

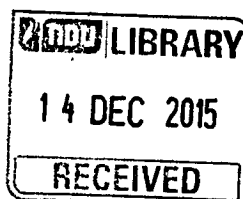
Notre Dame University-Louaize
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**Training and Job Satisfaction Attributes:
The Case of Cimenterie Nationale S.A.L**

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**A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of the Master of Business Administration
(M.B.A.)**

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Approval Certificate

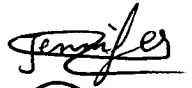
Training and Job Satisfaction Attributes:
The Case of Cimenterie Nationale S.A.L

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GRADE: **A+**

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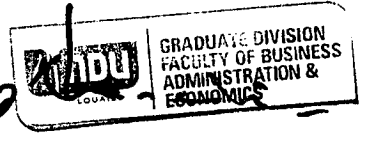
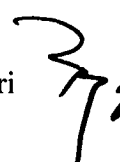
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May 14, 2015

DECLARATION

I hereby declare that this thesis is entirely my own work and that it has not been submitted as an exercise for a degree at any other University.

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ANTRANIG JIRAYR TANGOUKIAN

ABSTRACT

Purpose: This research attempts to investigate the perception of Cimenterie Nationale's S.A.L employees about four different categories of training attributes (quality of training, benefits, personal commitment and level of satisfaction) and to examine the existence of potential variations of perception with respect to demographic variables, such as age, education level and years of work experience of the different respondents.

Design/methodology/approach: This research is a case study using multimethodological approach for data gathering, with qualitative and quantitative tools. The philosophical approach is post-positivism, with inductive reasoning approach.

Findings: Level of employee satisfaction is associated with demographic variables and training attributes.

Research limitations/implications: The main limitation in this research was the timing in the distribution of the survey questionnaire survey, which was a very busy time due to the yearly overhauling plans and the Christmas holiday vacations which elongated the time needed to gather the necessary sample to make this research successful.

Practical implications: The findings in this research will help Cimenterie Nationale S.A.L in implementing training plans in a more efficient and effective manner, so that employees will have the maximum benefit from the training's.

Originality/value: Even though there might be other studies focusing on training and changes it brings to the organization, however this study's originality is in its covering of the manufacturing industry in Lebanon, specifically Cimenterie Nationale S.A.L, which is one of the country's biggest employers.

Keywords: Training, development, job satisfaction, working conditions, Manufacturing industry, case study, Cimenterie Nationale S.A.L

LIST OF TABLES

Table 1: Contexts of the training and the three needs of development	13
Table 2: Summary of training evaluation statements by different scholars	38
Table 3: Summary of career development statements by different scholars.....	39
Table 4: Summary of multiskilling statements by different scholars.....	39
Table 5: Summary of investment in training statements by different scholars	39
Table 6: Summary of various training effects on salary statements by different scholars	40
Table 7: Summary of employee performance statements by different scholars	40
Table 8: Summary of fear from training statements by different scholars.....	41
Table 9: Summary of commitment statements by different scholars	41
Table 10: Summary of training effects on safety and health statements by different scholars.....	42
Table 11: Summary of types of training statements by different scholars.....	42
Table 12: Summary of working conditions statements by different scholars	43
Table 13: Summary of job involvement statements by different scholars.....	43
Table 14: Summary of retention statements by different scholars.....	44
Table 15: Summary of benefits of training statements by different scholars.....	44
Table 16: Summary of organization profitability statements by different scholars.....	44
Table 17: Summary of employee job satisfaction statements by different scholars	45
Table 18: Summary of training importance statements by different scholars.....	46
Table 19: Comments on the Background section.....	55
Table 20: Comments on Training Quality.....	55
Table 21: Comments on Training Benefits and Challenges.....	56
Table 22: Population and sample of the survey	71
Table 23: Distribution of the respondents by departments	72
Table 24: Distribution of the sample size by respondents departments.....	73
Table 25: Distribution of the population by gender	74
Table 26: Distribution of the respondent by gender.....	74

Table 27: Frequency table of the age of the respondents.....	74
Table 28: Frequency table of the highest education level of the respondents.....	75
Table 29: Frequency table of the respondent's job titles	75
Table 30: Frequency table of the respondent's departments.....	76
Table 31: Frequency table of the respondent's years of experience	76
Table 32: Frequency table of training in departments.....	76
Table 33: Frequency table of employees enrolled in training.....	77
Table 34: Frequency table of number of training enrolled by an employee	77
Table 35: Frequency table of training purpose explained	77
Table 36: Frequency table of training instructor type	78
Table 37: Frequency table of type of training attended	78
Table 38: Frequency table of future training interest.....	78
Table 39: Age test with quality variables.....	81
Table 40: Age test with benefits and challenges variables.....	82
Table 41: Mann-Whitney test of variable 6 result at level 1-2.....	82
Table 42: Age test with level of satisfaction variables.....	83
Table 43: Mann-Whitney test of variable 10 result at level 3-4.....	84
Table 44: Age test with personal commitment variables	84
Table 45: Education level test with quality variables	85
Table 46: Mann-Whitney test of variable 1 result at level 1-2.....	86
Table 47: Mann-Whitney test of Variable 3 result at level 3-4.....	86
Table 48: Mann-Whitney test of Variable 6 result at level 1-2.....	86
Table 49: Education level test with benefits and challenges variables	87
Table 50: Mann-Whitney test of variable 3 result at level 1-2.....	87
Table 51: Mann-Whitney test of variable 3 result at level 1-3.....	88
Table 52: Mann-Whitney test of variable 4 result at level 1-2.....	88
Table 53: Mann-Whitney test of variable 6 result at level 1-2.....	88
Table 54: Mann-Whitney test of variable 7 result at level 1-2.....	88
Table 55: Education level test with level of satisfaction variables	89
Table 56: Mann-Whitney test of variable 1 result at level 3-4.....	90
Table 57: Mann-Whitney test of variable 4 result at level 3-4.....	90

Table 58: Mann-Whitney test of variable 5 result at level 1-2.....	90
Table 59: Mann-Whitney test of variable 5 result at level 3-4.....	91
Table 60: Mann-Whitney test of variable 6 result at level 2-3.....	91
Table 61: Education level test with personal commitment variables.....	91
Table 62: Years of experience test with quality variables	92
Table 63: Mann-Whitney test of variable 1 result at level 2-4.....	93
Table 64: Mann-Whitney test of variable 6 result at level 2-4.....	93
Table 65: Years of experience test with personal commitment variables.....	93
Table 66: Years of experience test with level of satisfaction variables	94
Table 67: Years of experience test with benefits and challenges variables	95
Table 68: Hypothesis 1 result summary	98
Table 69: Hypothesis 2 result summary	98
Table 70: Hypothesis 3 result summary	99
Table 71: Table showing the relation between the research and the theories	103
Table 72: Table of Cronbach's alpha test on the 26 metric questions	104
Table 73: Summary of the coding family.....	121
Table 74: Summary of Interview with the Senior Supply Chain Manager.....	123
Table 75: Summary of Interview with the Compensation and Benefits Manager	124
Table 76: Summary of Interview with the Electrical and Instrumentation Director.....	126
Table 77: Summary of Interview with the Lab, RMP and QOD Director	128
Table 78: Summary of Interview with the Cement Mills and Packing Plant Manager .	130
Table 79: Summary of Interview with the Plant Administration Senior Manager	131
Table 80: Summary of Interview with the QHSE, Site and Civil and Port Manager	133
Table 81: Summary of Interview with the Raw Material Preparation Manager	135
Table 82: Summary of Interview with the MIS Manager	137
Table 83: Summary of Interview with the Senior HR Generalist	139
Table 84: Summary of Interview with the CAFO	140
Table 85: Summary of Interview with Accounting Manager	141
Table 86: Reliability of the different validities in the qualitative survey.....	147

LIST OF FIGURES

Figure 1: ADDIE Training Process	10
Figure 2: Hypotheses Framework	48
Figure 3: Type of Variables	49
Figure 4: Regression Variables	49
Figure 5: Distribution of the population workforce	52
Figure 6: Hypotheses Framework	57
Figure 7: Quantitative Analysis Framework	59
Figure 8: Regression frequency chart.....	80

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CONTENTS

ABSTRACT.....	IV
LIST OF TABLES.....	V
LIST OF FIGURES.....	VIII
AKNOWLEDGMENTS.....	IX
Chapter 1.....	1
INTRODUCTION.....	1
1.1 Background.....	1
1.2 Need for the Study	3
1.3 Purpose of the Study	5
1.4 Brief Overview of All Chapters.....	6
Chapter 2.....	7
LITREATURE REVIEW	7
2.1 Training	7
2.1.1 General Background.....	7
2.1.2 Training Process.....	8
2.1.3 Training needs.....	10
2.1.4 Training and development methods	13
2.1.5 Fears from Training.....	16
2.1.6 Training Evaluation.....	17
2.1.7 Training Theories	19
2.1.7.1 Scenistic Methods	21
2.1.7.2 Human Capital Theory	21
2.2 Training Benefits	22
2.2.1 Career Development.....	26
2.2.2 Employee Commitment from Training.....	27

2.2.3 Job involvement from Training..... 29

2.2.4 Training Effects on Working Environment 30

2.2.5 Training Effects on Salary 31

2.2.6 Employee Performance from Training 32

2.2.7 Job Satisfaction 33

2.3 Conclusion..... 35

2.3.1 Summary of Chapter 2..... 36

Chapter 3..... 47

PROCEDURES AND METHODOLGY 47

3.1 Introduction 47

3.2 Hypotheses 47

3.3 Variables..... 49

3.4 Methodology..... 50

3.4.1 Philosophical Approach..... 50

3.4.2 Reasoning Approach 50

3.4.3 Population and Sampling Procedure..... 51

3.4.4 Research Strategy 52

3.4.5 Instrumentation 53

3.4.6 Research Analysis 54

3.4.7 Pilot Test..... 55

3.5 Conclusion..... 56

3.6 Summary 57

Chapter 4..... 58

FINDINGS..... 58

4.1 Introduction 58

4.2 Analyses Framework..... 59

4.2.1 Quantitative..... 59

4.3 Qualitative Analysis 59

4.3.1 Training Policies, Norms and Methods Implemented 60

4.3.2 Assessment of Training and Challenges 63

4.3.3 Benefits of Training and Employee Participation 64

4.3.4 Career Development and its Benefits 65

4.3.5	Working Environment	68
4.4	Quantitative Analysis	71
4.4.1	Descriptive	71
4.4.2	Regression Analysis	79
4.4.3	Variance Analysis	80
4.5	Conclusion.....	95
Chapter 5.....		97
CONCLUSION AND RECOMMENDATIONS		97
5.1	Summary of Main Findings.....	97
5.1.1	Summary of Hypotheses	98
5.2	Validity Issues	99
5.2.1	Qualitative Methodology	99
5.2.2	Quantitative Methodology	101
5.2.2.1	External Validity	101
5.2.2.2	Construct Validity	102
5.2.2.3	Statistical Validity	103
5.3	Reliability	103
5.4	Research Limitations.....	104
5.5	Possible Implications	105
5.6	Possible Future Research.....	106
5.7	Ending Remarks.....	107
REFERENCES.....		109
APPENDECIES		119
Appendix A: Interview Guideline		119
Appendix B: Coding of the Interviews		121
Appendix C: Interviews		122
Appendix D: Survey Questionnaire.....		142
Appendix E: Reliability of the Validities.....		147

Chapter 1

INTRODUCTION

1.1 Background

Most companies in the late 20th century started implementing training programs to improve their productivity, improve employee working conditions and set a career development plan for their employees to increase job satisfaction and motivation (Coget (2011). Training “generates benefits for the employee as well as for the organization by positively influencing employee performance through the development of employee knowledge, skills, ability, competencies and behavior” (Sultana et al., 2012, p.467). Training is a tool and a way to acquire new and different set of knowledge, skills and attitudes that are work related, and can have short and long term benefits for the employee and the organization.

Companies started investing millions of dollars on training and educating their workforce on new skills and how to improve prior skills. However, the amount of the investment varied from one country to another and even from one company to another. As noted by Coget (2011) companies in countries such as the U.S and Sweden provide 4% to 6% of their payroll on training, whereas it roughly reaches to 2% in countries such as Ireland and Slovakia. According to Robert and Shamsuddin (2000) companies that valued the implementation of training and development, witnessed a higher profitability and employee satisfaction, than companies with no or little training and human development focus. For example, the manufacturing industry in the U.S almost lost its competitive edge if it hadn't kept pace with the technological changes and advancements (Mark, 1987). Even though most of the times training provides a positive outcome to the company both on the individual and organizational level, sometimes it can fire back (Kennett, 2014; Nassazi 2013). For instance an employer who has trained his employee and devoted a lot of time and cost on him, will be a vulnerable target from competitors (Kennett, 2014). This created a sense of fear and dilemma for organizations who invest thousands of dollars on employees and it also made them think twice before training

their employees (Becker, 1993; Brum, 2007; Green et al., 2000; O'Malley 2013). For instance, recently some organizations started implementing training conditions on their employees, such as obliging them to stay in the organization for certain duration before they can resign or leave and also by requiring employees to return the amount of the training expenditure incurred if they decide to leave.

Unlike, the U.S or most developed countries, training and development is a new process in the Lebanese market, HR as a whole is a new concept field in Lebanon, since most companies are small to medium sized , and big companies are largely family oriented, with little training and development opportunities (Dirani, 2006). Like most major Lebanese firms, Cimenterie Nationale S.A.L is a family based business, specialized in manufacturing cement. It adopted training and development process not more than a decade ago. Since then, its production has increased yearly. From the many positive effects and benefits of training on companies and organizations, working conditions and career development are considered the most vital, especially to manufacturing companies like Cimenterie Nationale S.A.L. Hence, when employees have a better awareness on safety and health issues and a perception on work actions, they are less prone to have work related accidents, better health, and as a result, less absenteeism, less turnover and increased job satisfaction (Cole 2002, cited in Nassazi 2013). So is the case with career development where employee job satisfaction is determined by the development opportunities, which itself leads to increase in employee retention, employee performance and decrease in training related costs (Garci'a-Bernal et al., 2005). According to Jackson and Schuler (2003) training and development are regarded as the most crucial HRM functions and are closely interrelated. Development contrary to training is for updating long-term needed competencies.

As an HR employee in Cimenterie Nationale S.A.L, it is interesting to know why the company determined to create the HR department, what plan did they pursue, and how the workforce accepted (from managers to technicians) the new processes. Cimenterie Nationale S.A.L is trying to be an employer of choice in Lebanon. This study will assist

the company in fulfilling this purpose by assuring each employee has his chance of development and a healthy stress free work environment.

1.2 Need for the Study

Cimenterie Nationale (www.cimnat.com.lb) is a joint stock company, founded in 1953 by the Doumet and Asseily families. Today it is the leading cement producer in Lebanon with an annual cement production exceeding 2.6 million tons. The cement is branded under the name "Al Sabeh Cement". As well as being a leader in the Lebanese industry, Cimenterie Nationale S.A.L is also a prominent worldwide cement exporter in the Levant market, mainly in Iraq and Syria, where the "Al Sabeh" cement brand is widely known and respected, additionally with occasional exports to Africa and Europe.

It currently has a workforce of over 700 personnel located in three diverse geographic areas in Lebanon. The plant which is located in Chekka has the bulk of this workforce, with around 600 employees. The remaining staff are located at its head office in Yarze, and its' sales office in Antelias. Furthermore it provides 1,000 indirect employment opportunities for employees working in fields, such as maintenance, transport and logistics. Sustainable development is an important foundation of the company's operations. As today, high quality cement products with national and international standards are produced with 700 highly committed, experienced and qualified employees. The strict code of conduct that the company enforces on how to conduct its' business with dedication to their employees and clients to continuously serve their needs has been a crucial aspect in Cimenterie Nationale S.A.L's growing success. Moreover, preserving the environment and dedication to superior quality are integral parts of the company's strategy and operations, which are highlighted by the three ISO certifications from international bodies (ISO 9001:2008 Quality Management System, ISO 14001:2009 Environmental Management System, and OHSAS 18001 Occupational Health and Safety Management System) and various other nominations and awards. Finally, Cimenterie Nationale S.A.L takes its Corporate Social Responsibility (CSR) role very seriously and with equal dedication, especially for the community in which they operate in. To promote social welfare in these communities, the company has

undertaken numerous activities and initiatives, such as supporting and sponsoring various educational, sporting, social and environmental causes.

Not less than a decade ago in 2003, did Cimenterie Nationale start implementing HR functions throughout its organizational levels. With a growing workforce from 600 in 2003 to 700 in 2014, it is necessary to keep the employees and all the workforce satisfied and motivated to keep them committed to the company and its' shared values and vision. This is not an easy task to accomplish; this is where training and development play a vital role by preparing the workforce to anticipated internal or external changes like closing the gap between employee's current skills and future needed skills. Also by anticipating employee related issues, such as employee motivation, job expectation, and creating a healthy and safe work environment to avoid employee and employer conflicts that could harm the company's reputation, productivity, and destroy the harmony between them.

Being aware of these issues and as a proactive measure, Cimenterie Nationale has recently started working on its employee's career development due to its importance in creating a committed and a skillful workforce in the highly competitive open market. It has been engaging in activities, such as creating a pool of multi-skilled employees in each department through internal and external training to enlarge their jobs, diminish the need for extra manpower, diminish lost time, and decrease the cost of productivity.

Also by working on its employee's career plan and providing recognition it is sustaining its high retention rate with 99.3%, which is one of the lowest retention rate in the industry and the Lebanese market and considered to be an outstanding rate according to the external ISO audits carried at Cimenterie National. Moreover, Cimenterie Nationale has provided a big sum of its training budget on its workforce to health and safety training, since high accident rates and employee well being has been the Achilles heel of Cimenterie Nationale. Therefore, to minimize the risk of accidents on employees, create good working conditions and a healthy life, various safety training and awareness sessions or courses, such as personal protective equipment usage, chemical usage, dust

masks, and weekly safety meeting are held and taught continuously throughout the year in every department. Furthermore, employees are being trained to operate in a way to diminish and control various sources of dust emissions from the plant, to improve their health and diminish environmental complaints from surrounding communities.

As a result of all the commitments, continuous development plans and maintaining a healthy work environment in Cimenterie Nationale the need for this study arises to further study the effects of these training on employees.

1.3 Purpose of the Study

The objective of this research arises from the need of this study. Globalization and the open trade market created a highly competitive environment for all type of industries; they obliged companies to pursue training and development programs in order to have a competitive edge over their competitors and stay in the market. Hence, this research attempts to investigate the perception of Cimenterie Nationale's employees about 4 different categories of training attributes (quality of training, benefits, personal commitment and level of satisfaction) and to examine the existence of potential variations of perception with respect to demographic variables, such as age, education level and years of work experience of the different respondents, as well as to check for probable relationships between the four categories of attributes and demographics variables.

As a result, the research should answers these following questions:

- On what basis are the training provided to employees?
- Have the training resulted in improved employee job satisfaction?
- Have the development programs increased employee commitment and retention rate?
- Have work related accidents and health issues improved after training on health and safety?

In the following chapters there will be more clarifications and studies on training and its various effects, hence facilitating to answer these questions and finding a link between training provided by Cimenterie Nationale S.A.L to its employees and its influences.

1.4 Brief Overview of All Chapters

This research is composed of five chapters. Chapter one is an introduction with an overview of training and its effects on organizations. This chapter we also introduced Cimenterie Nationale S.A.L and we clarified the purpose of this study.

In chapter two, different theories and studies focusing on training and its influences are determined. Starting with various training factors, such as training process, methods and effects. Later on, an empirical research presenting various theories and principles regarding training, such as commitment, career development, and working environment. Lastly a conclusion on the literature review and presenting the research question of this study.

Chapter three includes the methodology of the study. It clarifies the reason for the selected method, procedure of collecting data, the variables in the study, and the hypotheses.

Chapter four identifies and analyzes the findings of the study and claims whether the hypothesis is accepted or rejected.

Finally, chapter five is a conclusion on the research and a discussion about whether the obtained results and findings support the theories. Reliability and validity issues are discussed. Moreover, the limitations of the research will be clarified, with the implications of the research on Cimenterie Nationale S.A.L or other future researches. As a final point, recommendations will conclude the research.

Chapter 2

LITREATURE REVIEW

2.1 Training

2.1.1 General Background

In any organization the most important key to its success is the quality of the people employed in it, that is its' workforce. Hence, any organization seeking to gain growth and sustain in these current competitive market must improve the quality of its employees. One way for achieving this growth and success is through training. Training's importance can be clearly understood when an organization trains an employee and has a direct positive impact on the employee's performance and hence an improvement in the company's performance.

As mentioned by Beardwell and Holden (2001) (cited in Nassazi, 2013), training is a learning experience which creates a permanent change in the skills, knowledge and attitude of individuals on a currently held job and also enables employees to gain knowledge which they can transfer to other job areas.

Training throughout the last decade has seen a significant growth in importance and influence in different industries in the market. A major increase in its importance is mainly due to the intensification of competition between organizations in the open global market and also due to the rapid change in technology and processes. According to Milhem et al. (2014) organization's number of training hours dedicated to their workforce increased in average from 4,000 hours in 2009 to 4,540 hours in 2010. Consequently, organizations found out that investing in employee training plans has a major influence on an organizations' success, and as a result emphasized on training to gain competitive edge in the market and to keep their employees on the top of their job. Organizations are investing millions of dollars on training and educating their workforce on new skills. As statistics indicate, investments made by organizations on training are continuously growing. However, the amount of these investments varies from one

country to another. As mentioned previously by Coget (2011) companies in countries such as U.S and Sweden provide 4% to 6% of their payroll on training, whereas it roughly reaches to 2% in countries such as Ireland and Slovakia.

However, many organizations set their training plans in an unplanned and unsystematic manner without identifying the training needs of the department or the organization, and as a result the training's implemented will not be successful and might even have negative consequences. Hence, as investments in training's continue to increase, organizations should clarify to their workforce the need for the training and its impact on the organization. As mentioned by Sultana (2012), the more a trainee is motivated, the quicker he or she will acquire a new skill. Moreover, Jolles (2005) states that stressing the significance of the training to employees would make them comprehend the need for that training; that is it should answer "what's in it for me?"

2.1.2 Training Process

For an organizational training to be effective it must follow a certain designed process and not just be view training as something that has to be done. Training should be viewed as an integrated process which transforms organizational inputs into organizational needed output (Blanchard and Thacker, 2006).

The training process begins with a triggering event. A triggering event occurs when a manager identifies the actual organizational performance is less than the expected organizational performance, this means that there is a gap somewhere. As a result, there should be some design to identify the gap, and deal with it accordingly to diminish or close the gap. One of the most successful methods used for transfer of learning and training by organizations is the ADDIE model.

ADDIE is an instructional model defined by (Gagne et al. 2005, cited in Koohang and Harman 2007 p.360) "an arrangement of resources and procedures used to promote learning". Over the years ADDIE has been continuously revised, however all the models consist of these five basic phases: Analysis, Design, Development, Implementation, and

Evaluation. To be effective, one phase should be completed to move to the next phase. Blanchard and Thacker (2006) summarize the ADDIE model as such:

1. **Analysis:** The first phase in the ADDIE model. In this phase organization's training needs are identified (known as Training Needs Analysis). As a result, performance gap is identified. Once a gap is identified, the cause of the gap must be determined. For example, the cause of the performance gap might be inadequate employee skills which can be solved by adequate training for this skill deficiency (Knowledge, Skills, and Abilities causes, known as KSA). Of course there could be other causes which could not be solved with training, and require alternative solutions (non-KSA causes).
2. **Design:** The training needs identified in the first stage are the inputs in this stage. Training objective is developed to specify the organizational and employee outcomes to be achieved.
3. **Development:** In this phase instructional strategy is formulated which includes developing manuals, identifying facilities and equipment needed. All these are integrated into a training plan to achieve the training objective. Nevertheless most companies fail at this stage due to failure to identify analysis and design phases. There should be a pilot program to continuously evaluate and refine the training.
4. **Implementation:** In this stage the training is delivered to the training audience.
5. **Evaluation:** This is the final phase which ensures the training achieved its goals. There are two parts. Formative and Summative Evaluation. Formative evaluation assesses and revises the process of each stage, so that the objective of each stage is achieved. Summative evaluation assesses the end outcome of the training and the content and summarizes its effects on the trainees, department and the organization. However, many organizations fail at this stage due to inadequate measurements, surveys and assessments of the impact of the training.

