|----------------------|---------------------------|
| 4 | | 1 | 2 | 3 | 4 | 5 |
| 4.1 | Company follow-up for changing in materials, new equipment and machines that are put on the market | | | | | |
| 4.2 | Company follow-up for external and internal changes in the labor market | | | | | |
| 4.3 | Company follow- up for change in required skills for the industry and the extent of availability of skilled labor required for this change from outside the company | | | | | |
| 4.4 | Inadequate supply for the used necessary materials and spare parts and lack of compatibility with existing labors | | | | | |

Fifth group :- Factors related to who carry out of employees evaluation

| No | Factors related to who carry out of employees evaluation | low degree effect | Something effect | moderately effect | Significantly affect | Very Significantly effect |
|-----|--|-------------------|------------------|-------------------|----------------------|---------------------------|
| 5 | | 1 | 2 | 3 | 4 | 5 |
| 5.1 | Follow the company appraisal the managers for their employees system | | | | | |
| 5.2 | Follow the company peer appraisal system | | | | | |
| 5.3 | Follow the company subordinate appraisal system | | | | | |
| 5.4 | Follow the company self performance appraisal system | | | | | |
| 5.5 | Follow the company team appraisal system | | | | | |

- Sixth group:- Others factors

| No | Factors related to training | low degree effect | Something effect | moderately effect | Significantly affect | Very Significantly effect |
|------|--|-------------------|------------------|-------------------|----------------------|---------------------------|
| 6 | | 1 | 2 | 3 | 4 | 5 |
| 6.1 | Type of contract with employees from were permanent or temporary | | | | | |
| 6.2 | Existence supervision from company at employees to obligate With work and profession ethics | | | | | |
| 6.3 | The company dissemination a culture of corporation between employees during work | | | | | |
| 6.4 | Laws and work legislation in the country and the existence of supervision at companies work quality | | | | | |
| 6.5 | Attention the company with individual characteristics required for each profession such as (Speed - Gender- educational level- age) and suitability to the nature of profession and work | | | | | |
| 6.6 | Demographic change of the workforce in the construction industry | | | | | |
| 6.7 | Improve the company for environment and general work conditions for employees and providing required needs from tools and services | | | | | |
| 6.8 | Existence permission with employees to enable them to make decisions | | | | | |
| 6.9 | Relationship between the top management and employees at the lower levels in the company | | | | | |
| 6.10 | Cultural, political and religious factors in the company | | | | | |
| 6.11 | Respect company for employees personal life and understand the conditions and problems related them | | | | | |
| 6.12 | Nature of relationship between the employees in company | | | | | |
| 6.13 | Nature of the relationship between the company and other parties such as the consultant and owner | | | | | |
| 6.14 | Follow the company customer appraisal system | | | | | |

Third part:- Factors that barring implementation of human resource development in contracting companies in the Gaza Strip

To what extent influence follow factors for barring implementation of human resource development in contracting companies in the Gaza Strip

seventh group:- Factors that barring implementation of human resource development in contracting companies in the Gaza Strip

| No | Factors related to training | low degree effect | Something effect | moderately effect | Significantly affect | Very Significantly effect |
|------|---|-------------------|------------------|-------------------|----------------------|---------------------------|
| 7 | | 1 | 2 | 3 | 4 | 5 |
| 7.1 | The company unable to cover human resource development programs costs | | | | | |
| 7.2 | Doesn't immaturity of human resources development culture in companies | | | | | |
| 7.3 | Small size of companies leads to the difficulty of implement of human resource development and skills development programs | | | | | |
| 7.4 | Lack of awareness of importance of the implementation of human resource development programs in construction companies at employees and company's owner | | | | | |
| 7.5 | Lack of incentives and rewards provided by the company for employees to participate in training programs | | | | | |
| 7.6 | Lack of time and work pressure in companies | | | | | |
| 7.7 | Weak effectiveness and lack of enthusiasm at employees to participate in the development of human resources programs | | | | | |
| 7.8 | Poor self-confidence and fear from failure at employees to benefit from the skills development programs | | | | | |
| 7.9 | Lack the necessary resources to implement human resource development programs | | | | | |
| 7.10 | Level of scientific and practical capabilities of employees | | | | | |
| 7.11 | Lack of job security at employees because of the temporary contract with the company | | | | | |
| 7.12 | Indecision companies owner to implement training programs for employees because employees change continuously | | | | | |
| 7.13 | Discontinuous of companies work and lack of continuity of work because of the external conditions of the company | | | | | |
| 7.14 | The absence of laws and legislation that obligate companies to apply human resource development programs | | | | | |
| 7.15 | weakness of the company's follow-up to the changes of the external market (skilled labor available and new materials that are put on the market) | | | | | |
| 7.16 | Company dependence on subcontractors in implementation of projects | | | | | |

Thank you for corporation



استبانة بعنوان /

دور تنمية الموارد البشرية في تحقيق الجودة في شركات المقاولات في قطاع غزة

السادة المقاولون المحترمون /

السلام عليكم ورحمة الله وبركاته.....

