



Department of Educational and Social Policy

# **Human Resource Development through the Exploitation of Lifelong Learning Methods**

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## **ABSTRACT**

Despite the emphasis placed on Lifelong Learning (LL) in the past decades, there is little theoretical and empirical evidence to support the connection between Human Resource Development (HRD) and LL, where LL is clearly defined as an integral part of HRD. Due to the lack of evidence on how LL and its methods influence HRD, mainly in relation to the personal and professional development of the workforce within enterprises and organizations, this research study dealt with the investigation and justification of that influence. For this reason, a quantitative Likert scale, based on the objectives of this research, was designed and named Lifelong Learning and Human Resource Development (LLEHUREDE) scale. It was based to a greater extent on Resource Based View (RBV) theory and to a lesser extent on learning theories, and Learning Orientation Theory (LOT), in order to assess this impact and eliminate any possible confounding variables that may have been present in previous research and simultaneously to clarify any misunderstanding issues. In addition, qualitative research was conducted through interviews with employees, managers and employers of various enterprises, as well as through thorough observations of specialized training programmes. The identification and analysis of the investigated impact of LL on HRD focused mainly on learning culture, learning strategy, and the implementation of these within enterprises and organizations, as well as the twofold identity of each employee, firstly as a member of an organization and secondly as a Life Long Learner (LLL). The analysis was undertaken based on the consideration that few enterprises and organizations have placed proper emphasis on human resources and even fewer have investigated the awareness of their employees of LL, their desire for further learning or commitment to LL activities. The main purpose of the present research study was to test the hypothesis, or rather to answer the question, as to whether LL had an impact on HRD, in an effort to determine if this new intervention could enhance the development of a LL culture and strategy, to increase the competitiveness and sustainable development of enterprises and organizations, through Strategic Human Resource Management (SHRM). Results showed that the majority of managers, employers and employees were aware of the non-formal and informal character of LL. Through their participation in LL activities, where lecture and discussion were the key selected learning methods, learning outcomes such as improvement in job performance, professional development as well as personal development and enhancement of self-esteem, predominated over the desire for further learning. In addition, Quality of Learning (QoL), prerequisites of which were considered to be the educational and evaluation policies in the quantitative approach, was shown to depend more on the ability of instructors to transfer the knowledge than on the selected learning method in the qualitative approach of the research. Finally, by demonstrating the value of LL and its impact on HRD, which is significant not only for the personal and professional development of the managers, employers and employees, but for the organization development as a whole, the present research highlights the necessity for investment in LL activities.

## ΠΕΡΙΛΗΨΗ [Abstract in Greek]

Παρά την μεγάλη έμφαση που δίνεται τις τελευταίες δεκαετίες στη Δια Βίου Μάθηση (ΔΒΜ), υπάρχουν λίγες θεωρητικές και εμπειρικές έρευνες που αναφέρονται στη σύνδεσή της με την ανάπτυξη ανθρώπινων πόρων, στις οποίες μάλιστα η ΔΒΜ εμφανίζεται κυρίως ως αναπόσπαστο τμήμα της ανάπτυξης ανθρώπινων πόρων. Εξ αιτίας της έλλειψης ερευνών σχετικών με το πώς επιδρά η ΔΒΜ μέσω των μεθόδων της στην ανάπτυξη ανθρώπινων πόρων, κυρίως στην προσωπική και επαγγελματική ανάπτυξη των εργαζομένων σε επιχειρήσεις και οργανισμούς, η παρούσα έρευνα ασχολήθηκε με την διερεύνηση και τεκμηρίωση αυτής της επίδρασης. Για αυτό το λόγο, ένα ερωτηματολόγιο με βάση τους σκοπούς της έρευνας και με χρήση της κλίμακας Likert σχεδιάστηκε και δημιουργήθηκε η ποσοτική κλίμακα που ονομάστηκε ΔιΒιΜαΑΑΠ. Η δημιουργία της βασίστηκε σε μεγαλύτερο βαθμό στη θεωρία ότι οι άνθρωποι χαρακτηρίζονται ως πόροι και σε μικρότερο βαθμό στις θεωρίες μάθησης και στη θεωρία με προσανατολισμό στη μάθηση με σκοπό να εκτιμηθεί αυτή η επίδραση και να απομακρυνθούν τυχόν πιθανές ασαφείς (μη κατανοήσιμες) μεταβλητές που μπορεί να ήταν παρούσες σε προηγούμενες έρευνες και παράλληλα να διευκρινιστούν τυχόν παρεξηγημένες έννοιες. Επιπρόσθετα, πραγματοποιήθηκε μια ποιοτική προσέγγιση με τη διεξαγωγή συνεντεύξεων σε εργαζόμενους και σε στελέχη ή/και εργοδότες διαφορετικών επιχειρήσεων ή οργανισμών, καθώς και με εμπειριστατωμένες παρατηρήσεις εξειδικευμένων εκπαιδευτικών προγραμμάτων. Η εξακρίβωση και ανάλυση της ερευνομένης επίδρασης της ΔΒΜ στην ανάπτυξη ανθρώπινων πόρων εστιάστηκε κύρια στην κουλτούρα μάθησης, στη στρατηγική μάθησης και στην εφαρμογή αυτών σε επιχειρήσεις και οργανισμούς, καθώς και στη διττή ταυτότητα του κάθε εργαζόμενου, κατά πρώτο λόγο ως μέλος του οργανισμού και κατά δεύτερο λόγο ως δια βίου μαθητή. Η ανάλυση αυτή πραγματοποιήθηκε έχοντας υπόψη ότι λίγες επιχειρήσεις και οργανισμοί έχουν δώσει την πρέπουσα σημασία στους ανθρώπινους πόρους και ακόμα λιγότερες έχουν ανακαλύψει εάν οι εργαζόμενοι τους γνωρίζουν τι είναι η ΔΒΜ και εάν έχουν την επιθυμία για περισσότερη μάθηση ή νιώθουν τη δέσμευση για συμμετοχή σε ΔΒΜ δραστηριότητες. Ο κύριος σκοπός της παρούσας ερευνητικής μελέτης ήταν να ελεγχθεί η υπόθεση ή καλύτερα να απαντηθεί η ερώτηση, εάν η ΔΒΜ είχε επίδραση στην ανάπτυξη ανθρώπινων πόρων, στην προσπάθεια να προσδιοριστεί αν αυτή η νέα παρέμβαση θα μπορούσε να ενισχύσει την ανάπτυξη κουλτούρας και στρατηγικής ΔΒΜ προς όφελος της ανταγωνιστικότητας και της βιώσιμης ανάπτυξης επιχειρήσεων και οργανισμών μέσω της στρατηγικής διαχείρισης των ανθρώπινων πόρων. Τα αποτελέσματα έδειξαν ότι η πλειοψηφία των διευθυντών, εργοδοτών και εργαζομένων είχαν επίγνωση του μη τυπικού και άτυπου χαρακτήρα της ΔΒΜ. Μέσω της συμμετοχής τους σε ΔΒΜ δραστηριότητες, όπου η εισήγηση και η συζήτηση επικράτησαν μεταξύ των επιλεγόμενων μεθόδων μάθησης, τα μαθησιακά αποτελέσματα όπως βελτίωση της απόδοσης εργασίας, επαγγελματική ανάπτυξη καθώς και προσωπική ανάπτυξη και ενίσχυση της αυτοεκτίμησης υπερίσχυσαν έναντι της επιθυμίας για περισσότερη μάθηση. Επίσης, η ποιότητα της μάθησης, προϋποθέσεις της οποίας θεωρήθηκαν η εκπαιδευτική πολιτική και η πολιτική αξιολόγησης στην ποσοτική προσέγγιση, φάνηκε στην ποιοτική προσέγγιση της έρευνας ότι εξαρτάται περισσότερο από την ικανότητα του εκπαιδευτή να μεταφέρει τη γνώση παρά από την επιλεγόμενη μέθοδο μάθησης. Τέλος, αποδεικνύοντας την αξία και την επίδραση

της ΔΒΜ στην ανάπτυξη ανθρώπινων πόρων, η οποία δεν είναι σημαντική μόνο στην προσωπική και επαγγελματική ανάπτυξη των διευθυντών, εργοδοτών και εργαζομένων, αλλά και στην ανάπτυξη όλου του οργανισμού, η παρούσα έρευνα τονίζει την αναγκαιότητα επενδύσεων σε δραστηριότητες ΔΒΜ.

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## Abbreviations

AFC	Analysis of Factorial Components
AMO	Ability Motivation Opportunity
ATC21S	Assessment and Teaching of 21 <sup>st</sup> Century Skills
CEDEFOP	European Centre for the Development of Vocational Training
CHRM	Critical Human Resource Management
CIPD	Chartered Institute of Personnel and Development
CSR	Corporate Social Responsibility
ELLI	Effective Lifelong Learning Inventory
ELOT	Hellenic Organization for Standardization
GPHR	Global Professional in Human Resources
HEI	Higher Educational Institution
HR	Human Resources
HRCI	Human Resource Certification Institute
HRD	Human Resource Development
HRM	Human Resource Management
ICT	Information and Communication Technology
ISO	International Organization for Standardization
IT	Information Technology
KMO	Kaiser-Meyer-Olkin
KSA	Knowledge, Skills and Abilities
KSAVE	Knowledge, Skills, and Attitudes, Values and Ethics
LLEHUREDE	Lifelong Learning and Human Resource Development
LL	Lifelong Learning
LLL	Lifelong Learning Learner
LOT	Learning Orientation Theory
MAD	Méthodes d' Analyse des Données
NSRF	National Strategic Reference Framework
OECD	Organisation for Economic Co-operation and Development
OC	Organizational Culture
OD	Organizational development
OL	Organizational Learning

PBL	Problem-Based Learning
PHR	Professional Human Resources
PM	Participative management
QoL	Quality of Learning
RBV	Resource-Based View
ROI	Return On Investment
SEVE	Greek International Business Association
SHRD	Strategic Human Resource Development
SHRM	Strategic Human Resource Management
SMEs	Small and Medium-Sized Enterprises
SPHR	Senior Professional in Human Resources
TEI	Technical Educational Institution
TVET	Technical and Vocational Education and Training

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**PART I**  
**OUTLINE OF THE RESEARCH**

## **Chapter 1**

### **INTRODUCTION**

Although contemporary enterprises and organizations appear to have recognized the value of Human Resources (HR) as a vital force for business or organizational development and performance, this is not evident in practice in their attention to the educating, training and developing of their employees. Firstly, this is clear from the low level of exploitation by certain EU countries, including Greece, of European funds that support Education and Lifelong Learning (LL) and Human Resource Development (HRD) programmes. For example, in Greece, in the Central Macedonia region, with a budget limit of €499.576.836 for Education and LL, contracts to the value of up to €294.345.671 were signed, while for HRD, the budget limit was €480.533.636 and contracts signed €306.968.688, according to the analytical information, provided in the official website of the Ministry for Development, Competitiveness, Infrastructure, Transport and Networks concerning funding programmes that are offered mainly in the context of the National Strategic Reference Framework (NSRF) 2007-2013. This under of NSRF funds, also verifies the low level of interest in LL and HRD. More particularly: 2007: absorption target €3.058 million, absorption less than €100 million; 2008: absorption target €2.999 million, absorption less than €100 million; 2009: absorption target €2.937 million, absorption €729 million; 2010 absorption target €2.750 million, absorption €2.820 million; and 2011: absorption target €3.350 million, absorption €3.390 million (National Strategic Reference Framework (NSRF) 2007-2013, Retrieved May 12, 2012, from <http://www.anaptyxi.gov.gr/Default.aspx?tabid=41&language=en-US>).

It is worth mentioning that the strategic objectives of NSRF concerning enterprises, in terms of working population, include raising the qualifications of the

active population and adjusting supply to demand for qualifications. In terms of value creation by enterprises, the aims are to raise the efficiency of producing and the quality of products in order to improve the position of exporting enterprises and to increase enterprise and employee adaptability to the economic cycle and structural change (NSRF Observatory, 2009).

Secondly, the job losses and cost cutting expenditures due to the economic crisis have resulted in a decrease in training investment, provision and involvement by private sector enterprises and organizations (OECD, 2010, p. 11). This tendency follows the mainstream of government cuts in spending on education, in many countries of the world, especially European countries, as a result of the global economic crisis (Education International, 2009). Also, there is an opposition, as there is a small number of countries where private sector enterprises and organizations demonstrate a tendency to increase investments in training and maintain a steady number of in-house vocational training opportunities (OECD, 2010). Additionally, as Technical and Vocational Education and Training (TVET) seems to be closely tied to the state of the economy, patterns of educational investment by private enterprises are expected to change (Bakarat, Holler, Prettnner, & Schuster, 2010, p. 9).

Therefore, lack of participation in European funding programmes concerning LL and HRD reflects a drop in the interest and ability of enterprises and organizations to engage in learning activities, in the long run. Also, they appear to be unwilling to concentrate on educating their employees, to enable them to achieve their business goals, including those affecting survival of the business, by overcoming difficulties and transforming threats into opportunities, to gain competitive advantage. Instead, they opt for dismissals rather than skilling and reskilling their employees or enhancing their professional development, by missing opportunities to take advantage of their involvement into various LL activities that may result in organizational development and improved performance. Furthermore, their evaluation policy as far as acceptance of any offer for delivery of training courses is concerned, as well as the analysis of learning outcomes after the completion of any educational programmes, training courses or other learning activities, reveal the risk of not bringing the expected benefit in relation to the time, energy and money spent, or rather wasted, on any learning activity.

This reality reveals that enterprises and organizations are on the defensive and they do not seem reluctant to take their destiny in their hands. The researcher has been dealing with enterprises for many years, among which several years as a manager in the financial and export departments of National Bank of Greece in eight branches and the rest years as a freelancer quality consultant and adult educator. During her career in the bank she has followed and analyzed the development of many enterprises from their starting up to their mature phase and even their closing phase. Indeed, entrepreneurs tend to emphasize financial resources and their value, they struggle for profit making, they respect their entrepreneurship abilities of taking risk and accomplishing successful pursuits, but quite often they overlook the value of their employees and how they can be their partners to their risk-taking and decision-making. This situation in enterprises and organizations and the emphasis placed on financial resources instead of HR was one of the essential motives for the carrying out of present research, which seeks for explaining this by investigating the influence of LL and its methods on HRD.

On the contrary, even though LL has gained a good foothold in educational marketing, enterprises and organizations have not increased their investment in learning activities. There is a really large amount of research on issues of HRD, in particular over the two last decades, concerning theories, models, methods and theoretical frameworks, but less empirical studies. The conjunction of theoretical frameworks and empirical studies may be more useful to enterprises and organizations of the 21<sup>st</sup> century than theories and research in a largely academic framework. In addition, the evolving interest in LL in the context of the European cohesion policy, national government policies as well as by the academia and practitioners, will compensate for the shortage of mainly empirical studies to this direction.

Concerning enterprises and organizations, it is not evident whether this emerging interest in LL provokes investments in educating, training and development of their employees and managers. Therefore, the main interest of the researcher was to find out whether LL influences HRD. The investigation of whether people in enterprises and organizations are aware of the meaning of LL and its aims was characterized essential by the researcher as a basis for the interest in taking part

in learning activities. Whether the corporate strategy of each enterprise and organization has an orientation towards HR and what is their learning culture were considered as important because these reflect the interest of enterprises in the power of learning as a means of competitive advantage through continuous development of their employees, managers and employers themselves. In addition, as many managers and employers complain for not having the expected benefit of their employees participation in training courses, the investigation of the evaluation policy of each enterprise and organization was characterized as vital by the researcher in order the quality of learning can be examined.

Moreover, the promotion and marketing of LL as the magic means of development within governmental policies as well as in the objectives of European funded programmes concerning HRD and the expectations of suppliers of educational services raises questions as to whether LL influences HRD. In particular, the elaborating interest of the researcher was to find out what are the learning outcomes when employees, managers and employers participate into the most common and contemporary learning activities when various LL methods are selected. In addition, as LL transfers the responsibility from the educator to the learner, his and her learning identity is considered an issue of great importance.

Inevitably, research investigating the impact of LL, through the exploitation of its methods, on HRD will be of great value and significance to enterprises and organizations as well as to academics, as there is lack on research studies directly connecting these two issues. This existing gap was aspired to be covered by the researcher through the present innovative research study and its quantitative and qualitative approaches.

Due to the longitudinal career, studies, experience and broad interest of the researcher, the context of this study includes many fields of research such as HRD, LL, Human Resource Management (HRM), Strategic Human Resource Management (SHRM), Strategic Management and Quality Management, Adult Learning, Workplace Learning, Quality of Learning (QoL), Learning Assessment, Learning Methods, Learning Process, Organizational Learning (OL), Organizational Culture (OC), Leadership, Ethics, Knowledge Transfer and Management, and other fields relative to the broad meaning of HRD and LL.

The present study comprises four parts and six chapters. The abstract introduces the focus and significance of the present research study (in both, English and Greek). Part I starts with Chapter One, Part II follows with two chapters, Part III with one chapter and Part IV with two chapters. Part I in Chapter One introduces the statement of the problem on which the present research is based, the purpose of the study, the main research questions, objectives and design of the study, identification of key terms, limitations and significance of the research and finally, the state of the art of the study.

Part II consists of two chapters, and presents a critical review of the literature relevant to the study, including recent research in the fields of HRD, LL and their inter-connection. Chapter Two introduces the context and role of HRD and other related or relevant to its ongoing development. This chapter also examines corporate strategy and learning strategy and how they are connected to HRD. Chapter Three examines: The context of learning; learning perspectives and theories; lifelong learning (LL), methods and its current trends; learning styles and strategy; and assessment of learning outcomes in terms of quality and effective learning. It also provides an overview of how individuals learn and what their learning identity is, including their learning style, strategy and preferences and how these converge and impact on their personal and professional development. This chapter ends with an overview of recent research studies concerning the connection between HRD and LL. Thus, Part II explores the literature surrounding the connection of the two key issues HRD and LL, with a particular focus on the impact of LL and its methods on HRD.

Part III and particularly Chapter Four, refers to the methodology and the research procedure. In particular, Part III consists of one chapter, in which description of the research design, methodology, data mining and data analysis are presented. More specifically, Chapter Four includes the design of the research, the methodology, the pilot study and its results, the development of the main research tool, the data collection and data analysis of both approaches, quantitative and qualitative.

Part IV comprises two chapters: Chapter Five presents results of the quantitative and qualitative analysis of the research, while Chapter Six presents the conclusions and discussion, drawing connections between HRD and LL, implications of the research findings and recommendations for further research.

At the end, there are references and appendices that provide complementary information.

### **1.1 Statement of the problem**

Enterprises and organizations have the tendency to place more emphasis on financial resources and less on human resources (HR). Firstly, this is evident from their lack of participation in European funding programmes such as those offered in the context of the NSRF 2007-2013, to support LL and HRD as there is low uptake of them in some European countries including Greece. Secondly, due to the economic crisis and its consequential effect on sales and profits, enterprises tend to decrease their investment in education, training and development. Finally, the non-achievement of expected learning goals and outcomes, evident from the assessment of participating in learning activities, make enterprises and organizations cautious about investing in learning activities with uncertain benefits.

Therefore, investigation of the corporate strategy and LL culture, awareness of what is LL and its aims, evaluation policy of participation in LL activities can reveal the real causes and effects of non-participation in learning activities and the benefits in case of participation. In addition, through tracing learner's characteristics and the learning outcomes dependent on the selected learning method, the influence of LL and its methods on HRD can be defined. These was the main focus of the present research study.

### **1.2 Purpose of the research**

The purpose of the present study was to investigate the impact of LL, through the exploitation of its methods, on HRD and mainly the factors that affect the relation between LL and HRD. The rationale of this research study was to answer the question: Whether LL, through the exploitation of its methods, has influenced the personal and professional development of employees, managers and employers in an attempt to identify whether LL can be aligned with corporate strategy for the competitiveness and sustainability of enterprises and organizations. More precisely, the main objectives of the research were to examine the extent to which employees, managers and employers perceive the content of LL, its aims and its relationship to

personal and professional development, especially the improvement of job performance and self-esteem as well as the desire for further learning, through tracing learning outcomes and learners' identity. The approach of this research was a strategic one and in particular, included the attitudes of employees, managers and employers in relation to: Understanding the content and aims of LL; the corporate strategy in terms of the value put on HR; LL culture and strategy; assessment of participation in training programmes; recognition of the identity and orientation of the employee, manager and employer who embraces the role of lifelong learner (LLL); as well as learning outcomes related to personal and professional development, self-esteem, job performance and desire for further learning according to the selected learning method in each different learning activity. This research focused on enterprises and organizations which have been active exporters, as well as those demonstrating a tendency to get involved in export activities in the imminent future, either as exporters or as mediators in the fulfillment of export activities, because extroversion of enterprises and organizations could be considered a dependable defensive mechanism to economic crisis.

### **1.3 Research questions**

The present research intended to provide answers to the following questions:

- How do employees, managers and employers perceive the content and basic aims of LL?
- What is the corporate strategy of enterprises and organizations concerning the value of HR?
- What is the LL culture and strategy of enterprises and organizations?
- What is the evaluation policy of enterprises and organizations concerning educational, training and learning activities?
- What is the influence of LL methods on the outcomes of learning activities in which employees, managers and employers engage?
- What is the identity of employees, managers and employers when they participate in LL activities?

#### **1.4 Objectives and design of the research**

The present research offers a means of evaluating the impact of LL and its methods on HRD and identifying opportunities to enhance awareness of LL and how this can be achieved within enterprises and organizations, with the ultimate goal of increasing investment in learning activities during the lifespan. Gaining a better understanding of the meaning and benefit of LL may help employees and employers to become LLL and, thus, continuously try to improve their knowledge, skills, behaviours and competencies.

Furthermore, LL activities are intended to contribute to raising productivity through the personal and professional development of people and increasing the profitability of their organizations, in order for the latter to further gain and sustain a competitive advantage over their competitors. In addition, the significance of the teaching methods commonly applied by instructors, educators and trainers in educational programmes, training courses and other LL activities, in which employees, managers and employers participate, are also evaluated, for the purpose of identifying the most appropriate method for different learning activities. Finally, the ultimate aim of this research study was to enrich the process of building a LL culture and strategy.

For this research a sample of enterprises and organizations selected using the criterion of already being involved in export activities, or demonstrating a vigorous interest and capability of immediate involvement.

The target group of the study consisted of employees and employers from enterprises and organizations already exporting; those who have been mediators in export processes and others who were oriented towards the development of a strategy to support export activities and transactions. The survey took place in the period 2010-2011 and lasted less than two years. This quantitative approach was supported by an improvised questionnaire, the reliability and validity of which were completely verified, and complemented by a qualitative approach using semi-structured interviews of managers, employers and employees. In addition, observations in a series of seminars and a specialized learning project concerning the acquisition of skills for export activities were carried out.

#### **1.4.1 General fulfilment of the objectives of the research**

The results of the present research showed clearly that exploitation of LL methods contributes to a significant extent to the personal and professional development of employees and employers, triggering impacts not only on them but also at the organizational level of enterprises and organizations. An added value for enterprises and organizations could also be the respect of their employees as unique humans and LLL, where a LL culture is created and a learning strategy applied as a part of their corporate strategy. The significance of the **Lifelong Learning and Human Resource Development (LLEHUREDE)** scale (described in detail in Chapter Four) is that it can be used as a research tool to examine how far employees and employers have a deep understanding of the meaning of LL, the advantage of having a LL culture and strategy, as well as the impact of LL and its methods on HRD.