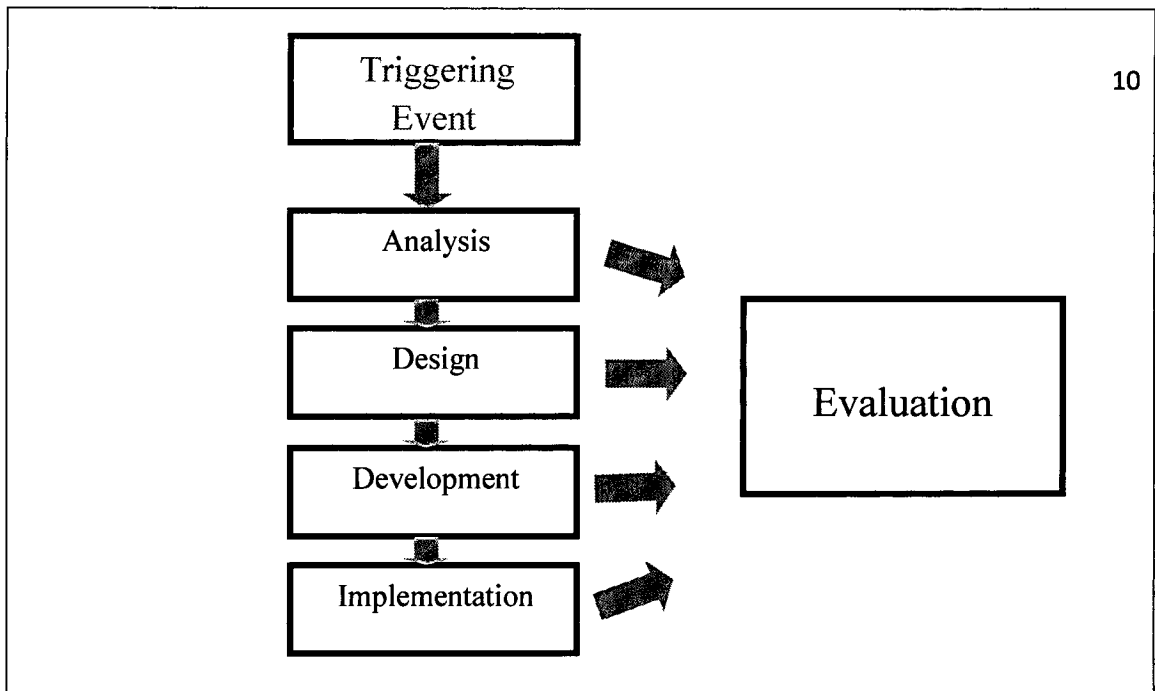


Figure 1: ADDIE Training Process

Training plan can be arranged formally or informally. However, in this research our study will be only on formal training.

- Shayo et al. (1999), cited in Wu and Rocheleau (2001) define formal training as planned previously and organized according to a specific program and schedule. It usually undertakes personal and specific topics. Employees take these training's on-the-job or off-the-job according to the content of the training and the type of skill or knowledge needed to acquire.
- Informal training on the other hand is a spontaneous and unstructured training due to a sudden need to a certain topic required to improve and develop skills, knowledge and abilities (Coombs 1985, cited in Wu and Rocheleau 2001).

However, according to Wu and Rocheleau (2001), formal training may lead to informal training and vice versa, because each type of training may generate a new interest in a certain topic or a path to fulfill the training experience in a different approach.

2.1.3 Training needs

Training needs arises when organizations need to adjust and adapt to market changes in order to improve employee and organizational performance. Any employee in any organization no matter what level they are or educational background they have, should

be entitled to training programs to keep up-to date with the latest technologies, processes and to develop their skills.

Educational systems nowadays, especially universities, do not teach specific technicalities and knowledge for specific job positions in organizations; they mainly focus on theories with little practical work. As a result organizations recruiting for fresh graduates or for any new vacant position will need to train the right skills, knowledge and competencies needed for that specific position in the organization. Therefore there is a need for extensive external and internal training for employees to be able to contribute to the productivity of the organizations.

Wognum (2001), cited in Nassazi (2013) states that the need for training and development occurs at three organizational levels:

1. Strategic level: The needs for training and development are determined by the top management of the organization while taking into consideration the organizations overall mission, goals and strategy that need to be addressed or fixed.
2. Tactical level: The needs for training and development are determined by middle management while taking into consideration the organizations development needs.
3. Operational level: The needs for training and development are determined by lower management in the organization while considering problems related to daily routine operations such as production and performance.

In every organization there is a gap between desired standards or levels in work performance and actual levels. Thus, every organization needs to adopt strategies to achieve these desired standards and goals (Appiah, 2010). To make it possible, organizations can use training to reach these desired standards and goals.

Edmond and Noon (2001), cited in Nassazi (2013) identified two approaches to identify training needs. They are the problem-centered and the profile comparison approach.

1. Problem centered approach (Performance Gap): This approach focuses on employee performance problems and difficulties resulting from insufficient knowledge or skill that need to be improved in order to solve the problem.
2. Profile comparison approach (Changes and Skills): Focuses on matching the employees' competencies with the role profile of that position. This approach may also be used when new technology or process is introduced

According to Kennett (2013) employers provide training and development courses for two main purposes; individual development and organizational development.

1. Individual development's drivers of training include:
 - Enhancing job performance
 - Career development
 - Building loyalty and commitment

For example organizations choose individual development when recruiting fresh university graduates, or improving current employee's skills and knowledge (Green et al., 2000).

2. Organizational development's drivers of training include:
 - Facilitating change
 - Linking training to the business strategy
 - Improving organizational performance
 - Complying with standards and regulations
 - Being an employer of choice
 - Gaining competitive advantage in the market

An example for organizational development is when there is a change on the organizational level (strategy, management...) and the organization wants to facilitate this change or transitional period on the employees (Tay, 2009).

In his study, Becker (1993), cited in Armstrong (2001) clarified two types of training, "general training" and "specific training". General training is the type of training that provides employees with skill and knowledge development which might be used and

transferred to other organizations in the market. On the other hand specific training is specific to the task and the organization that offers the training, mostly used for improving productivity.

As argued by Kennett (2013), the format and the content of the training's vary according to the needs of the development. The table below distinguishes between the contexts of the training and the three needs of development.

Training Need Training Context	Individual Development	Team Development	Organizational Development
Content of Training	General	Team specific	Organization specific
Format of Training	Formal	Formal/Informal	Formal/Informal
Method of Training	External accredited courses	Internal/External unaccredited courses	Internal unaccredited courses

Table 1: Contexts of the training and the three needs of development (Kennett, 2013)

2.1.4 Training and development methods

There are two methods for training and developing employee's skills in an organization. They are known as; on-the-job training and off-the-job training. Armstrong (2001) argues that organizations choose on the training method based on various variables and considerations like the strategy and the goals of the organization, training duration, location, available resources at hand, and the targeted group which is to be trained, such as individual employee, a team, or a department. According to Frazis et al. (1998), cited in Brum (2007) \$7.7 billion was spent on in-house training's and \$2.8 billion was spent on employee tuition payments.

2.1.4.1 On-the-job training

On-the-job training is also known as “in-house” and “internal training”. Holden (2001), cited in Melhem et al. (2014) argues that this type of training is conducted within the premises of the organization on regular working hours. He also mentions that it is mostly intended to teach trainees certain set of skills. Here are some of the most used and important on-the-job training methods according to (Blanchard and Thacker, 2006).

1. Job rotation: In this type of training, trainees are moved from one position or a job to another. This move can be within the same department or into another department. This will allow the trainees to have a broader look on the work process of the department or the organization, understand its problems, and develop their skills.
2. Coaching/Mentoring: In this type of training, trainees are placed under a supervisor who provides one-on-one guidance with regular feedback on the trainee’s performance and consults the deficiencies. Coaching focus on the technical aspects of the job, whereas mentoring focus in the employee’s organization fit.
3. Job instruction: In this type of training, trainers explain to the trainees all the necessary job skills and knowledge required how to do the job right, and develop their skills. It consists of four steps: Prepare, Present, Try out and Follow up.
4. Committee Assignments: In this type of training, group of trainees are given an actual organizational problem and asked to solve it jointly. This develops teamwork.
5. Orientation: This type of training is used for new recruits in the organization. Employees are familiarized with the job. Additionally they are given an overview of the organizations work environment; like working conditions, culture, procedures, and rules and regulations.
6. Internship: This type of training is largely encouraged by universities as part of students’ curriculum and sponsored by organizations. Organizations provide students the opportunity to get a real-life work experience with theoretical and practical aspects, on the other hand organizations can have extra manpower to

assist them and can recruit good interns and offer them a permanent job or an apprenticeship.

7. Apprenticeship: This is a mixed type of training between classroom educations along with on-the-job work. It has duration of three to four years. An apprentice must demonstrate mastery in all the required skills and knowledge before graduating. This type of training is mainly used for crafts and trades area since proficiency in the job relates to the duration of the apprenticeship.

2.1.4.2 Off-the-job Training

Also known as “external training”, Kempton (1995), cited in Milhem et al.(2014) states in this type of training trainees are sent to training venues outside the organizations premises, so that trainees will be away from the work environment and focus on the training, they are mostly intended to teach specialized skills. These are some of the important off-the-job training methods used as noted by (Blanchard and Thacker, 2006).

1. Lecture/Conference: In this type of training trainees are assembled in a room, and a trainer lectures and presents to the audience a particular topic. It’s a good way to train a large group but may lead to boredom.
2. Audio-Visual: This type of training uses multimedia guide, such as short movies, videos, and presentations to demonstrate how to do something or how it works. It provides wide range of examples but a downside of this method is one way communication.
3. Role Playing: In this method the trainees assume roles and act out in scenarios and situations. Trainees are put in a certain situation and have to respond naturally to changing situations. This method is specially used with customer services.
4. Simulation: In this method trainees will be trained on a specially designed machine that replicates the real world field experience as closely as possible. This is an expensive method, used for critical jobs and tasks, such airline pilots, military officers and ship navigators.

5. Case Studies: In this method trainees are given real past situations in an organization and trainees have to analyze the situation and come up with a solution. Later on these solutions are discussed with an instructor to evaluate the soundness of each solution. This is an excellent method to generate decision making.
6. Vestibule Training: This method is used specially with technical employees who use tools and machines in their daily routine job. For instant when a new machine or a tool is to be purchased by an organization, trainees are provided with a demonstration outside the workplace on how to use and handle the machine in a safe and efficient manner. Moreover the trainees test the machine themselves.
7. Management Game: This method divides the trainees into teams to compete against each other on organization based simulations. This allows the trainees to improve their teamwork spirit, problem solving skills and planning.
8. In-Basket Training: This method provides the trainees with a pack of information and requests that are usually handled at a given position, such as memos and reports. This method is mainly used when promoting an employee.

2.1.5 Fears from Training

Even though training provides mostly positive outcome to the employee and to the organization, sometimes it can have negative effects and consequences (Kennett, 2014; Nassazi, 2013). For example, when an organization invests large sum of money on its employees and eventually these employees become vulnerable targets from their competitors or other employers (Kennett 2014). This created a major fear and a dilemma for organizations who invest millions in their workforce (Becker, 1993; Brum, 2007; Green et al., 2000; O'Malley, 2013). A study conducted by Becker (1993), cited in Brum (2007) reveals that divisions that have adopted training and development have the highest rate of employee turnover in the organizations. This high risk of employee mobility is mainly due to the increase in the employee's value and current employers not paying up enough wages, hence creating a motive for employees to leave. As mentioned by Green et al. (2000) the expectation of employee turnover is enough to stop employers

from investing in training programs. On the other hand Schmidt (2007) argues that high employee turnover is one of the main reasons why organizations need to invest in training in order to recover employee commitment.

2.1.6 Training Evaluation

One of the most important human resource development strategies is training evaluation (Singh, 2013). Evaluation is a mean to measure the effectiveness of the training's obtained by the employees; it should be measured before, during and after the training. "Training evaluation provides the data needed to demonstrate that training does provide benefits to the company" (Kumpikaitė, 2007, p.29). For example when an organization analysis the training evaluation on a certain training, and discovers an inadequate or a negative return on investment and effectiveness, the organization will stop that training or look for other institutions that provide better training experience for their staff.

According to Philips (1983), mentioned in Kumpikaitė (2007), training evaluation has number of purposes and helps with:

- Determine whether the training reached its objectives and was appropriate
- Identify which of the trainees benefited from the training and who didn't
- Identify the strengths and weaknesses of the training
- Determine the cost benefit of the training
- Determine the participants for future training
- Gather and establish database to assist in managerial decision making like career development.

Pine and Tingley (1993), as cited in Shenge (2014), in their study identified four levels of measurement to be included in training evaluations:

1. Reaction of the participants' during training.
2. Learning and comprehending the content of the training by the participants.
3. The employment of the new acquired skills and knowledge on the participants' job.
4. Organization's return on training investment.

As argued by Kumpikaitė (2007), there are two types of training evaluation data; hard and soft. Hard data are quantifiable and objective such as time and output. Soft data are qualitative and subjective, such as job satisfaction, organizational commitment, and teamwork, they are usually hard to assess. In contrast, hard data are easier to measure and assess.

In many instances, organizations face a dilemma on whether to conduct certain training or not. This dilemma is mainly due to training evaluation's complexity in evaluating the training outcome and return on investment (Kirkpatrick 1998, cited in Gachunga 2012). Various studies indicate that considerable percentage of investments in training made by organizations doesn't reach their optimal objectives (Scaduto et al. 2008, cited in Shenge, 2014). Training evaluation poses a challenge for many employers, trainers and everyone who has an interest in the training. According to Kirkpatrick (1998), cited in Gachunga (2012), due to difficulties in collecting evaluation data, most organizations neglect the evaluation phase, moreover he adds if direct measures cannot be made, it is at least advised to estimate the cost of training, since effectiveness of the training can be measured in monetary (like return on investment) or non-monetary terms (like effects on performance).

Most of the challenges and problems are due to implementing training plans haphazardly without any prior plan and also due to the conspiracy of failure. Conspiracy of failure as defined by Rothwell (2005), cited in Shenge (2012) is when training is not integrated with the organizational strategy, lack of transfer of training from instructional setting to the work setting and inadequate training assessment.

Shenge (2012) advised that when evaluating training, organizations must distinguish between training and development gains. Training influences current performance, whereas development updates the trainees by making them flexible and more capable for the long term. This is important because organizations to have an effective training evaluation, they should evaluate their employee's training based on the type of training they undertake. That is you can't use one criteria or measurement for all type of training's, since there are different circumstances and type of skills or knowledge

acquired. An example by Kraiger (2003) mentions that a method used to evaluate a technical training workshop cannot be used to evaluate a communication skills building workshop.

Training reaches its objective and its chances of success are increased when there is transfer of training and training maintenance. According to Baldwin and Ford (1988), cited in Kraiger (2004) they are defined as such; transfer of training is the degree to which the trainees apply their newly gained skills, knowledge and attitudes effectively in their job, whereas training maintenance is the adaptation of the newly acquired skills in new and more complex settings. Kraiger (2003) concluded that trainees showed higher intention to transfer their training when they expected some sort of follow-up or assessment activity from their employers after they undergo certain training. Adding on this finding, Tannenbaum and Yukl (1992, p.418) stated: ‘The fact that their supervisor would require them to prepare a post-training report or undergo an assessment meant that they were being held accountable for their own learning and apparently conveyed the message that the training was important’.

Shenge (2012) argues that employees differ in their perception of training, and that evaluating training depends on that person’s perception of training. That is what is valuable for one person has no value for another person. Therefore it is important to know the evaluator of the training before a judgment on that training is to be made.

2.1.7 Training Theories

Training dates way back to the early dawn of human civilization in 5th century BCE with the Chinese philosopher Lao-Tse who wrote “If you tell me, I will listen. If you show me, I will see. But if you let me experience, I will learn” (Clark, 2010). Later on, Greek philosophers, such as Aristotle, Socrates and Plato developed new theories and ideas. For instance Socrates used Socratic or Dialectic Method to transfer knowledge to his trainees through skillful leading questioning which lead to self generated understanding (Clark, 2010). He also argues that it is worth mentioning that in the mid 1950’s and 1970’s researches on training had sharply declined, throughout these times researches on training were basically supported by the military and focused on general learning

principles (behavioral learning theories). However in the last ten to fifteen years there has been a considerable increase in interest in the amount of training researches and theories, largely because of the effectiveness and the crucial role training plays in these highly competing markets (Kraiger, 2003). And throughout the different ages and centuries, different philosophers, researchers and scholars have come up with various theories and understandings of training from different angles and points of view.

Training is referred as “a planned process to modify attitude, knowledge, skill or behavior through learning experience to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to develop the abilities of the individuals and to satisfy the current and future needs of the organization” (Manpower Service Commission, 1981, p.62). According to Kreitner (1995), cited in Appiah (2010, p.10) “training gives competitive edge to the organization and no matter how carefully job applicants are screened, typically a gap remains between what the employee does know and what they should know”.

Training’s have considerable financial influence on an organization since there are multiple costs to incur. These costs according to O’Malley (2013) are direct and indirect costs.

- Direct costs, such as costs incurred on needed materials for training and instructor’s salary.
- Indirect costs are incurred during and after the completion of the training such as employee productivity.

However these costs can be felt less if there are training that foster commitment to employees.

Brum (2007) argues that there are two schools of thought in training , one school states that training leads to an increase in turnover rate, whereas another schools states that training leads to higher employee retention rate. Nevertheless, regardless on this argument, training has certain significant impact on the employees and the organization whether positive or negative. However, in this research we will only study the effects that training has on Cimenterie Nationale S.A.L’s employees.

2.1.7.1 Scenistic Methods

As defined by Milhem et al. (2014) scenistic method is a variety of processes and scripted actions that focus on certain events, case-studies, and settings for performance related issues. He also states that due to cost and effectiveness factors, the scenistic methodology is more preferable for team training rather than for individual training. It includes four methodologies: situated learning, constructivism an experiential learning, transformative learning theory, and action theory.

1. Situated Learning

According to Anderson et al. (1996) situated learning is “based on situations in which trainees are involved on a regular basis”.

2. Constructivism and Experiential Learning Theory

In this method there are no ideal solutions; employees construct their own knowledge and skills through experience (Carver, 1996). “Experiential learning is based on constructivism and uses psychology, philosophy, sociology, anthropology, and cognitive sciences to gain a greater insight into the learning process” (Milhem et al. , 2014, p.17).

3. Transformative Learning Theory

In this method trainees are encouraged to participate in the preparation and building the content of learning activities, such as empowerment in decision making (Kucukaydin and Cranton, 2013)

4. Action Theory

As described by Davidson (2012), action theory is linked to behavior and it explains how to regulate learning and how trainees change their behavior to meet different type of objectives.

2.1.7.2 Human Capital Theory

Salisbury (2008), cited in Milhem et al. (2014) states that human capital theory is the sum of the skills and knowledge employees have which influence on their productivity. Moreover, he mentions that in this theory employees are important resource in an organization and attempts are made to contrast the productivity between employees who had training from the ones who didn't. Becker (1962), cited in Milhem et al. (2014)

mentions that training can be evaluated by financial criteria's because it is regarded as an investment with expenses and benefits. Furthermore, he states that there are two types of human capital. One type encourages employees to cover up for the expenses of the training and is considered as general training. The second type, employers and employees share the cost of the training and is regarded as specific training. Garcia (2005) mentions, training that employees have to finance themselves, won't create a positive impact on their performance if they know that the training won't increase their salary. On the other hand organizations that finance the training, will obtain their returns through the increase in employee productivity and performance.

Throughout this section we introduced and discussed the essential theories and basic topics that training is encompassed of, such as training process, needs and methods. After having a better understanding on training and how it functions, the next section will identify the benefits that training conveys on employees and organizations, and how it impacts them.

2.2 Training Benefits

Training as defined by Armstrong (2001, p.543) "is the formal and systematic modification of behaviors through learning which occurs as a result of education, instruction, development and planned experience." It is intended to teach new set of skills to improve current performance and focuses on updating competencies needed for the short-term (Jackson and Schuler, 2003).

The benefits of training are mostly attained when the training is planned in advance, and all the parties in the training (trainee, trainer, and organization) are well prepared for it. According to Kenney & Reid (1986), cited in Nassazi (2013)" planned training is the deliberate intervention aimed at achieving the learning necessary for improved job performance".

Training provides numerous benefits. Becker (1993), cited in Brum (2007) states that employers who have invested in training expect an increase in the organization's skills and improvement in productivity. Training is essential in supplying the organization with competent and adequate supply of employees for career development purpose such

as being a specialist or a manager in a certain department (Sultana, 2012). One of the most important benefits of training according to this study is in career development and enhanced workplace environment and conditions.

Career development as defined by DeSimone et al. (2003) (cited in Kumpikaitė, 2007), is an ongoing learning process of series of stages by which trainees go through and each stage is characterized by its own sets of tasks and issues. It focuses on a wide range of activities like career path, employee engagement, multi-skilling, job enrichment, job enlargement and creating retention. However, due to the needs of this study, the study will be on multi-skilling.

A research conducted by Bartlett (2001) came to the conclusion that there is a positive relationship between training and organizational commitment, the research indicates that training and development contribute to certain employee workplace attitudes which influence behaviors like turnover and retention. The employee's attitude and perception of the training opportunities if offered or to be offered, effect the employee's feeling about their job and organization, and hence the importance of employee retention. As defined by (Merriam-Webster's Collegiate Dictionary, 2003) retention "is the act of keeping someone or something". According to DeSimone et al. (2003), cited in Kumpikaitė (2007) career development increases loyalty and retention in the organization. Retention is an important element in an organization's success, and organizations work hard to retain their employees, because they know that once an employee is retained he will be engaged and be more productive.

Not long ago did multi-skilling become an important activity in the human resources study, its importance rose mainly due to the highly competitive and changing market demands and strategy. Multi-skilling is the opposite of functional specialization, it is achieved by providing employees with the proper training and support to possess wide range of skills and knowledge needed to undertake different tasks and jobs in the department or the organization (Eitzen and Panton 2004). Organizations started introducing multi-skilling to their workforce to offer flexibility by increasing the employee's pool of skills, hence increasing efficiency and effectiveness (Eitzen and

Panton 2004). However multi-skilling has some challenges and disadvantages. For instance some employees with specialized skills will resist and not welcome sharing their skills with others, causing demotivation and distrust between colleagues and supervisors (Watkins et al. 1992, cited in Clark 1999).

For many employees work isn't just about showing up to work, finishing up their tasks and getting their pay check at the end of the month. For them, employment in an organization is a means of social engagement, self esteem, recognition and a healthy lifestyle through favorable working conditions and settings (Perez et al., 2012). Working conditions consists of many factors and variables, not limited to (Hinze 2013, cited in Chi 2013):

- Safety and health, such as exposure to chemicals and radiations, housekeeping, level of dust, noise and vibration level.
- Ergonomics, such as accurate work posture, adequate equipment, clothing and facilities.
- Psychosocial aspects, such as working hours and shifts, overtime, discrimination and job demand.

Unsafe work act is defined as an inappropriate employee behavior or action that reduces the safety and quality of the operation (Saurin et al. 2005, cited in Chi 2013), whereas unsafe work condition is the surroundings and conditions of the employees that affect the safety and the quality of the operations (Bakri et.al 2006, cited in Abd Rahim 2014). Therefore, health and safety have become important priority for organizations especially since every year around two million employees worldwide are killed with work related accidents (Somavia, 2013). So employers should promote and commit themselves to work place safety practices by training their workforce on health and safety issues.

For most developed countries, workplace safety is a priority, that's why their governments have obliged organizations operating within their border to enforce various rules and regulations to control and prevent workplace accidents and health problems. Employees at different levels are trained on how to operate their machines and tools safely and how to operate in toxic and hazardous environments. If not well trained and

prepared to work under the hazardous and inappropriate working conditions, they create different negative effects on the employee's mental and physical health. As mentioned by Nelson et al. (2005), cited in Perez (2012) they lead to unfavorable work environment, such as:

- Distressful employee/employer relations which lead to high absenteeism rate to avoid the mental and physical stress and demands awaiting them at their job.
- High turnover rate due to lack of safety and health criteria's, and lack of motivation and job satisfaction.
- Increase in cost of productivity from lack of manpower and cost of replacement due to high turn overate and high accidents rate due to unsafe work conditions or unsafe work acts resulting in extra expenses like insurance and medical coverage.

As noted by Kennett (2013, p.113), "organizations benefit from training by being more productive, more competitive, and consequently more profitable in the future". To highlight on this point, a research made by Almeida and Carneiro (2006), cited in Kennett (2013) found out that an increase in 10 hours per year in training per employee leads to a 0.6 percent increase in productivity.

Cole (2002), cited in Appiah (2010), states that these five points below summarize the main benefits of training:

1. Change management: Training allows employees to understand change and involve them in the change process.
2. High morale: Increase in confidence and motivation in employees who have received training.
3. Lower cost of production: Employees with training make better use of materials and machines; hence less stoppages, less wasted materials. Also less or no need for overtime due to better time management.
4. Provide recognition: Training provides enhanced responsibility through job enlargement and job enrichment.

5. Lower turnover: Training creates a healthier work environment through job security and less stress which lead to less turnover and absenteeism.

When employees are well trained, the organization will have a reduced turnover rate, less absenteeism and less dissatisfaction complaints; because employees will experience job satisfaction associated with a sense of achievement and development in their capabilities (Pigors and Myers 1989, cited in Nassezi 2013). Furthermore, workplace satisfaction will result in a reduced cost of hiring because fewer employees will want to leave the organization and hence less recruitment costs for replacement. Job satisfaction is a reflection of good treatment. It is considered to be an indicator of employee's emotional and psychological well-being (Robert and Shamsuddin, 2000). Job satisfaction is simply "how people feel about their job and different aspects of their job" (Spector, 1997, cited in Robert and Shamsuddin, 2000, p.131). For example, an employee might have multiple feelings about various parts of his job; he might be satisfied with some part, dissatisfied with another part or have neutral feelings about some other parts of his job.

All these training benefits and effects result in an improved employee job performance. Job performance as referred by Borman et al. (2001) is the extent to which employees accomplish their tasks according to the requirements of the job.

Therefore, training not only improves the performance of the employees to perform their current job and tasks effectively, but it also enhances their knowledge, skills and attitude allowing them to handle future arising tasks and situations efficiently and effectively.

2.2.1 Career Development

The human resources department of an organization plays a vital role in closing the gap between present and future needed skills of the employees, and the best way to deal with this change in skills is by developing the workforce through career development (Robert and Shamsuddin, 2000).

Career development is defined as a joint process between organizations and individuals to meet their end goals and objectives (McDonald and Hite, 2005). According to this

definition, career definition is an ongoing process between employee and employer, and that career development opportunities such as career path and enhancement of skills isn't restricted to a select employees or jobs, but on the contrary everyone in the workforce should have equal opportunities.