نشكر تعاونكم و مساهمتكم في تعبئة هذا الاستبيان الذي يعتبر جزء من البحث التكميلي لنيل درجة الماجستير في إدارة المشاريع الهندسية والذي يهدف إلى تحديد دور تنمية الموارد البشرية في تحقيق الجودة في شركات المقاولات في قطاع غزة .

مكونات الاستبيان

1. الجزء الأول : معلومات عامة حول معبئ الاستبيان.
2. الجزء الثاني: يتكون من عوامل تنمية الموارد البشرية التي تؤدي لتحقيق الجودة في شركات المقاولات في قطاع غزة ويتكون من ست مجموعات.
 - عوامل ذات علاقة بالممارسات الرئيسية لإدارة الموارد البشرية
 - عوامل مرتبطة بالتدريب
 - عوامل ناتجة عن برامج التدريب
 - عوامل مرتبطة بتغيرات سوق العمل (مواد/ معدات وآلات / عمالة)
 - عوامل مرتبطة بجهة تقييم العاملين
 - عوامل أخرى
3. الجزء الثالث : يتكون من العوامل التي تعيق تطبيق تنمية الموارد البشرية في شركات المقاولات في قطاع غزة

وإنني أؤمن جهدكم وإجاباتكم على الأسئلة المطروحة في الاستبيان، علمًا بأن جميع المعلومات التي يتم الحصول عليها من سيادتكم سوف تستخدم لغرض الدراسة العلمية البحتة بهدف التطوير وسوف تعامل بسرية.

أشكر سيادتكم على التعاون وتقبلوا فائق الاحترام والتقدير

إشراف الباحث

م . محمد مسلم

د. م . نبيل الصوالحي

الجزء الأول: معلومات عامة حول معبئ الاستبيان

1. الوصف الوظيفي
 صاحب الشركة مدير الشركة مدير دائرة الموارد البشرية مدير المشاريع آخري
2. عدد سنوات الخبرة لمن يقوم بتعبئة الاستبيان
 من 3 سنوات من 3 - أقل من 5 سنوات
 5 - أقل من 10 سنوات 10 سنوات أو أكثر
3. متوسط قيمة المشاريع المنفذة سنويا خلال الخمس سنوات الماضية (بالدولار)
 أقل من 0.5 مليون من 0.5 - أقل من 1 مليون
 من 1 - أقل من 2 مليون 2 مليون أو أكثر
4. عدد العاملين الكلي بالشركة (بشكل دائم ومؤقت)
 15 شخص أو أقل من 16 - 30 شخص
 من 31 - 50 شخص أكثر من 50 شخص
5. عدد العاملين الثابتين بالشركة (دائم).
 10 أشخاص أو أقل من 11 - 20 شخص
 من 21 - 40 شخص أكثر من 40 شخص
6. عدد العاملين الذين تسقط بهم الشركة للعمل بها سنويا
 5 أشخاص أو أقل من 6 - 20 شخص
 من 21 - 30 شخص أكثر من 30 شخص
7. عدد العاملين الذين يخرجون أو يتم تسريحهم من قبل الشركة سنويا
 5 أشخاص أو أقل من 6 - 10 أشخاص
 من 11 - 20 شخص أكثر من 20 شخص

الجزء الثاني :- عوامل تنمية الموارد البشرية التي تؤدي لتحقيق الجودة في شركات المقاولات

إلى أي مدى تؤثر عوامل تنمية الموارد البشرية التالية في تحقيق الجودة في شركات المقاولات

1 . يؤثر بدرجة قليلة جدا 2 . يؤثر بدرجة قليلة 3 . يؤثر بدرجة متوسطة 4 . يؤثر بدرجة كبيرة 5 . يؤثر بدرجة كبيرة جدا