#### **1.5 Identification of key terms**

First of all, we have to clarify the meaning of culture and culture change; identity; organization and organizational change; strategy and corporate strategy and how these are used and interpreted in the present research.

Culture defined as:

a pattern of shared tacit assumptions that was learned by a group as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems

(Schein, 2009, p. 27).

Culture is not a simple concept but a complex one that exists at all levels within an enterprise or organization, such as at the strategic level, strategy, mission, vision, philosophy and goals; the operational level, structure and processes; the business level, mainly the beliefs, perceptions, values, thoughts and feeling of all members of an enterprise or organization.

Another key element is culture change which in the present research connected to the term development. Phillips (2003), in his attempt to define HRD integrates training, education and development. More specifically, he connects training to job related skills, education to preparation for the next job and

development to culture change. Thus, in considering the impact of LL and its methods on HRD, culture and culture change constitute the main research focus of the present research. As our focal point is to examine how LL can lead to HRD, firstly the existence of a LL culture in enterprises and organizations was traced. The influence of the selected learning method on job performance, personal and professional development, as well as the desire for further learning which is considered both a critical element of LL culture and a desirable outcome of participating in LL activities, were also thoroughly investigated.

In this research, the concept of the organization has a broader meaning and, thus, it includes the enterprise and any reference either to the enterprise or organization as an integral part of its meaning. Inevitably, not only do leaders and managers shape organizational culture, but all members of the organization contribute with their cultural background and shared experience, whether the creation of culture or its change. In other words, organizational culture can be characterized as “the organization’s identity” (Schein, 2009, p. 16).

Identity is a concept that has been the subject of extensive study (Albert & Whetten, 1985; Ashforth & Mael, 1996; Corley, et al., 2006; Margolis, 2009; Ravasi & Schultz, 2006; Whetten, 2006) both at different levels, including individual, group and organizational, and in connection with culture (Hatch & Schultz, 2002). Even though identity and culture are different, they are closely and particularly connected at the organizational level (Corley et al, 2006; Hatch & Schultz, 2002), where culture overarches identity, but identity is the focus of the organizations’ culture management (Fiol, 1991; Fiol, Hatch, & Golden-Biddle, 1998) and the essence of the organization (Albert & Whetten, 1985).

In our research, identity was considered at an individual level and, mainly, as an emotional identity since the emotions of participants were considered to be of great significance in the context of learning activities and, in particular, in LL since the desire for further learning is a core issue in the existence and development of LL philosophy.

Regarding organizational change, it has three key components: The change context, which is the ‘why’ of change; the change content, which is the ‘what’ of change; and the change process, which is the ‘how’. The change context includes the

external context, which includes the social, economic, political and competitive environment and the internal context, which refers to the culture, structure and capabilities of the organization as well as its political context (Balogun, Hailey, Johnson & Scholes, 1999, p. 3). In our research, the main interest is in the internal context, incorporating resources, capabilities, culture and politics.

Strategy is likely to be concerned with the long-term direction of an organization and strategic decisions are normally concerned with the scope of the organization's activities in its attempt to achieve competitiveness (Johnson & Scholes, 2002, p. 4-5).

Corporate strategy is used here for two main reasons. Firstly, because the research study is concerned to all types of organization, commercial enterprises from very small to large as well as non-governmental and specialized service organizations and self-employed entrepreneurs/employees; thus, 'corporate' is all encompassing. Secondly, because corporate strategy denotes the most general level of strategy in an organization and, in this sense, embraces other levels of strategy such as organizational strategy, business strategy and strategic management. On the other hand, corporate strategy is taken to mean anything pertaining to enterprises and organizations, as the terms enterprise and organization are often used interchangeably, and, moreover, any organization strategy also implies entrepreneurial strategies. Furthermore, the interdisciplinary and interconnected nature of diverse scientific studies justifies this approach while technology, economics, society and globalization also drive towards an entrepreneurial rationale.

Finally, as LL is characterized by longitudinal development throughout the lifespan and strategy by a long-term orientation, the adoption of a strategic approach seems most appropriate to the present research.

## **1.6 Significance of the research**

Despite the growing interest of theorists, researchers, and practitioners, including business owners, executives and policy makers, there is limited academic research on the contributions of LL and its methods to HRD in enterprises and organizations. In addition, no serious research has been carried out in the field of LL and its connection to personal, professional and organizational development, considering these to be key

parameters of HRD. Therefore, the investigation of factors that determine the influence of LL on HRD is of great importance.

Recognizing that learning within enterprises and organizations, on the one hand, is closely connected to business corporate strategy, its value system and the evaluation policy of participation in educational programmes or training courses, and on the other hand, it depends on the employee or employer identity as a learner or, rather as a LLL, we proceeded to analyze and interpret this relation through the application of the Lifelong Learning and Human Resource Development (LLEHUREDE) scale. This scale clarifies the impact of LL on HRD by addressing seven crucial factors. Therefore, besides the utility of this scale as a research tool for researchers LLEHUREDE scale can also be useful for enterprises and organizations in order to identify employee attitudes towards LL and their perception of the existing learning strategy in the enterprise or organization to which they belong. Consequently, they may be able to foresee their employees' future expectations and the potential success of their involvement in LL activities.

Our research contributes to the field by integrating multiple HRD dimensions that emerge through the prism of LL. In addition, it offers a scale that can serve both as a research tool and as a building block for research on, and use of, LL issues in HR interventions in competitiveness settings.

Furthermore, this research can be of value for students, professionals and managers in enterprises or organizations, active in the fields of HRD and LL, in relation to the comprehension of the strategic role of HRD and its advancement through the exploitation of LL and its methods.

Finally, the findings of the present research may also be a comprehensive source of information for those who choose either the field of HRD or the field of LL as a career.

## **1.7 Limitations of the research**

The present research was designed to investigate the impact of LL, through the exploitation of its methods, on HRD. The intention was not to cover all possible influencing factors of LL on HRD but to include only those critical to employers and employees. The selected population and sample for this research were drawn from

the data base of active members of The Greek International Business Association, named SEVE, who are already involved in export activities, as well as potential active members, poised to start export activities in the near future. Potential export companies constitute a complementary data base of SEVE and is considered as an annex to the main list of active members. This complementary data includes a significant number of potential export companies, who want to learn how to launch or expand their capacity for exporting their products and services throughout the world, even though they used to have an export activity in the past. As the vision of SEVE is to expand, by including more intermediary export organizations in the export transactions than before, these organizations were included to the population and the selected sample of the present study. This expansion concerns, to a large extent, the organizations such as banks and the Hellenic Organization for Standardization (ELOT S.A.), as these are considered to be the main intervening organizations in the export process.

More precisely, banks are responsible for the fulfillment of export processes concerning the credit of export transactions, safe delivery of products and services to the export destination, and the good dispatch of payment. ELOT is one of the 164 countries-members of the International Organization for Standardization (ISO), which is a network of national standard bodies (International Organization for Standardization (ISO), Retrieved April 8, 2011, from <http://www.iso.org/iso/home/about.htm>). ELOT was established in 1976 as a non-profit legal entity and since 1997 operates as ‘Societe Anonyme’ with the distinctive title ‘ELOT S.A.’ under the supervision of the Minister of Development (Hellenic Organization for Standardization (ELOT S.A.), Retrieved March 10, 2012, from [http://www.elot.gr/30\\_ENU\\_HTML.aspx](http://www.elot.gr/30_ENU_HTML.aspx)).

Among the main activities of ELOT S.A. is the granting of conformity marks and certificates to products, which are the most important prerequisites for companies which want to export their products and services to new markets and for the facilitation of free and global trade. Therefore, ELOT S.A. is an important intervening organization in the export process as none of the enterprises and organizations can export their products and services without the certification of the compliance of each product or service with the international standards.

Therefore, the research population targeted was taken from the total data for the year 2010-2011, including active export companies, potential export companies and intervening organizations in the export process.

For research triangulation reasons, besides data collection from a satisfactory number of completed and valid questionnaires, many various observations, and a limited number of interviews, mostly with managers, executives or employers and fewer with employees, were carried out.

Limitations of time was also a barrier to extend research in more details and analysis of other different factors influencing LL, applications of a variety of learning methods and evaluation of different research groups, which can be the baseline for recommendations for further research.

Finally, as is the case in any research, the results may be different if a different sample of enterprises is taken.

## **1.8 State of the art of the research**

The factors influencing HRD have been the fodder of significant debate and research in the multidisciplinary field of HR including industrial psychology, human resource management, neuroscience and education. On the contrary, LL is gaining ground as a driver of development in every science, and as a key and promising issue in education, HRM and SHRD.

The broadened dimensions of learning that can be assessed demand a similarly broadened understanding of LL and require rethinking the relationship between individuals and the social context of their working environment.

Therefore, the connection of HRD and LL and in particular, how LL and its methods influence HRD in enterprises and organizations appears to be significant, as it is the first time that research focuses on the influence of a part of HRD, in this case this is LL, on the whole (which is HRD). Furthermore, the two issues HRD and LL have separately been attractive research fields with a bulk of research studies. However, the shortage of research studies concerning the connection of HRD and LL reveals the innovative approach of the present research. In addition, its strategic approach through the investigation and analysis of the link between HRD and LL in terms of the corporate strategy, learning culture, evaluation policy from the enterprise point of view

on the one hand, and through the emotional identity and lifelong orientation of the lifelong learner on the other side, as well as the selection of the appropriate research group (active and potential export enterprises and organizations confirm the innovative development and conduct of the research.

This research study does not seek to solve any particular problem relating to the connection of LL and HRD, but rather to inform through the description, comparison and evaluation of their determining factors. Therefore, it is intended to be a resource for researchers and professionals who desire a broad appreciation of LL, its methods and its impact on HRD and who may have a narrow awareness and understanding of the two fields. In addition, the LLEHUREDE scale can be a useful research and assessment tool for those interested in a deep understanding of the link between LL and HRD. Furthermore, a rather new thread of argument is to put forward LL within the field of HRD, where the LLEHUREDE scale can be used to measure awareness of LL, the current situation in corporate strategy in terms of the LL culture of employees and employers, regarding them as LLLs. Finally, this research study provides useful information for discussion of the current situation in the fields of LL and HRD and suggests resources for bridging the two fields, between current practice and future potential. Furthermore, the commercialization of LL as a brand name for the purpose of taking advantage of various funding programmes should be curtailed. Instead, a building of a LL culture and strategy helping employers and employees to appreciate and understand the meaning, the aims and the value of LL as a driver for further personal and professional development, improvement of job performance and self-esteem as well as for enhancement of the desire for further learning will follow.

**PART II**  
**LITERATURE REVIEW**

## **Chapter 2**

# **HUMAN RESOURCE DEVELOPMENT AND MANAGEMENT**

### **2.1 Introduction**

HRD is an attractive research theme and its evolution is linked to the shift from HRD to HRM, Strategic Human Resource Management (SHRM), and its connection to Strategy, Organizational Learning (OL), Organizational Development (OD), and Organizational Culture (OC). Besides the critical analysis of HRD evolution, an attempt of identifying HRD and its role, interpretation of HRD's connection to learning, analysis of the basics of HRM, a review of relevant supportive theories of HRD was regarded as necessary for building the theoretical framework of the present research.

According to the views of many theorists and researchers, the nature of HRD is interdisciplinary (Chalofsky, 1992; Jacobs, 1990; Weinberger, 1998). Initially, this interdisciplinary nature derives mostly from the major bodies of knowledge such as education, systems theory, economics, psychology, organizational behaviour (Jacobs, 1990, p. 65) and later, from management, strategy and critical analysis. All of these can indeed provide an appropriate way to view and frame fields of HRD. But as the previous conceptualizations of HRD have limited its focus mainly to issues such as human performance in organization settings, there is a need for an integrated view and future understanding of work and HRD that depend on complex systems and their interrelations, including different countries, organizations, labour unions and groups of people (Jacobs, 2002, p. 10) within a global dimension. Therefore, different approaches either to the definition of HRD or to its supporting theories result from. Most of these are contradictory and thus, little agreement has been achieved in the attempt to underlie HRD definition and its relevant theories (Weinberger, 1998).

Strong evidence that HRD is continually gaining ground is the ascertainment of Werner & DeSimone (2009, p. 20-21). They contend that growth of the field of HRD is witnessed in the publication of academic journals, such as: ‘The Human Resource Development Quarterly’ and, subsequently, ‘The Advances in Human Resource Development’, ‘The Human Resource Development International’ and ‘The Human Resource Development Review’; as well as the existence of The Human Resource Certification Institute (HRCI), which certifies the roles of the Professional in Human Resources (PHR), Senior Professional in Human Resources (SPHR) and the Global Professional in Human Resources (GPHR).

The HRD field is considered to be “relatively young as a scholarly discipline” (Hatala, 2006, p. 46), and it continues to explore new theories and methodologies (Swanson & Holton, 1997). As a result, a strong theoretical underpinning is needed for HRD, (to be built on) besides the theoretical foundation of HRD by Swanson (1998), through which HRD connects economic, psychological and system theory in an ethical framework. This may appear to be a disadvantage, but it is not, as it demonstrates that HRD is a field that continues to provoke further research, not exclusively within the limited HRD area but beyond its expanding concept and role, through its connections to other themes such as OD, HRM and SHRM.

In addition, Torraco (2004, p. 174 ) pinpoints the necessity for more systematic research with an orientation towards HRD theory, the theoretical foundation of HRD, theory-building processes and a combination of the process of theory-building and the theory itself. Torraco’s point of view is in alignment with Swanson’s view that “the arena of theory building research can be thought of as a never ending journey” (Swanson, 2001, p. 300). Furthermore, the sense of an unfinished journey can be desirable because it highlights that HRD remains an ambiguous, evolving concept, which promotes the development of new ideas (McGuire & Jorgensen, 2011). Therefore, HRD continuously seeks to develop new orientations that, on the one hand, will extend the field beyond its relation to psychology and management, and on the other hand, will reexamine or redefine the role of HRD. Furthermore, suggestions for adoption of a multi-perspective approach towards theory and practice in HRD might lead to the enhancement of theoretical depth and breadth in the field, and contribute to reflective HRD practices (Garavan, O’Donnell, McGuire, & Watson, 2007).

## **2.2 The identification of Human Resource Development and its role**

Undoubtedly, HRD is a discipline that is growing and continuously gaining ground, as it is considered to be the most critical issue for the survival and development of enterprises or organizations. Furthermore, it is considered as the main source not only of gaining competitive advantage but also of achieving sustainable development, due to the unique nature of HR and the difficulty others have to duplicate or to imitate (Barney, 1991). This is strengthened by the statement that “in the past decade, there was a great realization that people are an organization’s primary source of competitive advantage” (Ruona & Gibson, 2004, p. 49) and by the fact that human capital “has moved from a secondary, supportive role to a primary, central role in helping organizations achieve a competitive advantage” (Lengnick-Hall & Lengnick-Hall, 2003, p. xii), and the consideration that organizations success is mainly due to the activities, decisions and behaviours of its employees. Moreover, in terms of sustainability, HR can certainly help enterprises or organizations to gain sustainable competitive advantage and thus, they are expected to play a strategic role (Garavan, 2007; Murphy & Garavan, 2009, p. 3). A sustainable competitive advantage is closely linked to the failure or success of competitors’ efforts to enhance their value-creating strategy. How long a sustainable competitive advantage will last depends on the speed with which competitors acquire the necessary skills to maximize the benefits of their strategy (Hoskisson et al., 2008, p. 2).

Therefore, it is strategic entrepreneurship that can lead to the desired high performance, as it links opportunity-seeking to advantage-seeking behaviours (Ireland, Hitt & Sirmon, 2003, p. 963). Consequently, what is of key importance is that the achievement of competitive advantage through HR requires a corresponding strategic perspective, or in other words, the HR function has to contribute to the strategic objectives of an enterprise or organization (Lengnick-Hall & Lengnick-Hall, 1988). Moreover, HR can also be characterized as predictors of the performance of an enterprise or an organization, which evidences their determinative role (Barney 1991).

More particularly, the focus on HRD as a means of gaining competitive advantage placed an emphasis on the unique skills, knowledge and experience of each individual within an enterprise or an organization. This highlights the value of

learning and in particular the value of the learning strategy, where learning faster and more effectively than any other competitor within an HRD strategy is the key success factor for any enterprise and organization, core elements of which are training, development and learning.

In order to consider the role of HRD, the meanings of the terms education, training, development and learning must first be explored. “Education (or training path) is the sum of learning sequences followed by an individual to acquire knowledge, skills or competences” (CEDEFOP, 2008, p. 64). Education in the Freire mode is “the practice of liberty because it frees the educator no less than the learners from the twin thralldom of silence and monologue, as both are liberated when they begin to learn” (Freire, 2002, p. viii- ix). In a more broad perception, education is often characterized as a systematic and organized effort which is undertaken by different institutions and bodies or the society as a whole, in order people who want to be educated to gain profit (Kapsalis & Papastamatis, 2002, p. 11). Training is characterized as “ the international act of providing means for learning to take place” (Proctor & Thorton, 1961, p. 19). Also, training is “the process of systematically developing knowledge and expertise in individuals for the purpose of improving performance”, whereas development is “the planned growth and expansion of the knowledge and expertise of people, accomplished through systematic selection, training, assignment, and evaluation efforts” (Swanson, 1996, p. 7). These two issues, training and development, within the field of Human Resource Management (HRM) are connected to the training and development process, which is “a complex mixture of activities intended to improve the performance of individuals and groups within the organization” (French, 1998, p. 9).

Learning is “a process by which an individual assimilates information, ideas and values and thus, he/she acquires knowledge, know-how, skills and/or competences” (CEDEFOP, 2008, p. 111). Human competences, although similar to human capital, are preferable as a term rather than human capital as they either have economic or development implications. More specifically, when we use competences, the outcomes are related to financial benefit, but when we need to change existing levels of competence in order to cover emerging needs, development issues come into view, which range from the novice to the master level (Jacobs, 2002, p. 9).

Inevitably, however, learning is the broadest term, or, in other words, “learning is at the heart of training and development” (Matthews, Megginson, & Surtees, 2004, p. 88). Hence, it overarches the definitions and meaning of training, education and development.

Nadler and Nadler (1989) firstly incorporated education and development into the broader concept of HRD and later included the term training. In bringing together the three terms, training, education and development, they distinguish between them in terms of the relationship between learning and a job. Thus, “training is learning related to present job; education is learning to prepare the individual in spite of a present or future job; and development is learning for growth of the individual not related to a specific present or future job” (p. 4).

The same combination of these three terms was viewed by Phillips (2003), when he attempted to define the term HRD. Taking into consideration the pioneering work of Nadler and Nadler, Phillips correlates training, education and development to three issues: The focus, the time for payback and the risk for payback. More specifically, the focus of training, education and development is on job-related skills, preparation for the next job and on cultural change respectively. Furthermore, training, education and development have a different time frame for payback, which represents a different level of risk for payback. In particular, training has a short time frame which represents a low risk investment, while education has a medium time frame with a consequent moderate risk for payback. Development has a long time frame and therefore, the risk for payback is quite high. This definition, depicted in Table 2.1, actually interprets the reason why many enterprises and organizations prefer training to any other learning activity, due to its low level of risk and its fast payback.

**Table 2.1** Human Resource Development definition

	Focus	Time for payback	Risk for payback
Training	Job related skills	Short	Low
Education	Preparation for next job	Medium	Moderate
Development	Cultural change	Long	High

Source: Phillips, 2003, p. 19

Indeed, it is surprising that, regardless of the low level of risk and the fast payback of training, enterprises and organizations have not realized that the

improvement of employees' knowledge, skills, competencies and attitudes can improve "overall organizational efficiency and effectiveness" (Gilley & Maycunich 2000, p. 253). As a result, frequently do we see contemporary organizations decide to decrease the amount of money invested in training and professional development. This can be explained by problems such as recession, downsizing, cutting costs, cutbacks and new demanding challenges related to Corporate Social Responsibility (CSR), e-commerce and reengineering of any kind, that warrant the decrease of any investment.

Despite, a decrease in training expenditures, current trends suggest that when a decision to invest in training is taken, some items of expenditure seem to be relatively flexible. This situation mirrors the findings of surveys conducted by the Chartered Institute of Personnel and Development (CIPD, 2003) during previous and similar recession periods. In particular, during the recession of the early 1990s, there was a decrease in training expenditure by the majority of private sector organizations, due to the worsening economic circumstances, while only a small proportion of these organizations actually witnessed an increase in spending on training. The paradox was that the overall volume of training held up quite well. The explanation was that much of the spending on training, to a greater or lesser degree, was related to training activities characterized as mandatory, such as health and safety, as well as information technology (IT) issues (Keep, 2003, p. 5-6).

Besides the correlation between training, education and development, there is another approach where training and development, are more often used interchangeably, or rather as synonymous terms, in the literature, despite their different focus. They are accompanied by the notion of learning, bringing together the two terms, learning and development, and this yields much literature including research studies and terminology, that provide a sketch of the learning and development field. Within this field, have emerged various terms such as training and development, employee development and HRD, some of them popular with academics, others with practitioners. Training and development is still popular in official publications while the term employee development seems to be outmoded, as in the contemporary approach, employees are usually characterized as partners or associates rather than simple employees (Harrison & John, 2009, p. 87).

Furthermore, employees are often treated as partners through coaching, one of the main HRD activities, the aim of which is to help employees to manage achievement of both personal and organizational goals (Werner & DeSimone, 2009, p. 11).

In referring to development, the critical approach of Lee (1997) is worthy. Through her examination of the literature, she found that the word development was used in four different ways: Development as maturation, as shaping, as a voyage and as emergent. Development as maturation refers to a predetermined stage where individual, group or organization is a system with defined limits in a predictable external environment. Development as shaping refers to people seen as tools that can be shaped to the benefit of the organization. Development as a voyage has a lifelong horizon and puts emphasis on individuality. Thus, individuals can shape their own strong self concept, construct their own reality and continuously reanalyze their role in the evolution of any process they are involved in. Development as emergent has to do with the individual within a continuously reconstructed societal reality or system in which the individual can negotiate; this can lead to a transformation, caused by the system and the individuals, due to any kind of change (Lee, 1997. p. 200-201; Lee, 2000, p. 3-4). It seems that from these four issues of development, development as voyage and as emergent represent the main concern of the present research.

The term HRD has been attractive to academics, from the outset, in opposition to practitioners who, initially, refused to accept the characterization of people as a “resource” similar to money, equipment and ground (Harrison, 2005, p. 5).