A study done by Armstrong (2001) found that when it comes to job satisfaction, employees value and are more interested in things, such as being appreciated for a task accomplished and career development, rather than pay and promotion. Rowden (1995) states that businesses that have training and development as a priority are more profitable than ones' with no training or development plans.

Career development gives employees a clear focus on their career path in the organization; it gives them a vision on how far they can reach in the organizational ladder. Career development is vital in creating committed and engaged employees Rowden (1995).

2.2.2 Employee Commitment from Training

Organizations seeking to achieve their goals can use various human resource approaches and strategies. One of these approaches is commitment, which according to Arthur (1994) is a psychological development that connects employees to their organization to achieve the organizational goal. Brum (2007) hypothesized that committed employees have less desire to terminate their relation with the organization, as they have higher intent and desire to stay and work with more positive attitude. Hence, he concluded that commitment was related to employee turnover.

Employers seeking to maintain their employees following training courses should implement strategies on training tied to different human resource practices, such as recruitment and performance evaluation to foster employee commitment and lower turnover rate among employees specially the ones who have had training. Since such plans can lower the likelihood of employees seeking employment elsewhere. A study on employee mobility by Green et al. (2000) concluded that committed employees have higher chance and likelihood to remain with the organization. The study found out that when employers have commitment objectives in their strategy, the probability of

employees being “less likely to search for a job” increased from fifteen percent to twenty six percent, likewise the “more likely to search for a new job” factor decreased from 19 percent to ten percent. Another study done by Owens (2006) had also similar finding, with a correlation between turnover and commitment. The study found that employees who have had training on commitment had higher level of commitment, lower turnover considerations, and more positive attitude towards the job and the organization.

In Becker’s (1993) study, mentioned in paged 14 of this research, he tries to understand the relationship between turnover and training. The study mentions that due to fears from general training’s, employers are hesitant or do not invest in their employees in such training’s , since they will be obliged to increase their employee’s salary due to the new acquired skills, otherwise they will lose their employees to competing organizations, hence increasing turnover . On the other hand specific training’s are useless to other organizations because the training’s are nontransferable, hence having less impact on turnover. However in both cases, employees are investing their time and effort anticipating an improvement in their salary or career path, which is a positive signal in improving employee’s commitment to their organization. This argument is backed by Krueger and Rouse (1998) who state that employees attending training regardless of its specificity become more invested and committed.

Built on Becker’s (1993) study, new studies have emerged indicating that organizations are investing in a blended form of general and specific training. Acemoglu and Pischke (1999) argue that each type of training complements another. His argument states that organizations are unintentionally investing in general training while assuming the training is organization specific. A research by Frazis and Loewenstein (2006) shows that 63 percent of employees who have obtained training, report that the skills obtained from training can be transferred to other organizations.

Another factor that effects commitment and retention rate is reciprocity. Reciprocity is when employees have the “sense of debt “feeling towards their employers due to training (Tay, 2009). It goes with the saying that says ”don’t bite the hands that feed you”, since the organization helped the employee and invested in him , the employee in

return feels bad harming and leaving the organization. This in a way creates sense of loyalty and commitment (Scholl, 1981). Burke (1995), cited in Barrett and O'Connell (2001) states that, the more training an employee obtains, the more supportive and favorable he will feel towards the organization and less intentions to quit. In their research Barrett and O'Connell (2001) found out that employees value general training more than specific training, and view general training as a gift. They also analyzed that when organizations investment in their workforce this gives the employees a sense of being part of the organization and feeling like an "insider", as a result employees exert more effort to improve their performance and show their commitment to the organization.

A committed employee with the right training and compensation plan will be motivated, and a motivated employee will increase his performance, hence increasing the performance of the department and the organization he works in.

2.2.3 Job involvement from Training

Job involvement is the degree to which an individual emotionally and mentally identifies with his job and his perceived performance level important to self-worth Khan et al. (2011). The level of job involvement varies from one person to another. Job involvement is very similar to commitment since they both are concerned with the employee's identification with work; however job involvement is linked with the employee's identification with his job whereas commitment is linked to the dedication and attachment to the organization (Zhang, 2014). However, when an employee feels committed to his organization it doesn't always mean that he is involved in his job and same thing goes to when an employee is involved in his job doesn't mean that he is committed to his organization (Brown, 1996). Job involvement contains these 3 features according to Sultana (2012).

1. Accepting the rules and regulations of the organization
2. Willing to be part of the organization for a long term
3. Showing his full potential for the sake of the organization

Employees that are highly involved in their job feel that their job is an important part of their lives. Since as Miller and Monge (1986) mention, employees who are involved and have high performance and output feel satisfied, and this satisfaction leads to self esteem. As a result when an employee feels satisfied at his job, eventually this will lead to better performance rate with better effectiveness and efficiency and also lower turnover and absence rates. Also the more the employee feels involved and attached to his job the more he will take initiatives to solve issues and obstacles rather than waiting the issue to be solved or neglecting it. Brown (1996) argues that managers have noticed that employees who are more involved in their job and tasks have higher efficiency than the ones who have low involvement. Hence this means that there is a direct relationship between job involvement and job performance. This claim is backed up by study done by (Brown, 1996) who claims that there is a direct and automatic relationship between job involvement, higher job performance and commitment.

The most efficient way for an employee to improve his performance is allowing him to use and implement his newly acquired skills and knowledge during training on his job (Loui, 1995). This way the information and the process will still be fresh in his mind and he will easily be able to transfer and experience these skills on his actual job.

Nevertheless some researches argue that job involvement has effects on performance but to some extent (Dubinsky and Hartley, 1986). In the end Meyer et al. (1989) mention that employee commitment is a catalyst for job performance and involvement and effects them either directly or indirectly.

2.2.4 Training Effects on Working Environment

According to Somavia (2013) around 317 million work place accidents and work related diseases occur worldwide, and an estimate of 2.34 million workers die each year as a result of such cases. In many countries where there is no law or regulation on organizational health and safety, it is unlikely that firms will implement such safety and health standards. However due to the globalization and the need to have the higher edge from the competition, many firms in undeveloped countries with no rules on safety and health, have started to take their employee's working condition into consideration to be able to compete on international markets. Various workshops and courses are offered to

employees, such as fall protection, chemical safety protection, confined spaces, hazardous materials training and ergonomics training. All these in an effort to diminish and eliminate workplace hazards and familiarize employees to the risks that they might encounter at their workplace if they don't abide by the safety and health norms (Kelioway et al., 2006). Studies on these safety and health training's have included that they increase employee's safety participation and safety compliance (Abd Rahim, 2014). Safety participation is behavior that indirectly tends to increase employee's voluntary participation in safety activities, whereas safety compliance is abiding by the safety rules (Chi et al., 2014). Micheal et al. (2006) found that when the relationship between employer and employee is healthy, employees incorporate with safety and health policies more positively.

According to Bambra et al. (2009) hazardous working conditions where the main reason for sickness in the workforce; these conditions being physical or psychosocial stressors in the work environment. Work environment as defined by Che Rose et al. (2008) is the different working conditions and organizational contexts whether physical or social. Ergonomics help reduce illnesses and injuries in the workplace, such as musculoskeletal disorders (chronic back and neck), fatigue, anxiety and optical strain (Niu, 2010).

2.2.5 Training Effects on Salary

The compensation system of an organization affects the outcome of training, and training itself has various effects on salary. When organizations reward their trained employees, this will motivate their workforce and help them pass on their skills to fellow colleagues which will help the organization in the career development plan. As referred to in the Expectancy Theory, when an employee is rewarded adequately for his effective transfer of training to his colleagues, this will create an increase in employee's motivation (Vroom 1964, cited in Armstrong 2001).

According to Becker (1962), cited in Kennett (2013) on the Job Training has positive effect on employee salary because it enhances employee productivity and performance, it works as a catalyst in increasing of the salary. As mentioned by OK (2003) there is a relationship between mentoring/coaching (both are types of on the job training) and enhancement of salary. However, off the Job Training does not have the same significant

effect on salary (Lynch, 1992). A study conducted by Mincer (1996), cited in Sultana(2012) states that on the job training results in an increase in income approximately twelve to fifteen percent ,whereas off the job training increases between two to eight percent. However this increase in income with on the job training occurs when the employee remains at his is current organization. In case the employee leaves the organization and joins another organization, on the job training won't have any positive impact on his salary (Lynch, 1992).

Kline & Hsieh (2007) state that salary influences employee's decision to leave or stay. That is it either increases the turnover rate or increases the retention rate at the organization. When the pay is based on the performance on the employee this will motivate employees to generate more effort and be creative. However the impact of the performance based pay varies between employees who earn their salaries on a monthly basis and between the ones who earn it on a daily or a piece rate. Since according to Fernie and Metcalf (1995) employees who earn on a monthly basis don't show any noticeable enhancement, on the other hand employees who earn on a daily or piece rate show improved performance when the salary is performance based.

2.2.6 Employee Performance from Training

Wu and Rocheleau (2001) states that training, whether formal or informal are designed to develop the skills of employees so that they perform better. Performance is the set of tasks achieved in a specific job measured against predetermined criteria and standards (Sultana 2012). These predetermined standards are means for efficient and effective job operation to have maximum productivity and competitiveness. As mentioned by Kenny (1992), cited in Nassazi (2013) the performance standards set by the organization are used to measure employee performance. That is what the organization expects from you. When measuring a performance of an employee there are multiple considerations to take into account, such as quality, efficiency, effectiveness, and productivity (Elnaga and Imram, 2013).

When an employee is performing well in his job means he is performing the assigned tasks to him as required. When an employee shows good continuous performance after

training, the organization he works for can offer him some extra benefits, increase in salary and most importantly a career plan, otherwise other organizations being aware of his good performance will try to lure him with a better package to their organization. Kinicki and Kreitner (2007) found that employees perform better when they are happy and satisfied at their workplace, rather than employees who aren't satisfied.

Training plays a vital role in an organization's performance. Employee performance and organizational performance are related in one way or another, since when employees are performing well means the organization is performing well (Swart et al., 2005). Training develops employee's skills, knowledge, abilities and behaviors which improve the performance of the employee and eventually improving the organizational performance (Appiah, 2010). We can understand from this statement that there is a direct relation between training and employee performance. Moreover we can conclude that there is a difference in performance between organizations who train their employees and the ones who don't. As noted by Elnaga and Imram (2013) organizations that are devoted to generate profit for their shareholders and stakeholders invest heavily in training and development plants rather than the ones with no obligations.

2.2.7 Job Satisfaction

Most of us view and comprehend satisfaction in a different way. What makes someone happy might cause sadness for another. Job satisfaction isn't an easy concept to clarify, that's why many researchers have come up with various theories trying to figure it out. For example if you are happy with your job, doesn't necessarily mean that you are happy with all the aspects of your job (Scheers and Botha, 2014). Job satisfaction is a built up of multiple constructs. There are various range of aspects to take into consideration in job satisfaction, such as satisfaction with salary, supervisor, colleagues, working conditions and career development (Anderson, 2005). This means if you are satisfied with the pay, you might be dissatisfied from your relation with your supervisor.

According to Spector (1997) job satisfaction is a feeling that illustrates whether you like or dislike work. Lok and Crawford (2001) built on this statement and added on it, stating job satisfaction is how a person relates and perceives the degree of fit between him and

the organization. However, Blegen (1993) stressed that the organizational variables have a stronger influence on job satisfaction than individual variables have.

Moreover, Weiss (2002) argued that even though job satisfaction is an attitude, researchers should differentiate between various objects of cognitive evaluation, such as behaviors, affect and beliefs. This statement indicates that the feeling we have towards our job is formed by considering our behaviors, affect and beliefs.

Firms interested in improving their employee's performance should increase their employee's level of job satisfaction (Weiss, 2002). Training not only improves organizations overall performance but it also is an important factor in forming employee attitude. This claim is backed by Khawja et al. (2013) who affirmed that employees who have had training showed more satisfaction with their job than those with no training or training opportunities. In addition, training gave employees more options with their career development which in its turn increased employee's job satisfaction. Furthermore Khawja et al. (2013) elaborated that jobs that have development potentials act as a catalyst in increasing employee motivation, performance and hence job satisfaction.

A study conducted in Russia by Linz (2003) affirmed the previous statement. It found out those workers who have expectations from their job, such as career development chance, acquiring of new skills and knowledge, reported higher level of job satisfaction. Rowold (2008) and Bedingham (1997) stressed even more on training's impact on job satisfaction, they concluded that training's sole purpose and goal was to enhance employee job satisfaction and modify job behavior. Some of the benefits of job satisfaction were stated by Eaglen et al. (2000), they include employee satisfaction, lower turnover, better productivity and accepting organizational change.

According to Herzberg's (1968) two factor theory, also known as motivation-hygiene theory mentioned in Anderson (2005), there are factors that cause job satisfaction and other factors that cause job dissatisfaction, they are differentiated as intrinsic (motivators) and extrinsic (hygiene factors).

- Intrinsic (motivators): Arise from the job itself and are not tangible, they are emotional needs such as recognition and achievement.

- Extrinsic (hygiene factors): They are basic needs such as salary and job security. Their presence doesn't create job satisfaction, but if not present they create dissatisfaction.

2.3 Conclusion

The quantity and quality of training provided by organizations vary from one organization to another, and changes in the external environment, available resources and degree of internal changes are all factors that affect the organization's decision to invest in training (Cole 2002, cited in Nassazi 2013).

Although some organizations are skeptic to invest in training, nevertheless training can be an ultimate tool for organizations to gain a competitive edge over their competitors in the market (Khan et al. 2011). Training will help both the organization and its workforce, since through training employees will excel and upgrade their skills, knowledge, abilities and confidence in performing their tasks and duties more efficiently and in the same time increasing their organization's performance and productivity. As mentioned in the empirical part of this research, training offers various types of benefits, such as increase in job satisfaction, building a career development plan for employees, such as multi-skilling and career path, improving retention rate and commitment to the organization, enhancing working environment and conditions of employees for minimizing health risks and work accidents, all these directly or indirectly have an overall impact on the organization performance and reputation.

We can clearly notice from the examples the impact of training on organization's performance and sustainability, since failing to provide employees with the needed training and development to be up-to-date with the ever changing business environment and market around them will lead to various conflicts and obstacles to efficiently compete in the market and could eventually lead to an organization's bankruptcy. That is why, organizations should have a policy in their strategy about training to continuously develop and prepare their workforce for future arising challenges and not wait for a performance gap analysis to identify whether an employee has a gap in a certain skill in his job (Swart et al.2005).

However, for training to reach its objective and have an effective transfer of training there should be a continuous training evaluation throughout all the training process from pre-training, during training and after training, since changes in technology, rules and legislations forces organizations to revise and update their own training plans (Rothwell, 2007). For instance a training plan implemented a year ago with successful outcome may not produce the same outcome tomorrow and be considered as a successful training plan. Thus, evaluating and measuring the results accurately will help organizations adapt to these various changing circumstances (Rothwell, 2007).

We can conclude from these arguments and statements on how training is critical to organization's performance and how a misplanning, and poorly evaluating training can lead to catastrophic outcome.

2.3.1 Summary of Chapter 2

This chapter throughout its three different sections enlightened us with all there is to know about training from the need to training to evaluating training.

The first factor in the literature review section we introduced training by stating its different definitions. Next in the training process we identified the ADDIE model and concluded that for a training to be effective it needs to follow a certain predesigned process. Another training factor in the literature review section was the training needs, here we stated why organizations need to train their employees. Moreover we cited Wognum's (2001) three level of organizational training needs, Edmond and Noon's (2001) two approaches to identify training needs and Kennett's (2013) two purposes of employer provided training. After the training needs we introduced two training and development methods. The first being on-the-job training with seven categories, and the second being off-the-job training with eight categories. Fear from training was also discussed because many organizations fearing to lose their trained employees don't implement and invest on training plans. One of the most important processes in training was also discussed thoroughly which is evaluating the training. In this part we mentioned that many organizations fail in training because they don't effectively evaluate the training, furthermore we introduced Philip's (1983) training evaluation

purposes, Pine and Tingley's (1993) four level of measurements to be included in evaluations and the importance of transfer of training. Finally, the last part of the literature review was training theories where we discussed a brief history of training and how it evolved and also we identified the two training theories; scientific methods and human capital theory.

The second part of this chapter we introduced numerous benefits of training on organizations and employees. Training plays a crucial role on an employee's career development since it prepares them for future opportunities and challenges. Another benefit of training is creating committed workforce, as a study done by Owens (2006) shows that organizations that adopt training plans have a higher committed workforce than the ones who don't have. We also discussed reciprocity and its impact on commitment. Moreover we discussed training's influences on employee's job involvement in an organization, leading to an improved job performance. Nevertheless training also has a role on working environment, since training influences and improves employee's health and safety at the workplace. Last but not least we mentioned the effects of training on employee's salary and that salary decisions influence employee's decision to stay or leave. Finally, the effects of training on employee's performance was identified.

In the last section of this chapter we made a conclusion on all the topics discussed, we found out that training priority, type, investment and method used varies from one organization to another. Additionally as a summary of all the statements and theories mentioned in this chapter were briefed in separate tables.

In the next chapter the process and methodology of this research will be identified, such as the variables, data collection method, and required tests to generate reliable and valid analysis.

The following tables are a summary of the important training theories mentioned in the section. All the different factors that were stated by different authors are gathered and displayed according to factor types. There were a total of 18 various factors with 132 statements on training, varying from the importance of training to its' benefits on

employee's performance and satisfaction. An analysis of the table indicates that the most repetitive factor is the "training importance" with 18 statements, followed by "employee job satisfaction" with 16 statements, and "training evaluation" and "types of training" with 11 statements. From this we can comprehend the importance of training on organization's and why so many scholars have high interests on training and dedicated their studies on it. Also training evaluation is an important factor since precise study and analysis is needed to determine whether the training is beneficiary and needed. However, a further analysis of the factors indicates that 67 of the statements are related to training benefits and its' effects, such as commitment, job involvement, employee performance, employee satisfaction, and retention. All these positive 67 statements on training against only 6 statements on organizations' fear from training, cementing claims that training has positive effect on employee's performance and eventually organization's performance.

Factor	Author	Statement
Training Evaluation	Singh 2013	Training evaluation is an important HRM function
	Kumpikaitė 2007	Training evaluation definition
	Philips 1983	Purposes of training evaluation
	Pine and Tingley 1993	Four levels of measurement to be included in training evaluations
	Kumpikaitė 2007	Two types of training evaluation data
	Kirkpatrick 1998	Training evaluation's complexity
	Kirkpatrick 1998	Difficulties in training evaluations
	Shenge 2012	Distinguish between training and development gains
	Tannenbaum and Yukl 1992	Employees show more dedication when there is an evaluation
	Kraiger 2003	Employees show higher intention to transfer when there is follow up
	Rothwell 2007	Needs for training transfer to be effective

Table 2: Summary of training evaluation statements by different scholars

Factor	Author	Statement
Career Development	Sultana et al. 2012	Training is essential in supplying the organization with competent and adequate supply of employees
	DeSimone et al. 2003	Career Development includes activities like; career path, employee engagement, multi-skilling, job enrichment, job enlargement and creating retention
	DeSimone et al. 2003	Career development increases loyalty and retention in the organization
	Robert and Shamsuddin 2000	Importance of career development
	McDonald and Hite 2005	Definition of career development
	Armstrong 2001	Job satisfaction comes from career development

Table 3: Summary of career development statements by different scholars

Factor	Author	Statement
Multiskilling	Eitzen and Panton 2004	Creates flexibility by increasing the employee's pool of skills
	Watkins et al. 1992	Some employees will resist and not welcome sharing their skills with others

Table 4: Summary of multiskilling statements by different scholars

Factor	Author	Statement
Investment in Training	Milhem et al. 2014	Organizations dedicated training number hours for their employees increased
	Coget 2011	Countries such as Sweden dedicate 4 to 6% of their payroll on training
	Frazis et al. 1998	\$7.7 billion was spent on in-house training and \$2.8 billion was spent on employee tuition payments
	Scaduto et al. 2008	Training's don't reach their objectives
	Cole 2002	Investment in training differs from one organization to another

Table 5: Summary of investment in training statements by different scholars

Factor	Author	Statement
Training Effects on Salary	Vroom 1964	Effective transfer of training impacts
	Becker 1962	On-the-job training has positive effect on salary
	Lynch 1992	Off-the-job training has no positive effect on salary
	Mincer 1996	On-the-job training has positive effect on salary
	Kline & Hsieh 2007	Salary influences turnover rate

Table 6: Summary of various training effects on salary statements by different scholars

Factor	Author	Statement
Employee Performance	Sultana et al. 2012	Training positively influences employee performance
	Garci'a-Bernal et al. 2005	Employee development determines employee satisfaction ,productivity, retention and reduction in the cost of training
	Borman et al. 2001	Definition of job performance
	Brown 1996	Relations between involvement and employee performance
	Meyer et al. 1989	Commitment is a catalyst for employee performance and involvement
	Sultana 2012	Employee performance definition
	Kenny 1992	Employee performance and standards
	Elnaga and Imram 2013	Considerations on employee performance
	Kinicki and Kreitner 2007	Relation between employee performance and satisfaction
	Swart et al. 2005	Relation between employee performance and organizational performance

Table 7: Summary of employee performance statements by different scholars

Factor	Author	Statement
Fear from Training	Kennett 2014	An employer who has trained his employee will be a vulnerable target from competitors
	Becker 1993	Turnover rate is higher in divisions who have adopted training
	Green et al. 2000	Employee turnover is enough to stop employers from investing in training
	O'Malley 2013	Training costs
	Brum 2007	Two thoughts on training impact: turnover and retention
	Frazis and Loewenstein 2006	63% of employees can transfer their skills obtained from training to other organizations

Table 8: Summary of fear from training statements by different scholars

Factor	Author	Statement
Commitment	Arthur 1994	Definition of commitment
	Brum 2007	Effects of commitment
	Green et al. 2000	Effects of commitment
	Owens 2006	Relation between turnover and commitment
	Krueger and Rouse 1998	Employees become committed when they attend training
	Tay 2009	Definition of reciprocity
	Burke 1995	The more training obtained the more commitment
	Zhang 2014	Difference between job involvement and commitment
	Brown, 1996	Difference between job involvement and commitment
	Meyer et al. 1989	Commitment is a catalyst for employee performance and involvement

Table 9: Summary of commitment statements by different scholars

Factor	Author	Statement
Training Effects on Safety and Health	Cole 2002	Employees who have training on safety and health issues are less prone to commit accidents, hence less turnover and more job satisfaction
	Kelioway et al.2006	Increase in training offered to diminish work accidents and health issues
	Abd Rahim 2014	Safety and health training increase employee safety compliance
	Chi et al. 2014	Definition of safety participation and compliance

Table 10: Summary of training effects on safety and health statements by different scholars

Factor	Author	Statement
Types of Training	Shayo et al. 1999	Formal training is planned previously and organized
	Coombs 1985	Informal training is a spontaneous and unstructured training
	Wu and Rocheleau 2001	Formal training may lead to informal training and vice versa
	Holden 2001	On-the-job training is done in the premises of the company
	Blanchard and Thacker 2006	On-the-job training methods
	Kempton 1995	Off-the-job training is done outside the company
	Blanchard and Thacker 2006	Off-the-job training methods
	Milhem et al. 2014	Senistic method types
	Becker 1962	Human capital theory types
	Becker 1993	Specific and general training definitions
Barrett and O'Connell 2001	General training over specific training	

Table 11: Summary of types of training statements by different scholars

Factor	Author	Statement
Working Conditions	Hinze 2013	Working conditions consists of many factors
	Saurin et al. 2005	Unsafe work act is an inappropriate employee behavior
	Bakri et.al 2006	Unsafe work condition is the conditions that cause accidents
	Somavia 2013	Two million employees worldwide are killed yearly due to accidents
	Nelson et al. 2005	Inappropriate working conditions lead to unfavorable work environment
	Bambra et al. 2009	Hazardous working conditions impacts
	Che Rose et al. 2008	Definition of work environment
	Niu, 2010	Definition of ergonomics

Table 12: Summary of working conditions statements by different scholars

Factor	Author	Statement
Job Involvement	Khan et al. 2011	Definition of job involvement
	Zhang 2014	Difference between job involvement and commitment
	Brown, 1996	Difference between job involvement and commitment
	Sultana 2012	Three features of job involvement
	Miller and Monge 1986	Relations between involvement and employee satisfaction
	Brown 1996	Relations between involvement and employee performance
	Meyer et al. 1989	Commitment is a catalyst for employee performance and involvement
	Dubinsky and Hartley 1986	Limitations of job involvement

Table 13: Summary of job involvement statements by different scholars

Factor	Author	Statement
Retention	Garci'a-Bernal et al. 2005	Employee development determines employee satisfaction ,productivity, retention and reduction in the cost of training
	Bartlett 2001	Training and development influence behaviors like turnover and retention
	DeSimone et al. 2003	Career development increases loyalty and retention in the organization
	Brum 2007	Two thoughts on training impact: turnover and retention

Table 14: Summary of retention statements by different scholars

Factor	Author	Statement
Benefits of Training	Cole 2002	Change management, high morale, lower cost of production, provide recognition, lower turnover
	Khan et al. 2011	Training as a tool for success
	Appiah, 2010	Training develops employee's skills
	Elnaga and Imram 2013	Organizations are more devoted to training when there are stakeholders

Table 15: Summary of benefits of training statements by different scholars

Factor	Author	Statement
Organization Profitability	Robert and Shamsuddin 2000	Organizations witnessed a higher profitability and employee satisfaction
	Becker 1993	Organizations who have invested in training expect an increase in organizational productivity
	Kennett 2013	Organizations benefit from training by being more productive
	Almeida and Carneiro 2006	Increase in training leads to increase in productivity
	Swart et al. 2005	Relation between employee performance and organizational performance

Table 16: Summary of organization profitability statements by different scholars

Factor	Author	Statement
Employee Job Satisfaction	Robert and Shamsuddin 2000	Organizations witnessed a higher profitability and employee satisfaction
	Garci'a-Bernal et al. 2005	Employee development determines employee satisfaction ,productivity, retention and reduction in the cost of training
	Cole 2002	Employees who have training on safety and health issues are less prone to commit accidents, hence less turnover and more job satisfaction
	Pigors and Myers 1989	Well trained employees experience satisfaction
	Robert and Shamsuddin 2000	Definition of job satisfaction
	Armstrong 2001	Job satisfaction comes from career development
	Miller and Monge 1986	Relations between involvement and employee satisfaction
	Kinicki and Kreitner 2007	Relation between employee performance and satisfaction
	Scheers and Botha 2014	Being happy with your job doesn't mean being happy with all aspects of job
	Anderson 2005	Range of aspects to take into consideration: Satisfaction with salary, supervisor, colleagues, working conditions and career development
	Spector 1997	Job satisfaction is a feeling that illustrates whether you like or dislike work
	Lok and Crawford 2001	Job satisfaction is how a person relates and perceives the degree of fit between him and the organization
	Weiss 2002	Researchers should differentiate between various objects of cognitive evaluation, such as behaviors, affect and beliefs
	Khawja et.al 2013	Jobs that have development potentials act as a catalyst in increasing job satisfaction
	Herzberg 1968	Herzberg's two factor theory
Eaglen et al. 2000	Benefits include: Employee satisfaction, lower turnover, better productivity and accepting organizational change	

Table 17: Summary of employee job satisfaction statements by different scholars

Factor	Author	Statement
Training Importance	Joelles 2005	Stressing the importance of training to employees will facilitate training
	Blanchard and Thacker 2006	Training should be viewed as an integral part of the organization
	Cole 2002	Employees who have training on safety and health issues are less prone to commit accidents, hence less turnover and more job satisfaction
	Jackson and Shuler 2003	Training is regarded as one of the most important HRM functions
	Beardwell and Holden 2001	Training creates a permanent change in the KSA's of individuals for current held job and future jobs
	Wognum 2001	The need for training and development occurs at three organizational levels
	Edmond and Noon 2001	Two approaches to identify training needs. Problem-centered and the profile comparison approach
	Kennetta 2014	Employers provide training for two main purposes: Individual and Organizational development
	Green et al., 2000	Individual development
	Tay, 2009	Organizational development
	Kennetta 2014	The format and the content of the training vary according to the needs of the development
	Shmidt 2007	Employers should invest due to employee turnover
	Rothwell 2005	Conspiracy of failure definition
	Baldwin and Ford 1988	Training definition
	Shenge 2012	Employees differ in their understanding of training
	Krietner 1995	There's always a gap between new recruits and required skills
	Swart et al.2005	Training should be part of organization's strategy

Table 18: Summary of training importance statements by different scholars

Chapter 3

PROCEDURES AND METHODOLOGY

3.1 Introduction

This research attempts to investigate the perception of Cimenterie Nationale's employees about 4 different categories of training attributes (quality of training, benefits and challenges, personal commitment and level of satisfaction) and to examine the existence of potential variations of perception with respect to 3 demographic variables (age, education level and years of work experience of the different respondents), as well as to check for probable relationships between the four categories of attributes and demographics variables.