المجموعة الأولى :- عوامل ذات علاقة بالممارسات الرئيسية لإدارة الموارد البشرية

| م | عوامل ذات علاقة بالممارسات الرئيسية لإدارة الموارد البشرية | يؤثر بدرجة كبيرة جدا | يؤثر بدرجة كبيرة | يؤثر بدرجة متوسطة | يؤثر بدرجة قليلة | يؤثر بدرجة قليلة جدا |
|------|--|----------------------|------------------|-------------------|------------------|----------------------|
| 1 | | 5 | 4 | 3 | 2 | 1 |
| 1.1 | الطرق والآليات المتبعة لجلب واستقطاب عاملين جدد للشركة | | | | | |
| 1.2 | تطبيق معيار الكفاءة لاختيار المتقدمين للعمل في الشركة | | | | | |
| 1.3 | وجود تعويض مالي للعاملين في حال تعرضهم للضرر أو نهاية خدمتهم | | | | | |
| 1.4 | وضوح الوصف الوظيفي للعاملين و لكل وظيفة يتم الإعلان عنها | | | | | |
| 1.5 | الاهتمام بسلامة وصحة العاملين بالشركة | | | | | |
| 1.6 | وجود نظام تخطيط وظيفي وتحديد الاحتياجات المستقبلية من العاملين للشركة | | | | | |
| 1.7 | وجود نظام لتقييم أداء العاملين بالشركة | | | | | |
| 1.8 | تطبيق مبدأ مشاركة العاملين في صنع القرار لتحقيق الذات لديهم | | | | | |
| 1.9 | صرف مكافآت وحوافز للعاملين | | | | | |
| 1.10 | قدرة الشركة على إدارة مواردها البشرية بكفاءة وفاعلية | | | | | |
| 1.11 | معدل غياب العاملين وخروجهم من الشركة نتيجة سوء إدارة الموارد البشرية | | | | | |
| 1.12 | صرف رواتب وأجور العاملين بانتظام وبعادلة ووجود زيادة للأجور تبعا لغلاء المعيشة | | | | | |

المجموعة الثانية :- عوامل مرتبطة بالتدريب

| يؤثر بدرجة قليلة جدا | يؤثر بدرجة قليلة | يؤثر بدرجة متوسطة | يؤثر بدرجة كبيرة | يؤثر بدرجة كبيرة جدا | عوامل مرتبطة بالتدريب | م |
|-------------------------------|------------------------|-------------------------|------------------------|-------------------------------|--|------|
| 1 | 2 | 3 | 4 | 5 | | 2 |
| | | | | | وجود تحفيز العاملين للالتزام ببرامج التدريب | 2.1 |
| | | | | | وجود تدريب خاص بالسلامة الشخصية والصحية في مواقع العمل لدى العاملين | 2.2 |
| | | | | | تدريب العاملين على استخدام التكنولوجيا المستخدمة في صناعة الإنشاءات والتكيف معها | 2.3 |
| | | | | | رفع الشركة لمستوى الوعي لدى العاملين بأهمية التدريب ونشر ثقافة التدريب | 2.4 |
| | | | | | توسيع دائرة التدريب في الشركة لتشمل كافة العاملين | 2.5 |
| | | | | | دعم الإدارة العليا في الشركة لبرامج التدريب | 2.6 |
| | | | | | تأثيرات البيئة الخارجية للشركة مثل (السياسية – الأمنية – الثقافية) على برامج التدريب | 2.7 |
| | | | | | مستوى وكفاءة العاملين للالتحاق والاستفادة من برامج التدريب | 2.8 |
| | | | | | تقطع العمل في الشركة وتأثيره على مستوى التدريب | 2.9 |
| | | | | | كفاءة المدربين والأسس والمعايير التي يتم بناء عليها اختيار جهة التدريب | 2.10 |
| | | | | | تدريب العاملين على المهارات الشخصية المطلوبة للعمل مثل تنسيق العمل والتواصل مع الآخرين والتوثيق والأرشفة | 2.11 |
| | | | | | وجود تدريب خاص للاستخدام الآمن للألات والمعدات وإجراء صيانة دورية لها | 2.12 |
| | | | | | استخدام الشركة لطريقة التدريب في المواقع لزيادة الخبرة العملية لدى العاملين | 2.13 |
| | | | | | عقد دورات تدريبية لتنمية القدرات العلمية والمعرفية والمهارات لدى العاملين | 2.14 |
| | | | | | تطبيق الشركة لتقنية التدريب عن بعد لزيادة كفاءة العاملين | 2.15 |
| | | | | | توفير العاملين داخل الشركة لتطوير المهارات لديهم | 2.16 |
| | | | | | تنفيذ مؤتمرات وورش عمل للعاملين بالشركة | 2.17 |
| | | | | | تبادل الخبرات مع الشركات المحلية أو الأجنبية | 2.18 |