HRD first became popular with academics with a limited meaning as a series of organizational activities that aimed to produce behavioural change or as organised learning experiences that create the possibility for job performance growth within a specific time (Nadler, 1984; Nadler & Nadler, 1990). Later it took on a strategic dimension, covering the acquisition of key skills, long term learning and possible relation to organizational and business strategies (Armstrong, 2006). It is only since 2001, when CIPD issued professional standards for identifying the purpose and meaning of learning and developing, that learning and development has gained considerable attention. Learning and development is the critical organizational process of developing people, by integrating the learning and development processes,

operations and relationships, to enhance both organizational effectiveness and sustainability of the business and personal competence, better adaptability and employability of the individuals (Harrison, 2005, p. 7). Later on, as learning and development continued to be characterized as an organizational process, this definition was integrated. Now, it includes the achievement of business goals through the collaborative, expert and ethical stimulation and facilitation of learning and knowledge acquisition, as well as the development of individual potential, by taking into consideration the diversity issue (Harrison & Klein, 2007).

Swanson (1999) approached the meaning of HRD in an interesting way when he connected definition and process. He analytically defined HRD as “a process of developing and/or unleashing human expertise through organization development and personnel training and development, for the purpose of improving performance at the organizational, process and individual/group levels” (p. 2-3). He continues that HRD as a process “is made up of five core phases: Analyse, propose, create, implement and assess” (Swanson, 1999, p. 3). He also contends that as HRD theory-building discussion, debate and serious inquiry continue to grow, so the capacity of the HRD field to expand continues.

The Frank’s three assumptions (1988) gave a different identity to HRD: His first assumption correlates HRD with adult education and, hence, the creation of appropriate learning circumstances helps adults change behaviour through learning. The second assumption connects HRD with performance in the work environment and the third assumption links HRD with change, in particular, with the change of individuals (Frank, 1988).

Concerning the connection between HRD and performance, a debate, underlined by Garavan, Gunnigle, and Morely (2000), highlights disagreement over whether HRD is a part of HRM, and thus, connected with performance, or whether HRD should be considered as a part of adult education, and therefore, it is related to learning. In their attempt to define HRD, they analysed a broad range of methodologies and the use of many research methods, leading them to propose a theoretical perspective in which capabilities, psychological contracts, the learning organization and organizational learning are key issues in the concept of HRD in organizations.

Other surveys of HRD show that the main activities of HRD were considered to be OD, training and development, human resource planning and career development. An example of this is the use of the concept of career development by Gilley & Egglund (1989) which includes HRD activities such as mentoring, career counseling and career pathing. Moreover, in seeking to define the roles of HRD professionals, they refer to the career counselor, consultant, learning specialist, program manager and training administrator as the most predominant roles. Later, many other researchers suggested the perception of other organizational members to assist in determining the HRD roles and further expand the representation of HRD professionals to other organizational members participation (Wallick, 1999, p. 71).

Another approach relates HRD to performance and through this, “HRD is a process of developing and unleashing human expertise through OD and personnel training and development (often abbreviated as T & D) for the purpose of improving performance” (Swanson & Holton, 2009, p. 90). Later, Swanson & Holton provided a broader dimension of HRD placing emphasis on its purpose, where the issues team and organizational performance emerge and, hence, HRD is defined as “a process of developing and unleashing expertise for improving individual, team, work process, and organizational performance (Swanson & Holton, 2009, p. 4).

Humanistic approaches to HRD have been grounded in the belief that employees are the most important resource and a “true source of added value” in an enterprise or organization (McGuire, Cross & O’ Donnell, 2005, p. 132). The humanistic approach is in accordance with the humanistic philosophy reflected by Maslow, Rogers and Knowles, which was primarily concerned with individual actualization and the andragogy’s focus on the learner (Holton, Swanson, & Naquin, 2001, p. 123). Although humanistic approaches can be characterized as indicative of a modern and strategic approach to people management, they cannot provide a complete picture of the existence of enterprises and organizations in the labour market, where the achievement of competitive advantage is a matter of first priority; thus, the social perspective cannot prevail to the economic perspective.

The humanistic perspective is in alignment with the focus on OD which refers to the potential of the organization to enhance knowledge, expertise, productivity, satisfaction, income, interpersonal relationships, and other desired

outcomes for the benefit of all in the organization and the whole humanity (Hamlin, Ellinger & Beattie, 2009, p. 32-35; McLean, 2006).

These diverse approaches to the conceptualization of HRD can be strengthened by an attempt to analyze different definitions of HRD and its purposes.

### **2.2.1 Definition and analysis of Human Resource Development**

Although it is difficult to define HRD, an attempt to analyze different definitions would appear helpful to shaping the theoretical basis on which the present research is built. A deep understanding of the meaning of HRD and its major purposes will clarify the different approaches of various theorists and researchers and the various correlations provided through their investigation.

Firstly, it is essential to distinguish whether HRD is considered to be a process, a series of activities and abilities or a system. Secondly, it is of interest to clarify HRD purposes as they are defined by different definitions. These diverse approaches to HRD have been categorized by Hamlin, Ellinger & Beattie (2009) in their attempt to gather the existing definitions and descriptions of the scope of HRD, according to different theorists and researchers.

HRD has been defined as a process of improving an organization's performance through the capabilities of its personnel, training and development (Swanson, 1999; Swanson & Arnolds, 1996); a process of "developing and unleashing human expertise through organization development and personnel training and development for the purpose of improving performance" (Swanson, 1999, p. 2-3; Swanson & Holton, 2009, p. 4); and as a process which

comprises the skilful planning and facilitation of a variety of formal and informal learning and knowledge processes and experiences, primarily but not exclusively in the workplace, in order that organisational progress and individual potential can be enhanced through the competence, adaptability, collaboration and knowledge-creating activity of all who work for the organisation

(Harrison & Kessels, 2004, p. 4-5).

In Nadler's definition (1970, p. 3), learning and development was termed 'human resource development' and it was defined as "a series of activities conducted within a specified time and designed to produce behavioural change". Hamlin et al.,

(2009) in their effort to collate definitions of HRD, found that Jones (1981, p. 388) defined HRD as a “set of the systematic expansion of people’s work-related abilities, focused on the attainment of both organization and personal goals”. Werner & DeSimone (2009; 2012, p. 4) also defined HRD as “a set of systematic and planned activities designed by an organization to provide its members with the opportunities to learn necessary skills to meet current and future job demands”.

HRD is defined as a system by Nadler & Wiggs (1986) and more specifically, as “a comprehensive learning system for the release of the organization’s human potentials, including learning experiences that are keyed to the organization’s reasons for survival” (p. 5). HRD consists of “programs and activities, direct and indirect, instructional and/or individual that positively affect the development of the individuals, the productivity and profit of the organization” (Smith 1988, p. 1). Furthermore, according to Nadler and Nadler (1989, p. 6) HRD is the “organized learning experiences provided for employees within a specified period of time to bring about the possibility of performance improvement and/or personal growth”.

Analysis of not only the above mentioned definitions but also other attempts to understand the meaning and role of HRD, reveals a number of approaches and dimensions which influence the evolving and complicated nature of HRD. What is important behind different arguments on the nature of HRD is the diversity of scope that shapes the extent of HRD activities’ implementation (McLean & McLean, 2001), as well as the diverse approaches to HRD as a field of study. McLean and McLean, in their attempt to explore definitions of HRD, combined OD with a broader context of HRD globally, and defined HRD as

any process or activity that, either initially or over the long term, has the potential to develop... work-based knowledge, expertise, productivity and satisfaction, whether for personal or group/team gain, or for the benefit of an organization, community, nation, or ultimately, the whole of humanity

(McLean, 2006, p. 11; McLean & McLean, 2001, p. 322).

Watkins (1989) defines HRD as “the field of study and practice responsible for the fostering of a long-term, work-related learning capacity at the individual, group and organizational level of organizations..., and as such, it includes – but is not limited to – training, career development and organizational development” (p. 427). This definition implies the connection of HRD to learning throughout the life

span, at all levels of an organization as it correlates long term learning capacity to development. Craig (1976) places an emphasis on LL, asserting that HRD focus is the development of human potential in every aspect of LL.

Apart from investigation of the meaning of HRD through its various definitions, it also seems interesting to examine the HRD issue by comparing the two different approaches to HRD adopted on the one hand by the U.S. School, and on the other, by the European School, in order to explain its meaning in a deep and adequate way. The U.S. School of HRD has a developmental focus, with an emphasis on learning processes, organizational orientation, structured learning methodology, and is outcome oriented. Furthermore, it is formal or instructional, with a unitary perspective and a cognitive view of learning. The European School of HRD has a strategic focus, with an emphasis on skill acquisition, individual orientation, a philosophy for investing in people and is process oriented. It is informal or formal, with a pluralistic perspective and a constructive view of learning (McGuire, O'Donnell, Garavan, & Murphy, 2001).

These differing strategies of the two schools are indicative of the different interpretations of HRD conventional to each school or country's philosophy about people, their learning and development. However, we can not put aside Monica Lee's point of view, her refusal to define HRD, as she believed that attempts to do so are usually for political reasons and, moreover, HRD is accepted as a thing of 'being' and not as a process of 'becoming' (Lee, 2000, p. 1). According to Lee's belief, HRD as a process of becoming seems a realistic approach, since different practitioners and theorists usually give a new meaning to HRD tailored to their different perspectives.

In conclusion, it is clear from an investigation of different definitions and approaches that HRD, and its contributory areas of training, education, development and learning, is closely related to learning at all levels individual, group, and organizational. Moreover, its aim is to enhance the effectiveness of HR through the achievement of organizational objectives.

Inevitably, HRD is still an evolving issue and, thus, it cannot be defined in a simple and adequate way, due to the difficulty in determining differences between HRD and other similar issues, in terms of their scope and activities, in clarifying the relationship between HRD and HRM (Abdullah, 2009, p. 486) and in identifying the

dimensions and limits of the conceptualization of HRD. But what it cannot be denied is the close connection between HRD with HRM. An attempt to analyze the basics and the role of HRM may clarify the relationship between HRM and HRD.

### **2.3 The basics of Human Resource Management and the development of its role**

Human resource management (HRM) first emerged in the mid-1980s (Armstrong, 2000, p. 5) but mainly started to exist when theorists and practitioners began to regard people as resources for an organization and soon after it became a dominant issue. Firstly, personnel management and HRM are regarded as discrete entities, as they differ in many ways. One of the main differences is that personnel management represents the traditional form of people management, whereas HRM represents the contemporary form (Shipton, 2005, p. 29). However, there is no need to deal with them as separate entities, but rather to conceive of them as a continuum, from personnel management at one end to HRM at the other.

The continuous evolution of HRD is attested to by contiguous approaches to HRD, described by the shifts, and in particular: The shift from HRD to SHRD, HRD to HRM, HRM to SHRM and then, from SHRM to Critical Human Resource Management (CHRM).

In 1980, SHRD started to acquire a strategic perspective. Hence, SHRD referred to the identification of needed skills and active management of learning in the long run with convergence to corporate and business strategies (Harrison, 2005). Thus, HRD gained a strategic perspective and related to change, quality, flexibility, new technology, new competitive structures (Garavan, Costine, & Heraty, 1995; Wilson, 2005).

With the certainty that it is people, or in other words HR, that create, grow and enable enterprises and organizations to survive, their development is not sufficient. The effective management of HR is required. Consequently, the shift from HRD to HRM is unavoidable, as the mismanagement of HR will lead enterprises and organizations to fail (French, 1998, p. 3).

How HRM ties in with SHRM is evident in the definition of SHRM as a “process by which organizations seek to link the human, social, and intellectual

capital of their members to the strategic needs of the firm” (Bamberger & Meshulam, 2000, p. 6). Besides that, the suggestion that the success of the organization is achieved through alignment between the strategic direction of the organization, its size, its structure, its available technology, its environment and its HRM practices enhances the link and interrelation of HRM and SHRM (by Alcazar, Fernandez, & Gardey, 2005a; Brown, J., Elliott, S., Christensen-Hughes, J., Lyons, S., Mann, S. & Zdaniuk, A., 2009, p. 4)

Furthermore, SHRM is also related to CHRM, the conceptions and dilemmas of which, mainly in relation to its theory and practice (Fenwick, 2004; 2005), determine the difficulty in formulating its definition. In a relatively recent work, Bierema and Fenwick (2005) attempted to define CHRM. Their approach is characterized by a threefold assumption: a. it views the workplace as contested terrain, b. it opposes the subjugation of human knowledge, skills, relationships and education to organizational gain and goals that are primarily economic or instrumental; c. it is devoted to the transformation of organization and HRD practice, toward a just, equitable, life-living and sustainable workplace. This approach pinpoints the importance of organizational superiority and the orientation towards a workplace capable of supporting stability and equal opportunities for all.

Recently, the concept ‘critical’ has been applied to the study of management and organization and, to a lesser extent, to management learning. Four criticisms of traditional HRD advocate its critical turn (Rigg, Stewart, & Trehan, 2007). The first criticism argues that the purpose of HRD has been to improve performance in economic terms, with no attention paid to business ethics and CSR. According to the second criticism, HRD focuses on humanistic assumptions about individual identity and self, which appear to be good for people to cope with the world, but HRD also needs to be helping people to change the world. The third criticism deals with a representation limited to organization perspectives. Although, theories of HRD have broadened to incorporate learning into HRD, and conceive of HRD as integral to organizing processes, HRD research remains limited to the consideration of HRD as training activities conceived of as things and their measurement to expenditure, training days and qualifications. Finally, the fourth criticism refers to the HRD curriculum that has been disseminated through traditional pedagogical methods and

not through critical thinking and transformation (Rigg et al., 2007, p. 3-7). CHR D is suggested as a continuum to the concept of HR D as it had been accepted by both academics and practitioners in HR D during the last decades. Critical is not accepted as an alternative to the functional approach, but includes the diverse understandings that can be generally applied to critical analysis. Although the term HR D has existed in American vocabulary for more than 30 years, and its history in the United Kingdom is just 10 or 15 years, the contention that HR D has been inadequately considered from a critical point of view holds (Sambrook, 2004). Moreover, the late appearance of critical analysis is serious proof of HR D's present maturity stage (Sambrook, 2004; 2008). Later, CHR D embedded the social aspect that refers to social justice, through which all persons in an organization collaborate, treated fairly and share benefits of their contribution (McGuire, 2010, p. 10).

In addition, new challenges for HR M emerge in the knowledge economy and, thus, HR M cannot be limited to conventional functions, such as staffing, training and development, performance management and business functions like marketing, finance and strategy. It should be seriously focused not only on people management but on the "capabilities that people create and the relations that people must develop" (Lengnick-Hall & Lengnick-Hall, 2003, p. 30).

Thus, it is clear that HR M in the knowledge economy should not be function-based but role-based, as the idea of role is clear of definite structures and it can contribute directly to the achievement of the required organizational capabilities. By adopting this approach, Lengnick-Hall & Lengnick-Hall (2003) identified four HR roles appropriate to the demands of the knowledge economy: Human capital steward, knowledge facilitator, relationship builder, and rapid deployment specialist which are linked to the new challenges for HR M (Lengnick-Hall, & Lengnick-Hall, 2003, p. 34-35).

Apart from new roles and new challenges in HR M, a strategic approach to HR M, named SHRM, emerges as a path to attracting, creating and retaining more productive employees, in order to achieve sustainable competitive advantage through well-designed organizational systems (Brown et al., 2009). In addition, HR practices that are well aligned with business strategy are those that may lead to effective SHRM.

## **2.4 The identification of Strategic Human Resource Management**

In recent decades, the field of SHRM has enjoyed remarkable attention among both academics and practitioners in management. Both have devoted much of their thinking and energy to developing or improving HR practices, without giving priority to a strategic approach. The origins of SHRM date to the end of the 1970s, continuing to develop through various theoretical foundations, sequential models and explanations (Alcazar, Fernandez & Gardey, 2005b). In the early 1980s, the link between business strategy and HR was set out by Fombrun, Tichy, & Devanna, (1984), who signified the conceptual imprinting of SHRM. SHRM links HRM to strategic planning and culture change. Quite often, competitive business strategies prioritize management issues rather than human dimensions and, as a result, workers may be viewed as a commodity in the labour market and thus, feel insecure and dissatisfied with their job. Therefore, taking into consideration the human view of organizations could be a better approach.

SHRM is chiefly related to human capital, HRM systems and company performance in organizational sciences, according to the interest of each researcher. SHRM has received increasing attention in the literature from both scholars and practitioners, and, thus, it becomes apparent that the field of SHRM is beginning to approach the maturity level. During the last thirty years SHRM has taken shape, developed and had a strong influence on both research activities in HR practices and management disciplines (Lengnick-Hall et al., 2009, p. 64). Moreover, contemporary management research presents SHRM and Participative Management (PM) as central concepts, tracing their origins to the post-World War II period, in the writings of scholars, such as Kurt Lewin, Douglas McGregor, Chris Argyris, H. Igor Ansoff, and Michael Porter (Kaufman, 2001). Furthermore, it has become evident that scholars in the field of SHRM may focus on different issues. Among these, two key orientations may be distinguished: The ability of an enterprise or organization to achieve its goals and the organizational capability to adapt to changing environmental conditions, through SHRM activities that influence its effectiveness. The ability to achieve goals is related to two kinds of fit, the vertical fit, which involves the alignment of HRM practices, and the horizontal fit, which involves the fit among different HRM practices, while organizational capability to adapt is related to flexibility (Wright &

Snell, 1998). All these orientations demonstrate that SHRM has an expanding perspective.

In their attempt to outline the future of SHRM, Becker and Huselid (2006) argue that SHRM focuses on organizational performance rather than individual performance, which places an emphasis on HRM systems, rather than individual HRM practices, as solutions to business problems. They attempt to provide an explanation of how the integration of strategy implementation can be a mediating variable in the relationship between a company's HR architecture and performance. By a company's HR architecture, they mean the systems, practices, competencies and employee performance behaviour that appoint the development and management of the company's strategic human capital (Becker & Huselid, 2006, p. 899-900). As a consequence, the fit between HR architecture and company's performance points to the serious contribution of strategy implementation to gaining competitive advantage. In addition, HRM strategy in order to be successful, should be central to business policy (Pedler, Boydell, & Burgoyne, 1988).

Moreover, the potential of people must be taken into account when managing people. Their potential is regarded as a primary asset of the organization, and, thus, HR practices can become more effective in their attempt to align people's talents with organizational competencies, through organizational strategy, by the development of programs and policies that reinforce this strategic orientation (Ruona & Gibson, 2004, p. 49).

## **2.5 Human Resource Development and its supporting theories**

The linkage among HRD, strategy and HRM, in terms of resource-orientation, brought into consideration the theory of Resource-Based View (RBV) of an enterprise, as a reaction to different economic theories and models, such as Porter's model of generic strategies based on cost, differentiation and focus. Michael Porter (1980; 1985) developed a model of the five competitive forces, namely: Competitive rivalry within the industry, threat of new entrants, threat of substitutes, bargaining power of suppliers and bargaining power of customers. This model deals with the ability of a corporate strategy to meet opportunities and threats in the external environment, while RBV focuses on the internal environment of the enterprise. Thus,

Porter's model focuses mainly on the product and the external environment of the enterprise, whereas RBV focuses on the resources and the internal environment. Wernerfelt (1984) considered product and resources as "two sides of the same coin" (p. 171), as products require resources and resources can be used in products. In his attempt to examine the resource position of an enterprise through the use of Porter's model, he emphasized that resource barriers were analogous to entry barriers and thus, he stressed the relationship between resources and products and the consequent value of growth paths and strategies. The results of his study strengthened the aspect that RBV is connected to SHRM, since SHRM played an instrumental role in its development.

Human resources include the construct of **Knowledge, Skills and Abilities (KSA)**, as well as behavior, based on RBV, according to Wright, McMahan & McWilliams (1994). The KSA construct has been expanded and, thus, later includes the concept of competency, which concerns motives, traits, self-concept and values (Clardy, 2008, p. 388).

The Assessment and Teaching of 21<sup>st</sup> Century Skills project (ATC21S) which conducted by the University of Melbourne, the main aim of which was to offer new assessment perspectives through the comparison of different national educational systems, has provided a list of 21<sup>st</sup> century skills categorized into four groups: Ways of thinking; ways of working; tools for working; and living in the world. The first category-group, ways of thinking, includes three skill areas: Creativity and innovation; critical thinking, problem solving and decision making; learning to learn and metacognition. The second group, ways of working, incorporates two skills: Communication and collaboration (teamwork). The third group, tools for working, covers two skills: Information literacy and information and communication technology (ICT) literacy. The fourth group, living in the world, includes three skill areas: Citizenship (local and global); life and career; personal and social responsibility – including cultural awareness and competence. In this respect, Binkley et al., (2012) have provided a framework that could be used as a model for developing assessments of 21<sup>st</sup> century skills, by analyzing each of the ten skills in order to provide measurable descriptions of each. Taking into consideration the **Knowledge, Skills, and Attitudes, Values and Ethics** aspects of each skill, they have created the KSAVE framework for the assessment of the 10 skills of the 21<sup>st</sup> century.

Furthermore, besides the KSA construct and its expansion, the development of the concept of core competencies places an emphasis on the RBV, as it seems to be an appropriate approach for understanding them. The main sources of core competencies are considered to be organizational learning, strategic flexibility, effective technology management and people management (Bani-Hani, & AlHawary, 2009, p. 98) which can be characterized as important sources and major determinants of competitive advantage.

The RBV has been subject to strong criticisms and other perspectives have developed as a result. Hart (1995) proposed a natural RBV, where competitive advantage is based on the firm's relationship to natural environment and is composed of three interlinked strategies such as pollution prevention, product stewardship, and sustainable development (p. 986). Another perspective is the competence-based perspective, which focuses on HR activities, functions and processes with an emphasis on rare, valuable, non-substitutable capabilities that form the basis for a firm's sustained competitive advantage (Lado & Wilson, 1994, p. 699). These competencies can generate tacit organizational knowledge as well as can be embedded in a firm's history and culture. Barney (1991) holds a similar perspective, where building sustainable competitive advantage relies on the internal resources and capabilities of an organization, where these resources should be rare, valuable, inimitable, and non substitutable in order to provide sustainable competitive advantage. Thus, it seems that Barney, with his emphasis on the characteristics of the resources, supported the popularity of the RBV within SHRM (Schuler & Jackson, 2007).

Later on, the firm (enterprise) gained a social aspect which was strongly enhanced by Drucker (1993). He sees the firm not as an economic organization, but as a social system. In his view, workers are named 'knowledge workers who are valuable for their heads and not for their hands'. Expanding his theory, he later argues that these workers now control society's most important asset 'brain power' and it is the responsibility of management to make knowledge productive (Drucker, 1993, p. 190) and also, its main task is to persuade them that they are the 'new bosses' (Drucker, 1999a). Indeed, he emphasized the brain formation and through his theory he analyzed management challenges for the 21<sup>st</sup> century (Drucker, 1999b, p. 157).

According to the RBV, every enterprise and organization's unique resources and capabilities form the basis of its strategy that outlines the path for gaining sustainable competitive advantage. Differences in performance among enterprises and organizations is due to their distinct resources and capabilities. Resources are either intangible or tangible and can be characterized as the "inputs into a firm's production process, including capital equipment, skills of employees, patents, finances, and talented managers" while "capability is the capacity for a set of resources to perform a task or an activity in an integrative manner" (Hitt, Ireland & Hoskisson, 2001, p. 15). Whenever resources are transformed into capabilities dynamically managed, a competitive advantage can be gained. Moreover, resources and capabilities, in other words core competencies, can be regarded as a source of competitive advantage for a firm over its rivals. It is their rare combination and their effective management that ensures potential above average returns. Core competencies are often visible in the form of organizational functions. They are also related to the complex interaction of people, skills and technologies that influence performance and address the importance of learning and its evolution (Deist & Winterton, 2005, p. 27).