In this chapter the hypotheses will be identified arising from the research question along with the dependant and independent variables of the study. Moreover, different methodology factors will be identified, such as the strategy of the research, how the sampling procedure will be done, the data collection methods that will be utilized, how the analysis of the data will be done using statistical package that will eventually answer the research question and the objective.

3.2 Hypotheses

We want to examine the potential variation of four categories of training attributes with respect with three demographic variables. The following hypotheses were established to formulate and illustrate the relationship between the demographic variables and training attributes.

H1: Age has a positive linear relationship with training attributes

H1.1: Age has a positive linear relationship with quality of training

H1.2: Age has a positive linear relationship with benefits and challenges

H1.3: Age has a positive linear relationship with personal commitment

H1.4: Age has a positive linear relationship with level of satisfaction

H2: Level of education has a positive linear relationship with training attributes

H2.1: Level of education has a positive linear relationship with quality of training

H2.2: Level of education has a positive linear relationship with benefits and challenges

H2.3: Level of education has a positive linear relationship with personal commitment

H2.4: Level of education has a positive linear relationship with level of satisfaction

H3: Years of experience has a positive linear relationship with training attributes

H3.1: Years of experience has a positive linear relationship with quality of training

H3.2: Years of experience has a positive linear relationship with benefits and challenges

H3.3: Years of experience has a positive linear relationship with personal commitment

H3.4: Years of experience has a positive linear relationship with level of satisfaction

The following figure depicts the relationship between these three hypotheses.

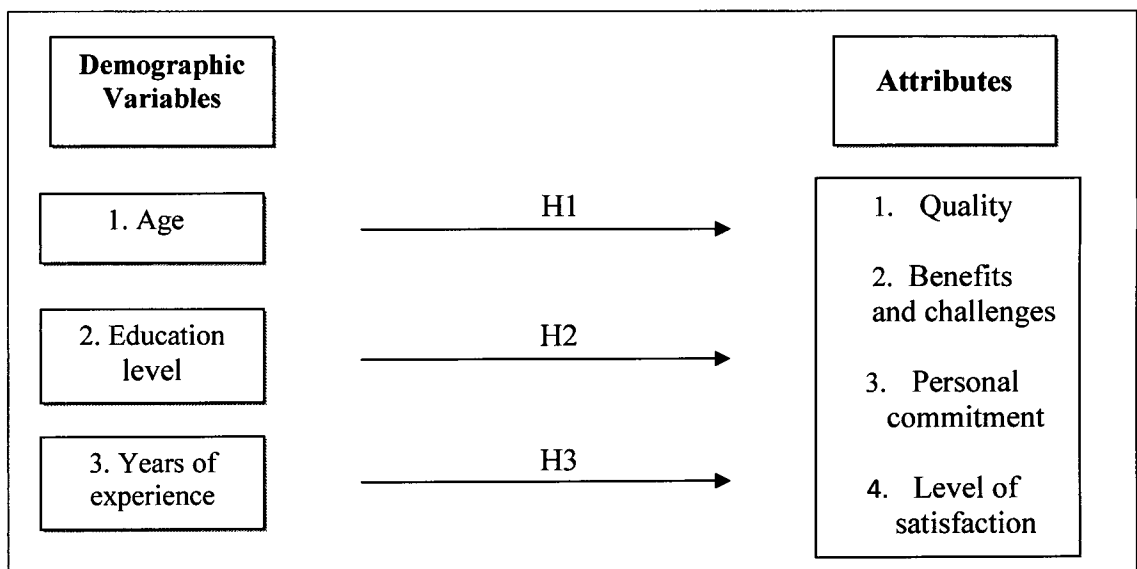


Figure 2: Hypotheses Framework

3.3 Variables

As per Trochim and Donnelly (2006), independent variable is something that can be influenced or manipulated like a cause; on the other hand dependent variable is affected by the independent variable like the outcome.

According to this research and the questions orbiting it, the main independent variables are age, level of education and years of experience of Cimenterie National's employees in this research.

The dependant variables are the benefits arising from training, the quality of training offered, personal commitments towards the job and the organization, and finally level of employee satisfaction. However, for the regression we have a different set of variables. The independent variables, in addition to the demographic variables included some training attribute variables, like quality of training, benefits and personal commitment. The dependent variable was solely the level of employee satisfaction.

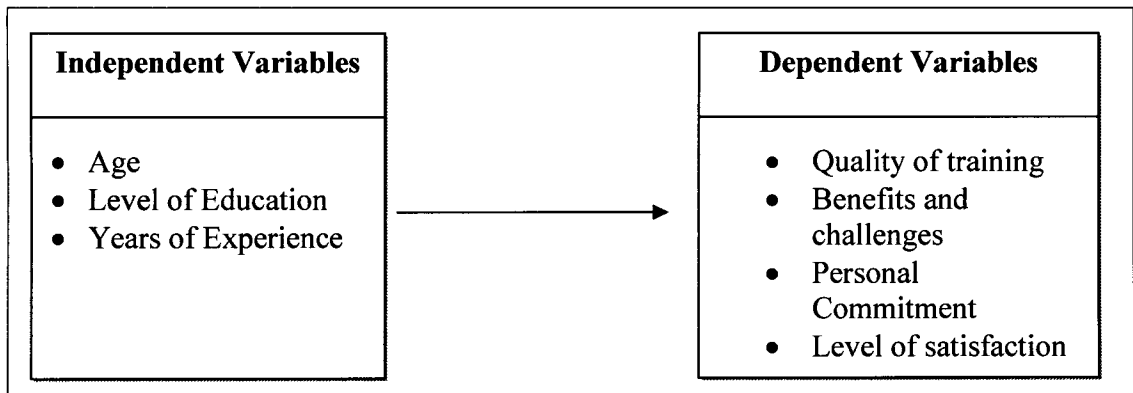


Figure 3: Type of Variables

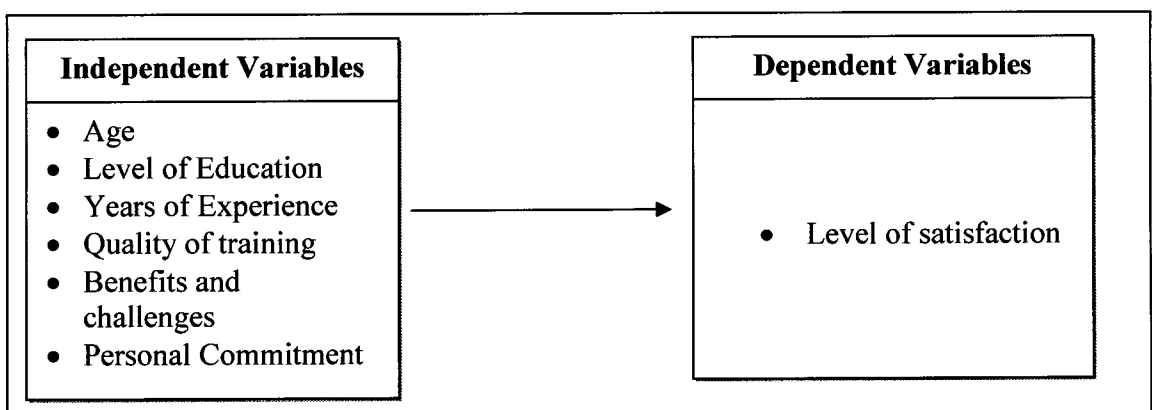


Figure 4: Regression Variables

3.4 Methodology

After indicating the hypotheses and the variables of this research, now we proceed with the methodology to be used to identify the strategy of this research, tools to gather the data, and how to analyze the data with valid and reliable outcome.

3.4.1 Philosophical Approach

The three main research philosophical debates according to Menassa (2014) are:

- Positivism philosophy relies on reality and is objective; it sees things as they are. According to Menassa (2014) positivism believe that tools for social sciences can be used for hard sciences, moreover he states for a study to be meaningful it needs to be verified though direct measurements and experiences.
- Post-Positivism also known as realism, thrive for objectivity even though it might not be achieved and use a mix of data collection tools to better understand reality, hence they use the triangulation method. (Menassa, 2014).
- Phenomological philosophy on the other hand is socially constructed and is subjective; it doesn't take things as they are rather it studies things in context, since human beings are subjective and the observer is considered to be part of the study (Menassa, 2014).

Post-Positivism approach will be used for this research. The main objective is to interpret the policies and the practices used to train, develop and retain employees at Cimenterie Nationale S.A.L, and their implications on the employee's job satisfaction. We will study the point of view and experiences of the concerned parties (employers and employees), to give us a good understanding of developing employees.

3.4.2 Reasoning Approach

According to Trochim and Donnelly (2006) there are two approaches for reasoning.

- Deductive reasoning: Also called "top-down approach", starts with a general theory, narrowed down into specific hypotheses. It is narrowed down further with specific observations that are tested and eventually confirming the general theory.

- Inductive reasoning: Also called “bottom-up approach”, is the opposite of deductive reasoning. It starts with a specific observation, and then detects patterns, create hypotheses, and finally develop a theory.

This research will follow a deductive reasoning approach, since it starts with a general theory that; training has certain influences on employee’s job satisfaction. Hypotheses and a research question are developed; the perception of Cimenterie Nationale’s employees about 4 different categories of training attributes to examine the existence of potential variations of perception with respect to three demographic variables, as well as to check for probable relationships between the four categories of attributes and demographics variables. The hypotheses will be tested with specific data collected, which will lead to validate and confirm the proposed theory.

3.4.3 Population and Sampling Procedure

As this research is a study on Cimenterie Nationale S.A.L. The population is the workforce of Cimenterie Nationals S.A.L, which as of September 2014, is compromised of 501 full time employees, divided into 27 various departments and processes. The bulk of the workforce is located at the plant which has around 501 full time employees, whereas the rest of the employees are located at the head office and the sales office.

For clarification on the population, the workforce is divided into four sections; unskilled/semi-skilled labor, skilled/specialized labor, supervisory and top management. The unskilled/semi-skilled labor section with 224 employees represents 45% of the workforce; it is composed of employees who have low level technical abilities, such as clericals, housekeepers, guards, technicians and drivers. The skilled/specialized labor section with 193 employees represent 38% of the workforce, it is compromised of employees who poses specific and high technical abilities, such as group leaders, senior technicians, heavy machinery drivers and administrative employees. The supervisory section with 63 employees represents 13% of the workforce, it is compromised of employees who have subordinates and are responsible for them includes foremen, assistant managers, and engineers. Finally, top management is composed of 22 employees who represents 4% of the workforce and have financial and managerial authority, such as managers and directors.

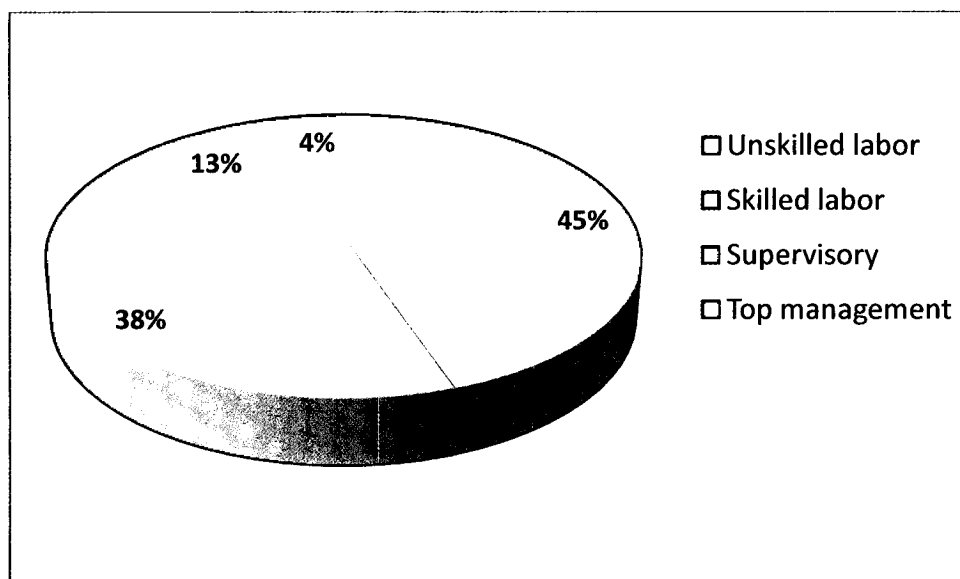


Figure 5: Distribution of the population workforce

The sampling method to be used varies by the type of data collecting tool. A two day trip to the plant is required once every other week, so that data from different shifts will be collected equally and fairly. Moreover, 12 interviews will be done using expert sampling method, especially for those responsible for planning and implementing the training and development program at Cimenterie Nationale S.A.L. For the survey questionnaire, simple random sampling method will be used where 479 questionnaires will be given to employees randomly from various departments and shifts. The three sections of the workforce unskilled, skilled, and supervisory will be included in this survey, which is 96% of the workforce with 479 employees.

3.4.4 Research Strategy

This research is a case study. A case study according to Trochim and Donnelly (2006, p.147) is an “intensive study of a specific individual or specific content”. We only cover the practices and policies implemented at Cimenterie Nationale S.A.L regarding employee training and development, and how effective they are. There will be no attempts to generalize this case to other companies and institutions, because each company has its own specific case which cannot be applied or considered to others. Since we are a part of Cimenterie Nationale S.A.L, and we are personally involved in

data collection and analyses, the research is considered to be an “action research”. Action research as defined by Menassa (2014) is similar to a case study, but with the researcher being an active participant in the research. Nevertheless, action research will be disregarded, since the proposed changes on the organization’s strategy will not be imposed and observed. Hence, this study is considered to be a “case study” with higher chances of bias.

3.4.5 Instrumentation

This study will use a multimethodology with a complementary approach for data collection (interviews and questions). This way these two data collection methods (quantitative and qualitative) will provide different information from different point of views and will be checked with each other on the basis that they complement each other. Multimethodology according to Menassa (2014), is utilizing more than one methodology within a single intervention. Ethical considerations will be of high importance, as each respondent will be aware of his rights, confidentiality issues and with an informed consent.

Personal interviews will be conducted with the top management section whom are responsible for the preparation and the operation of the training and development program. The interviewees are the following: HR manager, CAFO, plant administrator, QHSE and site and civil manager, quarry manager, personnel manager, supply chain manager, electrical and instrumentation manager, cement mills and packing plant manager, Lab manager, accounting manager and MIS manager. Interviews will be semi-structured, recorded and an interview guide will set guidelines on what topics to cover and how to proceed. This will allow the interviewer to prepare competent questions ahead of time, and allow some means of deviation from the questions so that the interviewee will feel free to express his thoughts and views. These interviews will cover 12 out of the 22 employees in top management section, which represents 54.5% of the workforce in that section.

Also 479 questionnaires will be distributed to employees in all the 27 departments, not including the top management. The questionnaires will be provided to the employees after the monthly safety meetings held individually by each department. The

questionnaires will be distributed by two assistants none related to the company, who are well aware of the research questions and guidelines, so that if any clarification is needed it will be dealt with promptly. The reason why we won't personally be involved in gathering the survey questions is to ensure employees answer the questions honestly and with peace of mind. The aim of the questionnaire and the instructions will be mentioned on the front page. Also, the questionnaire will be anonymous, so that employees will express their thoughts clearly without any pressure or fear. Various types of questions will be used, depending on the section. For example, for the background information close ended questions and multiple choices will be used. However, for the other sections a mix of multiple choices and metric scales will be used.

3.4.6 Research Analysis

Qualitative technique as stated by Trochim and Donnelly (2006) is any data that can be recorded but not in numerical form. Qualitative techniques will be used for interviews to generate better insight on the hypothesis, and gather various opinions and thoughts. Moreover, this will facilitate in preparing the quantitative survey questions. On the other hand quantitative technique according to Trochim and Donnelly (2006) is anything that can be represented or measured numerically. Quantitative techniques will be used for the questionnaires to measure the numerical data, make statistical facts from them, and also to generalize the findings to the population. This research will use a mix method between quantitative and qualitative research analysis. In the mix method both qualitative and quantitative techniques are used so that we can boast the advantages of each method (Trochim and Donnelly, 2006). SPSS software will be used to analyze the quantitative data collected. Both descriptive and inferential statistics will be used. Descriptive statistics will provide us with a summary of the sample in a meaningful way. Afterwards, inferential statistics will predict and infer the results of the chosen sample with certain tests, to check the significance of the relationship between the variables and to reach to a conclusion on the hypothesis. Finally, variation, correlation and regression methods will be determined between the dependent and independent variables.

3.4.7 Pilot Test

Three pilot tests were conducted for the interview questions, to test the approximate time needed to accomplish the interview questions. Also the questions were tested to find whether they are accurate, easy to understand, and the suitability of their orders. As a result of these tests we found that the questions were suitable to proceed further with the actual interviews. Two of the three tests were done in Cimenterie Nationale S.A.L with managerial levels, while the third was done with an experienced individual in the construction industry.

Eighteen pilot tests were conducted to make the survey questions accurate, easy to understand and answer. The respondents ranged from managers, professors and experienced employees many of them with PHD and MBA degrees. Five of these tests were completed by colleagues at Cimenterie Nationale S.A.L, this gave the questions extra credibility and efficiency, since the respondents know the organization and its issues first hand. Furthermore, another thirteen pilot tests were completed by individuals with different backgrounds and multiple years of experience in organizations. These tests were very helpful in shaping and amending the questions. Although there were multiple amendments in certain words and the approach of asking some questions, however the essence and the format of these questions were not altered.

These were the main comments on the survey questions in the *Background* section.

#	Pilot Test	Remarks/Suggestions
1.2	Education	Highest level of completed education
1.3	Function	Job Title

Table 19: Comments on the Background section

These were the main comments on the survey questions in the *Training Quality* section.

#	Pilot Test	Remarks/Suggestions
3.2	Kindly specify the types of training you have attended	On the options, <i>If others please specify</i> was added
3.9	Training quality is suitable	<i>For my job</i> was added since it wasn't clear what the training was suitable for?

Table 20: Comments on Training Quality

These were the main comments on the survey questions in the *Training Benefits and Challenges* section.

#	Pilot Test	Remarks/Suggestions
4.3	Do you think that these new acquired skills will influence your career path in your current organization?	These new acquired skills will influence your career path in the organization you currently work in?
4.5	Transfer of training not applicable in my department	Transfer of training not known by many. So the question is replaced by: I'm not able to use my newly acquired skills from training because my supervisor doesn't allow me too.

Table 21: Comments on Training Benefits and Challenges

These were the main comments on the survey questions in *Personal Attributes* section.

#	Pilot Test	Remarks/Suggestions
Title	Suggestions and Proposals for Improvement	Title changed to : <i>Personal Attributes</i>

Table 22: Comments on Suggestions and Proposals for Improvement

3.5 Conclusion

In this chapter we identified the hypotheses which were the variation of quality of training with respect to variables, such as age, education and experience level. Moreover, variables were identified and were segmented into independent and dependant.

In the methodology section, various philosophical approaches were defined and post-positivism was identified as the approach to be used for this research. Reasoning approaches were also defined and deductive reasoning was the approach to be used. Furthermore, the population and the sample were identified; the population was the employees of Cimenterie Nationale S.A.L. The sampling method varied between expert sampling method for the qualitative section and simple random sampling method for the quantitative section. The research strategy was recognized as a case study with some implications of the research being "action research", however this claim was reputed since the proposed changes won't be imposed in the organization. In the instrumentation section we identified that this study will use a multimethodolgy with a complementary

approach. For the interviews, the interviewee's were identified and the guidelines for the interviews. Likewise, for the questionnaire survey, the sample were identified and how the guidelines.

As a result of this study having both interview and questionnaire sections, both qualitative and quantitative analysis techniques will be used. SPSS will be used to analyze the qualitative data, with descriptive and inferential statistics analysis.

Finally, for the interview questions and the survey questionnaire to be credible, easy to understand and accurate, we had different pilot tests with experienced employees in the construction industry with PHD and MBA degrees.

3.6 Summary

As a summary for this chapter we can conclude it with the hypotheses framework of this research.

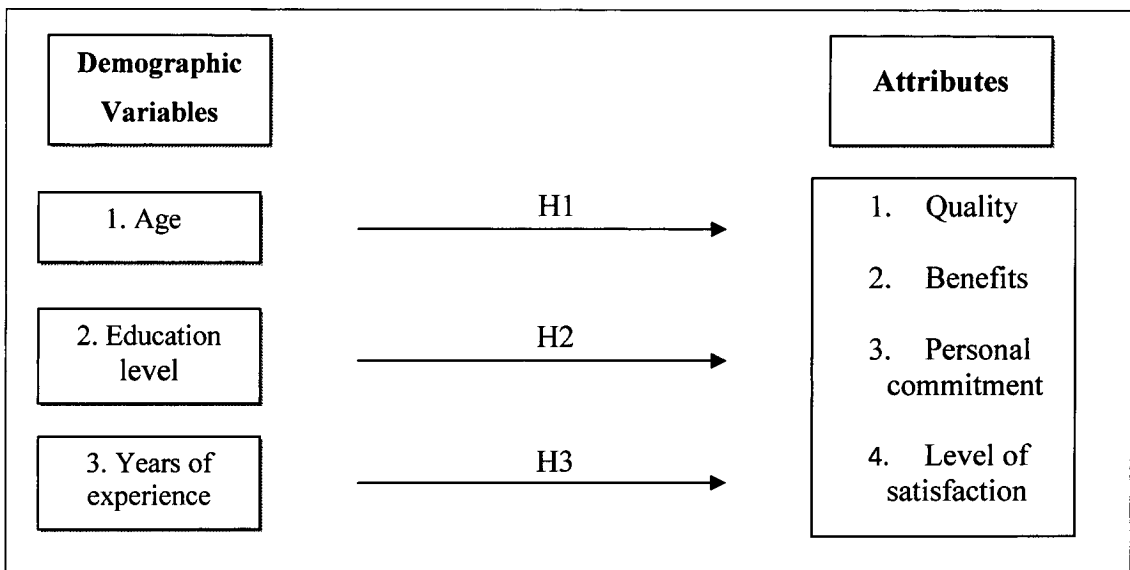


Figure 6: Hypotheses Framework

This research is a case study, we are following a multithodology approach. We first interviewed twelve managers from Cimenterie Nationale S.A.L. Then, a questionnaire was distributed to the employees of this organization and we were able to gather 120 answers. The multithodology technique followed is complementary approach. The data gathered will be analyzed and tested by SPSS to check for variations between the variables.

Chapter 4

FINDINGS

4.1 Introduction

The given information in the methodology paved the way for us to proceed with this case study, gather the necessary data and make useful analyses of them.