المجموعة الثالثة :- عوامل ناتجة عن برامج التدريب

| يؤثر بدرجة قليلة جدا | يؤثر بدرجة قليلة | يؤثر بدرجة متوسطة | يؤثر بدرجة كبيرة | يؤثر بدرجة كبيرة جدا | م |
|-------------------------------|------------------------|-------------------------|------------------------|-------------------------------|---|
| 1 | 2 | 3 | 4 | 5 | 3 |
| | | | | | 3.1 زيادة الرضا الوظيفي لدى العاملين بسبب وجود برامج تدريبية |
| | | | | | 3.2 تحسين الوضع المالي للشركة وتقليل تكاليف التنفيذ نتيجة تطبيق برامج تدريبية |
| | | | | | 3.3 رفع معنوية العاملين وتقليل القلق والإحباط لديهم |
| | | | | | 3.4 زيادة تكيف العاملين مع التكنولوجيا الجديدة بعد تطبيق برامج تدريبية |
| | | | | | 3.5 تقليل خروج العاملين من الشركة بعد تطبيق برامج تدريبية |
| | | | | | 3.6 زيادة كفاءة وفاعلية العاملين |
| | | | | | 3.7 زيادة انتماء العاملين للشركة |
| | | | | | 3.8 زيادة ثقة العاملين بالقدرة على القيام بالأعمال المطلوبة |
| | | | | | 3.9 تقليل حوادث العمل في مواقع العمل |

المجموعة الرابعة :- عوامل مرتبطة بتغيرات سوق العمل (مواد/ معدات وآلات / عمالة)

| يؤثر بدرجة قليلة جدا | يؤثر بدرجة قليلة | يؤثر بدرجة متوسطة | يؤثر بدرجة كبيرة | يؤثر بدرجة كبيرة جدا | م |
|-------------------------------|------------------------|-------------------------|------------------------|-------------------------------|---|
| 1 | 2 | 3 | 4 | 5 | 4 |
| | | | | | 4.1 متابعة الشركة للتغير في المواد والمعدات والآلات الجديدة التي يتم طرحها في السوق |
| | | | | | 4.2 متابعة الشركة للمتغيرات الخارجية والداخلية في سوق العمالة |
| | | | | | 4.3 متابعة الشركة لتغير المهارات المطلوبة للصناعة ومدى توفر العمالة الماهرة المطلوبة لهذا التغير من خارج الشركة |
| | | | | | 4.4 التوريد غير الملائم للمواد المستخدمة وقطع الغيار اللازمة وعدم توافقها مع العمالة الموجودة |

المجموعة الخامسة :- عوامل مرتبطة بجهة تقييم العاملين

| يؤثر بدرجة قليلة جدا | يؤثر بدرجة قليلة | يؤثر بدرجة متوسطة | يؤثر بدرجة كبيرة | يؤثر بدرجة كبيرة جدا | عوامل مرتبطة بجهة تقييم العاملين | م |
|-------------------------------|------------------------|-------------------------|------------------------|-------------------------------|--|-----|
| 1 | 2 | 3 | 4 | 5 | | 5 |
| | | | | | إتباع نظام تقييم المدراء للعاملين في الشركة | 5.1 |
| | | | | | إتباع تقييم العاملين لزملائهم من نفس المستوى الوظيفي | 5.2 |
| | | | | | إتباع نظام تقييم العاملين بالشركة لمدرائهم | 5.3 |
| | | | | | إتباع نظام تقييم العامل لذاته بالشركة | 5.4 |
| | | | | | إتباع نظام تقييم فريق العمل للعامل بالشركة | 5.5 |
| | | | | | إتباع نظام تقييم الزبون للشركة | 5.6 |