The concept of competence or competency ('competence' generally refers to functional areas and 'competency' to behavioural areas) dominated the management strategy literature of the 1990s, which emphasized 'core competence' as a key organizational resource that could be exploited to gain competitive advantage (e.g. Mitrani, Dalziel, & Fitt, 1992; Nadler & Tushman, 1998). Hamel and Prahalad (1990; 1994) defined core competence as the collective learning in the organisation, especially how to co-ordinate diverse production skills and integrate multiple streams of technologies (Prahalad & Hamel, 1990). From the perspective of a resource-based theory of the firm, sustained competitive advantage is seen as deriving from a firm's internal resources if these can add value, are unique or rare, are difficult for competitors to imitate and are non-substitutable (Foss & Knudsen, 1996).

A similar distinction is made by many theorists who separate resources from capabilities. Resources are regarded as tradable and non-specific to the firm and are used to utilize the resources within the firm, such as implicit processes in order to transfer knowledge within the firm (Makadok, 2001, p. 388-389), while capabilities are closely related to opportunities and human development.

Considering human development as both a process and an outcome, the choices and capabilities concepts arise. Human development as a process is concerned with the choices every human being continuously makes and the enlargement of those choices, while an outcome is concerned with what it derives from the enlargement of these choices. This enlargement has a close relationship on the one hand, with capabilities and functioning of people and, on the other hand, with their opportunities to use their capabilities. Hence, enlargement of choices quite often implies enlargement of capabilities. Capabilities refer to the combinations of different important and valuable things a person can be and achieve (functioning), including the freedom to achieve them. Capabilities are interlinked with any kind of opportunity, such as economic, political, and social, because without the existence of opportunities to put capabilities to use, capabilities become useless. Underpinning the connection between capabilities and opportunities, human development can be characterized as an equation, on the left-hand side of which are capabilities and on the right-hand side are opportunities necessary for the use of capabilities (Arab Human Development Report, 2002).

Furthermore, Alkire (2010) suggested that the enlargement of choices must be complemented by procedural principles such as equity, efficiency, sustainability, respect for human rights and responsibility (p. 16). She also placed emphasis on the characterization of people as agents and intimated the consideration of people as beneficiaries of development, due to their involvement in the creation of positive outcomes from the use of their capabilities. Therefore, as she made a point of the value of capabilities, human development might be evaluated as an extensive framework, where principles such as efficiency and sustainability are taken into consideration due to capable workforce.

The dimensions of human development, while in no way fixed since people's lives and capabilities are not stable but flexible, may include: Health and life; education; a decent standard of living; political freedom & process freedoms; creativity and productivity; environment; social & relational aspects; culture and the arts (Alkire, 2010, p. 23). Most of these dimensions of human development constitute issues of HRD, a common and very popular issue in research studies and critical analyses in the field of management, adult education, workplace learning and LL, where emphasis is placed on HR.

The value of HR was highlighted by Bogner, Thomas, & McGee (1999) in connection with sustainability. They believe that enterprises and organizations cannot easily address people withdrawal and the consequent loss of knowledge and experience and so they suggest OL and the building of complex intangible relationships as a means of achieving sustainable competitive advantage. Thus, it is vital for enterprises and organizations focused on gaining sustainable competitive advantage to recognize both the value and meaning of OL and development.

With reference to OD, Cummings & Worley (2009) support the definition that connects OD with organizational effectiveness. More precisely, OD as “a systemwide application and transfer of behavioural science knowledge to the planned development, improvement, and reinforcement of the strategies, structures, and processes that lead to organization effectiveness” (p. 2). OD as a process seems to have “more of a human values base” (Rothwell & Sullivan, 2005, p. 17). Furthermore, financial instability and the rapid changes in markets, society and technology force enterprises and organizations to develop their capability to adapt to changing conditions and improve their management of change. OD is quite frequently used synonymously with change management (Cummings & Worley, 2009, preface xvi). Beyond this approach, OD is also considered to be a prevailing enabler. This explains the recent increase in publications on OD in practice and, in particular, on the potential outcomes of its intervention and its linkage to the HR field.

In an attempt to contextualize the HR of twenty first century, Ruona and Gibson (2004) conducted an analysis of the possible convergence of HRM, HRD and OD. Their analysis was mainly based on Brockbank’s (1999) model, which sets out two dimensions of competitive advantage for HR activities, the operational or strategic and the reactive or proactive. Operational activities are generally those focused on things done on a daily basis, whereas strategic activities are related to long-term and value-added activities, organized and planned to integrate and achieve business success. Reactive activities are those that deal with the implementation of the basics, in order to support the existing strategy, while proactive activities include actions to improve the basics and the creation of future strategic alternatives (p. 50-51). They analysed the evolution of the three fields HRM, HRD and OD. Concerning HRM, Ruona and Gibson analysed its development from the administrative role and

basic personnel functions (reactive dimension), to the improvement of HR practices that enhance employee satisfaction and involvement and the changing of the organizational climate (proactive dimension). They also studied the shift from supporting strategy based on results, people culture and change management, to creating strategic alternatives in terms of culture change for radical innovation and its contribution to organizational core competencies. In addition, they analyse HRD by explaining the shift from job-focused and instructor-driven training (operationally reactive level), to training connected to individual performance improvement, with a focus on alternative methods of training delivery (operationally proactive level): At the strategic level, the shift from whole system methods of performance improvement through multiskilling, cross-training and constructivist learning approaches (reactive dimension), to an agile and knowledgeable workforce and workplace through organizational learning, learning organizations, self-directed learning and development and well designed knowledge management. Regarding OD, the shift is from personal development through interpersonal relations and soft skills (e.g. group dynamics, team building etc) development (operationally reactive), to sociotechnical approaches and market-driven change acceleration (operationally proactive). According to the strategic approach, the shift is from long-term, multiple-level change and collaborative approaches (strategically reactive), to organizational transformation and transorganizational OD (strategically proactive). This strategic approach puts an emphasis on the development of different collective and collaborative strategies with other organizations (Cummings & Worley, 2009; Ruona & Gibson, 2004). Furthermore, this approach demonstrates the tendency of OL to encompass OD, interventions from behavioral science and humanistic approaches, and thus, developing a broad and meaningful concept.

From their analysis it is clear that the synergy between HRM, HRD and OD can help enterprises and organizations to respond effectively to their external environment. Consequently, they can differentiate their HR practices to enable their people to contribute to organizational strategy and results, or furthermore, to the OL since they are responsible for their competitive advantage.

## **2.6 Strategy and organizational learning**

All enterprises and organizations address the issues of direction, function, priorities, how to distribute resources across different activities and how to gain a competitive advantage. They have to provide answers to all these questions and, thus, the notion of strategy is raised. Commenting on this, Johnson and Scholes (2002) contend that strategy, besides its long term focus, has mainly to do with decisions about the scope of an enterprise or organization, its achievement of any kind of advantage over its competitors and especially, the “matching fit” of its resources and activities to the environment in which it operates (p. 5). Identification of opportunities in the business environment is the first step to achieving this matching fit, and thereafter, the investigation of which resources best suited to taking advantage of these opportunities. In terms of HR, this investigation concerns the realization of core competencies, whether they exist or not and whether the enterprise or organization needs to develop them through OL, a positive driver for which is properly structured HRD (Blackman & Lee-Kelley, 2006, p. 629).

Nevertheless, enterprises and organizations are encumbered with yielding new opportunities and exploit them to gain competitive advantage, thus, they must expand their resources and competences for this purpose. But it is not only the environment that has a strong impact on strategy, or rather, on corporate strategy. At this point, it is important to note that the term corporate strategy is often used in the present study in general sense, embracing strategy and strategic decisions of all types of organizations, from very small and small, through medium-sized to large commercial enterprises, in both public and private sectors. All these types of enterprises and organizations are included in the sample population of our research (described in chapter 4). In addition, corporate strategy embodies all levels of strategy, business policy and organizational strategy, a combination of which is taking into consideration in the present study.

Apart from the environment, corporate strategy is influenced by the values and expectations of those who have power in and around it, in other words, the stakeholders. Bearing in mind all the characteristics of strategy, Johnson and Scholes (2002) define strategy as “the direction and scope of an organization over the long term, which achieves advantage for the organization through its configuration of

resources within a changing environment and to fulfill stakeholder expectations”, (p. 10). Hence, strategy has to do with the overall performance of an enterprise or organization and its success is expressed in the existence and maintenance of competitive advantage.

But strategy is closely related to culture, chiefly to OC. OC includes the value system and business ethics of the whole organization. Indeed, when employees decide to adopt it, they have to put aside their own culture and dedicate themselves to successful embodiment as real and active members of the organization. Drawn on the concept of OC, it was the perspective of OL suggested by Cook & Yanow (1993) at their attempt to explain OL in practice, opposite to its meaning introduced in relative traditional theories, where OL is either learning by individuals in organizational contexts or individual learning as a model for organizational action (p. 373). Therefore, as strategy and OL are closely connected to OC, its value, development and change will be briefly described.

## **2.7 Organizational culture and development**

Organizational culture (OC) is the main source of an organization’s identity (Schein, 2009, p. 16) and its significance is mainly confirmed in case a new manager is assigned and he/she has to decide which path of OC strategy to follow.

Within enterprises and organizations new leaders or managers quite frequently face the dilemma of whether to create a new OC or change the existing culture. These two options shape four alternative paths of OC strategy, which are of great importance, especially for new leaders or managers and were described in detail by Schein (2009). The first path is to destroy the existing culture. This carries the risk that the new leader or manager may lose vital knowledge, skills and know-how, with a sequential decrease in performance. The second alternative for the new leader is to fight the existing culture, by imposing his/her values and beliefs and in this case, the risk is whether it can be achieved a real and deep adoption of his/her culture or whether it will vanish when he moves on to a new enterprise or organization. The third option is to adjust to the existing culture, with the risk of retaining old and obsolete values and beliefs, without supporting any demanding change. The last alternative is for the culture to evolve, by adapting the good

elements of the existing culture and gradually imposing new elements considered essential following a thorough investigation. This usually depicts culture change. Culture change is accepted to be the most preferred alternative for improving effectiveness (Schein, 2009, p. 4-5).

Fullan (2008) suggested six secrets of change useful for leaders to help their organizations to survive and thrive. These are: love your employees; connect peers with purpose; capacity building prevails; learning is the work; transparency rules; systems learn. At his attempt to place an emphasis on culture change through these six secrets he highlighted OC. In particular, he stated that “it is the culture of the entire organization that counts...manifested by leaders at all levels of the organizations” (p. 28). He also pinpointed the importance of core values and practices of leadership in culture change (Fullan, 2007).

In terms of learning culture, approaching culture change through the path of culture evolution seems better suited to its transformation to a LL culture. But, like any other change, culture change encompasses resistance from all, who may be responsible for it, employees, leaders and managers. In terms of OL culture, this is more complex, as the learning culture of each employee, employer or manager may be completely different and not easy to understand. Inevitably, the individual learning culture may have a significant impact on the development of an OL culture, as well as its change. Therefore, acknowledgement of the learning identity and orientation of each employee and employer can be helpful to understanding individual learning culture, as well as OC. This was the reason that employees and employers’ learning orientation and identity was taken into serious consideration at the present research study.

Under the belief that learning enables organizations to build an organizational understanding and recognize and interpret their environment (Daft & Weick, 1984), the stimuli of which influence organizations’ effectiveness (Schwandt & Marquardt, 2000) and with the aim to investigate the influence of LL and its methods on HRD, an introductory reference to learning, adult learning, workplace learning, LLL, LL methods, learning assessment, knowledge transfer and management, and QoL, will be the main focus of the following chapter.

.

## **Chapter 3**

### **LEARNING AND LIFELONG LEARNING**

#### **3.1 Introduction**

Learning is introduced in different ways and when it deals with location or duration or breadth is called workplace learning, LL and lifewide learning respectively (Stern & Sommerlad, 1999). Learning in a globalized society has acquired a lifelong dimension in response to the demands of rapid and often radical changes in technology, economy, society and the workplace.

Different governmental and educational policies promote LL, by attaching different meanings to learning and, in particular, to LL. Some present LL as a means of expanding learning, others as an evolutionary type of adult learning, others as a means of marketing, still others as an interdisciplinary concept.

Learning acquires a different meaning and dimensions within different learning theories. Workplace learning has started to gain ground in the fields of education, HRD and adult learning and, finally, LL seems to be all encompassing. As LL is mostly self-regulated, learning styles, strategy, quality and assessment of learning, as well as learning identity and orientation towards LL of employee, manager and employer, are key factors in HRD within enterprises and organizations, and thus, those constituted the main focus of the present research.

Therefore, an attempt of explaining the concept of learning, learning theories, adult learning, workplace learning, lifelong learner (LLL), LL methods, learning assessment, knowledge transfer and management, and QoL follow with the aim to formulate the research's theoretical framework.

### **3.2 The concept of learning**

Learning has been studied by a diversity of researchers, theorists and practitioners, each from a different perspective due to their different research orientation and scientific specialty. Some approach learning according to the principles of behaviourism (Pavlov, 1927; Skinner 1953; 1974; Watson, 1930), others of cognitivism (Bruner, 1960; 1966; 1973; Piaget, 1932; 1936; 1945; 1950; 1957; Vygotsky, 1978), others of social learning (Bandura, 1977; 1986), others of social constructionism (Gergen, 1991; 1994) and still others focus on tasks, including the point of view of Zeigarni, according to Hergenhahn & Olson (1997, p. 260), who found that uncompleted tasks were more memorable than completed ones. This has come to be called Zeigarnik effect, which is defined as “the tendency to remember uncompleted tasks longer than completed ones” (p. 278). Also, another approach is the task-centered instructional strategy proposed by Merrill (2008).

Indeed, learning theories in educational psychology focus on what happens in learning situations, while those in instructional psychology concentrates on what has been done before learning takes place. Cognitive theories, on the other hand, stress three aspects of learning which support the development of instructional and behaviourist psychologies. These three aspects are: Learning as a process of knowledge construction (rather than the recording or absorption of knowledge), learning as knowledge-dependent (as people use current knowledge to construct new knowledge) and learning as highly aligned with the context in which it takes place (Resnick, 1989, p. 1). The latter, known as situational learning (Lave & Wenger, 1991) and certainly, has drawn the particular interest of many researchers and theorists within the LL field.

As a reaction to the behaviorist theories of Pavlov and Watson, who focused on stimulus-response behavior, Gestalt theory emerged. Pavlov (1927) worked with learning through classical conditioning and the stimulus and the response pattern, while Watson (1930) was more interested in the effects of stimuli and the substitution of one stimulus for another with the aim of better response and believed that practice strengthens learning. Gestalt means “organized whole” and thus, the central idea of Gestalt theory was “grouping” where the whole dominates the parts, which are of secondary importance even though they can be clearly identified.

Grouping factors were proximity (elements that are close in space tend to be grouped together and may be perceived as one object), similarity (items with similar characteristics tend to be put together), closure (elements which appear to complete an object tend to be grouped together) and simplicity (objects are organized in simple figures) and all together were called 'laws of organizations' (Wertheimer, 1924). Among the early Gestalt theorists were the trio of Wertheimer (1924), Koffka (1935/1963) and Kohler (1947). The core of this trio theorists was Wertheimer (King & Wertheimer, 2009), the work of whom dealt with productive thinking (Wertheimer, 1945). He was seriously interested in the nature of problem solving and his ideas appeared thinking and treating of a problem that comes from the whole to the parts, where the process of resolving a problem is to proceed from a bad gestalt to a better one. Koffka's ideas appear the interdependence of facts more important than the recognition of many separate facts. Kohler proposed insight learning and according to his view, insight comes from the consideration of the characteristics of objects, and learning could occur by sudden comprehension instead of a gradual understanding.

Therefore, Gestalt psychologists offered another view, proposing that learning occurs suddenly, from insights that promote the discovery of new ideas and solutions to any problem, after the conceptualization of previous experiences (Werner & DeSimone, 2009, p. 66). Learning through experience gave rise to the theory of Kolb and his Learning Styles Inventory (Kolb, 1984; 1985).

Conclusively, there are four fundamental perspectives on learning: behaviouristic (focus on observable behavior); cognitive (focus on learning as a mental process); humanistic (focus on emotions and affect playing a role in learning); social (focus on humans learning in group activities). Humanistic perspective concerns the innate tendency and desire of everyone to learn and is likely more concentrated on the value of learning through autonomous learning and thinking, an example of which is the transformative learning. Transformative learning requires critical thinking, learning to take place through discovery, imaginative approach to problem-solving and discourse to be learner-centered, participatory and interactive (Mezirow, 1991; 1997). Social learning through the social cognitive theory of Bandura (1986; 1999) is based on the learners' cognitive responses, behaviours and the environment that all

work together to create learning. Learners have a self-system control that allows them to check their thoughts, feelings and actions, to learn from others and influence and be influenced by their external environment. Apart from them, there are the general theories of memory and intelligence where some of their representatives are Gardner (2006) with the view of multiple intelligences and Sternberg (1985) with his triarchic theory of intelligence. In addition, there are the instructional theories, mainly characterized by Cross (1981) with the view of characteristics of adult learners, Knowles (1950) and his andragogy perspective, Gagne and Medsker (1996) with the conditions of learning theory, and Merrill (1999) with the component display theory and instructional transaction theory. Concerning the tendency of instructional design to follow cognitive theories' design, Gagne in his theory describes a hierarchy of different types of learning based upon different instructional strategies and design related to learning outcomes, which provides an explanation of the occurrence of sequences within learning activities. According to Merrill's theory, these sequences are related to specific instructional transactions and knowledge objects dominated by the learner and thus, the type of learning, the goals and objectives of the learning activity and the knowledge base of the learner are essential to the learning process (Leonard, 2002, p. 95).

Therefore, learning has gained different interpretation within different learning theories, but only some of them characterized convergent to the present research's concern and orientation and selected as a basis for its theoretical framework.

### **3.3 Learning theories as a basis for the research framework: A brief review**

One of the theories that the present research is based on is the RBV (described in detail in chapter 2) to the development of which Wernerfelt (1984) offered much, and considered that in order for this theory to be useful, a more detailed mapping of the field of resources is needed (Wernerfelt, 1995, p. 172). This theory is one of the three theories of HRM based on the categorization by Boselie, Dietz & Boom (2005), where the other two were: The contingency theory (Legge, 1978) and the Ability Motivation Opportunity (AMO) theory, proposed by Appelbaum, Bailey, Berg & Kalleberg (2000) and Bailey, Berg & Sandy (2001). The AMO theory can complete RBV theory, as it is based on the equation: Performance = f (employees' ability,

motivation, and opportunity to participate) (Boselie et al., p. 72). Thus, Boselie et al. (2005) provide the basis for developing any HR system, focused on employees' interests, skills, motivation and quality of job. To the same aspect of HR system, where employees abilities, motivation and job performance are its vital drivers, many other researchers and theorists are converged (Appelbaum et al., 2000; Bailey et al., 2001; Boxall & Purcell, 2003).

The second theory, regarded as an essential part of the theoretical framework of the present research is Learning Orientation Theory (LOT), which is based on the learning orientation perspective (Martinez, 1999) in which learning orientation is translated into the way an individual intentionally approaches learning. In the learning orientation construct of LOT, three learning orientation factors play a crucial role, and these are: Emotional and intentional motivational aspects; self-directed strategic planning and committed learning effort; learning independence or autonomy (Stein & Farmer, 2004). Therefore, through the LOT, emphasis is placed on high-level psychological human attributes which can contribute to a better definition of a successful learner. Towler and Dipboye (2003), in their attempt to develop a learning style orientation model, questioned the reliability and validity of Kolb's Learning Style Inventory. Their learning style orientation model is based on the existence of five factors: Experiential, discovery, observational, group, structured; and the consequent categories of learner, such as: Experiential learners, who enjoy role-plays, simulations rather than the traditional passive style; group learners, who enjoy group discussion, one-on-one discussion and activities involving contact with people; discovery learners, who enjoy interactional lectures and active-reflective activities; observational learners, who enjoy concrete experiences organized by others, such as films or field trips; and structured learners, who rely on their own information-processing strategies for effective learning, when they are given autonomy and choices in learning (p. 230-231).

Another theory is the formulation of the theory of the three dimensions of learning (Illeris, 2003; 2004). Illeris (2003) designed a framework or a model construction of the field of learning, in which he included two processes and three dimensions: The two processes are the external interaction process between the learner and his/her environment and, the internal psychological process of acquisition

and elaboration (Illeris, 2003, p. 398). The three dimensions are: The cognitive dimension of the learning content; the emotional or psychodynamic dimension, which combines mental energy, feelings and motivations; and the social dimension. The first two deal with the internal process, while the third with the external. Thus, learning involves all three dimensions.

Another important aspect of learning theory is its concept of association. The process of association in learning is characterized by three principles: Contiguity, the law of effect, and the practice. Contiguity means that when two elements are experienced together they tend to become associated with each other. The law of effect says that when the consequence of behaviour is positive, this is likely to be repeated. The practice deals with what strengthens the association, after the repeat of an action (Werner & DeSimone, 2009, p. 66). Indeed, the concept of association refers to the theory of association but the approach of Gestalt theorists to it is vital, even though their discussion of associative learning was incomplete and mainly related to the acquisition of skills (Ogden, 2001, p. 590). It is worth mentioning the work of Lewin who, through his criticism of association and experiments, showed the strength of association and in particular, this strength can be different if measured “by the result it can produce under definite instructions or attitudes” from the case when the strength of association is measured “by what it must do under any instruction” (Ogden, 2001, p. 572).

Besides, this overview of the theories of learning supportive to this research theoretical framework, the reference to adult learning and what it encompass can be preceded with the reference to LL, its methods, assessment and quality, and LLL.

### **3.4 Adult learning and types of learning**

Learning is a basic human activity, with a longitudinal character throughout the life span. Adult learning takes place in diverse informal environments, through everyday experiences. When adult learning is linked to the development of an individual it takes on a more complex character, as when an adult is called upon to play any new role, it is translated to a new learning experience (Papastamatis, 2010, p. 36).

Without doubt, adults may learn in different learning activities and, thus, can gain formal or informal knowledge. These two kinds of knowledge should not be

viewed as alternative approaches (Lehtinen, 2002, p. 1) as quite often well-structured formal knowledge remains available for use if the informal knowledge, based on practical experience, fails to produce an adequate solution to the problem at hand. In addition, a high level of expertise appears to demand both, formal and informal knowledge. A common debate over formal and informal knowledge is that formal knowledge does not prepare learners by providing them with appropriate skills to face and solve the complex problems and demands of working life (Mandl, Gruber, & Renkl, 1994).

A significant approach to adult learning is Knowles's theory about adult learning (andragogy). Knowles defined andragogy as a connection of two Greek words *aner*, which means 'man or adult' (in contrast to *pais*, which means child in pedagogy) and *agogos*, which means 'leader of ', and it interprets "the art and science of helping adults to learn" (Thorpe, Edwards & Hanson, 1993, p. 110). Through his reorientation of adult learning and development of the notions of informal education and self-direction, as an answer to the expanding critique on his andragogy, he emphasized that the most important thing is not to educate people but better to help them to learn (Knowles, 1950, p. 6). Thus, it is clear from his theory and attitudes that when we talk about adults, we refer not so much to their education, but to their learning. Without doubt, learning certainly turns to become a prevailing term in adult education and an emphasis is placed on its approaches and types.