Overall the interviews were done in a very positive atmosphere with open and constructive communication. The interviewees were motivated and excited to take the interview once they were proposed. The average time for the 12 interviews was 18 minutes with a range from 12 to 25 minutes per interview. The 12 interviewees represented 16 out of 27 departments, that is it represented 237 employees out of 479.

The survey questionnaire distribution was divided into 2 sections. The first section was for the head office employees who all have access to internet and emails. Thus, the survey questionnaire was sent to them directly to them through their email. Within one week most of the questionnaires were sent back and replied. However, due to the nature of work in the plant the data collection took longer than the head office for various reasons. First, the survey questionnaire was prepared in Arabic since most of the employees have little education with no knowledge of English. Moreover, the questionnaires were all printed out in hard copies. The collection of the questionnaires in the plant lasted five weeks due to various obstacles and unseen events, such as malfunctions, overhauling, and holidays. Nevertheless, we received 120 replies in total both in the plant and the head office, 4 were non usable since these 4 respondents weren't enrolled in a training. 2 out of these 4 respondents were new recruits with no training opportunities yet for them and the other 2 had no training due to the nature of their job which requires no specific training.

4.2 Analyses Framework

4.2.1 Quantitative

This section illustrates the dispersions, central tendencies and the various tests used for the quantitative methodology of this case study.

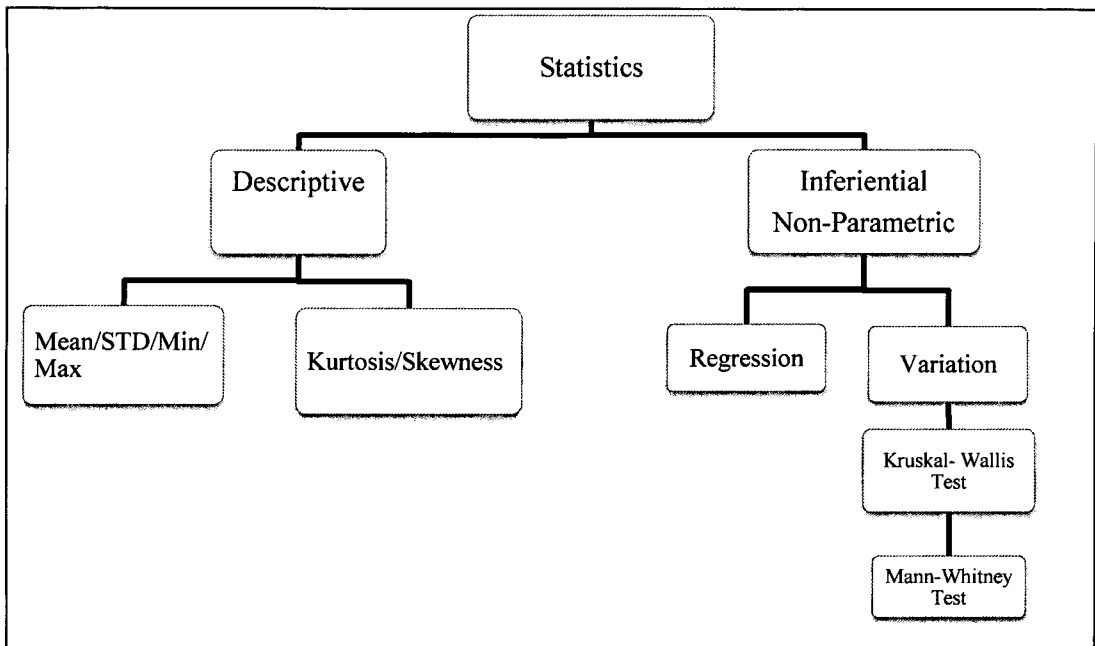


Figure 7: Quantitative Analysis Framework

4.3 Qualitative Analysis

The data collected from the twelve interviews were thoroughly analyzed and as a result, various topics regarding training were identified. To simplify the explanation, we divided and summarized the topics into five sections with quotations from various interviewees accordingly. The following are the sections in which the qualitative data were divided:

1. Training policies, norms and methods implemented
2. Assessment of training and challenges
3. Benefits of training and employee participation
4. Career development and its benefits
5. Working environment

4.3.1 Training Policies, Norms and Methods Implemented

All of the respondents mentioned that they have training plans in their departments with the majority deriving their department's training from the performance appraisal's outcome and the yearly training needs analysis, where gaps are identified and developed. The training topics ranged from health, safety, environment, job development, technical and behavioral skills.

“We have a continuous training in the department; the training's are based from yearly performance appraisals and from departmental and personal programs.” (I.1)

“It is done through two things. First training arising from the performance appraisal, second we have a continuous training such as brainstorming between me and my employees, it is like an informal training. ” (I.2)

“First of all we rely on the result of the yearly appraisal to detect the weaknesses in our employees, based on that we ask for training in order to fill the gap.” (I.4)

Candidates for training are chosen according to the needs of the employees and the target level of the training.

“The candidates for the training are done based on employee's skills and job profile first of all and secondly based on the type of the training.” (I.1)

“Who attends the training depends on the type of training and the situation.” (I.3)

“According to the needs of the employees and also the target level of the training. If the training is intended for the level two employees (engineers, assistant managers) then you can’t include a level three employee, because it will bring no added value to him and vice versa.” (I.10)

Both internal and external training are implemented in the majority of the departments. Internal training is mainly used for safety, health and environment through the weekly/monthly departmental meetings. Also for specific technical training, because as cement manufacturing industry specific training isn’t available in the market, as a result highly qualified and specialized employees transfer their skills to their fellow employees according to the needs.

“However if a certain training is needed, and certain employees in the department are highly qualified, we do the training (internal training).” (I.4)

“This is a cement manufacturing industry it is very hard to find specific training. So some specific training is done on the job, where potential employees are identified who can train different tasks each one in his specialty and according to their skills inventory.” (I.6)

“Internal training is limited, they are mostly done for health, safety, environment and specific training’s done by the QHSE department or a manager of a process.” (I.10)

On the other hand external training is used when there is a new machinery or process. Also in some instances employees are sent abroad for job development, especially since there are no training in cement in Lebanon. Moreover in some instances external trainers are brought to give in-house training especially if the number of trainees is high. Finally

external training is used for general training which are aligned with the organization's strategy.

“There are some instances when an external instructor comes over to our company to do certain training. When a new polycom was installed, a representative from that firm trained the employees extensively for ten days.” (I.5)

“External training is used for gaining new skills and improving quality, for example we sent employees abroad for workshops and sometimes if there is a group of trainees we prefer bringing an external instructor in house.” (I.6)

“External training's are those that are common in various departments, like the change of culture.” (I.10)

Half of the respondents stated that employees value external training more because they see it as more professional, however the other half indicated that if employee's really want to learn and acquire new skills, it shouldn't matter to them whether it's internal or external training.

“External training motivates employees more because they weight it more valuable and see it more professional.” (I.7)

“Regarding whether if employees prefer internal or external training, for me if employees really wants to learn and acquire a new skill, it shouldn't matter to them wither its internal or external training.” (I.3)

“For me it doesn't matter if the training is by an internal or external instructor, what matters is the methodology of the

training and on how you transfer the training material to the employees.” (I.4)

4.3.2 Assessment of Training and Challenges

All clarified that after training is conducted they measure and assess how successful it was whether informally or formally. Some even evaluate training as they happen by requiring their employees to give them feedback regularly to check if everything is going well and they are benefiting.

“Yes off course, I always have a brief from the trainees after a training, I interview them on how it was and what did you learn.” (I.1)

“Usually the training is evaluated by the HR through training reports after the training is completed. However if there is an external training I regularly keep in touch with my employees to check if the quality of the training is good, if they are facing any problems with the material or the instructor, and if they do I contact the institution or the instructor.” (I.7)

“After the training the employee’s performance and behavior is monitored. If you do training and don’t implement it, what is the point of that training?” (I.8)

There are two major problem faced by the concerned department managers when it comes to training. The first is the lack of training, courses and workshops related to cement industry in Lebanon whether by universities or training institutions. Second scheduling for certain training since it is quite difficult to find the right time that suits all the concerned employees in the training.

“Yes we have a problem because the training’s aren’t always in Lebanon, and if they are done in Lebanon they are scheduled afternoon, the employees feel tired.” (I.9)

“Sometimes it is hard to find the right training specifically when it comes to health, safety and specific technical training. This is because a cement manufacturing company, universities or institutions in Lebanon don’t teach you for example how to operate a kiln. So we send employees abroad or in-house training through external instructors.” (I.11)

“The major problem faced is allocating time for training. We have a training plan, but it is hard to dedicate time for it due to work overload and different shifts.” (I.3)

4.3.3 Benefits of Training and Employee Participation

There were multiple benefits identified by the interviewees, differing from one department to another. Here are some of the mentioned benefits:

- Improved employee performance and proficiency since they are more knowledgeable and skillful.
- Increased job engagement and loyalty which increases employee motivation and reduces absenteeism rate.
- Better productivity and competitiveness because of reduced cost of production such as less lost time and better maintenance.
- Less accidents and lower accident severity rate due to employee’s awareness, decrease employee mental and physical stress.

“The monthly health and safety monthly meetings decrease the accidents rate and severity.” (I.6)

“The employees have less stress, because they have better maintenance on their machines due to improved technical skills and off course they will perform better.” (I.3)

“Since employees are trained and they know more, so they will perform better.” (I.2)

“Yes I agree because in my opinion giving training to the employee’s is a motivating factor and engages employees. It is not like employees work all day and at the end of the month here is your salary.” (I.6)

According to the managers all the employees are motivated to participate in the training since they will acquire new skills. However the older employees are less motivated since they are not used to change and are indifferent since they think they have reached the maximum of their career path.

“Off course they are motivated. As I mentioned before training benefit them on different levels, it benefits them personally, gives them the chance to develop technically and it’s a way of changing routine.” (I.12)

“Higher level employees are more motivated to attend training, however lower level employees and older employees are less tend to be excited and motivated for employees, because they are not used to change and their mentality.” (I.6)

4.3.4 Career Development and its Benefits

The vast majority of the respondents declared that even tough training has impact on creating some kind of employee loyalty and retention, however it is not enough. When

you train employees, you have to offer them a career development plan, such as job enlargement and career path.

“It can contribute, but it is not the only factor. To increase loyalty, it needs trust and confidence. Of course it’s a motivating factor when the company sends his employee’s abroad for training, but it isn’t the only factor that creates increased retention rate.” (I.1)

“You have to create challenging projects because no ambitious employee stays in the same position with routine tasks.” (I.9)

As mentioned by the CAFO “career development is what your people are looking for”. Here are the major benefits of career development seen by the interviewees:

- Employees can survive any change and uncertainty since they are more knowledgeable
- Employees are empowered. This creates commitment and motivation
- Multiskilling decreases dependency and the need for more manpower
- Improved department productivity due to multiskilling

“Simply if a career development plan exists, employees will feel committed and enthusiastic, since he knows his effort will be rewarded.” (I.2)

“Multiskilling decreases the number of jobs needed, more productivity and efficiency that is you will have time to do more activities and improvement in quality.” (I.3)

“Thanks to the technical training the employees can survive any change.” (I.4)

“The benefits for career development in this department include lifting up the knowledge of the employees, hence lifting up the quality and productivity of the department.” (I.7)

Fourteen out of the sixteen departments represented in the interview enforce multiskilling. Employees are developed to be able to do all the tasks of the department and to be aware of all the functions of the department.

“All the employees in the QHSE department are multiskilled and can be co-assigned to other tasks and position within the department.” (I.7)

“The goal is to create rotation between employees and each position, every week they drive a different machine. Around 90% of my employees are multiskilled.” (I.8)

“Yes there is multiskilling and specialty, however multiskilling is encouraged and it is done by internal training. Sometimes some departments work together on an assignment as if they are merged, in order to have some knowledge of how work is done in other departments.” (I.6)

All the managers concluded that an ongoing constructive communication with their employees regarding their career path is very vital, since you will be outlining the employee's future and they will not be in a dark tunnel. Also all noted that performance appraisal is very crucial in outlining the employee's weaknesses and identifying the gaps needed to develop.

“There should be a daily ongoing communication between them, when a person in the department has a say or has a need he shouldn’t back off, and also when the manager sees that his employee is underperforming and can improve he shouldn’t hesitate and wait for the performance appraisal.” (I.12)

“During the performance appraisal we talk about the career path of the employee, where you see him in a few years and where he can be. We give him the idea, we enlarge his responsibility and decision making.” (I.9)

Inter-departmental communication is mostly done on managerial level and based on need. All of the managers agreed that they need to develop their communication and be proactive.

“There is some communication between departments but not often.” (I.11)

“Yes we do communicate with other departments, but it needs to be developed.” (I.12)

“There is a communication, but on managerial level only.” (I.4)

4.3.5 Working Environment

Since the company is ISO certified, they are required by ISO standards to clarify the health risks of each position on the job description and how to avoid those risks either through following a certain process or using the right protective equipments. Moreover there are weekly and monthly health, safety and environment awareness sessions, such as “tools box talks” where employees are trained on how to handle equipments and how

to deal with hazardous and toxic materials. Furthermore as mentioned by one of the managers, multiskilling helps minimize health risks in his department due to rotations. Finally through regular medical checkups done, it has come to attention that health related accidents have decreased, all due to the awareness and training sessions on health and safety.

“Since the company is ISO certified, we are required to clarify the health risks of each position on the job description and how to avoid those risks, either through following a certain process or using the right protective equipments. Each employee is aware of these issues and has signed on the job description.” (I.10)

“Another point for implementing multiskilling in my department is to minimize health risks. For example a bulldozer operator who has constant shocks from smashing huge rocks for seven days a week, can rest, because he is able to rest his back by driving other less demanding machines throughout the rest of the month.” (I.8)

“As we are certified by OHSAS 18001, we are required to regularly check and test their employee’s health, tests, such as hearing tests, back pain and many others are conducted depending which department, since each one has different risks.” (I.7)

“Training is done through tools box talks where different safety and health issues are discussed. Near miss accidents are discussed and how to tackle them. There are many awareness sessions on a weekly and monthly basis just focused on health, safety and environment.” (I.6)

Accident rates and accident severity have sharply decreased from the past four years by 40%. Various department managers clarified that their departments are accident free for many years. They all praised the top management's dedication to improve the working environment in the company through intensive training and awareness sessions on health and safety. Of course implementing the new health and safety rules and regulations wasn't easy, it was first enforced and then it became a habit.

“We are proud of the fact that in the last twenty years they have had no accidents, thanks to the continuous awareness and training.” (I.4)

“Statistically the accidents have decreases by 40% since three to four years. Employees are more aware, when they see an unsafe condition anything that might create an injury or risk they immediately contact the champions or their supervisor to fix the issues.” (I.6)

“Yes they have decreased significantly. At the begging we enforced the safety rules like the usage of personal protective equipments, because the idea was new to the employees and they resisted, but now it's a habit.” (I.5)

4.4 Quantitative Analysis

The data gathered from the survey were analyzed by various tests using SPSS to check for reliability and validity of the variables. We used descriptive analyses with metric and non-metric factors, and non-parametric inferential analyses and metric regression.

4.4.1 Descriptive

The descriptive analysis was divided into 2 sections: metric and non-metric (for nominal and ordinal variables). We included central tendencies and dispersions: mean, standard deviation, min, max and with skewness and kurtosis distributions. Descriptive tests helped us to analyze the variation of employee's perception on training attributes.

4.4.1.1 Non-Metric Variables Analyses

4.4.1.1.1 Population of the Survey

The sample used represents 24% (116 questionnaires/479 population) of the survey population.

Population	N=	479	Percentage:
Respondents		120	$120/479 = 25$
Non-usable		4	$4/120 = 3$
Usable Sample		116	$116/479 = 24$

Table 22: Population and sample of the survey

Moreover, there were 23 departments represented in the sample, out of 27 departments in the organization. Hence, 85% of the departments were represented.

#	Departments	Number of employees	Number of respondents	Percentage
1	Accounting	4	4	100
2	Workshop	35	7	20
3	Personnel	2	2	100
4	Weighbridge	13	0	0
5	Drawing & Design	8	5	63
6	Electrical & Instrumentation	40	2	5
7	Guards	33	1	3
8	Finance	2	1	50
9	HR	5	3	60
10	Kilns2,3	25	1	4
11	Kiln4	20	0	0
12	Legal	11	5	43
13	Mechanical Maintenance	34	9	26
14	Management Information Systems	11	10	90
15	Machinery Maintenance	33	11	33
16	Power Generation	25	8	31
17	Plant Admin.	40	2	5
18	QHSE	6	5	83
19	Quarry Operation	13	8	58
20	Raw Material Preparation	20	12	60
21	Supply Chain	6	6	100
22	Stores	10	4	40
23	Site & Civil	16	1	6
24	Packing	12	0	0
25	Cement Mills	28	7	5
26	Laboratory	15	6	38
27	Sales	12	0	0
	Total	479	120	25

Table 23: Distribution of the respondents by departments

#	Departments	Number of respondents	Percentage
1	Accounting	4	3.3
2	Workshop	7	5.8
3	Personnel	2	1.6
4	Weighbridge	0	0
5	Drawing & Design	5	4.1
6	Electrical & Instrumentation	2	1.6
7	Guards	1	0.83
8	Finance	1	0.83
9	HR	3	2.5
10	Kilns2,3	1	0.83
11	Kiln4	0	0
12	Legal	5	4.1
13	Mechanical Maintenance	9	7.5
14	Management Information Systems	10	8.3
15	Machinery Maintenance	11	9.1
16	Power Generation	8	6.6
17	Plant Admin.	2	1.6
18	QHSE	5	4.1
19	Quarry Operation	8	6.6
20	Raw Material Preparation	12	10
21	Supply Chain	6	5
22	Stores	4	3.3
23	Site & Civil	1	0.83
24	Packing	0	0
25	Cement Mills	7	5.8
26	Laboratory	6	5
27	Sales	0	0
Total		120	100

Table 24: Distribution of the sample size by respondents departments

4.4.1.1.2 Gender of the Respondents

From the 116 usable respondents sample, 18 were females (16%) and the remaining 98 (84%) were males. The 18 female respondents represented 82% of the females in this survey's population of 479; whereas the 98 male respondents represented 21% of the entire male population.

Gender	Number of employees	Number of respondents	Percentage
Male	457	98	21
Female	22	18	82
Total	479	116	24

Table 25: Distribution of the population by gender

Gender	Number of respondents	Percentage
Male	98	84.5
Female	18	15.5
Total	116	100

Table 26: Distribution of the respondent by gender

4.4.1.1.3 Age of the Respondents

The age distribution of the 116 respondents was as follow: 20% of the respondents were below the age of 30, 23% were between 31 and 40, 32% between 41 and 50, and 25% of the respondents were over 50 years of age. The highest percentage of respondents was between the ages of 41 and 50 with 32%.

Age	Frequency	Percent	Cumulative Percent
Below 30	23	19.8	19.8
31-40	27	23.3	43.1
41-50	37	31.9	75.0
Above 50	29	25.0	100.0
Total	116	100.0	

Table 27: Frequency table of the age of the respondents

4.4.1.1.4 Highest Level of Education

16% of the respondents have elementary education, 51% have a high school or a technical certificate. 16% have bachelor degree, whereas 17% have a master degree. The highest percentage of the respondents was employees with high school or technical certificate with 51%.

Highest Education Level	Frequency	Percent	Cumulative Percent
Elementary	19	16.4	16.4
High School/Technical	59	50.9	67.2
Bachelor	18	15.5	82.8
Master	20	17.2	100.0
Total	116	100.0	

Table 28: Frequency table of the highest education level of the respondents

4.4.1.1.5 Job Title

72% of the respondents have technical titles, whereas 28% have administrative titles.

Job Title	Frequency	Percent	Cumulative Percent
Technician	84	72.4	72.4
Administrator	32	27.6	100.0
Total	116	100.0	

Table 29: Frequency table of the respondent's job titles

4.4.1.1.6 Departments

As per table 23, there were respondents from 23 departments. To make use of them we divided the 23 departments into 3 categories:

1. Technical and production departments which include: Workshop, cement mills, drawing, kilns, electrical & instrumentation, laboratory, mechanical maintenance, machinery maintenance, power generation, quarry operation, raw material preparation and the stores.

2. Service Departments which include: Accounting, personnel, finance, HR, legal, plant administration, and supply chain.
3. Quality, safety and assurance which include: QHSE, guards and site & civil.

Accordingly technical departments had the highest percentage in the survey with 66%, followed by service departments with 28% and finally quality, safety and assurance departments with 6%.

Departments	Frequency	Percent	Cumulative Percent
Technical and Production	76	65.5	65.5
Service	33	28.4	94.0
Quality, Safety and Assurance	7	6.0	100.0
Total	116	100.0	

Table 30: Frequency table of the respondent's departments

4.4.1.1.7 Years of Experience

The category with the highest percentage of years of experience was below 10 years with 39%. Then employees with 11 to 20 years of experience with 30%, followed by 21 to 30 years of experience with 18% and lastly above 30 years of experience with 13%.

Years of Experience	Frequency	Percent	Cumulative Percent
Below 10	45	38.8	38.8
11-20	35	30.2	69.0
21-30	21	18.1	87.1
Above 30	15	12.9	100.0
Total	116	100.0	

Table 31: Frequency table of the respondent's years of experience

Training in Departments	Frequency	Percent	Cumulative Percent
Yes	116	100.0	100.0

Table 32: Frequency table of training in departments

Likewise, all of the respondents mentioned that they are personally enrolled in training plans.

Enrolled in Training	Frequency	Percent	Cumulative Percent
Yes	116	100.0	100.0

Table 33: Frequency table of employees enrolled in training

77% of the respondents clarified that they have had between 1 to 10 training in the past 2 years. 17% with 11 to 20 training, only 1% with 21 to 30 training and finally 5% with training above 30.

Number of Training	Frequency	Percent	Cumulative Percent
1-10	89	76.7	76.7
11-20	20	17.2	94.0
21-30	1	.9	94.8
Above 30	6	5.2	100.0
Total	116	100.0	

Table 34: Frequency table of number of training enrolled by an employee

97% of the respondents stated that the purpose of the training was explained to them, whereas only 3% stated that training purpose was not made clear to them.

Training Purpose Explained	Frequency	Percent	Cumulative Percent
No	4	3.4	3.4
Yes	112	96.6	100.0
Total	116	100.0	

Table 35: Frequency table of training purpose explained

56% of the respondents stated that the majority of the training they were enrolled in was externally done, and 44% stated that the training were mostly done by internal instructors.

Instructor Type	Frequency	Percent	Cumulative Percent
Internal	51	44.0	44.0
External	65	56.0	100.0
Total	116	100.0	

Table 36: Frequency table of training instructor type

When asked what type of training employees have attended the most. 42% mentioned that they have had a mix of training ranging from technical, behavioral, to health and safety. However, 38% mentioned that they have had behavioral training such as soft skills. 14% had technical specific training and 6% mentioned to have had only training regarding health, safety and environment.

Type of Training	Frequency	Percent	Cumulative Percent
Technical	16	13.8	13.8
HSE	7	6.0	19.8
Behavioral	44	37.9	57.8
Multiple	49	42.2	100.0
Total	116	100.0	

Table 37: Frequency table of type of training attended

When asked what type of training they like to have in the future. 73% mentioned that they like to have a mix of training from technical to multiskilling. On the other hand 18% would like to have multiskilling training and only 9% would like to have technical training.

Future Training Interest	Frequency	Percent	Cumulative Percent
Technical	10	8.6	8.6
Multiskilling	21	18.1	26.7
Multiple	85	73.3	100.0
Total	116	100.0	

Table 38: Frequency table of future training interest

4.4.2 Regression Analysis

We used regression to check for causality between the dependant and the independent variables [$Y=a+bx$]; where the regression (Y) is that satisfaction level is a function of training attributes (x) which is the independent variable that is, the effect of (x) on (Y). (a) is a constant and (b) is the weight.

To check for regression we used the stepwise test and we had the following regression formula:

$$Y = 1.954 + 0.21*\text{ImprovedPerformanceAfterTraining} + 0.159*\text{NumberTraining} + 0.221*\text{TrainingInfluencesCareerPath} - 0.224*\text{HighestEducation} + 0.149*\text{LoyaltyToOrganization}$$

From the formula we can see that all the predictors have direct positive relationship with the dependant variable (level of satisfaction) but the level of highest education, which has a negative relationship with the dependant variable (level of satisfaction) since it has a negative -0.224 coefficient. This negative coefficient in this case means that every time the Education is increased by 1, the satisfaction level (Y) will decrease by -0.244.

The regression's model summary was as such: R= 76% which means the model's independent variables correlate with the dependant variable, $R^2=59\%$ which means 59% of variation in satisfaction level is explained by the model and Adjusted R=57% which is high and almost equal to $R^2=59\%$ means the large number of independent variables used in the model had no negative impact.

Some of the variables were deemed not be normally distributed since they had Kurtosis higher than 3 and Skewness more than 1. However, we plotted unstandardized residuals to make sure the model as a whole is normally distributed. The following is the depiction from the plot.