المجموعة السادسة:- عوامل أخرى

| م | عوامل أخرى | يؤثر بدرجة كبيرة جدا | يؤثر بدرجة كبيرة | يؤثر بدرجة متوسطة | يؤثر بدرجة قليلة | يؤثر بدرجة قليلة جدا |
|------|---|-------------------------------|------------------------|-------------------------|------------------------|-------------------------------|
| 6 | | 5 | 4 | 3 | 2 | 1 |
| 6.1 | نوع التعاقد مع العاملين من حيث دائم أو مؤقت | | | | | |
| 6.2 | وجود رقابة من الشركة على العاملين للالتزام بأخلاقيات العمل والمهنة | | | | | |
| 6.3 | قيام الشركة بنشر ثقافة التعاون بين العاملين خلال العمل | | | | | |
| 6.4 | قوانين وتشريعات العمل في الدولة ووجود رقابة على جودة عمل الشركات | | | | | |
| 6.5 | اهتمام الشركة بالخصائص الفردية المطلوبة لكل مهنة مثل (السرعة- الجنس- المستوى التعليمي- العمر) وملائمتها مع طبيعة العمل والمهنة | | | | | |
| 6.6 | التغير الديمغرافي للقوى العاملة في صناعة الإنشاءات | | | | | |
| 6.7 | تحسين الشركة لظروف وبيئة العمل العامة للعاملين وتوفير الاحتياجات اللازمة من وسائل وخدمات | | | | | |
| 6.8 | وجود صلاحيات للعاملين تمكنهم من اتخاذ القرارات | | | | | |
| 6.9 | العلاقة بين الإدارة العليا في الشركة والعاملين في المستويات الدنيا في الشركة | | | | | |
| 6.10 | العوامل الثقافية والسياسية والدينية في الشركة | | | | | |
| 6.11 | احترام الشركة للحياة الشخصية للعاملين وتفهم الظروف والمشاكل الخاصة بهم | | | | | |
| 6.12 | طبيعة العلاقة بين العاملين في الشركة | | | | | |
| 6.13 | طبيعة العلاقة بين الشركة والأطراف الأخرى مثل الاستشاري والمالك | | | | | |
| 6.14 | إتباع نظام تقييم الزبون للشركة | | | | | |

الجزء الثالث :- العوامل التي تعيق تطبيق تنمية الموارد البشرية في شركات المقاولات في قطاع غزة

إلى أي مدى تؤثر تلك العوامل في إعاقة تطبيق تنمية الموارد البشرية في شركات المقاولات في قطاع غزة

المجموعة السابعة : عوامل تعيق تطبيق تنمية الموارد البشرية في شركات المقاولات في قطاع غزة

| م | عوامل تعيق تطبيق تنمية الموارد البشرية في شركات المقاولات في قطاع غزة | يؤثر بدرجة كبيرة جدا | يؤثر بدرجة كبيرة | يؤثر بدرجة متوسطة | يؤثر بدرجة قليلة | يؤثر بدرجة قليلة جدا |
|------|---|-------------------------------|------------------------|-------------------------|------------------------|-------------------------------|
| 7 | | 5 | 4 | 3 | 2 | 1 |
| 7.1 | عدم قدرة الشركة على تغطية تكاليف برامج تنمية الموارد البشرية | | | | | |
| 7.2 | عدم نضوج ثقافة تنمية الموارد البشرية لدى الشركات | | | | | |
| 7.3 | صغر حجم الشركات يؤدي لصعوبة تطبيق برامج تنمية الموارد البشرية وتطوير المهارات | | | | | |
| 7.4 | قلة الوعي بأهمية تطبيق برامج تنمية الموارد البشرية في شركات المقاولات لدى العاملين وأصحاب الشركات | | | | | |
| 7.5 | قلة الحوافز والمكافآت المقدمة من الشركة للعاملين للمشاركة في برامج التدريب | | | | | |
| 7.6 | قلة الوقت وضغط العمل في الشركات | | | | | |
| 7.7 | ضعف الفاعلية و قلة الحماسة لدى العاملين للمشاركة في برامج تنمية الموارد البشرية | | | | | |
| 7.8 | ضعف الثقة بالنفس والخوف من الفشل لدى العاملين من الاستفادة من برامج تطوير المهارات | | | | | |
| 7.9 | قلة الموارد اللازمة لتطبيق برامج تنمية الموارد البشرية | | | | | |
| 7.10 | مستوى القدرات العلمية والعملية لدى العاملين | | | | | |
| 7.11 | عدم وجود أمان وظيفي لدى العاملين بسبب التعاقد المؤقت مع الشركة | | | | | |
| 7.12 | تردد أصحاب الشركات في عمل برامج تدريبية لتغيير العاملين باستمرار | | | | | |
| 7.13 | عدم تواصل عمل الشركات وعدم استمرارية العمل بسبب الظروف الخارجية للشركة | | | | | |
| 7.14 | عدم وجود قوانين وتشريعات تلزم الشركات بتطبيق برامج لتنمية الموارد البشرية | | | | | |
| 7.15 | ضعف متابعة الشركة لمتغيرات السوق الخارجية (العمالة الماهرة المتوفرة والمواد الجديدة التي يتم طرحها في السوق) | | | | | |
| 7.16 | اعتماد الشركة على مقاولي الباطن في تنفيذ المشاريع | | | | | |

شاكرين لكم حسن تعاونكم