Knowles (1950; 1980; 1990) placed emphasis on the differences between adults and children in their approach to learning. These differences emerged through a comparison between pedagogy and andragogy, mainly in the key aspects of: Concept of the learner; the role of the learner's experience; readiness to learn; and orientation towards learning (Knowles, 1980, p. 43-44). In andragogy, the learner moves towards independence, and, thus, self-directed learning is promoted where the role of the teacher is simply to encourage and support this way of learning. Another characteristic is that adults are ready to learn what they need to know and, thus, this should be taken into consideration in the design of adult programmes, where the application of knowledge counts.

Concerning learning outcomes, Knowles believed that adult learning should produce outcomes for adults, such as: A mature understanding of themselves; the

developing of an attitude of acceptance, love, and respect toward others; growth of a dynamic attitude towards life; learning how to react to the causes, not the symptoms, of behavior; acquisition of skills necessary to achieve the potential of their personalities; an understanding of the essential values in the human experience; an understanding of their society and acquisition of the skills to direct social change (Smith, 2002). These kinds of outcomes can constitute the end of learning activities, where self-directed learning or self-managed learning takes place.

Knowles' andragogy received a lot of criticism (Conti, 1985; Cross, 1981; Hartree, 1984; Lebel, 1978; Rachal, 1983; Yeo, 1982) whether it is a theory, a method or an approach, about its discrimination, dichotomous perspective and empirical efficacy and it was certainly questioned by many theorists, researchers and practitioners (Thorpe et al., 1993, p. 116). As a consequence, andragogy could not manage to be widely established and generalized due its disadvantages as well as to the relative psychological perspective where education ends at an adult's coming of age and his/her maturity completion (Kapsalis & Papastamatis, 2002, p. 29). In addition, adult learning concerns and embodies a unified way of learning where various types of learning are developed away from any discrimination.

Concerning different types of learning, Argyris (1993) contributed most to the appreciation of OL and a deep understanding of experiential learning. Argyris (1977) firstly introduced single-loop learning and double-loop learning and defined single-loop learning as a style of learning involved in dealing with the surface symptoms of a problem and not its root causes, while double-loop learning is the style of learning involved in dealing in questioning and analyzing the causes of a problem. With Schön, he created the model which essentially consists of single-loop and double-loop learning. Single-loop learning, a way of learning following the rules, refers to the occurrence of little or no learning in organizations, where double-loop learning is applied by detecting and correcting the rules and rigid strategies and policies which are established. Double-loop concerns changing of rules, involves more thinking out of the box; creativity and critical thinking, and its application appears to be critical to the success of organization. Triple-loop learning is about learning how to learn and helps us to understand a great deal about ourselves (Argyris & Schön, 1978). Single-loop and double-loop of learning may correspond

to doing things right and doing the right things, respectively, as single-loop involves changing methods and improving efficiency to achieve established objectives, while double-loop concerns changing the objectives themselves (Cartwright, 2002, p. 68).

Finally, as adult education appears to become refigured through wider discourses on LL, which certainly imply that adult education should vary in order to be a choice (Zackrisson & Assarsson, 2008, p. 121), new types of learning will emerge. Furthermore, besides those types of learning that came into light due to the radical changes in technology, economy and society, new types of learning seems to be proper to the vision of knowledge society and forwarding strategies of European Commission (mainly in case of European nations-members) in order to cover this kind of expectations. Nevertheless, any type of learning should converge to the evolution of LL and its methods based on a serious focus on the needs, identity and learning orientation of the learner.

### **3.5 Lifelong learning**

Lifelong learning (LL) is the new educational reality, where the dimension of learning throughout a lifetime appears to be the most popular issue among politicians, governments, policy makers, researchers and practitioners, while in Europe LL is the main goal and vehicle of its strategy in relation to the knowledge society.

Knowledge is always a marketable issue, whether sold as commodity or brand name. Human capital is considered to be a resource that anyone may use or must use, and may renew or must renew and this results in constitution of the human brain as a new 'grey capital' or another key resource, in addition to land, labour and finance (Field, 2006, p. 9).

LL provokes binary thoughts. Thus, the first meaning of LL is equivalent to the prime idea of learning as a process, through which every human being learns in different and complex ways and incorporates the philosophical ideas of Aristotle and Plato on the benefits of learning. The second meaning deals with what is popular as the LL context, mainly in European countries, and which has less of a historical past and specific social, political and economic dimensions (Karavakou, 2011, p. 1-2).

Diverse interpretations of LL raise discussions about its advantages and disadvantages (Papastamatis & Giossi, 2011). The positive influence of LL has been disputed, as it was regarded as a means of satisfying the needs and expectations of the labour market to the benefit of governments and enterprises (Dale, Glowacki-Dudka, & Hyslop-Margison, 2005). OECD and World Bank policies, which place a focus on LL as a means of economic growth are of a similar type (Illeris, 2004, p. 32-33).

On the contrary, LL has undeniably gained a social dimension through a contemporary new social movement, as it brings out its social aspect and appears to include both, individualistic and collective aims (Jarvis, 2007a; Jarvis, 2007b). This movement has influenced adults and thus, they choose to participate in LL activities, whether it relates to their work or their free time (Jarvis, 1995). LL activities include formal, non-formal and informal learning activities (Coombs, Prosser & Ahmed, 1973) and, in particular, their contexts are less formal than those experienced by children and youth (Kang, 2007). According to Coombs et al. (1973), formal learning implies a hierarchical structure between instructor and learner and incorporates assessment and certification, while informal learning deals with every day interactions and non-formal learning shares elements of both formal and informal learning. Further characteristics of non-formal learning are its occurrence outside as a rule, outside traditional educational institutions, a relationship between instructor and learner based on the sharing knowledge and expertise as peers, and lack of formalized assessment or any kind of certification. Instructors in non-formal learning settings have little formal teacher training, offer their expertise (Taylor, 2006) and are oriented towards the needs and interests of learners, emphasize interactivity, informality and time limitations (Taylor, 2005; Taylor & Caldarelli, 2004).

One essential characteristic of LL is that it is self-regulated, which resembles Knowles' theory about andragogy, where the learner is independent and self-directed in his/her learning process. Knowles (1975) explained the reasons for self-directed learning: The first reason can be explained through his comparison between proactive and reactive learners (Knowles, 1975, p. 14), where proactive are those who take the initiative in their learning and, as result, they learn more, better and with greater motivation; while reactive learners are passive learners, dependent on their teacher's direction. The second reason stresses the harmonization of self-

directed learning with our natural processes of psychological development, while the third reason deals with the maturity of adults to take the initiative for their own learning and direct it. Convergent to self-directed learning is the approach of critical thinking, explored by Socrates over 2000 years ago, which is characterized as an active process in which learners do not receive information and ideas from others but they gain knowledge through raising questions themselves and finding relevant information themselves, too (Fisher, 2001).

### **3.5.1 Focusing on the learner and learning styles**

Unquestionably, LL is a self-regulated process and, thus, the learner and his/her orientation towards learning constitute key components of its development. Adult learning is developed, and should be developed, around adult experiences, as adults are mainly performance-centered in their learning orientation (Knowles 1980, p. 44). Another determining factor of adult learning is the learning style of the learner, which appears to be vital, not only to the learning process, but also to the learning-teaching exchange, where the identification of learning styles is aimed to contribute to matching teaching methods to learning styles (Reid, 2005, p. 6).

Learning styles have been the subject research of many researchers, in their attempt to understand the way adults learn and how they can learn effectively. Learning styles are the different ways in which people think and feel, as they solve problems, create products and interact (Silver, Strong & Perini, 1997), or it may be characterized as the sum of strengths and preferences in the way adults take in and process information (Felder, 1996, p. 1). Common inventories of learning styles are the Learning Style Inventory (Kolb, 1985), the Felder Silverman's Index of Learning Styles (Felder & Silverman, 1988; Fedler & Spurlin, 2005) and the Honey & Mumford's (2000) Styles Questionnaire, which is a popular tool among management educators. Among these inventories of learning styles, Felder's model of learning styles has five dimensions: Processing (active/reflective); perception (sensing/intuitive); input (visual/verbal); understanding (sequential/global); and organization (inductive/deductive). He recommends inductive teaching methods, which include Problem-Based Learning (PBL) and discovery-based learning.

Learning style really influences LL, which can be enhanced where adult learners are motivated to recognize it (Coffield, Moseley, Hall, & Ecclestone, 2004). The recognition of learning style can be helpful to both learner and teacher; for the teacher in selecting the appropriate learner-centered learning methods and for the learner in monitoring his/her self-directed learning. This also makes for improved understanding, as, by paying attention to the diversity issue, teachers can better respect the uniqueness of every learner and every learner can better identify his/her differences and talents.

Illeris (2004) described a qualification theoretical model as a product of a specific qualification project, which comprised three levels, namely: The concrete, the general and the basic level. The concrete level includes qualifications in practical skills, factual knowledge, which are less related to the perception of our self. The general level refers to broader understanding and patterns of action. The basic level concerns overarching qualifications, general modes of experience, thought and action that form our self-perception and labeled identity (p. 44-45). He suggested this research model as helpful for curricula development and the formulation of different formal qualification profiles of learning groups and a learner's identity.

Besides an emphasis on learning orientation, learning styles and identity, whenever the learner is a leader, he or she needs to adopt a leadership style which can promote the concept of learning orientation (Farrell, 2000, p. 206). Slater and Narver (1995) argue that a complex environment may result in complex leadership; a transformational leader who communicates in an effective way and motivates people to want to learn is the best example of leadership.

However, focus on the learner, his/her learning identity and style in the learning process is inadequate if it does not accompanied with significant consideration of learning methods, especially those concerning learner-centered approach as these are considered adjustable to LL settings.

### **3.6 Lifelong learning methods**

For adults, a variety of new methods have been developed that take into account their characteristics, their needs for knowledge to be in applicable structures, their learning orientation and experience (Knowles, 1980; 1984), as well as learning

through experience (Kolb, 1984) and PBL, in its constructivist concept (Wilson, 1996).

Constructivist principles, following attempts of Savery and Duffy (1996) to describe PBL environments, have been identified as follows: Anchor all learning activities to a larger task or problem; support the learner in developing ownership of the overall problem or task; design an authentic task; design the task and the learning environment to reflect the complexity of the environment that the learner should be able to function in, at the end of learning process; give the learner ownership of the process used to develop a solution; design the learning environment to support and challenge the learner's thinking; encourage the testing ideas against alternative views and alternative contexts; and provide opportunity for, and support reflection on, both the content learned and the learning process (p. 137-140).

Furthermore, case and problem-based methods are considered to be effective approaches in many learning contexts, where learners' self-directed learning and collaborative processes are present. In addition, the quality of problems used in the learning process raises questions around whether they affect problem-based groups and their learning, in terms of stimulating group discussion, formulating learning goals and stimulating self-directed learning. PBL, even though it was firstly applied in medical education, was adopted in an increasing number of other areas, such as in business schools (Milter & Stinson, 1995), schools of education (Bridges & Hallinger, 1992; 1997; Savery & Duffy, 1994) and social work (Boud & Feletti, 1997), in many cases replacing the traditional lecture-based approach (p. 140). Through their research, Norman and Schmidt (2000) concluded that PBL, indeed, "provides a more challenging, motivating and enjoyable approach to education" (p. 727).

Engel (1985) places PBL in the context of an approach to learning rather than a teaching technique, where PBL is a means of developing learning for capability, rather than LL for the sake of acquiring knowledge. Barrow's (1986) analysis associates PBL with a particular strategy based on small groups, with a supportive tutor, as this method is consistent with adult learning principles and takes into account not only the need of courses to teach well, but also the foundations for a lifetime of continuing education, formal and informal (Boud & Feletti, 1997, p. 15).

PBL has been widely adopted and often aims to fulfill two purposes: Firstly, it is intended to be used as a method of making a learner capable in a set of competences, such as: Adapting to and participating in change; dealing with problems and making the appropriate decisions; reasoning critically and creatively; adopting a more universal or holistic approach; practicing empathy, appreciating the other person's point of view; collaborating productively in groups or teams; identifying own strengths and weaknesses and undertaking appropriate remediation through continuing, self-directed learning. Secondly, as a method of choice suitable to supporting the conditions that influence effective adult learning, such as: Active learning; integrated learning (that is learning in a variety of subjects or disciplines applied in real-life situations); cumulative learning, through a series of different learning experiences; and learning for understanding, rather than for recall of isolated facts (Boud & Feletti, 1997, p. 19). Concerning PBL effectiveness, a comparison between conventional learners and PBL learners indicates that the latter enjoyed substantially higher satisfaction than the former (Bridges & Hallinger, 1997, p. 139).

Arends (2007), in his attempt in analyzing ways of effective teaching suggested a classification of six models of teaching. He put these six models in two categories, the traditional or teacher-centered and the constructivist or learner-centered. The first category included lecture (presentation), direct instruction and concept teaching. The second included cooperative learning, problem-based learning and classroom discussion (p. 25).

Indeed, in recent years there is a tendency of leaving aside teacher-centered models in favour of learner-centered models. The demand of skills and competences such as critical thinking, problem solving, decision making, information handling, self-awareness, motivation and creativity, most apparent in the lifelong world, requires teaching to be differently oriented in order to be effective (Wlodkowski, 2008).

Thus, self-regulated or self-managed learning becomes a prevailing way of learning in adult learning, where the learner takes the initiative and responsibility of monitoring his/her learning from the beginning to the end of the learning process, including the assessment of learning and its process. Among the main characteristics of self-regulated learning is that every learner can involve in it someday in his/her

life and he is engaged to any decision in relation to learning. In addition, self-regulated learning exists without necessarily being in isolation from other kinds of learning and it can take different forms, include different activities and take advantage of various resources (Kapsalis & Papastamatis, 2000, p. 50).

Furthermore, self-regulated learning can be easily combined to other kinds of learning such as learning through projects, as they both have two characteristics in common: Learner's responsibility towards learning by planning learning activities by him/herself and his/her active involvement in problem solving appeared during the learning process (Kapsalis & Papastamatis, 2000, p. 51). More recently, self-regulated learning still gains ground in various governmental educational policies, including Greek educational policies as it is considered to enhance learner's autonomy, independence, critical thinking and creativity.

In particular, in the workplace learning the role of instructor, trainer or teacher changes into a role of a consultant, coach and mentor. Mentoring programmes start to become more popular than before, and, in case of enterprises and organizations they prefer learning through mentoring as the experience and knowledge of experts can easily be transferred to inexperienced with a certain and permanent learning outcome. There are various different types of mentoring, with either a formal or informal style, the aims of which are to prepare mentors and mentees for their role, explain the benefits of the relationship between mentor and mentee in terms of the acquisition of knowledge and the transfer of experience. Some of mentoring types are: Group mentoring (mentor refers to a team of mentees at the same time), peer mentoring (mentor or mentee can be at the same hierarchical level or job series), reverse mentoring (mentoring of senior person by a junior person), situational mentoring (mentoring as the right help at the right time in a situation), supervisory mentoring (mentor as leader offers a supervisory coaching and feedback), team mentoring (more than one mentor works with one mentee or a group of them) and virtual mentoring, where videoconferencing, internet and e-mail are used for mentoring individuals, but at least once a face-to-face mentoring meeting is recommended (United States Office of Personnel Management, 2008, p. 16-17). Except from mentoring, other types of learning can change the way they are implemented due to the use of technology and internet.

Finally, in education, time and space have been transformed in such a way that people can learn and study whenever and wherever they wish throughout their lifespan and, thus, the value of LL has been upgraded and its methods have been differentiated. Apart from learning methods, assessment of learning continuously attracts the interest of researchers, theorists, practitioners, governments and, thus, a number of arguments have been articulated about assessment and how it is implemented.

### **3.7 Learning assessment and lifelong learning**

In education, training and learning fields, assessment and evaluation are two terms often used interchangeably, with similar meaning and processes. They are both related to evidence and decisions about selection, use, collection, analysis, interpretation, criticism and communication of the evidence and aim to improve the learning status. Apart from their similarities, assessment and evaluation differ in the kind of evidence, the purpose and the basis on which criticism is made. Harlen (2007a, p. 12) stressed that the decision to use the term ‘assessment’ or ‘evaluation’ in some countries often depends on governmental decisions and the meaning they decide to attribute to each term. For example, in the United States of America, the term ‘evaluation’ is mostly used with reference to an individual’s achievement, whereas in the United Kingdom it refers to the process of collecting, analyzing and making judgements about programmes, systems, materials, procedures and processes. Also in the United Kingdom, the term ‘assessment’ is often used to mean a process of collecting evidence related to outcomes; where, in terms of students, the outcome is the achievement of specific learning goals and, in terms of school teachers, the outcome is their understanding of learning as a whole. The concern and focus of the present research study is what people can do with what they know and if there is any difference after their completion of a learning activity of any kind. Therefore, assessment is the preferred term used in this research.

Two types of school learning assessment are popular, which could be adopted by any educational organization providing educational programmes, training courses and learning activities in the workplace environment: The first is called ‘assessment for learning’ (Assessment Reform Group, 2002), which resembles formative

assessment and the second is ‘assessment of learning’ (Harlen, 2007b), which resembles summative assessment. The basic difference between these two assessment approaches is that assessment of learning determines the status of learning and thus, provides evidence of achievement for public reporting, whereas assessment for learning helps students to learn more, and, hence, promotes continuing and greater learning (Stiggins, 2002).

Empirical investigations of assessment for learning (formative assessment) conducted by researchers such as Natriello (1987), Crooks (1988), and Black and William (1998a), indicated that this kind of assessment could improve performance in all students, including those with low learning attainment. In their document entitled “Inside the Black Box” (where black box was the classroom environment) Black and William (1998b) emphasized the benefits of this kind of assessment for both teacher and student, stating that it could improve the performance of students and that both students and teacher together could use information from ongoing activities to determine the next steps in learning and find the way to attain it. In attempting to explain assessment for learning in practice, Harlen (2007a) showed that assessment for learning is characterized by key components: Among these were the process of feedback to students, students’ understanding of their work goals, students’ involvement in self-assessment, students’ engagement in communicating their understanding, dialogue between teacher and students, and teachers’ use of information for the students’ benefit (p. 119). In particular, the aim of feedback is to provide advice on how to improve or move forward. Indeed, evidence from a great deal of research shows that providing frequent formative feedback can influence the students’ learning, as both teacher and student can see the level of understanding of students and of the class as a whole. Many studies have also documented the impact of formative feedback on students’ performance (Black & William, 1998a; 1998b; Crooks, 1988; Kluger & DeNisi, 1996; Natriello, 1987; Shute, 2007), while others have shown that frequent formative assessments can accelerate students’ learning, such as the research by Good, Grouws, & Ebmeier (1983), who developed an effective teaching model for mathematics and research by Slavin (1995), who was one of the leading developers of cooperative learning.

In particular, students' understanding of the goals of their work can help them to recognize the quality of their work and the standard of their learning, by comparing achieved and expected goals. The involvement of students in self-assessment is crucial, as it gives them the opportunity to identify their strengths and weaknesses and, as a result, they can define what they need to do, in order to improve their learning. Their engagement in expressing and communicating their understanding, knowledge and skills, through open and student-centered questions, enhances the capacity for real improvement. The enhancement of discussion between teacher and students can also be helpful, as it promotes reflections on learning while the constructive use of information provided by a teacher can encourage students to take advantage of diverse opportunities to learn. All these components could be characterized as drivers of success in learning. A number of concepts expanding the definition of assessment for learning (formative assessment) are also apparent in the literature: One is described by Scriven (1967), who, following evaluation of an ongoing programme, claimed that formative assessment can provide information about the learning process (Dunn & Mulvenon, 2009, p. 3; Scriven, 1967). Another refers to its value to instructional decisions taking by teachers (Bloom, Hastings, & Madaus, 1971; Bloom, Madaus, & Hasting, 1981), while it can also improve students' performance, and enhance their motivation (Black & William, 1998b; Crooks, 1988; Natriello, 1987).

Beyond its components, there are diverse strategies for assessment for learning: William (2007) suggested five key strategies: a. clarifying, understanding, and sharing learning intentions; b. engineering effective classroom discussions, tasks and activities that elicit evidence of learning; c. providing feedback that moves learners forward; d. activating students as learning resources for one another; and e. activating students as owners of their own learning.

A great deal of research has established that providing frequent formative feedback, to give both the teacher and the students immediate indicators of levels of individual and class understanding at any time, can have a substantial impact on student learning. Many studies have documented the impact of formative feedback on students' performance (Black & William, 1998a; 1998b) and evidence from the US (Crooks, 1988; McMillan, 2007; Natriello, 1987) and elsewhere, has shown that

frequent formative assessments in daily classroom instruction can accelerate students' learning (Good, Grouws, & Ebmeier, 1983; Kapsalis & Papastamatis, 2002; Papastamatis, 2010; Slavin, 1995).

Hargreaves (2003) attempted to investigate how people understand the phrase "assessment for learning" through a survey. Participant responses gave rise to a number of definitions of assessment, which Hargreaves grouped into six categories. In the first category, assessment for learning meant the monitoring of student performance against targets or objectives. The second dealt with the use of assessment in order to inform the next steps in teaching and learning and the third with teacher feedback for improvement. The fourth related to teachers' learning about students' learning; the fifth with students taking some control of their own learning and assessment and finally, the sixth group of definitions dealt with turning of assessment into a learning event (p. 2-8).

To sum up, assessment for learning can promote learning, as teacher and students gather information from ongoing activities related to learning goals of any kind and to achievement of specific goals, it involves students in self-assessment. Furthermore, it can be characterized, not as a measurement but as an integral and continuous part of teaching (Harlen, 2007a, p. 121; Papastamatis, 2010).

Another type of assessment is the assessment of learning or summative assessment (Kapsalis, 2008; Papastamatis, 2010), as it called by many researchers and practitioners. Its main purpose is to measure the amount and type of learning, through measurement of the level of the student, the school and the success of the programme (Chappuis & Chappuis, 2008). The following may be identified as some of the key characteristics of summative assessment: a. it may be based on a teachers' judgement, external tests, or a combination of both; b. it is not a cyclical part of learning since it is necessary only at the stage when achievement is reported; c. it relates to the achievement of broad and general goals, d. it is based on judgement of all students by the same criteria; d. it requires measures to ascertain reliability; and e. it may provide self-assessment opportunities to students in some circumstances (Harlen, 2007a, p. 123).

Assessment for learning (formative assessment) usually precedes assessment of learning (summative assessment). Both types of assessment are useful for students and teachers in making decisions about actions to promote further learning.

Another critical issue in learning assessment is accountability, which is the responsibility of all parties involved in learning activities. Therefore, not only are instructors/educators/trainers/or teachers responsible for assessment but also trainees/students/or learners. In particular, in relation to the classroom and teachers' accountability, Reeves (2004) suggests teachers, in order to be leaders in accountability, should follow a four steps process: Observation, reflection, synthesis and replication of successful teaching practices. On the other hand, as students become involved in the process of assessment, they must contribute to its effectiveness by talking about what they are learning, compare it with their past experience and knowledge and try to apply it in their daily lives (Frye, 1999). For institutions or other providers of learning activities, accountability takes a fiscal character, the aim of which is to improve cost efficiency and quite often "is blind to issues of educational quality" (Frye, 1999, p. 3).