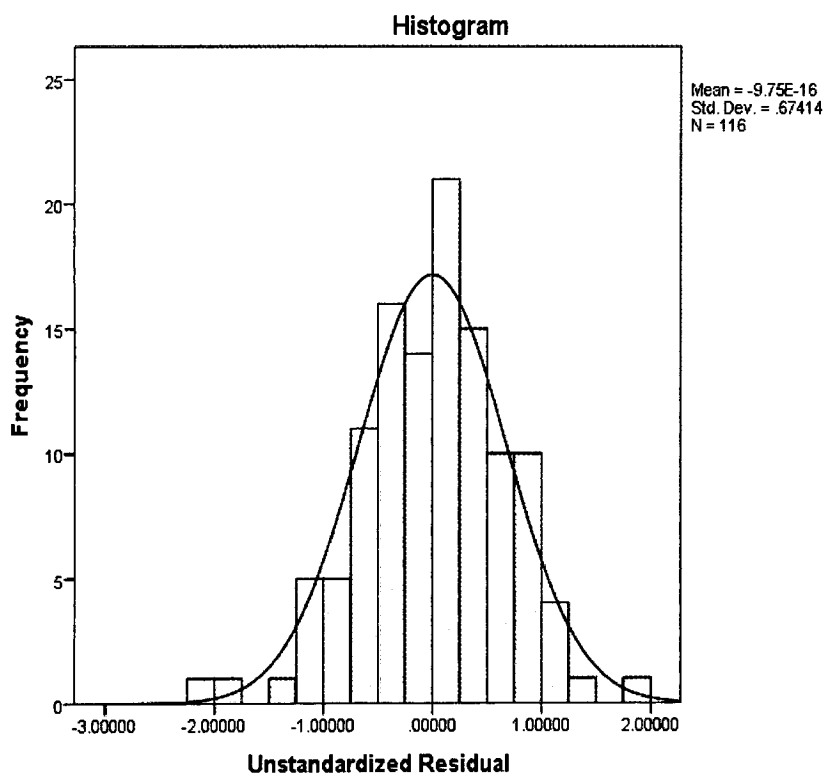


Figure 8: Regression frequency chart

Here we can see the high shape and the curve is in the middle which is excellent for the regression.

4.4.3 Variance Analysis

For variance analysis, even though we met the parametric conditions we didn't use parametric tests since our sample is not random. In fact we only asked employees at Cimenterie Nationale S.A.L to fill the survey questionnaire, so we decided to use non-parametric tests (Kruskal-Wallis known as the K-W test and Mann-Whitney test known as the U-test).

The Kruskal-Wallis test was used to compare 2 samples. As a result we used 3 demographic variables; age ordinal, education level ordinal and years of experience ordinal, with 4 variables which are the training attributes used in the hypotheses; quality, benefits, personal commitment and level of satisfaction. We tested these variables one by one against each other to check whether the hypotheses are retained or not and if there are variations in opinion with the different variables. Hence, in case there were any

rejections or variations in the hypotheses the Mann-Whitney test was used to further compare the concerned conditions.

4.4.3.1 Hypotheses 1 *Age has a positive linear relationship with training attributes*

We tested the hypotheses list separately against each other. (Age tested against quality of training, benefits and challenges of training, personal commitment from training and level of satisfaction). The following are the result of the tests.

4.4.3.1.1 Age with Quality of Training

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of SpecificOrGeneralTrn is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.083	Retain the null hypothesis.
2	The distribution of TrnUsefulinJob is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.104	Retain the null hypothesis.
3	The distribution of TrnMinimizeAcc is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.341	Retain the null hypothesis.
4	The distribution of AwareOfHealthRiskinJob is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.443	Retain the null hypothesis.
5	The distribution of PersonalProtectEquip is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.384	Retain the null hypothesis.
6	The distribution of TrnSuitable is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.083	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 39: Age test with quality variables

The Kruskal-Wallis test in this table shows that all the 6 variables in this hypothesis failed to reject, since they have significance level higher than 0.05. Therefore, there is no variation in opinion between the variables. No need for further testing with the Mann-Whitney test.

4.4.3.1.2 Age with Benefits and Challenges of Training

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ImprovPerformAfterTrn is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.133	Retain the null hypothesis.
2	The distribution of TechnicTrnMakeMeMultiskill is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.098	Retain the null hypothesis.
3	The distribution of TrnInfluencesCareerpath is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.463	Retain the null hypothesis.
4	The distribution of TrnBeneficialOutsideWrk is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.216	Retain the null hypothesis.
5	The distribution of SupervisrDoesntAllowToUseSkill is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.721	Retain the null hypothesis.
6	The distribution of SupervisrFollowsUpAfterTrn is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.016	Reject the null hypothesis.
7	The distribution of OrganizationDoesntTrnMe is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.479	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 40: Age test with benefits and challenges variables

The Kruskal-Wallis test in this table shows that 1 out of the 7 variables was rejected, since the significance level was below 0.05. As a result, we used the Mann-Whitney test on this variable. After the test on this variable, one of the items was rejected since it had a high significance level. Below is the table depicting this variation.

Variable 6 showed variation in opinion at level 1-2 with significance level (0.796).

	SupervisrFollowsUpAfterTrn
Mann-Whitney U	297.500
Wilcoxon W	573.500
Z	-.259
Asymp. Sig. (2-tailed)	.796

Table 41: Mann-Whitney test of variable 6 result at level 1-2

We can claim from these results that there is a slight variation in opinion of benefits and challenges with age in only 1 item from many items.

4.4.3.1.3 Age with Level of Satisfaction

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DifferentThingsTimeTime is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.536	Retain the null hypothesis.
2	The distribution of UseOfMyAbility is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.814	Retain the null hypothesis.
3	The distribution of ChanceForAdvancement is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.454	Retain the null hypothesis.
4	The distribution of FreedomOwnJudgment is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.117	Retain the null hypothesis.
5	The distribution of ChanceTryOwnMethods is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.455	Retain the null hypothesis.
6	The distribution of PraiseForGoodJob is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.698	Retain the null hypothesis.
7	The distribution of AccomplishFeelinFromJob is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.458	Retain the null hypothesis.
8	The distribution of SombodyInCommunity is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.792	Retain the null hypothesis.
9	The distribution of CoworkersAlongEachother is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.573	Retain the null hypothesis.
10	The distribution of SteadyEmployment is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.010	Reject the null hypothesis.
11	The distribution of CompetenceSupervisor is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.119	Retain the null hypothesis.
12	The distribution of Totalsatisfaction is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.489	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 42: Age test with level of satisfaction variables

The Kruskal-Wallis test in this table shows that 1 out of the 12 variables was rejected, since the significance level was below 0.05. As a result, we used the Mann-Whitney test on this variable. After the test, one of the items was rejected since it had a high significance level. Below is the table depicting this variation.

Variable 10 showed variation in opinion at level 3-4 with significance level (0.579).

	SteadyEmployment
Mann-Whitney U	496.000
Wilcoxon W	1199.000
Z	-.555
Asymp. Sig. (2-tailed)	.579

Table 43: Mann-Whitney test of variable 10 result at level 3-4

We can claim from these results that there is a slight variation in opinion of level of satisfaction with age in only 1 item from many items.

4.4.3.1.4 Age with Personal Commitment from Training

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of LoyalToOrganAfterCareerDevelop is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.727	Retain the null hypothesis.
2	The distribution of DedicationToCareerAfterTrn is the same across categories of AgeOrdinal.	Independent-Samples Kruskal-Wallis Test	.980	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 44: Age test with personal commitment variables

The Kruskal-Wallis test in this table shows that all the variables failed to reject, since they have significance level higher than 0.05. Therefore, there is no variation in opinion between the variables. No need for further testing with the Mann-Whitney test.

4.4.3.2 Hypotheses 2 *Education level has a positive linear relationship with training attributes*

We tested the hypotheses list separately against each other. (Education level tested against quality of training, benefits and challenges of training, personal commitment from training and level of satisfaction). The following are the result of the tests.

4.4.3.2.1 Education Level with Quality of Training

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of SpecificOrGeneralTrn is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.017	Reject the null hypothesis.
2	The distribution of TrnUsefulinJob is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.086	Retain the null hypothesis.
3	The distribution of TrnMinimizeAcc is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.003	Reject the null hypothesis.
4	The distribution of AwareOfHealthRiskinJob is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.019	Reject the null hypothesis.
5	The distribution of PersonalProtectEquip is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
6	The distribution of TrnSuitable is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.017	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 45: Education level test with quality variables

The Kruskal-Wallis test in this table shows that 5 out of the 6 variables were rejected, since their significance level was below 0.05. As a result, we used the Mann-Whitney test on these 5 variables. After the tests 2 of the 5 variables failed to reject (variables 4 and 5). However, variables 1,3 and 6 each had one item rejected since some of their significance level was very high. Below are the tables depicting these variations.

Variable 1 showed variation in opinion at level 1-2 with significance level (0.981).

	SpecificOrGeneralTrn
Mann-Whitney U	558.500
Wilcoxon W	2328.500
Z	-.024
Asymp. Sig. (2-tailed)	.981

Table 46: Mann-Whitney test of variable 1 result at level 1-2

Variable 3 showed variation in opinion at level 3-4 with significance level (0.671).

	TrnSuitable
Mann-Whitney U	166.000
Wilcoxon W	376.000
Z	-.425
Asymp. Sig. (2-tailed)	.671

Table 47: Mann-Whitney test of Variable 3 result at level 3-4

Variable 6 showed variation in opinion at level 1-2 with significance level (0.981).

	TrnSuitable
Mann-Whitney U	558.500
Wilcoxon W	2328.500
Z	-.024
Asymp. Sig. (2-tailed)	.981

Table 48: Mann-Whitney test of Variable 6 result at level 1-2

We can claim from these results that there is a slight variation in opinion of quality of training with level of highest education, since each of the 3 variables that were rejected by the Kruskal-Wallis test had only 1 items rejected from many items by the Mann-Whitney test.

4.4.3.2.2 Education Level with Benefits and Challenges

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ImprovPerformAfterTrn is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.001	Reject the null hypothesis.
2	The distribution of TechnicTrnMakeMeMultiskill is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.002	Reject the null hypothesis.
3	The distribution of TrnInfluencesCareerpath is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.031	Reject the null hypothesis.
4	The distribution of TrnBeneficialOutsideWrk is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.001	Reject the null hypothesis.
5	The distribution of SupervisorDoesntAllowToUseSkill is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.890	Retain the null hypothesis.
6	The distribution of SupervisorFollowsUpAfterTrn is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.007	Reject the null hypothesis.
7	The distribution of OrganizationDoesntTrnMe is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 49: Education level test with benefits and challenges variables

The Kruskal-Wallis test in this table shows that 6 out of the 7 variables were rejected, since their significance level was below 0.05. As a result, we used the Mann-Whitney test on these 6 variables. After the tests, 2 of the 6 variables failed to reject (variables 1 and 2). However, variables 3,4,6 and 7 had 1 or 2 of their items rejected since some of their significance level was very high. Below are the tables depicting these variations.

Variable 3 showed variation in opinion at level 1-2 with significance level (0.624) and at level 1-3 with significance level (0.770).

	TrnInfluencesCareerpath
Mann-Whitney U	520.000
Wilcoxon W	710.000
Z	-.490
Asymp. Sig. (2-tailed)	.624

Table 50: Mann-Whitney test of variable 3 result at level 1-2

	TrnInfluencesCareerpath
Mann-Whitney U	162.000
Wilcoxon W	333.000
Z	-.292
Asymp. Sig. (2-tailed)	.770
Exact Sig. [2*(1-tailed Sig.)]	.799

Table 51: Mann-Whitney test of variable 3 result at level 1-3

Variable 4 showed variation in opinion at level 1-2 with significance level (0.586)

	TrnBeneficalOutsideWrk
Mann-Whitney U	162.000
Wilcoxon W	372.000
Z	-.545
Asymp. Sig. (2-tailed)	.586
Exact Sig. [2*(1-tailed Sig.)]	.613

Table 52: Mann-Whitney test of variable 4 result at level 1-2

Variable 6 showed variation in opinion at level 1-2 with significance level (0.570)

	SupervisrFollowsUpAfterTrn
Mann-Whitney U	486.500
Wilcoxon W	2256.500
Z	-.568
Asymp. Sig. (2-tailed)	.570

Table 53: Mann-Whitney test of variable 6 result at level 1-2

Variable 7 showed variation in opinion at level 1-2 with significance level (0.570)

	OrganizationDoesntTrnMe
Mann-Whitney U	500.000
Wilcoxon W	671.000
Z	-.379
Asymp. Sig. (2-tailed)	.705

Table 54: Mann-Whitney test of variable 7 result at level 1-2

We can claim from these results that there is a slight variation in opinion of benefits and challenges of training with level of highest education, since each of the 4 variables that

were rejected by the Kruskal-Wallis test had only 1 or 2 items rejected from many items by the Mann-Whitney test.

4.4.3.2.3 Education Level with Level of Satisfaction

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DifferentThingsTimeTime is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.001	Reject the null hypothesis.
2	The distribution of UseOfMyAbility is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.008	Reject the null hypothesis.
3	The distribution of ChanceForAdvancement is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.001	Reject the null hypothesis.
4	The distribution of FreedomOwnJudgment is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
5	The distribution of ChanceTryOwnMethods is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.017	Reject the null hypothesis.
6	The distribution of PraiseForGoodJob is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.001	Reject the null hypothesis.
7	The distribution of AccomplishFeelinFromJob is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
8	The distribution of SombodyInCommunity is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.113	Retain the null hypothesis.
9	The distribution of CoworkersAlongEachother is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
10	The distribution of SteadyEmployment is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
11	The distribution of CompetenceSupervisor is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.
12	The distribution of Totalsatisfaction is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 55: Education level test with level of satisfaction variables

The Kruskal-Wallis test in this table shows that 11 out of the 12 variables were rejected, since their significance level was below 0.05. As a result, we used the Mann-Whitney test on these rejected variables. After the tests 7 of the 11 hypotheses failed to reject (variables 2, 3,7,9,10,11 and 12). However, variables 1,4,5 and 6 had 1 or 2 of their items rejected since some of their significance level was very high. Below are the tables depicting these variations.

Variable 1 showed variation in opinion at level 3-4 with significance level (0.783).

	DifferentThingsTimeTime
Mann-Whitney U	171.000
Wilcoxon W	342.000
Z	-.276
Asymp. Sig. (2-tailed)	.783
Exact Sig. [2*(1-tailed Sig.)]	.806

Table 56: Mann-Whitney test of variable 1 result at level 3-4

Variable 4 showed variation in opinion at level 3-4 with significance level (0.716).

	FreedomOwnJudgment
Mann-Whitney U	168.000
Wilcoxon W	378.000
Z	-.364
Asymp. Sig. (2-tailed)	.716
Exact Sig. [2*(1-tailed Sig.)]	.740

Table 57: Mann-Whitney test of variable 4 result at level 3-4

Variable 5 showed variation in opinion at level 1-2 with significance level (0.716) and at level 3-4 with significance level (0.717).

	ChanceTryOwnMethods
Mann-Whitney U	512.000
Wilcoxon W	2282.000
Z	-.588
Asymp. Sig. (2-tailed)	.556

Table 58: Mann-Whitney test of variable 5 result at level 1-2

	ChanceTryOwnMethods
Mann-Whitney U	168.000
Wilcoxon W	378.000
Z	-.362
Asymp. Sig. (2-tailed)	.717
Exact Sig. [2*(1-tailed Sig.)]	.740

Table 59: Mann-Whitney test of variable 5 result at level 3-4

Variable 6 showed variation in opinion at level 2-3 with significance level (0.522).

	PraiseForGoodJob
Mann-Whitney U	479.000
Wilcoxon W	650.000
Z	-.641
Asymp. Sig. (2-tailed)	.522

Table 60: Mann-Whitney test of variable 6 result at level 2-3

We can claim from these results that there is a slight variation in opinion of level of satisfaction with level of highest education, since each of the 4 variables that were rejected by the Kruskal-Wallis test had only 1 or 2 items rejected from many items by the Mann-Whitney test.

4.4.3.2.4 Education Level with Personal Commitment

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of LoyalToOrganAfterCareerDevelopment is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.706	Retain the null hypothesis.
2	The distribution of DedicationToCareerAfterTrn is the same across categories of HighestEducation.	Independent-Samples Kruskal-Wallis Test	.201	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 61: Education level test with personal commitment variables

The Kruskal-Wallis test in this table shows that all the variables failed to reject, since they have significance level higher than 0.05. Therefore, there is no variation in opinion between the variables. No need for further testing with the Mann-Whitney test.

4.4.3.3 Hypotheses 2 *Years of Experience has a positive linear relationship with training attributes*

We tested the hypotheses list separately against each other. (Years of experience tested against quality of training, benefits and challenges of training, personal commitment from training and level of satisfaction). The following are the result of the tests.

4.4.3.3.1 Years of Experience with Quality

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of SpecificOrGeneralTrn is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.024	Reject the null hypothesis.
2	The distribution of TrnUsefulInJob is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.147	Retain the null hypothesis.
3	The distribution of TrnMinimizeAcc is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.255	Retain the null hypothesis.
4	The distribution of AwareOfHealthRiskInJob is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.530	Retain the null hypothesis.
5	The distribution of PersonalProtectEquip is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.605	Retain the null hypothesis.
6	The distribution of TrnSuitable is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.024	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 62: Years of experience test with quality variables

The Kruskal-Wallis test in this table shows that 2 out of the 6 variables were rejected, since their significance level was below 0.05. As a result, we used the Mann-Whitney test on these 2 variables. After the tests these 2 variables had 1 of their items rejected each since they had a high significance level at some level. Below are the tables depicting the variations.

Variable 1 showed variation in opinion at level 2-4 with significance level (0.718).

	SpecificOrGeneralTrn
Mann-Whitney U	246.000
Wilcoxon W	366.000
Z	-.362
Asymp. Sig. (2-tailed)	.718

Table 63: Mann-Whitney test of variable 1 result at level 2-4

Variable 6 showed variation in opinion at level 2-4 with significance level (0.718).

	TrnSuitable
Mann-Whitney U	246.000
Wilcoxon W	366.000
Z	-.362
Asymp. Sig. (2-tailed)	.718

Table 64: Mann-Whitney test of variable 6 result at level 2-4

We can claim from these results that there is a variation in opinion of quality of training with years of experience.

4.4.3.3.2 Years of Experience with Personal Commitment

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of LoyalToOrganAfterCareerDevelopment is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.910	Retain the null hypothesis.
2	The distribution of DedicationToCareerAfterTrn is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.811	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 65: Years of experience test with personal commitment variables

The Kruskal-Wallis test in this table shows that all the variables failed to reject, since they have significance level higher than 0.05. Therefore, there is no variation in opinion between the variables. No need for further testing with the Mann-Whitney test.

4.4.3.3.3 Years of Experience with Level of Satisfaction

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DifferentThingsTimeTime is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.609	Retain the null hypothesis.
2	The distribution of UseOfMyAbility is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.284	Retain the null hypothesis.
3	The distribution of ChanceForAdvancement is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.349	Retain the null hypothesis.
4	The distribution of FreedomOwnJudgment is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.257	Retain the null hypothesis.
5	The distribution of ChanceTryOwnMethods is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.213	Retain the null hypothesis.
6	The distribution of PraiseForGoodJob is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.199	Retain the null hypothesis.
7	The distribution of AccomplishFeelinFromJob is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.070	Retain the null hypothesis.
8	The distribution of SombodyInCommunity is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.792	Retain the null hypothesis.
9	The distribution of CoworkersAlongEachother is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.350	Retain the null hypothesis.
10	The distribution of SteadyEmployment is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.083	Retain the null hypothesis.
11	The distribution of CompetenceSupervisor is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.182	Retain the null hypothesis.
12	The distribution of Totalsatisfaction is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.179	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 66: Years of experience test with level of satisfaction variables

The Kruskal-Wallis test in this table shows that all the 12 variables failed to reject, since they have significance level higher than 0.05. Therefore, there is no variation in opinion between the variables. No need for further testing with the Mann-Whitney test.

4.4.3.3.4 Years of Experience with Benefits and Challenges

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of ImprovPerformAfterTrn is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.056	Retain the null hypothesis.
2	The distribution of TechnicTrnMakeMeMultiskill is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.063	Retain the null hypothesis.
3	The distribution of TrnInfluencesCareerpath is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.722	Retain the null hypothesis.
4	The distribution of TrnBeneficialOutsideWrk is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.268	Retain the null hypothesis.
5	The distribution of SupervisDoesntAllowToUseSkill is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.507	Retain the null hypothesis.
6	The distribution of SupervisFollowsUpAfterTrn is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.530	Retain the null hypothesis.
7	The distribution of OrganizationDoesntTrnMe is the same across categories of YearExpOrdinal.	Independent-Samples Kruskal-Wallis Test	.119	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 67: Years of experience test with benefits and challenges variables

The Kruskal-Wallis test in this table shows that all the 7 variables failed to reject, since they have significance level higher than 0.05. Therefore, there is no variation in opinion between the variables. No need for further testing with the Mann-Whitney test.

4.5 Conclusion

After demonstrating the various test used for the quantitative data gathered and the corresponding results, we have concluded that the hypotheses used are all valid. This claim is backed up by the following results:

1. Non-metric variables from the population and the sample of the survey size, to the age, education level and the departments of the respondents of the survey, all were distributed normally with representatives from all categories. Therefore

making the non-metric variables valid and strong, and disregarding any claims of a weak or a manipulated data.

2. The regression test showed us that there is causality between the dependant and the independent variables. Some of the variables were not normally distributed since they had Kurtosis higher than 3 and Skewness more than 1. As a result, we plotted unstandardized residuals to make sure the model as a whole is normally distributed. From the regression frequency chart we notice that the slope is high and curved in the middle.
3. The variance analysis test was completed with the conclusion that all the hypotheses being failed to reject with only slight variations in some of the variable's items.

Chapter 5

CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Main Findings

In the previous chapter we were able to test the hypotheses that we had set in chapter 3 of this case study.

This case study has provided us with the support that investing in training is a wise initiative with added value and not just an additional expense that organizations have to incur. At least from Cimenterie Nationale's S.A.L perspectives we understand that the training and development plans which are being implemented regularly, not only widen their employee's knowledge, abilities and skills, but provide various opportunities, such as; increase in employee job satisfaction, improvement in performance and motivation through multiskilling and using safe work methods, and commitment to the job and the organization. All these come consistent with the theories mentioned priorly in the literature review section on training and development, and the qualitative and quantitative researches done. As a result of the various tests conducted, we were able to detect the following:

1. Level of satisfaction is associated with demographic variables and training attributes.
2. The 3 hypotheses are verified and failed to reject
3. Education level had the highest number of variations with 13 variations in the quantitative survey
4. The qualitative and quantitative data collected, showed that there is a link and a positive relationship between the goals of top management from training, and the expectations of employees from training.

5.1.1 Summary of Hypotheses

The following 3 tables are a summary of the 3 hypotheses of this case study.

5.1.1.1 Hypotheses 1

4Hypotheses		Number of items	Rejected	Failed to reject
Hypothesis 1	<i>Age has a positive linear relationship with training attributes</i>	162	2	160
Hypothesis 1.1	Age has a positive linear relationship with quality of training	36	0	36
Hypothesis 1.2	Age has a positive linear relationship with benefits and challenges	42	1	41
Hypothesis 1.3	Age has a positive linear relationship with personal commitment	12	0	12
Hypothesis 1.4	Age has a positive linear relationship with level of satisfaction	72	1	71

Table 68: Hypothesis 1 result summary

Consequently we verify that hypothesis H1 with all its sub-hypotheses has a positive linear relationship with age.

5.1.1.2 Hypotheses 2

Hypotheses		Number of items	Rejected	Failed to reject
Hypothesis 2	<i>Education level has a positive linear relationship with training attributes</i>	270	13	257
Hypothesis 2.1	Education level has a positive linear relationship with quality of training	60	3	57
Hypothesis 2.2	Education level has a positive linear relationship with benefits and challenges	70	5	65
Hypothesis 2.3	Education level has a positive linear relationship with personal commitment	20	0	20
Hypothesis 2.4	Education level has a positive linear relationship with level of satisfaction	120	5	115

Table 69: Hypothesis 2 result summary

Consequently we verify that hypothesis H2 with all its sub-hypotheses has a positive linear relationship with level of education.

5.1.1.3 Hypotheses 3

Hypotheses		Number of items	Rejected	Failed to reject
Hypothesis 3	<i>Years of experience has a positive linear relationship with training attributes</i>	162	2	160
Hypothesis 3.1	Years of experience has a positive linear relationship with quality of training	36	2	34
Hypothesis 3.2	Years of experience has a positive linear relationship with benefits and challenges	42	0	42
Hypothesis 3.3	Years of experience has a positive linear relationship with personal commitment	12	0	12
Hypothesis 3.4	Years of experience has a positive linear relationship with level of satisfaction	72	0	72

Table 70: Hypothesis 3 result summary

Consequently we verify that hypothesis H3 with all its sub-hypotheses has a linear relationship with years of experience.

5.2 Validity Issues

Validity studies were done to check all the validity questions and threats are considered and resolved. Construct validity will be demonstrated at the end with a link showing the relationship between theory and result. Internal validity/credibility will be demonstrated by the link between independent and dependant variables relationship. External validity/Transferability will demonstrated to check whether the findings can be generalized to other populations.

5.2.1 Qualitative Methodology

5.2.1.1 Credibility

Credibility is when the results of the qualitative research are believable and acceptable from the participants of the research (Trochim and Donnelly, 2006).

When the interviews were finalized we went back to each interviewee to verify that the transcriptions were accurate.

These are the threats to be considered for credibility:

- Selection Threat: Disregarded. There was no bias in selecting the interviewee's, they were all selected based on their posts as department managers knowledgeable of their department's training needs.
- History Threat: Disregarded. No external events occurred that would distort or impact the experience of the interviews.
- Maturity Threat: Disregarded. The interviews were done within 2 days, with no change in process or any developments that would impact the experience of the interviews.
- Testing Threat: Disregarded. The interviews were done once with each interviewee. The interviews ranged from 12 to 25 minutes.
- Instrumentation: Threat: Disregarded. One interviewer conducted all the 12 interviews with the same interview guide and questions.
- Mortality Threat: Disregarded. There were no dropouts from the interviewee's in between the interviews.
- Regression Threat: Disregarded. Even though all the interviews were done within the work premises, however all the interviewee's showed great enthusiasm and comfort hence disregarding claims of phenomena affecting their answers.
- Contamination Threat: Disregarded. The interview questions and guide were anonymous to all the interviewees so there was no chance for them to modify their answers.