Accuracy of assessment is also important and requires choice of an appropriate method in each context, as every method has advantages and disadvantages and works well in some contexts but not in others. In addition, as assessment methods are not interchangeable, the quality of assessment relies on the correct choice and application of method (Stiggins, Arter, Chappuis, & Chappuis, 2004, p. 16).

Another critical issue is how assessment is designed in order that its quality is ensured. Quality assessment means the provision of accurate information and this can be achieved through the clear definition of learning targets for students, consideration of the key aspects of a learning target, deep understanding of learning purposes, the use of the appropriate assessment method and communication of assessment results, tailored to the needs of the participant (Stiggins et al., 2004, p. 26). Learning targets could be knowledge, reasoning, skills of any kind, creation of products, design of programmes or projects, application issues and whatever is considered necessary to be learned. However, it is the way in which the design of the assessment is capable of defining learning targets in a proper way and connecting

them to the learning outcomes that proves its ability to provide accurate information and to improve a participant's learning.

Indeed, where assessment is used as a tool to enhance student achievement, students themselves are expected to be responsible for their learning and the relationship between teachers and students is expected to be more collaborative (Shepard, 2000, p. 12). It is worth mentioning Sadler's (1989) observation that students should be able to improve and develop their capacity to monitor the quality of their own work and possess an appreciation of what high quality of work is (p. 119). In addition, the engagement of students in a quality vision can help them overcome the drawbacks of assessment, by shaping their future steps in the learning process (Chappuis & Stiggins, 2002, p. 42). Furthermore, feedback highlights the ability of students to recognize the next steps in their learning and find a way to achieve them (Assessment Reform Group, 1999).

Another approach to assessment suited to LL is the learning portfolio. With a long history in arts and design, on which portfolio pedagogy is built, learning portfolios have their origin in the field of rhetoric and composition in the early 1980s. They were introduced as "a means of assessing writing in multiple contexts and for the development of writing ability over time" (Cambridge, 2010, p. 2). Thus, portfolios can be characterized as assessment tools and a means of supporting learning.

Portfolios are similar to accomplishment records (Hough, 1984), as both are based on self-reported descriptions of accomplishments and achievements, and are also commonly applied to adult assessment. Portfolios represent examinee's past achievements, through a collection of work samples indicative of a student's progress and ability (Sackett, Schmitt, Ellingson, & Kabin, 2001, p. 312). Initially, portfolios were printed but later were presented as e-portfolios, which is the most popular and contemporary form. Eportfolios seem attractive to universities and workplace training institutions. Universities in the United States had and continue to have, the potential to embrace them due to the availability of advanced technology software and their view that portfolios can be an effective way of measuring learning outcomes. Cambridge (2010) realized the utility of the eportfolio, and decided to investigate its use in the field of LL. In his view, LL is not only a means of acquiring

skills necessary for employment, but it is also a means for development of skills to deal with certain key “challenges that adults face throughout their lives, across roles and over time” (Cambridge, 2010, p. 4). Later on, the idea of eportfolios expanded across countries such as The Netherlands, England, Wales and others, within both academic and workplace communities. Many people in academia and business believe that eportfolios can help people develop the habits of mind needed for learning throughout life and, at the same time, enable people to record and present their capabilities and thus help them to explore their learning identities. Although many discussions, conferences and various interdisciplinary research studies on eportfolios have focused on technology, data collection and accreditation agents’ reports, eportfolios seem to have good prospects in universities, as well as in the workplace, as they can highlight the understanding and importance of LL in employment settings.

In the belief that eportfolio practice is closely related to authenticity and integrity (Cambridge, 2010, p. 11), where evidence for their value is creativity, “a key to the expressive self that is an essential component of authenticity” emerges (Cambridge, 2010, p. 23). In addition, creativity interprets the diverse backgrounds and the different characteristics of individuals as well as their unique learning identity which eportfolios can reveal effectively.

Eportfolios appear to be flexible and allow each learner’s unique capabilities to be visible, thus they accommodate diversity. One advantage of eportfolios is that they include evidence of learning experiences from different contexts, formal and informal sites of everyday learning. Hence, they may comfortably be characterized as a means of LL assessment. Another advantage is that eportfolios are standardized and accredited by specific agencies which assures their quality. Eportfolios are increasingly used to support diverse forms of learning such as experiential learning activities (Kolb, 1984) and learning through communities of practice (Lave & Wenger, 1991; Wenger, 1998; 2000). The reflection issue also takes on significance in eportfolios, as learners can document their learning experiences, analyse them and shape their goals, values and emotions, in order to decide how to act in the future, using past experiences as a basis (Boud, Keogh, & Walker, 1985; Cambridge, 2010, p. 25; Kolb, 1984).

Nevertheless, portfolios, whether electronic or paper-based, on the one hand involve learners in the assessment process and allow them to control their learning progress by documenting their achievements as suggested by Hertels (2004), and on the other can help learners continuously to revise their learning needs.

Botterill, Allan, & Brooks (2008) argued that “there has been a marked increase in the use of eportfolios in universities” (p. 71). Through their analysis of the trail of an eportfolio product at enterprise level at RMIT University in Australia, as part of a strategy concerning the utilization of blogs, wikis and eportfolios as online learning environments for strengthening the University’ ability to provide flexible assessment practices, they concluded that to integrate eportfolios into mainstream learning and teaching practices, a core organizational culture should be build in order for active learning opportunities, through reflection, assessment and professional development to be available for staff and students (p. 74).

Even though portfolios, and more so eportfolios, have been accepted in many universities, in the workplace environment they are not widespread or popular. On the contrary, in the workplace traditional ways of learning assessment continue to be applied, in spite of the existence of eportfolios and other contemporary means of assessment suggested as appropriate to workplace learning. The most common assessment tool is a multiple choice questionnaire which is usually used as the main, and quite often, the only assessment measure. The reason is that it can easily be applied in different circumstances and is not time-consuming.

In conclusion, the LL setting may demand a combination of both the summative (assessment of learning) and formative (assessment for learning) approach, with the use of eportfolios in order to have positive effects on the learner and the learning itself. However, another important issue related to assessment, apart from the choice of the appropriate kind of learning assessment, is the problem of the quality of the learning provided, concerning, in particular, knowledge transfer, skills achievements and whatever else is determined as learning outcomes.

### **3.8 Quality of learning and knowledge transfer and management in lifelong learning**

Quality of learning (QoL) can have various dimensions. According to the innovative project ‘Experiential Education’ (EXE), which was regarded as one of the most

important sources of influence for educational innovation in Flanders and in the Netherlands, especially in the field of pre-elementary education, the quality of an educational setting can be focused on three different dimensions-criteria. The first one is the treatment characteristics, such as classroom environment, teacher style, the content of a program, teaching methods, teacher/pupil ratios, and the opinions and level of the training of the teachers. The second criterion is the measurement of the effects of education, whether short term effects, concerning the transition to the next step of education, or long term effects, including the development of democratic attitudes. The third criterion includes the process variables related to student activity within the educational setting, such as time spent on a task, quality of interaction, meta-cognitive activity and other cognitive activities (Laevers, 1994, p. 159-160).

In the context of this EXE-project, the EXE- theory was developed, not limited to primary levels of formal education, based on these three dimensions of quality (classroom environment, measurement of effects and student's activity), with the process variables taking precedence over the treatment and effect variables, for the judgment of the quality of any educational context, from the preschool level to adult education. The focus of the EXE theory was on process variables limited to two dimensions, which were the degree of 'emotional well-being' and the level of involvement (Laevers, 1994, p. 161). The first dimension demands pedagogical interventions, while the second is linked to the exploratory drive which is a source of satisfaction and refers to the need of a learner to 'get a better grip on reality' (Laevers, 1994, p. 163) and thus it can allow developmental change to occur.

Thus, it is evident that emotional well-being, apart from being a source of satisfaction, can determine part of the QoL, especially in workplace learning. Also, as emotions play an important role in learning effectiveness in adult education, they should come under serious consideration in relation to the commonly expected learning outcomes, such as knowledge transition, skills acquisition and the consequent improvement in job performance and professional development. Indeed, in LL where learning is learner-centered, consideration of the emotions, status of self-esteem and personal development of the participants in learning activities seem to be key determinants of the effectiveness and quality of workplace learning. In addition, the longitudinal path of LL transforms the desire for further learning into a

critical dimension of learning or better a well-expected learning outcome. Due to the lack of evidence in previous and contemporary research studies concerning the synthesis of these issues, it was considered essential to measure and analyze this in the present research study. Therefore, improvement of self-esteem, job performance, professional development, personal development and desire for further learning were determined as outcomes from participation in LL settings. For the purpose of this research, seminars, training courses, one-day educational events and miscellaneous learning activities were selected as LL settings. Furthermore, analysis of learning outcomes from these LL settings was carried out in relation to the selected learning methods, as these were considered critical to this research issue.

Paying attention to competitiveness in the contemporary economy, organizational competitiveness emerged, the foundation of which has shifted from physical and tangible resources to knowledge (Wong & Aspinwall, 2005, p. 64) and thus, we mainly talk about knowledge management, rather than the management of information from different information systems.

In addition, knowledge dissemination plays a crucial role in organizational knowledge transfer and management and thus, how employees, managers and employers see the significance of this to the competitiveness of their enterprise or organization was also identified by respondents in the present survey questionnaire. Knowledge dissemination can really assist the diversion of personal benefit to organizational benefit and complements the extent of the QoL mainly in workplace learning.

Before describing the design, methodology and data analysis of the research, an overview of relevant research studies follows, with the aim of instigating research focus on the connection between the two issues, HRD and LL, as well as clarifying the existing gap, which the present research aspires to cover.

### **3.9 Overview of relative research studies concerning the connection between Human Resource Development and Lifelong Learning**

In addition to the above thorough literature review concerning HRD and LL and its methods, reference to indicative recent research studies concerning the fields HRD,

LL and their connection, was considered important in order to provide a focus on the innovative character of the present research study.

In the context of workplace learning, few research studies focus on enterprises, including Small and Medium-sized Enterprises (SMEs). For example, concerning the impact of education on productivity, there are more empirical studies on the influence of formal education on productivity, rather than the influence of training on productivity, and more so of on-the-job informal training. The reasons are that this kind of training quite often takes place without a well defined timetable and is characterized by heterogeneity, diversity and intensity (in terms of diverse characteristics of employees, industry sectors, establishments size and types of job) that make it difficult to trace, measure and incorporate differences in technology, organization and HR practices inside the firm (Kurosawa, Ohtake, & Ariga, 2005).

In relation to HRD, and sometimes to HRM, a broad range of influencing factors has appeared in the literature, mostly concerning issues such as productivity (Black & Lynch, 1997; Brooks & Nafukho, 2006; Kurosawa, Ohtake, & Ariga, 2005), return on investment-ROI (Wang, Dou, & Li, 2002), organizational performance (Savaneviciene & Stankeviciute, 2010), self-efficacy and hope (Luthans & Jensen, 2002), job satisfaction (Schmidt, 2007) and creativity (McLean, 2005; Waight, 2005). In addition, where LL is concerned, there is a great deal of research concerning learning and education in primary and secondary level schools and higher education, but less on adult learning, workplace learning and LL, where fortunately researcher interest seems to be continuously increasing.

Concerning HRM practices and their link to performance, a Greek empirical research study co-funded by the European Union and the Greek Ministry of Development attempted to explore best practices in HRM for better performance. The research sample consisted of Greek companies, from the tertiary sector, to which trade of products and provision of services belong, with employment of at least 50 employees as a prerequisite. Analysis of data from 242 questionnaires demonstrated that knowledge management, OL and the creation of organizational capabilities could influence performance (Theriou & Chatzoglou, 2009).

Concerning continuing education, learning and LL in enterprises, including SMEs, empirical studies usually refer to participation in a variety of training courses

and learning activities. Furthermore, serious interest has been placed on the learner's profile, which was firstly formulated in formal education settings and later, expanded to enterprises and organizations.

A comparative study between administrative professionals' participation in continuing education and training activities, in particular at the International Association of Administrative Professionals Conferences (539 administrative professionals in 2000 and 570 administrative professionals in 2005 respectively) aimed to examine participation in LL activities between 2000 and 2005, in terms of personal factors such as age, educational attainment and years of work experience, focusing on the reason for participation in education and training activities, the theme of the training activity and the selected method. Furthermore, that study had an additional purpose which was to assist educators, trainers and providers of training courses in their rethinking of how to offer, promote training activities and encourage participants to participate.

The findings of that study showed that over 95% percent of administrative professionals were involved in job-related continuing education and training courses in the years of 2000 and 2005. The vast majority of professionals participated in order to improve their professional development and on their own initiative. Unfortunately, despite the serious interest of employers and their requirement that their employees got involved in further learning activities, employees took responsibility for their continuing learning solely upon themselves (Alexander, Zhao, Truell, Underwood, & Wiggins, 2006). Almost all the respondents in both 2000 and 2005 were female, the majority of them (78% in 2000, 89% in 2005) were over the age of 40 and had been working for 20 or more years (70% in 2000 and 78% in 2005). Specifically, in 2005 the 40-50 years and over the 50 age groupser range were the prevailing ranges, against the corresponding range in 2000. Concerning the methods of continuing education and training activities, in 2000 more participants preferred to attend off-site training for technology and college courses than those in 2005. The opposite was the case for the participants in 2000 in in-company training and online education and training activities, compared with those in 2005. Another key finding was that more respondents participated, in 2005 in comparison with those of 2000, because of their employers' requirement for professional

development. Emphasis on the employers' requirement for them to participate in continuing education and training courses was also cited by the respondents, in 2005 more than in 2000, who had a high educational level of attainment. In addition, in 2005 significantly more respondents with 20 or 25 year of work experience, compared with those in 2000, participated in educational or training courses on the basis of their employers' requirement. In that research study, participation in continuing education and training activities was examined in relation to personal factors and the reason for participation, which was mainly professional development, considered to be the influence of learning on HRD.

An example of research with a focus on the learner is the Effective Lifelong Learning Inventory (ELLI) Learner Profile, developed from a research project at the University of Bristol, funded by the Lifelong Learning Foundation. Two key publications documented the original research: The first was addressed by Crick, Broadfoot, & Claxton (2004) and the second by Crick (2007). The rationale of that research project was that each learner who did not have the ownership of his/her learning, which means to understand why and how he/she learns, could develop his/her learning with difficulty, unless he/she was guided from reflection to action in an empowering way through the development of a learning profile. The aim of that research project was to identify the characteristics and qualities of effective LLLs and to develop resources and strategies for tracking, evaluating and recording people's growth as effective real-life learners. This research had two strands: The first was a scientific strand, concerning the identification of the components of learning power and the second was a dynamic strand, concerning the exploration of how the provisional dimensions of learning power might be useful in teaching and learning in the classroom.

The ELLI project was piloted across four schools with sixteen teachers, who received learning profiles for individuals in their classes and the average profiles from the whole class. It was suggested to be an appropriate resource for supporting learning in Technical Educational Institutions (TEI) and Higher Educational Institutions (HEI). It has really proved to be a powerful tool for generating awareness, reflection and personal development planning in higher education in recent years. ELLI was published in 2002 and in the years since has been used in

primary, secondary and higher education, in corporate organizations and in community-based development programmes. Its transferability from formal education to corporate and community organizations is evidence of its importance. In addition, ELLI's use outside the United Kingdom in places such as Australia, New Zealand, Bahrain, China and USA proves its value in an increasingly international context (Williamson, Coughlln, Small, & Thompson, 2008).

The seven learning dimensions described in the ELLI Learner Profile were: Changing and learning; meaning making; curiosity; creativity; learning relationships; resilience; strategic awareness (Crick, 2007; Crick, Broadfoot, & Claxton, 2004). Crick (2007), in her effort to analyze these seven dimensions, argued that the first dimension, changing and learning refers to a "sense of getting better at learning over time, and of growing, changing and adapting as a learner through the whole life", while getting below the surface and finding out critically what is going on refers to the second dimension, critical curiosity, while meaning-making, relating to orientation towards coherence and how new things fit with existing knowledge and experience, refers to the third learning dimension (p. 140). The fourth dimension is creativity, which refers to the imagination and looking at things in different ways, and the fifth is learning relationships concerning learning by and with others, through being sociable and not isolated in learning. Moreover, resilience is the sixth dimension, which includes the ability to get involved and persevere, in the face of difficult and uncertain learning situations. The seventh dimension deals with the learner's self-awareness of learning, self-evaluation and generally his/her responsibility for planning and organizing his/her learning (p. 141-142).

The ELLI model provided on the one hand a complete description of the LL situation in Europe and on the other consideration of the social and economic outcomes of learning (OECD, 2007). The major innovative characteristic of the ELLI project was that the quantified, integrated and comprehensive view of all aspects of LL was linked with economic and social outcomes, which interprets the link between learning and well-being. Therefore, ELLI is closely related to the learner, his/her abilities and strategy in approaching learning and thus, it formulates his/her learning profile. But even though it was used within different corporate and community organizations, and research studies, it was entirely limited to sketching a

learner's profile in relation to his/her learning power and energy. Therefore, to date, research and application of ELLI has concentrated on the learner's identity and energy without investigating the role of the learner as a member of a specific organization and his/her twofold identity, as a learner and as an employee.

Evidence of an effort to connect the two issues, HRD and LL, came through a pan-European project, funded by the European Commission under its so called TSER programmes, concerning research in education and training, conducted by seven universities in different European countries. The main focuses of this research were: To examine similarities and differences in organization practices related to HRD in the seven European countries; to explore potential factors accounting for HRD practices across Europe, in comparison with USA and Japan; to examine the critical concept of HRD, learning orientated organizations and LL; to provide reflections on the possibilities and limitations of HRD in the context of comparative and collaborative research. Its research questions referred to whether the HRD departments role was different throughout Europe and whether it was stimulating and supporting employees' continuous learning as part of everyday work; perspectives on the role of the HRD department in the USA and Japan, and HRD department strategies of learning (Sambrook & Stewart, 2005, p. 67-70).

Results were reported in terms of organization context, role of HRD, HRD strategies and influencing factors. The selection of organizations to participate in this research project was based on the capability of the organization to being defined as a learning-oriented organization, referring to innovative ability in the development and provision of products and services. Results showed globalization, increasingly competitive markets and rapidly changing technologies in connection with customer focus, as factors related to the organization context. The role of HRD was suggested to be different and become more strategic through development interventions and learning programmes and thus, the quality of customer service or innovation in the product producing process could be increased. Also, the HRD role of practitioners seemed to be more influenced by national cultures rather than of industry as a factor. Furthermore, in Japan, management of employee learning and development appeared to be part of the operational managers' role rather than the HRD practitioners' role, which was the case in Europe and the USA. HRD strategies were reliant on

traditional training and development, but expectations of change in the future were related to a greater focus on informal learning, facilitation of knowledge management and further use of information and communications technology in learning. In contrast to the similar HRD practices in Europe and the USA, in Japan HRD practices were more inclined towards learning in the workplace and on-the-job learning, and hence, learning could be more formal and planned. In addition, in Japan the tendency seemed to be how to facilitate organizational learning through teams and quality circles. Finally, Sambrook & Stewart (2005) emphasized the existence of certain factors that influenced learning orientation in a positive or negative way, dependent on each particular organization and particular time. Among these factors, motivation to learn, learning culture, HRD role, level of financial resources and time available for learning and development appeared to be the most important influencing factors ( p. 73-75).

From this brief review of recent research studies, it is evident that the connection between HRD and LL and its methods has not been investigated under the prism of LL. Furthermore, in recent studies the employee has been regarded separately and only as a learner and not as having a two-fold identity, as a member of an enterprise or organization and as a learner. This was the specific focus of the present research design, methodology and data analysis which will be described in the following chapter.

## **Chapter 4**

### **RESEARCH DESIGN, METHODOLOGY AND DATA ANALYSIS**

#### **4.1 Research design**

In order to investigate the impact of LL and its methods on HRD, and to identify the main affecting factors, a strategic approach was adopted. The research was designed, firstly, to explore whether and to what extent employees, managers and employers understand the content and aims of LL. Secondly, to examine whether corporate strategy places emphasis on human resources and their value, whether there is a LL culture and the nature of the educational policy on participation in educational programmes. A particular focus was put on learning outcomes, such as personal development, professional development, job performance, self-esteem and the desire for further learning, in accordance with the specific learning method selected, in learning activities such as seminars, training programmes, one-day educational events and other miscellaneous LL activities. Finally, as LL activities are mainly conducted by the learner, his/her orientation towards LL and emotional identity were also investigated.

For the fulfilment of the research, employees, managers and employers from enterprises and organizations already involved in exports were identified as the target group as well as those with a mediator role in export processes in addition to the companies having plans to export in the near future. The reason for this choice was that extroversion is considered to be the most promising path for enterprises and organizations to follow in order survive and thrive during the period of economic crisis.

A mixed methods approach was decided in order to overcome limitations of following either quantitative or qualitative approach exclusively (Creswell, 2003). A

mixed methods approach is characterized as a “third wave” (Williams, 2007, p. 17) and it is an alternative approach minimizing the consideration that the quantitative and qualitative approaches are incompatible and not be able to get mixed (Johnson & Onwuegbuzie, 2004). As the goal of mixed research is not to replace one to the other (quantitative to qualitative) but to utilize the strengths of both quantitative and qualitative in a complementary or parallel context (Onwuegbuzie & Johnson, 2006, p. 54), in this study the minimizations of the weaknesses of the two approaches was expected.

Both, a quantitative approach through a questionnaire, the reliability and validity of which were verified, and a qualitative approach, through semi-structured interviews with managers, employers and employees and observations in a series of seminars and a specialized learning project concerning the acquisition of skills for export activities, were considered to be suitable to fulfilment of research goals.

#### **4.2 Research methodology**

As already has been mentioned the present research applies both quantitative and qualitative approaches. For the quantitative approach, an improvised questionnaire was designed on the basis of the literature review and on the researcher’s interest, which intended to measure employee attitudes towards LL in relation to HRD. The content of the questionnaire was reviewed by experts from academia and business education and professional development managers as well as HRD department managers and they decided that the questionnaire met its objectives. This research tool initially consisted of 80 items (illustrated in Appendix A, Table A.2) referring to the main research questions and in particular, awareness of LL and its aims; educational, vocational and development policies; culture of LL; corporate strategy, value system and ethical perceptions; evaluation policy of participation in educational programmes; contemporary trends in LL; trainee (learner) orientation towards LL; and emotional identity of trainee (learner).

The impact of LL methods on the personal and professional development of participants, as well as on self-esteem, job performance and desire for further learning, were also examined, since these parameters constitute the HRD issue as it was defined in the subject of the present research.

In addition to demographic elements, the existence or non-existence of a separate HRD department, of a manager or person generally responsible for HR practices, including staff education, training and development, was thoroughly investigated. Moreover, their export background was considered to be a determining factor of both HRD and LL culture.

The 80 items questionnaire was applied following a pilot study process and after the reliability and validity control of the scale, a 42-item scale accrued, which was named **Lifelong Learning and Human Resources Development - LLEHUREDE Scale** (illustrated in Appendix A, Table A.1). Using LLEHUREDE scale in the main research, a separate reliability and validity examination and results analysis were decided, one for the employers and managers of enterprises and organizations and the other for their employees. The reason for this separation, even though it was inconvenient for the data collection, firstly supported due to some self-report questions where personal attitude had to be expressed and this was different when the respondents were employers and managers (for them the phrase was: ‘The company I manage or I owe’) or employees (for them the phrase was: ‘The company I belong to’). Secondly, through this sample separation, result analysis could easily present similarities and differences between employers and managers, and employees which were considered important for the present research’s comparisons. Therefore, sample description, reliability and validity of the main research instrument (LLEHUREDE scale) as well as result analysis per factor of the main research would be presented twice, firstly, referred to 150 employers and managers and secondly, to 271 employees.

In order to fulfill this research study successfully and for research triangulation reasons, a more in-depth analysis was carried out, on the one hand, of a significant number of companies or organizations that were members of the target group under observations and, on the other hand, of an indicative number of employers, managers and employees, through semi-structured interviews.

Observations concerned specific and specialized programmes related to preparing companies and organizations to develop their export skills. In particular: The first set of observations related to a training programme that consisted of a series of seminars, two series of which were observed; and the second set referred to a

European funding programme, at its pilot phase of implementation, on skills acquisition and upskilling in relation to the extroversion activities of Greek enterprises and organizations.

In the semi-structured interviews employers, managers and employees were decided to be those who accepted the role of an interviewee.

### **4.3 Description of the research population and sample**

The population and the sample of the study were selected mainly according to the proven capacity of enterprises and organizations to export products and services to different countries. In addition, enterprises and organizations involved in the mediatory processes, characterized as necessary entities for the fulfillment of any export activity and active as intermediary organizations such as banks, specialized and responsible for export transactions, and holding and insurance companies all included the population and sample groups of the research.

An initial list of companies was identified from the 2010-2011 data of SEVE, a non-profit organization of exporting companies in Greece, which enumerates more than 610 main members–companies. SEVE was established in 1975 and its mission is: ‘to promote and support Greek enterprises to export their products and services to other countries, to offer them important information, statistical data, and customized foreign market research through the Institute of Export Research and Studies and in addition, ‘to cooperate with organizations all over the world in order to enhance the export potential of Greece and finally, to provide consistent quality services and creative solutions to export problems that its members may face at any phase of the export procedure’ (Retrieved 15, June, 2010 from <http://www.seve.gr/default.aspx?lang=en-US&page=569>).

The list mainly consists of companies and organizations which have already implemented export activities. But as the intervention of banks is officially obligatory for the completion of export procedures by Greek companies, some banks authorized to play this intermediary role were also included in the list. Apart from the banks, some insurance companies specialized in support of specific export procedures were also included in the list. In addition, a sub-list of companies and organizations, often characterized as potential export companies by SEVE,

constituted another segment of the selected population and sample of this research study. Taking into account that there was a significant number of companies that had recently decided to develop export activities and may not have been included in the main list, we obtained this additional sub-list of companies of those who have already expressed a serious interest in export processes and thus, they were characterized as potential export companies due to their potential development in export markets in the near future. All companies that were required to participate in the research were willing to participate as they were familiar with the research processes and the utility of the research findings. This was mainly resulted from their previous and frequent participation in research studies carried out by the Exports' Research and Studies Institute (IEES), which was established by SEVE with the aim to provide them with customized foreign market research and information. Apart from their participation, without doubt they had benefited from the results of different international research studies of their interest.

During the period when this research took place, in particular from September 2010 to November 2011, the majority of the selected companies and organizations had already carried out some export transactions while others were in the preparatory phase. They are those characterized as potential future exporters. All of them were members of SEVE. Companies and organizations included in this sample were 61 and grouped into clusters according to their sector of activity, with details of whether they produce products or provide services. The sample companies and organizations were randomly chosen from a total of 608 companies and organizations of SEVE and therefore, our research sample represented a 10% percent of the total research population.

A sample of 150 managers and employers and 271 employees were included in the main research, in addition to the 87 included in the pilot study. Almost all managers, employers and employees who selected to be included in the sample of the study agreed to participate in the research and, thus, the pilot study included 87 respondents and the main research 421 in total. The majority of the respondents asked for the results of the research following its completion, as they felt that these could be useful for their future planning and strategy.

#### 4.4 Pilot study

Following the determination of the research sample, a pilot study took place. The initial research scale, was an improvised questionnaire, consisting of 80 items and designed on the basis of the literature review and according to the researcher's interest. For each item of the research tool a 5-point Likert scale was applied ranging from 1-Strongly Disagree to 5-Strongly Agree. A letter of confidentiality accompanied the questionnaire. The sample group of the pilot study consisted of 87 employees, managers and employers in Greek enterprises and organizations (105 were requested to participate, of whom 18 did not agree and thus, 87 completed the questionnaire). The 87 respondents to the initial questionnaire participating in the pilot study differed from those 421 included in the main research. The pilot study sampling was carried out between the beginning of November and the end of December 2010, when 87 valid questionnaires were collected personally by the researcher. This procedure gave rise to an opportunity for better understanding of the attitudes of the pilot study participants, thus, expanding the qualitative characteristics of the quantitative questionnaire.

Through the data analysis, the validity and reliability of the questionnaire was determined (Giossi, 2012a; 2012b). The adequacy indicator of the sample  $KMO=0.61 > 0.60$  indicated that the sample data were suited to factor analysis. Control of sphericity ( $Chi-Square=5539.240$ ,  $df=3160$ , Bartlett's sign  $< 0.01$ ) proved that the principal component analysis could be feasible. Through this analysis, data grouping was based on the inter-correlation of the items and eight different attitude subscales resulted after the implementation of principal component analysis (Anastasiadou, 2008; 2009; 2011b; Anastasiadou, Anastasiadis, Vandikas, & Angeletos, 2010a; Anastasiadou, Anastasiadis, Angeletos & Vandikas, 2010b; Anastasiadou & Anastasiadis, 2011a; Anastasiadou & Papadimitriou, 2001). These eight subscales were as follows: (a) Awareness of LL (b) Attitudes towards educational, vocational and development policies (c) Culture of LL (d) Business strategy, value system and ethical perceptions (e) Evaluation policy of participation in educational programmes (f) Trainee (learner) orientation towards LL (g) Emotional identity of trainee (learner) and (h) Contemporary trends in LL.

After the fulfilment of the pilot study, the research tool was formulated into a 42 item-scale with seven subscales, named LLEHUREDE Scale, as the eighth subscale, entitled as contemporary trends of LL, was excluded.

#### **4.4.1 Reliability and validity of the research instrument of the pilot study**

Any measurement should be reliable (which means that it should end to consistent, repeatable results) and valid (which means that it should measure what it is supposed to measure). The first attribute of the measurement is an issue of reliability and the second is of construct validity. Reliability can be estimated through different ways (inter-rater reliability, test-retest reliability and internal consistency reliability). At the measurements of the present research internal consistency reliability was chosen as it assesses the consistency of results across items within a test. The internal consistency of single-dimensional additive scales can be tested using Cronbach's alpha ( $\alpha$ ), a coefficient assessing how well a set of items on the scale measures a single construct. A high level of internal consistency among the items and a correspondingly high Cronbach alpha would be expected to appear in a valid instrument. In social sciences, it is widely accepted Cronbach alpha ( $\alpha$ ) to be 0.70 or higher for a set of items to be considered a scale, but sometimes it would be lower. This is suggested by Tuckman (1999), who states that for achievement tests alpha test reliability should be above 0.75, while for attitude tests could only be above 0.50.

For the validity of the research instrument, the construct validity, which refers to the extent to which an instrument actually measures the theoretical construct or trait that it is supposed to measure, was also estimated, while its reliability was examined through different reliability models.

##### **4.4.1.1 Reliability of the research instrument**

The reliability of the research scale of the pilot study (Appendix, Table A.1), consisted of 80 items, was verified using five models (Giossi, 2012a). The data for analysis was based on 5-Likert equal in strength rating. All the variables were independent and every couple of variables had bivariate normality. This scale can be characterized as an additive model since each item was linearly correlated with the

sum of all the others (Dafermos, 2011). The five models used to analyze the reliability of the research scale of the pilot study are the following:

**(1) Cronbach's Alfa ( $\alpha$ ) Model:** The coefficient alpha ( $\alpha$ ) of Cronbach (Cronbach, 1984) is considered to be the most important coefficient of internal consistency (Dafermos, 2009; Nunnally1978). It is based on the average of the correlations of all variables taken in twos and it is independent from their disposition (Anastasiadou, 2006). Thus, it was chosen to measure the reliability of the measurement scale with the sense of internal consistency.

**(2) Split-Half Model:** Based on the division of the scale into two parts, not necessarily equal, following which their correlation is examined (Dafermos, 2009).

**(3) Guttman Model:** Estimates the lowest limits of the coefficient for the true reliability of the measurement tool.

**(4) Parallel Model:** Assumes that all variables-items that constitute the measurement scale have equal variances and equal error variances within the structure of replications.

**(5) Strict Parallel Model:** Similar to the Parallel model, as it is based on the assumption that all the items in the questionnaire have equal averages (Dafermos, 2009).

Models parallel and strict parallel, are considered to be useful for the estimation of the adjustment level of a notional structure and for the evaluation of common and true dispersion as well as for provision of impartial reliability.

The following information was produced by application of the five models, distributed by each model:

#### **(1) Cronbach's Alfa ( $\alpha$ ) Model**

Table 4.1 shows that the value of the coefficient Cronbach  $\alpha$  for the scale of the research study is 0.829= 82.9% and as it surpasses 80 percent, it represents an extremely good value for the internal consistency of the notional structure of the exploratory scale (Anastasiadou, 2011b; Anastasiadou & Anastasiadis, 2011a; Dafermos, 2009; Dimitriadis, 2003). In case we release some units, for example the standard values of the variables, then the coefficient Cronbach  $\alpha$  takes the value  $\alpha=0.840$ , which means that it is slightly increased and, thus, if we increase the number of items, the coefficient Cronbach  $\alpha$  will take the value of 0.840.

**Table 4.1** Pilot Study: Cronbach Alpha Reliability Statistics

Cronbach's Alpha $\alpha$	Cronbach's Alpha Based on Standardized Items	N of Items
,829	,840	80

The last column of Table 4.2 (Item-Total Statistics) indicates the coefficient Cronbach  $\alpha$  of all the variables that remain as part of the reliability analysis when this specific item is missing from the scale. The last column helps us to decide whether or not to include an item, whether its absence causes a small or large increase in the coefficient Cronbach  $\alpha$ . For example, if item 30 is deleted from the reliability scale, the coefficient Cronbach  $\alpha$  will have a value of 0.833, instead of 0.829, which is a very small increase. Therefore, as there is no significant benefit to deleting specific item, it is preferable to keep it in the scale.

**Table 4.2** Pilot Study: Item-Total Statistics

Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation		Cronbach's Alpha if Item Deleted
q1	277,66	368,108	,076	,829
q2	277,43	368,624	,066	,829
q3	279,49	359,688	,212	,828
q4	278,84	369,197	-,001	,833
q5	278,41	369,068	,008	,832
q6	278,86	360,169	,210	,828
q7	277,57	369,872	,003	,831
q8	277,88	356,998	,377	,825
q9	277,91	365,191	,175	,828
q10	277,83	370,922	-,025	,831
q11	277,97	364,858	,151	,829
q12	278,63	360,778	,205	,828
q13	277,60	372,195	-,072	,831
q14	277,98	365,670	,154	,828
q15	277,78	362,621	,259	,827
q16	277,71	362,962	,242	,827

q17	278,08	361,323	,284	,826
q18	277,70	366,755	,148	,828
q19	277,73	360,645	,382	,825
q20	278,15	362,436	,217	,827
q21	278,08	356,946	,391	,824
q22	278,08	362,382	,260	,827
q23	278,55	362,345	,172	,828
q24	279,49	361,688	,170	,829
q25	278,16	361,056	,257	,827
q26	278,26	353,604	,417	,823
q27	278,98	365,341	,111	,830
q28	278,28	355,427	,339	,825
q29	277,85	358,412	,361	,825
q30	279,80	373,431	-,094	,833
q31	279,55	368,980	,011	,832
q32	277,94	361,726	,291	,826
q33	277,99	366,953	,104	,829
q34	277,71	368,820	,059	,830
q35	278,03	363,046	,243	,827
q36	277,86	362,898	,207	,828
q37	277,84	365,173	,151	,829
q38	277,76	361,998	,318	,826
q39	277,70	362,943	,272	,827
q40	278,10	355,860	,415	,824
q41	277,97	357,799	,389	,825
q42	278,02	362,917	,268	,827
q43	278,29	360,185	,324	,826
q44	278,27	357,398	,393	,825
q45	277,97	359,399	,437	,825
q46	277,87	361,407	,318	,826
q47	278,08	359,087	,365	,825
q48	278,12	355,092	,485	,823
q49	277,88	358,386	,389	,825
q50	278,38	353,792	,426	,823

q51	278,36	353,763	,431	,823
q52	278,33	353,916	,438	,823
q53	278,36	349,410	,552	,821
q54	278,42	353,164	,445	,823
q55	278,36	352,539	,485	,822
q56	278,78	368,551	,023	,832
q57	278,14	359,651	,294	,826
q58	277,95	363,057	,198	,828
q59	278,58	365,352	,094	,830
q60	278,59	361,115	,207	,828
q61	278,66	361,638	,205	,828
q62	278,17	363,252	,180	,828
q63	279,23	359,498	,249	,827
q64	277,84	367,761	,086	,829
q65	278,21	363,226	,183	,828
q66	278,12	361,822	,225	,827
q67	278,06	370,691	-,022	,832
q68	277,83	365,887	,122	,829
q69	277,71	361,785	,282	,826
q70	278,87	368,631	,014	,832
q71	278,06	367,820	,066	,830
q72	278,00	369,129	,045	,830
q73	277,97	362,811	,268	,827
q74	279,53	356,816	,366	,825
q75	279,59	357,021	,362	,825
q76	279,50	361,194	,219	,827
q77	278,55	362,980	,154	,829
q78	278,73	361,398	,204	,828
q79	278,27	364,810	,134	,829
q80	277,73	365,375	,178	,828

## (2) Split-Half Model

According to this model, the scale is divided into two parts, by chance/accidentally or not, each of which may consist of the same or a different number of variables, such that the correlation and internal consistency of the two parts can be examined.

Results shown in Table 4.3, demonstrate the splitting of the scale into two parts. Part 1 includes the following variables: q1, q2, q3, q4, q5, q6, q7, q8, q9, q10, q11, q12, q13, q14, q15, q16, q17, q18, q19, q20, q21, q22, q23, q24, q25, q26, q27, q28, q29, q30, q31, q32, q33, q34, q35, q36, q37, q38, q39, q40, with a very good coefficient of internal consistency  $\alpha=0.703$ , while Part 2 includes the variables q41, q42, q43, q44, q45, q46, q47, q48, q49, q50, q51, q52, q53, q54, q55, q56, q57, q58, q59, q60, q61, q62, q63, q64, q65, q66, q67, q68, q69, q70, q71, q72, q73, q74, q75, q76, q77, q78, q79, q80, with a satisfactory coefficient of consistency  $\alpha=0.805$ . These two parts demonstrate a coefficient of correlation  $r=0.414$ . According to the coefficient Spearman-Brown and where the two parts of the scale are equal in size, the reliability coefficient of Spearman-Brown has a class value equal to 0.586, while in the case of parts unequal in size, the value remains the same, i.e. 0.586. The two cases demonstrate the same values and, thus, they confirm that there is no problem with reliability. In terms of the coefficient of Guttman, the value of which is 0.577, there is clearly no problem with the reliability of the created scale.

**Table 4.3** Pilot study: Split Half Reliability Statistics

Cronbach's Alfa	Part 1	Value	,703
		N of items	40
	Part 2	Value	,805
		N of items	40
		Total N of items	80
Correlation Between Forms (r)			,414
Spearman-Brown Coefficient	Equal Length		,586
	Unequal Length		,586
Guttman Split-Half Coefficient			,577

### (3) Guttman Model

In the Model Guttman there are six measures of reliability test, L1, L2, L3, L4, L5, and L6, which represent all the lowest limits of true reliability. An examination of the table 4.4 indicates that their corresponding values are as follows: L1 is a simple reliability evaluation that constitutes the basis on which all the remaining lower limits can be estimated; its value is  $L1=0.819$ . L2 offers greater reliability evaluation than evaluations L1 and L3, but it introduces the problem of complication; its value is  $L2=0.849$ . L3 provides a better evaluation than L1, as it has a higher value and is also equal in strength to the coefficient of Cronbach  $\alpha$ ; its value is  $L3=0.829$ . L4 is the coefficient of the Split- Half of Guttman, representing the lowest limit of true reliability for every Split- Half test; its value is equal to  $L4=0.577$ . L5 is a better estimation than L2, when there is a variable that presents high covariance with the other variables for which it is not permitted to have high covariance among them; its value is  $L5=0.829$ . L6 provides a better evaluation than L2, when the intercorrelations of the variables are low, while they are compared with the coefficient R2. The coefficient R2 arises when one variable regresses over the others; its value is  $L6=0.829$ .

**Table 4.4** Pilot study: Guttman Reliability Statistics

Lambda (L)	1	,819	R2
	2	,849	
	3	,829	
	4	,577	
	5	,829	
	6		,829
N of Items		80	

### (4) Parallel Model

From Table 4.5, it may be ascertained that the common variance of the scale is equal to 0.840, all the items-variables that compose the measurement scale have true variance 0.048, error variance 0.792 and a common inter-item correlation of 0.057. The reliability of the scale is equal to 0.829, while the reliability of the scale (unbiased) is equal to 0.833.

**Table 4.5** Pilot study: Parallel Reliability Statistics

Common Variance	,840
True Variance	,048
Error Variance	,792
Common Inter-Item Correlation	,057
Reliability of Scale	,829
Reliability of Scale (Unbiased)	,833

The Test for Model Goodness of Fit (Table 4.6), which interprets the level of adjustment of a comprehensive structure, revealed the unbiased reliability of the scale.

**Table 4.6** Pilot Study: Parallel Test for Model Goodness of Fit

Chi-Square	Value	-984,883
	df	3238
	Sig	1,000
Log of Determinant of	Unconstrained Matrix	,000
	Constrained Matrix	-16,936

Under the parallel model assumption

### **(5) Strict Parallel Model**

Table 4.7, the Strict Parallel Model of Reliability, shows that the common mean of the scale is equal to 3.522 and the common variance equal to 1.129. All the items-variables in the measurement scale have true variance 0.054, error variance 1.075 and common inter-item correlation 0.039. The reliability of the scale is equal to 0.766, while the reliability of the scale (unbiased) is equal to 0.774.

**Table 4.7** Pilot study: Strict Parallel Reliability Statistics

Common Mean	3,522
Common Variance	1,129
True Variance	,054
Error Variance	1,075
Common Inter-Item Correlation	,039
Reliability of Scale	,766
Reliability of Scale (Unbiased)	,774

From the Test for Model Goodness of Fit (Table 4.8) that provides the level of adjustment of the comprehensive structure according to the Strict Parallel model of Reliability, the unbiased reliability of the scale is ascertained.

**Table 4.8** Pilot study: Strict Parallel Test for Model Goodness of Fit

Chi-Square	Value	466,369
	df	3317
	Sig	,000
Log of Determinant of	Unconstrained Matrix	,000
	Constrained Matrix	7,932

Under the strict parallel model assumption

In order to investigate whether the scale presents additivity, which means evaluating the zero hypothesis  $H_0$ , Tukey's Test for Nonadditivity is implemented. Tukey's Test for Nonadditivity (ANOVA with Tukey's Test for Nonadditivity), shown in Table 4.9, indicates a relatively good/observatory level of statistical significance and, therefore, the  $H_0$  is characterized as acceptable, which means that the model has additivity.

**Table 4.9** Pilot study: ANOVA with Tukey's Test for Nonadditivity

			Sum of Squares	df	Mean Square	F	Sig
Between People			393,935	85	4,635		
Within People	Between Items		1989,539	79	25,184	31,817	,000
	Residual	Nonadditivity	2,833*	1	2,833	3,580	,059
		Balance	5312,291	6714	,791		
		Total	5315,123	6715	,792		
	Total		7304,662	6794	1,075		
Total			7698,598	6879	1,119		

Grand Mean =3. 52

\* Tukey's estimate of power to which observations must be raised to achieve additivity = 1,555

Other tests of significance such as Hotelling's T-Squared Test and F Test were also applied with good results indicated in Table 4.10 and Table 4.11 accordingly.

**Table 4.10** Pilot study: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
9025,771	9,409	79	7	,002

**Table 4.11** Pilot study: Interclass Correlation Coefficient

		95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	,057**	,041	,082	5,855	85	6715	,000
Average Measures	,829***	,774	,877	5,855	85	6715	,000

Two-way mixed effects model where people effects are random and measure effects are fixed.

\* a. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

\*\* b. The estimator is the same, whether the interaction effect is present or not.

\*\*\* c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

After the reliability control of the research scale of the pilot study, its validity was examined, mainly concerning construct validity and with taking under consideration that “a test cannot be considered valid unless it is highly reliable” (Verma & Mallick, 1999, p. 133).

#### **4.4.1.2 Validity of the factorial structure of the research scale of the pilot study**

Analysis of Factorial Components (AFC) was used to examine the factorial structure of the research scale of the pilot study, which investigates qualitative characteristics of employee, manager and employer attitudes towards affective components relevant to LL, its methods and its impact on HRD. AFC is a simple construction capable of interpreting a large percent of dispersion or, in other words, a large percent of the entire data information from a small number of factors (Anastasiadou 2011b; Anastasiadou & Papadimitriou, 2001; Papadimitriou, 2002; Papadimitriou, 2007).

In the research process, the absolute and relative frequencies were defined applying classical statistical methods to the 80 items-variables-questions answered by 87 participants. Thereafter, the data table of 87x80 for the total number of the respondents was converted into a logical table of the type 0-1. Following that, the Burt table, which intersects every variable’s classes to the sum of the variables, was

designed/shaped. Finally, AFC analysis was applied to this Burt table and the results produced were analysed.

#### 4.4.1.2.1 Criteria: inertia, contribution and correlation

The indicators used to interpret the results the specific AFC are known as indicators “inertia”, “contribution” and “correlation”. These indicators allow let us directly to distinguish the most important and determinative variables or items that contribute to creating factorial axes.

The inertia, which is explained by each factorial axis as well as the contribution shared in the interpretation of the results of this factorial analysis. The total inertia of the cloud was  $I=l_1+l_2+\dots+l_n$ . The factorial axes were arranged in descending order of size of the corresponding characteristic roots  $l_i$  (Benzecri, 1973).