5.2.1.2 Transferability

Transferability as defined by (Trochim and Donnelly, 2006) is the generalization of the research to other researches.

Threats to transferability are limited. We chose the company Cimenterie Nationale S.A.L on the basis that they implement training and development plans to their

workforce and as mentioned before this is a case study solely on Cimenterie Nationale S.A.L and the findings can't be generalized to other organizations.

Moreover, the chosen sample represented 55% of the population, with all of the interviewees having high end positions such as managers and directors, with the ability to enforce, control and manage their departments' training needs.

5.2.1.3 Dependability

Dependability's main concern is whether the same result will be obtained if the observation is done twice. According to Trochim and Donnelly (2006) dependability is the degree of changes that occur within the research and their effect on the conclusion.

In this qualitative research, there were no changes in any process, method or context. Hence, dependability threat is disregarded.

5.2.1.4 Conformability

Conformability is whether the results of the qualitative research can be confirmed by others (Trochim and Donnelly, 2006).

To increase this study's strength, the coding of the qualitative section was prepared by three individuals from academic and industry fields. The codes were compared and as a result it was concluded that the three codes were very similar in nature. These coding along with the interviews are available in the appendices B and C.

5.2.2 Quantitative Methodology

5.2.2.1 External Validity

External validity according to Trochim and Donnelly (2006) is the degree of the conclusion being generalized to other population and settings.

Threats to external validity are limited. Likewise transferability, we chose the company Cimenterie Nationale S.A.L on the basis that they implement training and development plans to their workforce and as mentioned before this is a case study solely on Cimenterie Nationale S.A.L and the findings can't be generalized to other organizations. Moreover, the survey sample represented 24% of the population, with 23 various departments being included out of 27 departments. Hence, significantly improving the

coverage of the organization's different departments from production, services and quality assurance. Furthermore, the sample covered employees from all categories of labor, such as skilled, unskilled and supervisory labor.

5.2.2.2 Construct Validity

Construct validity is similar to external validity, but instead of generalizing the study to other settings and population we generalize our findings to the study's idea and theory (Trochim and Donnelly, 2006). That is, it is the relationship between the result and the theory.

To improve the construct validity and the strength of our quantitative tool, we had 18 pilot tests conducted with different individuals with respectable position in the manufacturing industry, 5 of these tests were done by employees of Cimenterie Nationale S.A.L, who were off course disregarded from the sample. Moreover, the respondents were not aware of the hypotheses, so they couldn't alter their behavior or answers. Additionally, the employees were in no stress or any pressure to take part in the survey, so the results are accurate and true. Also, bias level was very low or null, since interaction between the observers and the respondents were very rare.

The following table depicts the relationship between the research question, the tool used to gather the data, and theories mentioned in the literature review section of this research.

Research question	This research attempts to investigate the perception of Cimenterie Nationale's employees about 4 different categories of training attributes and to examine the existence of potential variations of perception with respect to demographic variables, as well as to check for probable relationships between the four categories of attributes and demographics variables.
Tool used	Survey questionnaire
Theories	Bartlett (2001) "there is a positive relationship between training and organizational commitment, the research indicates that training and development contribute to certain employee workplace attitudes which influence behaviors like turnover and retention. "
	Kennett (2013) "organizations benefit from training by being more productive, more competitive, and consequently more profitable in the future."
	Appiah (2010) "training develops employee skills, knowledge, abilities and behaviors which improve the performance of the employee and eventually improving the organizational performance."
	Khawja et al. (2013) "employees who have had training showed more satisfaction with their job than those with no training or training opportunities."
	Khawja et al. (2013) "jobs that have development potentials act as a catalyst in increasing employee motivation, performance and hence job satisfaction."

Table 71: Table showing the relation between the research and the theories

5.2.2.3 Statistical Validity

Statistical validity is whether the tests used are accurate (Menassa, 2014). We had some concerns since that the study wasn't a random sample, we chose to do a random questionnaire with employees of Cimenterie Nationale S.A.L, however within this sample we were able to generalize results within this company. Non parametric tests, such as Man-Whitney U-test, Kruskal-Wallis and Spearman Rho were used to validate our statistical results.

5.3 Reliability

Reliability according to Trochim and Donnelly (2006) is having the same results repeatedly, that is the results are consistent over time. Even though there are four types of reliability tests; Inter-rater, test-retest, parallel forms, and internal consistency reliability, we will only focus on inter-rater reliability. Inter-rater reliability also known

as inter-observer reliability is the consistency of different observers for the same phenomenon (Trochim and Donnelly, 2006).

As mentioned previously in chapter three of this research, we stated that the data collection of the quantitative survey was going to be done by two observers not related to the organization to minimize bias and avoid making this research an “action research”. For this reason we only focused on inter-rater reliability. There was some discrepancy on this, however we solved it. We can state that the main role of these two observers was just to spread the hard copies of the survey to the employees and collect them once they had finished. The observers had very little contact with the employees, the only instance where there was contact, was if the employees had difficulty comprehending a question, and such instances were so rare that the effect of the observers on the collected data was at minimum if not null.

Since the survey had multiple metric questions (26), we used “Cronbach alpha” test for the metric variables to have an estimate of reliability on the measures used. Accordingly, we had an acceptance level of 91% which is well above the needed 70% for high internal consistency. The following is the table of “Cronbach alpha”.

Cronbach's Alpha	N of Items
.912	26

Table 72: Table of Cronbach's alpha test on the 26 metric questions

The complete detailed list of the Cronbach’s alpha test is available in appendix E.

5.4 Research Limitations

Due to the nature of this research being a case study, we only focused and studied implications of training at Cimenterie Nationale S.A.L. The initial plan was to implement the research on the three cement manufacturing organizations in Lebanon to have a clear understanding of training and its implication on this industry and also to compare the data gathered from these 3 competing organizations. However, due to us being employees of a competitor it was impossible for us to go ahead with this plan.

There were no major problems to report; however the data collection stage took more than a month due to many unseen events. For example, the data collection at the plant where the bulk of the employees were was initiated in mid December, where most of the employees were busy with the yearly overhauling of the plant. Moreover, many employees were on vacation due to the holiday season and due to the nature of the working schedule at the plant made it difficult for the observers to get grip of employees and fill in the survey to collect the necessary data. Finally, we would have preferred if the data collected from the survey would have been larger, since the respondent's number was 120 with 116 of them usable.

5.5 Possible Implications

We mentioned this research is a case study, and any finding won't be enforced on the organization. However, the results will be viewed by the management and can be considered for various uses in future decision making.

The answers gathered from the survey indicate that Cimenterie Nationale S.A.L has a clear policy and standards regarding training their workforce and making them multiskilled and pro-active, since all of the respondents stated that they have had participated in at least one training during the past two years and 86% of the respondents stated that the training they received was enough. Additionally, 95% of the respondents were satisfied by the quality of the training provided and 95% cited that they found the training to be useful and benefited in many ways from these training; 94% revealed that it has influenced their job performance positively, and made them aware with health related issues and accidents arising from unsafe working conditions/acts. This awareness by employees, such as the use personal protective equipments resulted in diminishing the number of accidents severity and its level in the organization.

Employees also clarified that they are satisfied from their current job, since most answered positively in the Minnesota satisfaction questionnaire used; 97% stated that their job provides steady chance for employment, around 90% answered they have the chance to try something new from time to time and do something which makes use of their abilities, 94% stated their co-workers get along with each other and 86% noted that

they get praised for doing a good job. These good results imply that Cimenterie Nationale S.A.L is listening to its employees needs and taking care of them, so it is of utmost importance to them to keep on this track and even improve it.

However, we noticed an important fact that Cimenterie Nationale S.A.L should pay attention to it and work on improving it: 58% of the employees mentioned that their supervisors don't follow up with them after receiving a new skill from training. Perhaps a wise step for the organization would be obliging the supervisors and the managers to immediately follow up with their employees after a certain training, because if this matter is neglected it would lead to de-motivation and lack of interest in training and development by the employees. This would be very harmful to Cimenterie Nationale S.A.L since it has planned to initiate the career development program in the near future and specially that 79% of the respondents in the survey clarified that they will show more dedication to their job if the training is linked to their career path, furthermore 96% of the respondents stated that they will be more loyal to the organization if they know their career development plan.

5.6 Possible Future Research

Even though the findings of this case study are limited to Cimenterie Nationale S.A.L, however the literature review section can be insightful to other studies focusing on training and its implications in the manufacturing industries. Also the findings can be used as an example and as a proof that investment in training isn't a waste of money and time to organizations. As mentioned in the limitations section, our main plan was to implement this study on the 3 competing cement organizations in Lebanon (Cimenterie Nationale, Holcim Liban and Cement de Sibline), perhaps future studies can compare the training data collected in these organizations.

This case study found a positive relation between some training attributes, such as quality of training, benefits of training, personal commitment and level of job satisfaction with some demographic variables, such as age and years of experience at the workplace. However, this study is limited to these two variables. Future researches can further develop and focus on other variables such as salary range. Furthermore, during

this study Cimenterie Nationale S.A.L was in the final stages of implementing the career development plan for its employees, hence, future researches can study and compare the results before and after the implementation of the career development plan. Even more, commitment and retention rate can be identified as results of training and career development plans. Finally, since Cimenterie Nationale S.A.L is very active in its corporate social responsibility and its image, studies can be done to analyze the impact of CSR activities on Cimenterie Nationale S.A.L as a whole.

5.7 Ending Remarks

This research has been very helpful and insightful both on academic and professional levels. First, it gave us the chance to get familiar with most of the theories, processes and studies done by various lecturers, philosophers and researchers on the training field from types of training, methods, benefits, challenges, and processes of training. Second, we were able to experience and identify the theories discussed in the literature review section with real life experiences. This was the significance of the multimethodology approach used in this research. It enabled us to question the managers and the decision makers in the company and configure their understanding of training. Moreover, through the survey questionnaire we were able to have a clear picture of the employee's perception on training attributes, how they relate to them and how it influences their work. That is, we were able to experience and verify the theories that were discussed in chapter two.

To conclude, this research stated that the quality of training this research shows that the level of satisfaction increases with training, according to attributes like age and years of experience. However, the education level decreases the loyalty and the satisfaction of employees, since according to our research, as employee's education increases his interest in training decreases and so does his' loyalty and satisfaction level.

We understood from this research that all employees from different categories are satisfied with the quality and the type of training offered by Cimenterie Nationale S.A.L. Consequently, Cimenterie Nationale S.A.L should persist on offering specific, high quality training to its employees (preferably external training), and further develop and

enhance the development program that focuses on the career path of its employees in order to motivate and retain them in the long-term.

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APPENDECIES

Appendix A: Interview Guideline

As part of a master's research on training influences at the work place, developed by the School of Business of the Notre Dame University, we are conducting this interview.

Thank you for dedicating few minutes of your time for this interview. (estimated time: 15minutes).

You can trust us; all responses are strictly anonymous and confidential. The results of this interview will be used exclusively for scientific research.

- I. Awareness on Training and Development at Cimenterie Nationale S.A.L
 1. What is your departments policy in improving the employee's skills and know-how's?
 2. On what basis do you choose the candidates for a certain training?
 3. On what basis do you choose if a training needs to be done by an internal or external instructor?
 4. Are you following a career development plan in your department?
 5. Is multiskilling implemented in your department?
 6. How about your employee's health? Are they aware of work related health risks?

- II. Benefits perceived from the training and development at Cimenterie Nationale S.A.L
 1. How has the career development plan improved your department's performance?
 2. How are the training on safety and health transferred to the employees?
 3. What are the benefits that these training offer to your employees? Are they satisfied?
 4. Theories indicate that companies that implement training plans have better employee performance, do you agree?
 5. Do you agree with some scholars that training plans increase the employee's retention rate?
 6. Compared to your competitors and similar organizations, do you think you have a competitive edge due to your training and development plans?

III. Challenges and the Way Ahead for Training and Development at Cimenterie Nationale S.A.L

1. What are the major problems faced by your department when allocating the training?
2. Have the accidents rate decreased in your department now that you have such training?
3. Do you assess if a training was successful? Have you had a training that had no impact or negative impact on the employee's performance?
4. To what degree are the employees motivated to participate in training?
5. Do you have common training between departments?
6. Do you exchange skills between your department and others?
7. What is the best method/time for managers to communicate with employee's regarding their career path?

Appendix B: Coding of the Interviews

As a result of the comparisons of the coding of the interviews, we came up with this coding for conformability validity. Below is the table of the coding used for the qualitative tool.

Trpl		Training Plan
	Trpl Mtd	Training Plan Methods
	Trpl Pol	Training Plan Policies
	Trpl Bnf	Benefits
	Trpl Prb	Problems
	Trpl Ass	Assessment
	Trpl Emv	Employee motivation in training participation
Crdv		Career Development
	Crdv Rtn	Retention
	Crdv Mts	Multiskilling
	Crdv Crp	Career path
	Crdv Com	Communication Between departments
	Crdv Bnf	Benefits
Wkco		Working Condition
	Wkco Hlt	Health
	Wkco Sft	Safety

Table 73: Summary of the coding family

Appendix C: Interviews

Interview 1

Department: Supply Chain

Job Title: Senior Supply Chain Manager

Age: 47

Years of Service: 20 years

Trpl Pol	We have a continuous training in the department, the training's are based from yearly performance appraisals and from departmental and personal programs.
Trpl Pol	The candidates for the training are done based on employee's skills and job profile first of all and secondly based on the type of the training.
Trpl Mtd	The training policy depends on what the HR department will offer. Sometimes training can be done internally when there are experts in the department for specific tasks or skills. External training are done based on the expertise of the training institute, the knowledge of the trainer and the training location.
Trpl Bnf	If employees took 20% of a training and implemented it, this will result in an increase in efficiency, proficiency and performance. Also satisfaction, because they are learning the latest tools and skills.
Trpl Bnf	When you have a training plan you monitor and measure performance by creating KPI's, and you can't achieve a good performance without a good training. Training is to show you if you are aligned to the recent practices and strategies in the market.
Trpl Bnf	Training improve the image of the company. The overall performance in terms of production, maintenance and safety. All these will result in reduced cost and better quality product and supply.
Trpl Bnf	There is always added value from the training but the range differs, however the overall quality of the training we have attended are good.
Trpl Ass	Yes off course, I always have a brief from the trainees after a training, I interview them on how it was and what did you learn.
Trpl Emv	Yes off course employees are motivated to attend training, first it's an opportunity for them to enhance their knowledge, and then they consider the added value they will get which will help them increase their performance.
Trpl Prb	Yes we have a problem, because we haven't been to a lot of training. Unfortunately a lot of the targeted training is being done in Kuala Lumpur and that is very far.
Crdrv Mts	Multiskilling is somehow implemented, the team members know the job of their colleagues, replacement and rotation can be done within the department. However we can still further develop it by doing rotations in other departments.

Crdiv Bnf	Time is very crucial in our department. So if your team can work together and speak the same language then off course this will increase the performance of the department. It can be also reflected in the KPI, if everyone knows the KPI of the other and the contribution that they make, then you can notice how the multiskilling is important.
Crdiv Rtn	It can contribute, but it is not the only factor. To increase loyalty, it needs trust and confidence. Of course it's a motivating factor when the company sends his employee's abroad for training, but it isn't the only factor that creates increased retention rate.
Crdiv Com	Yes, when there is a cross functional processes, because we as a supply chain have relation with almost all the departments like the sales, production and maintenance..
Crdiv Com	It is very hard taking a specialist in your department and ask her to do an accounting transaction, this isn't her specialty! However it may be more helpful when you give her a task like distribution, because she will be using her same skills but in a different job.
Crdiv Crp	More communication, trust and respect. The employee's loyalty is also very important because this way the manager can feel more open and give him responsibility, he should prove himself that his eligible for training and that he wants to move his career.
Wkco Hlt	They are aware because in the processes we have a part talking about health and safety, for example how to handle heavy stuff, however it is not very significant in our department. We also have them on the job descriptions.

Table 74: Summary of Interview with the Senior Supply Chain Manager

Interview 2

Department: Compensation and Benefits

Job Title: Compensation and Benefits Manager

Age: 50

Years of Service: 19 years

Trpl Pol	It is done through two things. First training arising from the performance appraisal, second we have a continuous training such as brainstorming between me and my employees, it is like an informal training.
Trpl Pol	We have common training with other departments, such as health, safety, general training and some training with the accounting department such as income taxing.
Trpl Mtd	Usually we do external training. We have partial internal training if you want, they are done on day to day basis informally.

Trpl Bnf	Training provides them with more knowledge and skills, hence they will be more knowledgeable.
Trpl Bnf	Fully agree, since employees are trained and they know more, so they will perform better.
Trpl Bnf	Theatrically yes, because better performing employee means better company performance. However I can't tell if we are more competitive from our competitors.
Trpl Emv	Employees are always motivated to participate in training.
Trpl Prb	The major problem we face is scheduling of the training that is the timing. Also sometimes we have issues with the quality of the external training because at times we feel we know all that is being given we learned nothing new.
Trpl Ass	Informally yes, I check the behavior of the employee if it has improved. Yes we have had some instances where we didn't benefit from the training
Cr dv Com	There is no exchange of skills with other departments
Cr dv Mts	Career development is done with coordination of the HR department and top management
Cr dv Mts	We tend to implement it somehow, but sometimes it is difficult because some employees can't comprehend every new detail and also due to hierarchy and authority. There are some details in our department that only the person in charge should know and no one else.
Cr dv Rtn	It could increase retention rate, but it should also be linked to a proper career development plan.
Cr dv Bnf	Simply if a career development plan exists, employees will feel committed and enthusiastic, since he knows his effort will be rewarded.
Cr dv Crp	There should be a continuous communication to tell employees if they have any gap. Anytime is a good time, but the prime time is during the performance appraisal.

Table 75: Summary of Interview with the Compensation and Benefits Manager

Interview 3

Department: Electrical and Instrumentation

Job Title: Electrical and Instrumentation Director

Age: 53

Years of Service: 18 years

Trpl Pol	We have created a table with a list of tasks/skills needed in the department and the capability of each employee with those tasks/skills accordingly. As a result, if one employee has a score of 4 or 5 in that specific skill, means that he is qualified to teach his colleagues, whereas if you have a score of 1 or 2 means that there is a skill gap and it needs to be dealt with. So after we identify gaps, we deal with them by either internal or external training.
Trpl Pol	Who attends the training depends on the type of training and the situation.
Trpl Pol	Yes, some training are shared like safety, health, environment, and some technical training. This helps in multiskilling.
Trpl Mtd	Depends on the level of the employee, if the employee is of lower level, his supervisor or manager can do it internally, if it is too complicated then we do it externally. Also it depends on the number of candidates for a certain training, if the number is large we prefer to do it via external instructors but in-house.
Trpl Mtd	Regarding whether if employees prefer internal or external training, for me if employee's really wants to learn and acquire a new skill, it shouldn't matter to them wither its internal or external training.
Trpl Bnf	For sure there is a difference. Companies that have training plans have fewer problems. The employees have less stress, because they have better maintenance on their machines due to improved technical skills and off course they will perform better.
Trpl Bnf	Definitely if your workforce has the right training, they will outperform the competition because you will have better productivity.
Trpl Prb	The major problem faced is allocating time for training. We have a training plan, but it is hard to dedicate time for it due to work overload and different shifts.
Trpl Prb	Also another issue is quantity, sometimes there isn't enough room for all the employees to attend certain training, and this creates demotivation in those who didn't attend the training.
Trpl Emv	When employees know they have a training, they are all motivated and excited to attend.
Trpl Ass	Any type of training needs a follow up. So far all of the training are up to standards.
Crdiv Mts	Yes, multiskilling is available in our department; our employees can do multiple tasks.
Crdiv Bnf	Multiskilling decreases the number of jobs needed, more productivity and efficiency that is you will have time to do more activities and improvement in quality.

Crdrv Rtn	When an employee is loyal to the company, it doesn't matter whether you train him or not. But giving training to employees will make them feel valued from the company.
Crdrv Crp	When an employee knows of his career plan he will be motivated and happier at work.
Wkc Hlt	Off course our employees are aware of work related risks, especially that our main job is with electricity. They all wear their protective equipments.
Wkc Sft	"Tools box talks" awareness session is done every morning to the employees, in this session we remind the employees to regularly check their gears and equipments before heading out to work and remind them on how to operate safely to avoid accidents.
Wkc Sft	Moreover monthly safety meetings are done to discuss with employees any recent accidents or "near miss" accident cases.
Wkc Sft	We also have "champions" in the departments, whose main priority is to check for any unsafe work conditions or acts and raise to the managers attention to avoid any unnecessary risks.

Table 76: Summary of Interview with the Electrical and Instrumentation Director

Interview 4

Department: Laboratory, Raw Material Preparation and Quarry Operation

Job Title: Lab, RMP and QOD Director

Age: 46

Years of Service: 21 years

Trpl Pol	First of all we rely on the result of the yearly appraisal to detect the weaknesses in our employees, based on that we ask for training in order to fill the gap.
Trpl Pol	Second based on clients requests for certain changes needed on the products such as when there is a need for new type of cement, they attend training to widen their knowledge and know how's.
Trpl Pol	Third if new machinery is acquired they attend training to efficiently use that machine.
Trpl Pol	We choose candidates based on the type of the job, level of education and the level of experience.
Trpl Pol	Training gives the company competitive edge but the training should follow a guideline and a plan, and not just giving training for the sake of it.

Trpl Mtd	This is easy for us. If the subject is totally new and innovative for them, we do training by an external instructor. However if certain training is needed, and certain employees in the department are highly qualified, we do the training (internal training).
Trpl Mtd	For me it doesn't matter if the training is by an internal or external instructor, what matters is the methodology of the training and on how you transfer the training material to the employees.
Trpl Bnf	We are the market leader purely due to the training.
Trpl Emv	The motivation depends on the topic of the training. If the training is related to their health, or improving their techniques or it offers the chance to promote they will be motivated, but when the training is general without a clear objective such as a general information or technique, that training will be boring for them.
Trpl Prb	The major problem is detecting the weaknesses of the employees, because performance evaluation isn't enough to tell the weakness of the employees, and the employees themselves don't speak of their weakness because of again culture issue, they are shy.
Trpl Prb	Another problem is due to the nature of our industry, they don't find a lot of institutes training topics related to cement, so we are obliged to send our employees abroad which costs a lot.
Trpl Ass	All the training are evaluated during and after the training. Also all training have positive impact, but the level of the impact and success differs from one training to another
Crdiv Mts	In many of the departments I supervise, multiskilling is implemented based on the capacity and the knowledge of the workforce. The drivers in the quarry operation and quarry productions departments can drive multiple heavy machines, and in most cases we have had big success.
Crdiv Bnf	Thanks to the technical training's the employees can survive any change, because as stated in the cement industry there is always something new such as new machinery.
Crdiv Bnf	Moreover employees are happy and motivated because they are more knowledgeable, empowered and have a career plan. All these improve the performance of the employees and the productivity of the department.
Crdiv Bnf	When I first started managing the laboratory department, the level of knowledge was very poor and I had to interfere in every small detail to take decision, but now after lots of training through the years I barely interfere since the employees now have the knowledge and can make decisions alone.
Crdiv Rtn	Training and career development work in parallel direction, when you increase the knowledge of the employee, you have to offer him a career path, without that there will be no improved retention rate, but increase in turnover rate. So training somehow helps in retention.
Crdiv Com	There is a communication, but on managerial level only.

Crdr Crp	Communication with employees of their career path motivates them, but it needs to be communicated by top management and human resources. However due to the nature of the work in my departments, you have to wait for an open position or a change to start with the career path, but in the meanwhile you train and prepare the employees in case of such instances.
Wkco Hlt	Off course employees are aware. We do a lot of training and awareness to the employees regarding health, sometimes we repeat the same training as a reminder. These training's have improved the health level of the employees, but it can still be improved a lot, due to the Lebanese culture and way of thinking as "mucho man"; employees think they are strong and no harm can come to them.
Wkco Sft	We have monthly safety and health meetings by the champion of the department. There is risk analysis for every job and task.
Wkco Sft	We are proud of the fact that in the last twenty years they have had no accidents, thanks to the continuous awareness and training.

Table 77: Summary of Interview with the Lab, RMP and QOD Director

Interview 5

Department: Cement Mills and Packing Plant

Job Title: Cement Mills and Packing Plant Manager

Age: 53

Years of Service: 23 years

Trpl Pol	Usually workers in the department are trained to do a specific task, after they master that task/position they have to move to another task/position.
Trpl Pol	As I am responsible for both departments, I try to rotate the employees between different positions in these departments.
Trpl Pol	Depends on the topic of the training, if the training is safety for example, the entire team attends but it's a different case when it's a technical training.
Trpl Mtd	Internal training is conducted by me or the assistant manager, in case there's a need to train the employee on how to do a certain job or training's on safety and health
Trpl Mtd	External training is usually for foremen's who attend seminars and lectures regarding their domain and in turn transfer what they learned to their employees.

Trpl Mtd	There are some instances when an external instructor comes over to our company to do certain training. For example not while ago in the cement mills department when they installed a new polycom, a representative from that manufacturing firm trained the employees extensively for ten days, and afterwards he monitored them for a while to guarantee that they were operating the machine correctly and efficiently.
Trpl Bnf	When the employees see that the manager and the supervisor are on the same level with them attending the same training with open and frank discussions, this encourages them to be motivated and put extra effort.
Trpl Bnf	For sure, the employees will feel satisfied knowing that their actions is improving the companies competitiveness, and the organization itself will feel proud of its' employees.
Trpl Prb	The major problem for me is the language barrier. Almost all training, not counting the tools box talks are in English. This is an important issue, since most of the employees in the department are of lower educational level.
Trpl Ass	All training's are measured. In the training's that we they have done, (internal training) we've never faced neutral outcome. The employees are taught to always think before they act, this will allow them to quickly go over what they studied in the training and then act.
Trpl Emv	All the employees will participate actively, you can tell it by the numbers that attend.
Crdv Mts	Yes there is a mulitskilling and it is being implemented.
Crdv Bnf	Yes, I believe if there is a vacancy in his department it's not suitable to bring someone from outside when they have someone in the department who is capable, knows the ins and the outs of the department.
Crdv Bnf	This gives motivation to the employees, knowing someone from their own was promoted and that there is a chance from them in the future to have a higher position.
Crdv Bnf	It creates better employee performance
Crdv Rtn	Depends on the training and how positive the employee sees the training. For the employee to value the training you have to advise him frankly on why he needs the training and how it will improve his performance. This way the employee will feel important, whether the training was internal or external.
Crdv Crp	Openness is very important in communication. However, his employees lack some ambition maybe because of their age, and this limits their chances of career path.
Wkco Hlt	Off course they are aware. They have several tools box talks sessions in the department, on how to work without jeopardizing their health. The employees are advised to notify their supervisors whenever they notice or feel anything that might cause a "near miss" situation or an injury.

Wkco Sft	Yes they have decreased significantly. At the begging we enforced the safety rules like the usage of personal protective equipments, because the idea was new to the employees and they resisted, but now it's a habit.
Wkco Sft	It's like when you have a baby and have to teach him what to do before going to bed. You tell him wash your hands, brush your teeth, go to the bathroom and then go to sleep and tuck in.

Table 78: Summary of Interview with the Cement Mills and Packing Plant Manager

Interview 6

Department: Plant Administration

Job Title: Plant Administration Senior Manager

Age: 49

Years of Service at Cimenterie Nationale S.A.L: 13 years

Trpl Pol	Employees are regularly trained whether on health and safety, environment, development purposes, technical and behavioral skills.
Trpl Pol	The HR department prepares the TNA of each department which is done on a yearly basis.
Trpl Pol	Also there are on the spot training's, for example we receive an email or invitation informing us of an interesting training and finally when a new machinery is bought, an expert trainer is sent to train employees on how to operate and maintain the machine.
Trpl Pol	There are some common training between departments, such as health, safety and environment.
Trpl Mtd	This is a cement manufacturing industry it is very hard to find specific training. So some specific training is done on the job, where potential employees are identified who can train different tasks each one in his specialty and according to their skills inventory.
Trpl Mtd	External training is used for gaining new skills and improving quality, for example we sent employees abroad for workshops and sometimes if there is a group of trainees we prefer brining an external instructor in house.
Trpl Bnf	First of all the monthly health and safety monthly meetings decrease the accidents rate and severity.
Trpl Bnf	Second employees are more knowledgeable, hence they can use their gained skills and knowledge outside.

Trpl Bnf	Yes I agree because in my opinion giving training to the employee's is a motivating factor and engages employees. It is not like employees work all day and at the end of the month here is your salary, on the contrary the company is investing in them and thinks of them in constructive and human way.
Trpl Bnf	If training is taken seriously by employees and not just going to training for the sake of it, then off course it gives a competitive edge.
Trpl Prb	No major problems faced, because usually before taking training its objectives and outcomes are communicated with the employee.
Trpl Ass	Yes we take the feedback of the attendees, and check their performance. If it isn't positive we don't take other training with that organization.
Trpl Emv	It depends on the level of the employees. Higher level employees are more motivated to attend training, however lower level employees and older employees are less tend to be excited and motivated for employees, because they are not used to change and their mentality.
Crdrv Mlt	Yes there is multiskilling and specialty, however multiskilling is encouraged and it is done by internal training. Sometimes some departments work together on an assignment as if they are merged, in order to have some knowledge of how work is done in other departments.
Crdrv Bnf	Career development motivates employees by widening their knowledge, since with their new skills they can use them in their work or even outside the company.
Crdrv Bnf	Moreover, it decreases dependency on employees, for example when one employee is sick, another one can replace him.
Crdrv Rtn	Giving training to employees is one of many items that creates retention, but not solely training.
Crdrv Com	Sometimes there is communication based on need, still they aren't very proactive.
Crdrv Crp	There should be a clear communication especially between the HR department and the workforce, the HR should market itself and show the employees what they are doing such as the succession planning. Succession planning is available bust still underdevelopment.
Wkco Hlt	For sure, as an administration we spread awareness on health related issues and even create healthy working environment for the employees.
Wkco Sft	Training is done through tools box talks where different safety and health issues are discussed. Near miss accidents are discussed and how to tackle them. There are many awareness sessions on a weekly and monthly basis just focused on health, safety and environment.
Wkco Sft	Statistically the accidents have decreases by 40% since three to four years. Employees are more aware, when they see an unsafe condition anything that might create an injury or risk they immediately contact the champions or their supervisor to fix the issues.

Table 79: Summary of Interview with the Plant Administration Senior Manager

Interview 7

Department: QHSE, Site and Civil and Port

Job Title: QHSE, Site and Civil and Port Manager

Age: 60

Years of Service: 7 years

Trpl Pol	The department always coordinates the needs with HR department, and at the same time the HR department offers training for them.
Trpl Pol	First the role profile of each person is considered and what responsibilities they have, second the contents of the training, and finally whether this training is important for his career path
Trpl Mtd	The QHSE department has the capability to give internal training, however certain instances such as for skill development or improving the quality we go for external training or instructors. External training motivates employees more because they weight it more valuable and see it more professional.
Trpl Bnf	For an example when employees come back from training they feel they have achieved something and feel happy, this is very encouraging and prepares the employees for future tasks.
Trpl Bnf	For sure they are better, when you increase knowledge and awareness you minimize many risks. The employees are conscious, they know what they are doing and you decrease the human errors, which improves your productivity.
Trpl Bnf	As much as the training and awareness sessions increase as much as the risks decrease.
Trpl Bnf	Definitely, the employee will feel valued and that the company is looking after him. The employee's will think as quoted by him "the company is not only sucking my information, but they are giving me information that will increase my knowledge."
Trpl Prb	We don't face major problems, but I feel that more training should be provided, but more time is needed to do so. Even with external training, a summary or the just the essentials are given, which isn't enough and doesn't help the employee a lot.
Trpl Ass	Usually the training is evaluated by the HR through training reports after the training is completed. However if there is an external training I regularly keep in touch with my employees to check if the quality of the training is good, if they are facing any problems with the material or the instructor, and if they do I contact the institution or the instructor.

Trpl Emv	Once employees know they are attending a training they get excited, and sometimes they even search for training and ask their manager to attend a certain training.
Crdrv Mts	All the employees in the QHSE department are multiskilled and can be co-assigned to other tasks and position within the department.
Crdrv Bnf	The benefits for career development in this department include lifting up the knowledge of the employees, hence lifting up the quality and productivity of the department.
Crdrv Bnf	Yes, once you have multiskilling, you can co-assign an employee in a specific task in any department. As mentioned before all the members in this department are multiskilled and can face any challenges in the future.
Crdrv Crp	When you are outlining an employee's future, you are giving him a goal, he is not in a dark tunnel, employees want to improve and be in a better position. Now most of the employees in the department know of their career path, but before they were doubtful, because now they are following scientific processes, there is performance appraisal and training evaluation.
Wkco Hlt	Definitely they are aware this is QHSE! The employees are all well trained and they conduct health and safety training for trainers in other departments.
Wkco Hlt	As we are certified by OHSAS 18001, we are required to regularly check and test their employee's health, test, such as hearing tests, back pain and many others are conducted depending which department, since each one has different risks.
Wkco Sft	Comparing with years where there was no or little training on health and safety with now, the number of accidents and health issues has decreased sharply, and even the severity of the accidents has decreased.

Table 80: Summary of Interview with the QHSE, Site and Civil and Port Manager

Interview 8

Department: Raw Material Preparation

Job Title: Raw Material Preparation Manager

Age: 41

Years of Service: 3.5 years

Trpl Pol	My goal is to allow all the drivers in the department to drive all type of heavy machinery available in the department, off course if the employees are willing to learn, since it is not obligatory.
Trpl Pol	There are no specific criteria, but it depends from one employee to another, for example for the same training one employee needs one month while the other needs ten weeks, depending on his strength and ability. I even learned how to drive a caterpillar machine to be set an example for my employees.

Trpl Pol	For detailed technical training an employee at least needs to know English or have a minimum BT certificate, first because most of the training is done in English, and secondly most of the machines have signs and writing in English, so this way he can comprehend what the writings mean on the boards.
Trpl Mtd	Most of the training in the department are done internally because the majority of the workforce is highly qualified and they can easily transfer their skills to their colleagues. Sometimes I would have attended a certain training, and transfer it to my employees.
Trpl Mtd	Due to the nature of work in the department, my employees are satisfied with internal training and don't see external training as a more motivating factor because they know their ambitions are limited in the department and when they reach the wheel loader position, they feel they have reached the top.
Trpl Bnf	Because of these continuous training and awareness's the majority of the employees automatically wear their protective gears, such as safety boots, hats and masks. When there is a malfunction in any machine like a brake light, they immediately contact the garage department to fix it.
Trpl Bnf	Also the employees will be mentally and physically less distressed and less dependency due to the rotation and less manpower needed. Finally off course it improves the performance and the productivity of the department.
Trpl Bnf	Off course if we implement what we have learnt from our training's we will be the best. Because all the things that I have learned and my excellence is honestly due to the training I have attended. According to feedbacks we receive, we are the best in our industry in Lebanon and maybe the region.
Trpl Prb	Most of the training is allocated from internal resources from within the department. There should be more external training.
Trpl Ass	After a training the employee's performance and behavior is monitored. If you do training and don't implement it? What is the point of that training?
Trpl Emv	The majority of the employees are indifferent with training since they feel that they have reached the maximum in their career service.
Trpl Emv	However when it comes to multiskilling the majority are motivated since for them that's a new challenge for them driving or controlling a new machine.
Crdrv Mts	The goal is to create rotation between employees and each position, every week they drive a different machine. Around 90% of my employees are multiskilled.
Crdrv Bnf	The most important thing is the positive effect of multiskilling. When an employee in any position is sick or on his day off, the production doesn't stop, I can immediately replace that employee with another qualified employee. Moreover multiskilling creates a sense of equality between the employees, this way each of them will realize the importance of their colleagues' position and the tasks they accomplish.

Crdrv Bnf	And from the benefits of mulitskilling most of the employees are happy, because for example the truck driver is now able to drive many more heavy machines, he is no longer limited to a single machine, this for the employee's is considered to be a big achievement.
Crdrv Crp	The most important thing is honesty and candor between the employees and managers. Moreover employees need to be regularly evaluated on their performance fairly and not to give them a good evaluation because of personal interests.
Crdrv Rtn	Most of my employees don't care, because they all think they are "permanent" employees, the company can't get them out, especially with the older employees. Employees think that they have reached the height of their career and they couldn't care less whether you sent them to a training or not, they won't learn anything
Wkco Hlt	Yes all the employees are aware of health risks, but many of them are stubborn and think they are sick proof (laughing) eventually we are obliged to enforce employee's to use protective equipments.
Wkco Hlt	Another point for implementing muliskilling in my department is to minimize health risks. For example a bulldozer operator who has constant shocks from smashing huge rocks for seven days a week, can rest, because he is able to rest his back by driving other less demanding machines throughout the rest of the month.
Wkco Sft	There are monthly safety meetings. We show them videos on past accidents, their impact on the employee and the organization, and off course on how to avoid that sort of accidents. Employee's share their concerns and alert them if there are any unsafe conditions that might lead to accidents and risks.
Wkco Sft	It's been two years we have had zero accidents in our department (knocking on the table with his hand), off course most of this is due to the continuous safety and health awareness and training.

Table 81: Summary of Interview with the Raw Material Preparation Manager

Interview 9

Department: Management Information System

Job Title: MIS Manager

Age: 51

Years of Service: 19 years

Trpl Pol	We have a training plan for all the employees in the department which we prepare at the end of each year, we identify the skills in which they need to develop. There are two types of training; technical and managerial.
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Trpl Pol	Based on the nature of the job. For the IT we give them It related training, on the other side we have cognos which is completely different from IT and we also give them cognos related training and finally project management training and application development training for the assistant manager.
Trpl Mtd	If the candidates for the training are more than two, then we prefer doing the training in-house with external training, but if the candidates are one or two and the training is public we do it externally.
Trpl Mtd	There is no internal training within the department because each one has a different specific job, but we train other departments for example on how to use a certain software.
Trpl Bnf	In the MIS field the evolution is very fast, we have to be in line with the latest technologies. So the company needs to up-to-date, for the company to up-to-date the employees need to be up-to-date by doing training and research. This way you increase the level of the employee, you also make him feel valued and bloomed, because through the company he is earning new certificates and diplomas.
Trpl Bnf	Yes, for example I attend a lot of meetings, conferences and summits with multinational companies and managers, I feel confident and strong between them. This is because of the various type of training that we have taken from managerial to technical training. This makes us feel proud, strong and gives us a self confidence.
Trpl Prb	Yes we have a problem because the training's aren't always in Lebanon, and if they are done in Lebanon they are scheduled afternoon, the employees feel tired. Imagine full day work plus training after work, in such instances you feel like the employee is down and he won't benefit a lot from the training. It is better if the training is full day without work.
Trpl Ass	After the training employees give me feedback and so does the trainer. Also you can notice if the employees apply what they learned in the training.
Trpl Emv	All of them feel happy and motivated when they have a training, but they prefer a full time training and not one that is done afternoon after work.
Crdrv Mts	All the employees have a notion on what their colleagues in the department do, however since the MIS field is very wide, the employees are specialized.
Crdrv Mts	Nevertheless not long ago we started implementing something called MIS service management, it's like a log book, when an employee encounters a problem and finds a solution for it, he atomically registers the steps. This way we can know the know-how's of each job and its' problems and also facilitate transfer of knowledge, however this is still under development.
Crdrv Bnf	The MIS service management program that we started facilitates transfer of knowledge smoothly because I can't tell one of my technical employees go and learn from your colleague a new task, since this employee already has a full time job. So this way the employee's in the department know all the necessary tasks in the department without losing valuable time. This creates better department productivity by speeding up customer requests.

Crdrv Rtn	You have to create challenging projects because no ambitious employee stays in the same position with routine tasks.
Crdrv Com	We do train other departments on new application or software's, as MIS we can be involved in almost any department, because we need to know how their work is done so we can update their system or software.
Crdrv Crp	During the performance appraisal we talk about the career path of the employee, where you see him in a few years and where he can be. We give him the idea, we enlarge his responsibility and decision making. This way you take the employee's opinion and they can talk with you.
Wkco Sft	The employees are aware of electrical risks and avoid it, other than that we don't have any safety issues.

Table 82: Summary of Interview with the MIS Manager

Interview 10

Department: Human Resources

Job Title: Senior HR Generalist

Age: 64

Years of Service: 18 years

Trpl Pol	It starts by knowing what your employees lack to do the job efficiently and providing the necessary training.
Trpl Pol	Also by aligning the training with the strategy of the company, an example of such training is "change of culture" which is being done by Grid International.
Trpl Pol	According to the needs of the employees and also the target level of the training. If the training is intended for the level two employees (engineers, assistant managers) then you can't include a level three employee, because it will bring no added value to him and vice versa.
Trpl Mtd	Internal training is limited, they are mostly done for health, safety, environment and specific training's done by the QHSE department or a manager of a process.
Trpl Mtd	External training's are those that are common in various departments, like the change of culture. Also in some instances employees are sent abroad for job development, especially since there are no training in our business.
Trpl Bnf	Employees show satisfaction, because when you give a new knowledge to them they feel valued and respected. From the other benefits of training: improved employee performance and productivity, improved quality of the service, lower absenteeism and lost time.

Trpl Bnf	If you do your job in a safely manner, you reduce the cost, because according to him the cost of safety and health is very high, you have hospitalization, treatment, finding a replacement, loss of time and lowered production. So if you reduce this, you reduce the loss time and absenteeism, the employees will more proficient, the quality of their work will be better, and even the customer will be more satisfied.
Trpl Prb	There are two main problems. The first problem is finding the right training, especially if these training's are of specific technical nature or environmental, health and safety nature, because there is almost no training institute dealing with such issues in Lebanon. So they have to search for professionals abroad and bring them to do in-house training's.
Trpl Prb	The second problem is scheduling and organizing the training's, because if you have a group of trainees, you have to identify the availability of each one because sometimes they might be overloaded with work or on a vacation.
Trpl Ass	After training employees fill up a training evaluation form, and accordingly from their remarks if there is a shortage from the training, they contact the institute or the trainer for clarification.
Trpl Emv	Most of the trainees are motivated. Sometimes the training's are limited and still they exceed the limit because many employees want to participate. When an employee wants to learn and is eager, he doesn't wait training's from the company, he can learn by himself.
Crdrv Mts	Employees are developed to be able to do all the tasks of the department and to be aware of all the functions of the department. And then according to the needs of the department they can specialize.
Crdrv Mts	On the organizational level they have created prospects (level two) to take some part of the responsibilities of the managers and prepare and develop their career progress. In the last two years they have recruited around ten employees to fill such positions, especially engineers.
Crdrv Mts	For lower levels there is the criticality role, where critical positions are indentified in case the occupants of these positions leave, however this is still in the beginning stages.
Crdrv Bnf	Speaking generally, through multiskilling many employees have developed their skills and can take various roles. For example the drivers in the raw material preparation department the driver are more proficient and can drive various machines.
Crdrv Bnf	However when an employee knows that he has a plan in the company and chances for improvement, off course this will improve his performance.
Crdrv Rtn	To a certain extent again, why? Because the new generation wants to try different jobs and look for better opportunities. Even though you value them by giving training and teach them new skills, they still want to explore.
Crdrv Crp	The most important way to improve the communication is during the performance appraisal, where you can talk with the employee so he can know where he stands, give him the chance to tell you his needs and put the training plan with accordance with him so he knows why he needs this training.

Wkco Hlt	Since the company is ISO certified, we are required to clarify the health risks of each position on the job description and how to avoid those risks, either through following a certain process or using the right protective equipments. Each employee is aware of these issues and has signed on the job description.
Wkco Hlt	Through medical checkups done regularly in the company, we have discovered that health related accidents have decreased. This is due to the awareness and training sessions on health and safety.
Wkco Sft	There are weekly safety meetings and monthly safety, health meetings done by the QHSE and the champions of each department, in some meetings the managers and even the CEO attends.
Wkco Sft	Moreover international institutions have been conducting training's tailored for safety, health and environment. Such as occupational safety and the chemical waste management.
Wkco Sft	These training's have very good outcome. They have decreased the number of accidents and number of lost days due to accidents.

Table 83: Summary of Interview with the Senior HR Generalist

Interview 11

Department: Administration

Job Title: Chief Finance and Administration Officer

Age: 52

Years of Service: 31 years

Trpl Pol	There are several processes to identify the needs of the employee's. First it's done through HR by the performance appraisal, training needs analysis and career development. Then the department heads also identify the training needs through a yearly training plan for their department.
Trpl Pol	Who attends depends on the job requirements and career development.
Trpl Mtd	The type depends on the training topic
Trpl Bnf	Off course they are satisfied from the training. Training increases employee's job knowledge and allows job enlargement.
Trpl Bnf	Definitely, definitely training makes employees perform better.
Trpl Rtn	Yes it does help in retaining employees but it is not enough.

Trpl Prb	Sometimes it is hard to find the right training specifically when it comes to health, safety and specific technical training. This is because a cement manufacturing company, universities or institutions in Lebanon don't teach you for example how to operate a kiln. So we send employees abroad or in-house training through external instructors.
Trpl Ass	We don't have a systematic method, the head of department will know whether the employee benefited from the training, also the HR department gathers training evaluation forms from employees once they have completed the training. Not really almost all the training we have done are good.
Trpl Emv	Off course employees welcome training
Crdr Mts	Multiskilling is something being considered, some departments have it.
Crdr Bnf	Career development is what young people are looking for, we are developing it and will be in fully ready in a year.
Crdr Com	There is some communication between departments but not often.
Crdr Crp	The best method to communicate is during performance appraisal.

Table 84: Summary of Interview with the CAFO

Interview 12

Department: Accounting

Job Title: Accounting Manager

Age: 56

Years of Service: 14 years

Trpl Pol	There are always new developments in the accounting business as a result we have continuous training for our staff to introduce them to the latest norms and regulations.
Trpl Pol	Off course all our employees go to training, if there's a training all the employees in the department attend, because I want all my employees to know all the aspects and functions in the department, even though each one of them have their own job.
Trpl Mtd	Internal training is very important in our department. Personally I have been in this company for a long time, I started by a simple accountant position and through the internal training done to me by my predecessor I was able to reach what I am today. Through internal training, new employees are learning from older employees.
Trpl Mtd	External training is mostly used to acquire new techniques and norms.

Trpl Bnf	Training improves our performance and second we avoid taxes or penalties incurred to us if we don't follow the latest norms.
Trpl Bnf	The employee who has done training is personally motivated because there will be less routine. When you come to the company you just have your school's certificate, but here every now and then thanks to the company you are developing.
Trpl Bnf	The employee will become more attached and loyal to the company knowing the company is investing in him, he will also be more comfortable.
Trpl Bnf	If you don't do training you will either stagnant or go backwards.
Trpl Bnf	I don't have details about our competitors, but I can tell from the training or seminars we attend, we have the highest number of attendance in any training. So I think that's a positive sign that we are learning and improving.
Trpl Rtn	True training creates retention because the employee is benefiting, it is not like that you had one training and that's it, on the contrary it's an open option you can take as many training for your development. This encourages employees to continue with the company.
Trpl Prb	Honestly yes we need to have more training, since the company is giving us the chance.
Trpl Emv	Off course they are motivated, they like to go. As I mentioned before training benefit them on different levels, it benefits them personally, gives them the chance to develop technically and it's a way of changing routine.
Trpl Ass	Some training needs follow-up in work and when an employee goes to a training comes back and cant implement what he learned from the training, then he will forget. Regarding the quality of the training they are all good.
Crdrv Mts	Yes, for the work to function normally and without any stoppages everyone is familiar with others task.
Crdrv Mts	Yes, all the employees somehow know what the other does in the department, so in case one is sick or absent a fellow employee could replace him
Crdrv Bnf	As mentioned before, when one employee is sick another employee can cover for him. Employee's gain extra knowledge and skills allowing the department to be more productive.
Crdrv Crp	There should be a daily ongoing communication between them, when a person in the department has a say or has a need he shouldn't back off, and also when the manager sees that his employee is underperforming and can improve he shouldn't hesitate and wait for the performance appraisal. There should be candor and openness.
Crdrv Com	Yes we do communicate with other departments, but it needs to be developed. Personally I don't see it that practical, because an employee will leave his work temporarily in the department which leads to a decrease in the departments' productivity.

Table 85: Summary of Interview with Accounting Manager

Appendix D: Survey Questionnaire

Training Influences on Career Development and Working Conditions

Thank you for taking time to complete this questionnaire which is developed by the School of Business of the Notre Dame University, this questionnaire aims at gauging your views about the current status on training influences at the work place. Your opinion is vital for the success of this research and it will be treated in the strictest confidence within the ethical code of practice for field research at the Notre Dame University; thus the information gathered will solely be used to compile statistics. No data about you as an individual will be disclosed in any published results.

Section 1: Background Information

1.1 Age

(Fill in the blanks)

1.2 Highest level of completed education

(Indicate your choice by ticking on the most suitable answer for you)

- Elementary High School Technical Bachelor Master's Doctoral

If other, please specify

1.3 Job Title

1.4 Department

1.5 Years of work experience in your profession

Appendix E: Reliability of the Validities

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
SpecificOrGeneralTrn	133.22	405.473	.548	.908
TrnUsefulinJob	132.63	404.835	.635	.907
TrnMinimizeAcc	132.18	409.132	.565	.908
AwareOfHealthRiskinJob	132.02	419.181	.394	.911
PersonalProtectEquip	132.02	404.833	.670	.907
TrnSuitable	133.22	405.473	.548	.908
ImprovPerformAfterTrn	132.40	400.252	.726	.906
TechnicTrnMakeMeMultiskill	132.51	402.384	.707	.906
TrnInfluencesCareerpath	132.91	404.048	.572	.908
TrnBeneficalOutsideWrk	132.79	415.164	.347	.912
SupervisrDoesntAllowToUseSkill	135.58	416.548	.194	.918
SupervisrFollowsUpAfterTrn	135.25	449.167	-.192	.927
OrganizationDoesntTrnMe	134.03	390.729	.455	.912
DedicationToCareerAfterTrn	132.17	417.038	.340	.912
LoyalToOrganAfterCareerDevelop	132.22	416.956	.327	.912
DifferentThingsTimeTime	132.83	399.427	.609	.907
UseOfMyAbility	132.64	399.928	.714	.906
ChanceForAdvancement	132.77	392.020	.767	.904
FreedomOwnJudgment	132.56	402.934	.631	.907
ChanceTryOwnMethods	132.77	401.763	.560	.908
PraiseForGoodJob	133.01	389.665	.698	.905
AccomplishFeelinFromJob	132.59	392.296	.779	.904
SombodyInCommunity	133.09	395.707	.621	.907
CoworkersAlongEachother	132.58	399.044	.660	.906
SteadyEmployment	132.48	401.559	.682	.906
CompetenceSupervisor	132.59	397.215	.640	.907

Table 86: Reliability of the different validities in the qualitative survey