The relative contribution of the  $k$  first factorial axes to the total inertia of the cloud is given through the following formula:

$$\text{Cum}(k) = \frac{l_1+l_2+\dots+l_k}{l_1+l_2+\dots+l_n}$$

The ratio  $\text{Cum}(k)$  determines the percent of the interpreting inertia by the  $k$  first factorial axes. The proportion of inertia, interpreted by each factorial axis, is given by the ratio of the corresponding inertia of each axis to the total inertia of the cloud. This ratio determines the percent of the interpreting inertia, explained by each axis  $s$ , and is explained by the following formula:

$$\text{Interpreting inertia} = \frac{\text{Inertia of axis } s}{\text{Total inertia}} = \frac{l_s}{l_1+l_2+\dots+l_n}$$

The appearance of the signs  $f_j^i$  of the cloud within the factorial axes constitutes the components of these signs, while the factorial axes jointly compose a new category of variables, the factors.

Contribution interprets the intersection of each statistical unit with the configuration of each factor. The contribution of the  $i$  statistical unit on axis  $s$

attributes the percent of the I participation at the inertia part which the axis s explains. It is given by the application of the following relation:

$$\text{Ctr}_s(i) = \frac{\text{Inertia of the } i \text{ element of the axis } s}{\text{Total inertia of axis } s} = \frac{f_i \cdot F_s^2(i)}{l_s}$$

where:  $F_s(i)$  is the appearance of  $i$  from axis  $s$

$f_i$  is the weight level of  $i$  element

$l_s$  is the eigen value which corresponds to axis  $s$

The indicator  $\text{Ctr}$  shows how the statistical units contribute to the creation of each factorial axis. Moreover, this specific indicator pushes forward the statistical units that play a significant role in creating the factorial axes. A high value of the indicator  $\text{Ctr}(i)$  for the  $i$  statistical unit is a sign that it contributes to the configuration of the factorial axis. The sum of  $\text{Ctr}(i)$  for all the statistical units is  $1=100\%$ .

In terms of correlation, the relative correlation of axis  $s$  at sign  $i$ , represents a pattern of correlation between sign  $i$  and the factorial axis  $s$ . It is expressed by the  $\text{Cor}$ , which is equal to the square of the cosine of angle  $\omega$ , which is shaped from the axis with the straight line that connects the sign  $i$  with the weight centre of the cloud.

$$\text{Cor}_s(i) = \frac{F_s^2(i)}{r_s^2(i)}$$

where:  $F_s(i)$  is the appearance of  $i$  on axis  $s$ .

$r_s^2(i)$  is the distance of  $i$  and the weight centre.

A high value of  $\text{Cor}_s(i)$  is translated into a small angle  $\omega$ , which means that  $i$  approaches axis  $s$ , or, in other words,  $I$  has a high correlation to axis  $s$ . In addition indicator  $\text{Cor}_s(i)$  represents the inertia percent of the sign  $i$ , which is interpreted by the factorial axis  $s$ .

Through application of AFC, we succeeded in producing almost the total description of the phenomenon under the enhancement of a small number of new composite independent variables, named factors.

The factors that have the form of axes, vertical by two, are the factorial axes which come from the synthesis of the groups of the initial variables. As a result, the investigation of the relations between the variables becomes as revealing as possible.

The interpretation of the results of AFC takes place at the first factorial levels, in other words at those that are created by the factorial axes.

Table 4.12 below presents the characteristic values of  $\lambda_k$ , where  $k = 1, 2, 3, 4, \dots$  for each axis, with values from 0 to 1. In particular:

- First column represents the factorial axes  $ei$
- Second column represents the absolute values of the characteristic values
- Third column presents the percent of total inertia
- Fourth column presents the cumulative percent of the axes inertia
- Fifth column represents the histogram of the characteristic values in accordance with their size

The indicators inertia, contribution and correlation allowed distinction between the significant and determinate variables or items that contribute to the creation of the factorial axes. Thus, these three indicators supported the above mentioned interpretation.

Analysis of the data using AFC is initially interpreted in Table 4.12, which presents the characteristic values of the Burt table, as well as the inertia portion of each factorial axis. This Table allows us to distinguish the number of main factorial axes considered to be most suited to the interpretation of results. In addition, the inertia percent of each factorial axis allows us to know the significance percent of each (criterion 1).

According to the values of the histogram (Table 4.12), the significance percent of the first factorial axis is 28.53%, the second 17.10%, the third 14.66%, the fourth 13.30%, the fifth 11.01% and the sixth 10.31%, whereas the percent of the seventh factorial axis is 6.09%. The total information of these six factorial axes adds up to 100%. Table 4.12 shows the total information of the seven factorial axis.

**Table 4.12** Pilot study: Inertia- Characteristic roots

Axis	Inertia	Interpretation $\alpha$ %	Sum	Histogram of characteristic roots
e1	0.0234570	28.53%	28.53%	*****
e2	0.0140532	17.10%	45.63%	*****
e3	0.0120537	14.66%	60.29%	*****
e4	0.0101162	13.30%	72.59%	*****
e5	0.0090492	11.01%	83.60%	*****
e6	0.0084714	10.31%	93.91%	*****
e7	0.0050054	6.09%	100%	***

The method of analysis Méthodes d' Analyse des Données (MAD), used for the application of the AFC (Karapistolis, 2000), informs us about the quality of appearance and the contribution of the variables' attributes to the construction of axes, that is to say which signs-attributes emerge better and contribute most to the construction of the axes, their graphs and their levels. In particular, Tables 4.13, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19 include the variables, the coordinates  $F_i$  and the coefficients  $Cor$  and  $Ctr$  of rows and columns of the 7 axes.

The selection criteria of the variables of satisfactory quality appearance that contribute to the construction of the axes are exclusively based on experience. We regard values of:  $Cor \geq 200$  and  $Ctr \frac{1000}{\text{number of variables}}$  as satisfactory. Therefore, in our application, based on the foregoing information, we should select the variables  $Cor \geq 200$  (criterion 2) and  $Ctr \frac{1000}{80} = 12,5$ , or rather  $Ctr=13$  (criterion 3).

Evaluation of the two coefficients,  $Cor$  and  $Ctr$ , determines on which factorial axis each attribute of variables is better illustrated and how much it contributes to their construction.

#### 4.4.1.2.2 Factorial axes-Criteria-Interpretation of results

The most important aim of the analysis is to pinpoint the variables that contribute to the creation of the factorial axes. According to the cumulative frequency, the

factorial axes interpret 100% of the total dispersion of the data. This percentage is characterized as satisfactory for data interpretation.

Moreover, from the results of the AFC and according to the selected criteria (namely inertia, correlation and contribution), we traced the variables that contribute to the configuration of the factorial axes.

The variables characterized as important to the factorial axes according to the two criteria, inertia and contribution, are extensively presented in Table 4.13, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19.

### **Interpretation of the first factorial axis $e_1$**

According to the pilot study participants' responses, as revealed by factorial analysis, the first axis-factor  $e_1$ , with eigenvalue 0.0234570, accounts for 28.53% percent of total dispersion, and constructed in order of significance on the basis of questions q11, q8, q3, q14 q9, q6.

In particular, the first factorial axis  $e_1$  outlines the perceptions of respondents in relation to awareness of LL. An examination of Table 4.13 seems to indicate that the respondents consider that the basic aim of LL is to lead to behavioural change, following deep understanding gained on completion of the learning process (q11) (Cor=593, Ctr=27) and to improve knowledge, in a personal, civic, social and/or employment-related perspective (q8) (Cor=509, Ctr=26). They also think that LL is to learn until retirement (q3) (Cor=482, Ctr=24). Furthermore, they believe that the basic aim of LL is to improve competences in a personal, civic, social and/or employment-related perspective (q10) (Cor=26, Ctr=0), as LL includes non-formal and informal learning or, otherwise, liberal, vocational and learning with social dimensions (q14) (Cor=348, Ctr=23). Moreover, they think that the basic aim of LL is to improve skills in a personal, civic, social and/or employment-related perspective (q9) (Cor=249, Ctr=19), as it is related to the work-based learning (q6) (Cor=231, Ctr=16).

At the configuration of the first factorial axis  $e_1$ , the questions q1, q2, q4, q5, q7, q10, q12 and q13, with low values of correlation and contribution (fewer than 200 and 13 respectively), do not satisfy either criterion 2, or criterion 3, nor both of them simultaneously (Anastasiadou, 2006). Thus, their omission from the analysis is deemed

necessary. In particular, these items consider whether employees know what LL is (q1) (Cor=118, Ctr=7), whether LL is to learn throughout the life span (q2) (Cor=184, Ctr=4), whether it is clearly connected with schools and universities (q4) (Cor=7, Ctr=0), whether it is clearly connected with what people learn from life (or better from the ‘University of Life’) (q5) (Cor=123, Ctr=6). Furthermore, the following items, whether employees think that LL constitutes to all learning activities undertaken throughout life (q7) (Cor=176, Ctr=9); that the basic aim of LL is to improve competences in a personal, civic, social and/or employment-related perspective (q10) (Cor=26, Ctr=0); and that LL considered to be planned, purposeful, and systematic learning (q12) (Cor=123, Ctr=4), worthwhile for every employee as it contributes to his/her development (q13) (Cor=120, Ctr=11), did not prove to be of significance and were thus, removed from the analysis.

**Table 4.13** Pilot study: Variables referring to Awareness of lifelong learning

	#F1	COR	CTR
<b>q1. I know what lifelong learning is.</b>	-172	118	7
<b>q2. Lifelong learning is to learn throughout the life span.</b>	117	184	4
<b>q3. Lifelong learning is to learn until retirement.</b>	843	482	24
<b>q4. Lifelong learning is clearly connected with schools and universities.</b>	-56	7	0
<b>q5. Lifelong learning is clearly connected with what people learn from life (or better from the ‘University of Life’).</b>	142	123	6
<b>q6. Lifelong learning is related to work-based learning.</b>	-373	231	16
<b>q7. Lifelong learning is all learning activities undertaken throughout life.</b>	-276	176	9
<b>q8. The basic aim of lifelong learning is to improve knowledge, from a personal, civic, social and/or employment-related perspective.</b>	534	509	26
<b>q9. The basic aim of lifelong learning is to improve skills from a personal, civic, social and/or employment-related perspective.</b>	176	249	19
<b>q10. The basic aim of lifelong learning is to improve competences from a personal, civic, social and/or employment-related perspective.</b>	142	26	0

Table 4.13 *Continued*

<b>q11. The basic aim of lifelong learning is to lead to behavioural change, following the deep understanding gained from completion of the learning process.</b>	<b>614</b>	<b>593</b>	<b>27</b>
<b>q12. Lifelong learning is considered to be planned, purposeful, and systematic learning.</b>	-104	123	4
<b>q13. Lifelong learning is worthwhile for every employee as it contributes to his/her development.</b>	-32	120	11
<b>q14. Lifelong learning includes non-formal and informal learning, or otherwise liberal, vocational and learning with social dimensions.</b>	<b>317</b>	<b>348</b>	<b>23</b>

Consequently, the first factorial axis  $e_1$  is the composite variable, the construction of which is based on the items q11, q8, q3, q14 q9, q6 and can be named *Awareness of lifelong learning*.

### **Interpretation of the second factorial axis $e_2$**

The second factorial axis  $e_2$ , with eigenvalue 0.0140532, interprets 17.10% percent of the total dispersion of data. For the second axis  $e_2$ , q24, q16, q15, q18, q28, q26 were selected (Table 4.14). More specifically, the second factorial axis is constructed on the basis of items q24, q16, q15, q18, q28, q26 in order of significance. This axis F2 is constructed and interpreted according to the items that represent the responses of participants to the following questions: The company or organization I belong to believes that new knowledge is not necessary for those with broad experience (q24) (Cor=612, Ctr=29), I work hard (on my own) towards achieving continuous professional development (q16) (Cor=573, Ctr=26), I am responsible for my vocational training (q15) (Cor=572, Ctr=23), and I draw on my skills in order to contribute to achievement of organizational goals (q18) (Cor=476, Ctr=21). The company or the organization I belong to is committed to improving its employees' performance (knowledge, skills, competences, behaviour) through training courses financially supported by the EU or other specific bodies (q28) (Cor=348, Ctr=17). The company or the organization I belong to offers us opportunities to learn, with its financial support (q26) (Cor=221, Ctr=13).

Questions q17, q19 q27, q21, q25, q20, q22, q23 also contribute to the construction of the second factorial axis  $e_2$  with low values of correlation and contribution (fewer than 200 and 13 respectively, and they do not satisfy criterion 2, criterion 3 or both of them simultaneously (Anastasiadou, 2006). For this reason, it is deemed necessary to omit these from the analysis, due to their low and insignificant contribution.

They trace to what extent employees get involved in LL activities because they believe that in this way they contribute to the organizational learning (learning that have a share in the organization) (q17) (Cor=123, Ctr=8) and they are interested in participating in LL initiatives with the aim of continuously improving their skills (q19) (Cor=124, Ctr=2). In addition, the following items that trace to what extent the company or organization to which they belong selects the educational programmes it finances without prior assessment of employees' educational needs (q27) (Cor=123, Ctr=3); it continuously invests in education, training and development of its personnel (q21) (Cor=176, Ctr=1); it wants to have responsibility for education, training and development of its employees (q25) (Cor=76, Ctr=0), are also omitted. Hence, as any company is focused on customer service and thus, training is similarly focused (q20) (Cor=103, Ctr=0), the company or organization believes that employees are well-skilled through the training of their managers or other employees with greater experience (q22) (Cor=109, Ctr=10) and wants from its employees to update their knowledge outside working hours (q23) (Cor=144, Ctr=9).

**Table 4.14** Pilot study: Variables referring to Attitudes towards educational, training and development policies

	#F1	COR	CTR
<b>q15. I am responsible for my vocational training.</b>	<b>531</b>	<b>572</b>	<b>23</b>
<b>q16. I work hard (on my own) toward achieving continuous professional development.</b>	<b>503</b>	<b>573</b>	<b>26</b>
<b>q17. I get involved in lifelong learning activities as I contribute to organizational learning.</b>	97	123	8
<b>q18. I draw on my skills in order to contribute to the achievement of organizational goals.</b>	<b>-471</b>	<b>476</b>	<b>21</b>
<b>q19. I am interested in participating in lifelong learning initiatives in order to develop my skills continuously.</b>	149	124	2

Table 4.14 *Continued*

<b>q20. The company or organization I belong to is focused on customer service and thus, training is similarly focused.</b>	273	103	0
<b>q21. The company or organization I belong to continually invests in the education, training and development of its personnel.</b>	-35	176	1
<b>q22. The company or organization I belong to believes that we are well skilled through training by our managers or other employees with greater experience.</b>	-123	109	10
<b>q23. The company or organization I belong to wants us to update our knowledge outside working hours.</b>	-106	144	9
<b>q24. The company or organization I belong to believes that new knowledge is not necessary for those with broad experience.</b>	629	612	29
<b>q25. The company or organization I belong to wants to have responsibility for our education, training and development.</b>	235	76	0
<b>q26. The company or organization I belong to offers us opportunities to learn with its financial support.</b>	-251	221	13
<b>q27. The company or organization I belong to chooses the educational/training programmes/courses it supports without assessment of employees' educational needs.</b>	-532	123	3
<b>q28. The company or organization I belong to is committed to improving employee performance (knowledge, skills, competences, behaviour) through training courses financially supported by the EU or other specific bodies.</b>	-313	348	17

Thus, the second factorial axis  $e_2$  is a composite variable that owes its construction to the weighted order of items q24, q16, q15, q18, q28, q26 and can be named *Attitudes towards educational, training and development policies*.

### **Interpretation of the third factorial axis $e_3$**

The third factorial axis  $e_3$ , with eigenvalue 0.0120537 interprets 14.66% percent of the total dispersion of the data. The most important variables for the third axis are q35 q37, q38, q77, q29, q36, q32 (Table 4.15). The third factorial axis  $e_3$  includes the perceptions of respondents who believe that LL leads to job satisfaction (q35) (Cor=654, Ctr=31) and to better job performance (q37) (Cor=341, Ctr=24). In addition, their belief is that involvement in LL activities reinforces motivation for learning (q38) (Cor=423, Ctr=19) and the provision of qualitative LL requires certification (q77) (Cor=342, Ctr=17). According to the respondents, the company or organization they belong to has a positive attitude towards LL, too (q29) (Cor=254, Ctr=16). On the other hand, employees believe that LL leads to innovative ideas (q36) (Cor=210, Ctr=14) and to greater well-being of the participants in the learning process (q32) (Cor=207, Ctr=13).

Furthermore, items q30, q31, q33, q34, q39, with low correlation and contribution values (under 200 and 13 respectively) contribute to the third factorial axis  $e_3$  and they do not substantiate either criterion 2 or criterion 3, separately, or the two criteria simultaneously (Anastasiadou, 2006). Hence, they are removed from the analysis. More specifically, the omitted items are those which refer to: The extent to which employees believe that their company or organization has nothing to do with LL (q30) (Cor=105, Ctr=0) and regards LL as useless when sales go down (q31) (Cor=169, Ctr=6); the extent to which employees believe that LL leads to change in attitude towards the value of work (q33) (Cor=175, Ctr=4); it promotes each employee's creativity (q34) (Cor=89, Ctr=9) and that experience leads to better job performance (q39) (Cor=171, Ctr=11).

**Table 4.15** Pilot study: Variables referring to Culture of lifelong learning

	#F1	COR	CTR
<b>q29. The company or organization I belong to has a positive attitude towards lifelong learning.</b>	<b>546</b>	<b>254</b>	<b>16</b>
<b>q30. The company or organization I belong to has nothing to do with lifelong learning.</b>	142	105	0
<b>q31. The company or organization I belong to considers lifelong learning as useless when sales go down.</b>	454	169	6
<b>q32. My belief is that lifelong learning leads to greater wellbeing of participants in the learning process.</b>	<b>-471</b>	<b>207</b>	<b>13</b>
<b>q33. My belief is that lifelong learning leads to a change in attitude towards the value of work.</b>	39	175	4
<b>q34. My belief is that lifelong learning should promote each employee's creativity.</b>	-66	89	9
<b>q35. My belief is that lifelong learning leads to job satisfaction.</b>	<b>87</b>	<b>654</b>	<b>31</b>
<b>q36. My belief is that lifelong learning leads to innovative ideas.</b>	<b>564</b>	<b>210</b>	<b>14</b>
<b>q37. My belief is that lifelong learning leads to better job performance.</b>	<b>-509</b>	<b>341</b>	<b>25</b>
<b>q38. My belief is that involvement in lifelong learning activities reinforces motivation for learning.</b>	<b>-289</b>	<b>423</b>	<b>19</b>
<b>q39. My belief is that experience leads to better job performance.</b>	-23	172	11
<b>q77. The provision of qualitative lifelong learning requires certification.</b>	<b>654</b>	<b>342</b>	<b>17</b>

As a result, the third factorial axis  $e_3$  is the composite variable that owes its construction to the following items, in order of significance, q35, q37, q38, q77, q29, q36, q32 and can be named *Culture of lifelong learning*.

#### **Interpretation of the fourth factorial axis $e_4$**

The fourth factorial axis  $e_4$ , with eigenvalue 0.0101162, interprets 13.30% percent of the total dispersion of data. The fourth axis  $e_4$  is constructed and interpreted on the basis of items q48, q41, q40, q45, q47, q49 (Table 4.16).

Concerning factorial axis  $e_4$ , the respondents' belief has to do with the fact that their company or organization is socially responsible, which is clear in its educational policy (q48) (Cor=453, Ctr=29), it considers its employees as an important asset (q41) (Cor=432, Ctr=25), it strives to make learning accessible to everyone (q40) (Cor=361, Ctr=23), as it regards a lifelong learning strategy as one that creates value (q45) (Cor=368, Ctr=21). For this reason, it invests in staff training, because it considers it vital to gaining competitive advantage (q47) (Cor=249, Ctr=16). Furthermore, it believes that knowledge is of generic value, the dissemination of which is significant (q49) (Cor=235, Ctr=14).

Likewise, items q42, q43, q44, q46, with low correlation and contribution values (under 200 and 13 respectively) contribute to the fourth factorial axis  $e_3$  and they do not support either criterion 2 and criterion 3 separately nor the two criteria simultaneously (Anastasiadou, 2006). As a result, they are removed from the analysis. In particular, the omitted items are those which refer to what extent employees believe that their company or organization considers mentoring to be suited to the development of employee talents (q42) (Cor=134, Ctr=9); it considers that, whatever the change, it can be successful when accompanied by mentoring programmes (q43) (Cor=198, Ctr=10). It regards mentoring as the most important means by which any employee can achieve peak job performance (q44) (Cor=201, Ctr=11) and, consequently, it promotes teamwork and fosters an environment conducive to the exchange of ideas useful to improving work-related performance (q46) (Cor=157, Ctr=5).

**Table 4.16** Pilot study: Variables referring to Business strategy, value system and ethical perceptions

	#F1	COR	CTR
q40. The company or organization I belong to strives to make learning accessible to everyone.	156	361	23
q41. The company or organization I belong to considers its employees as an important asset.	198	432	25
q42. The company or organization I belong to considers mentoring to be suited to the development of employee talents.	187	134	9
q43. The company or organization I belong to considers that, whatever the change, it can be successful when accompanied by mentoring programmes.	564	198	10
q44. The company or organization I belong to regards mentoring as the most important means for any employee to achieve peak job performance.	-276	201	11
q45. The company or organization I belong to regards lifelong learning strategy as a strategy that creates value.	-387	368	21
q46. The company or organization I belong to promotes teamwork and fosters an environment conducive to the exchange of ideas useful to improving work-related performance.	-32	157	5
q47. The company or organization I belong to invests in staff training because it considers it vital to gaining competitive advantage.	-341	249	16
q48. The company or organization I belong to is socially responsible, which is clear in its educational policy.	279	453	29
q49. The company or organization I belong to believes that knowledge is of generic value, the dissemination of which is significant.	-289	235	14

Consequently, the fourth factor-axis  $e_4$  is the composite variable, the construction of which is based on the items q48, q41, q40, q45, q47, q49 and can be named *Business strategy, value system and ethical perceptions*.

### **Interpretation of the fifth factorial axis e<sub>5</sub>**

The fifth factorial axis e<sub>5</sub>, with eigenvalue 0.0090492, interprets 10.01% percent of the total dispersion of the data. This factorial axis e<sub>5</sub> is constructed and interpreted on the basis of items q52, q51, q55, q53, q54, q50 (Table 4.17), in order of significance.

The fifth factorial axis e<sub>5</sub> includes the perceptions of respondents who believe that the company or organization they belong to: Reviews the benefits of their participation in training programmes/courses (q52) (Cor=435, Ctr=29); assesses their educational/training needs before allowing employees to participate in any educational/training programme/course (q51) (Cor=367, Ctr=28); evaluates the learning outcomes of training courses in order that they are in alignment with the training goals set by the provider of learning activities (q55) (Cor=329, Ctr=18); and evaluates the benefit of participation in educational or training courses, in relation to the cost, after completion of the programme (q53) (Cor=234, Ctr=17); measures the outcomes of employee participation in learning activities, monitored by the manager or people in charge of the work-team (q54) (Cor=229, Ctr=15); and, finally, rewards participation in educational programmes useful to performance enhancement (q50) (Cor=205, Ctr=14).

**Table 4.17** Pilot study: Variables referring to Evaluation policy of participation in educational programmes.

	<b>#F1</b>	<b>COR</b>	<b>CTR</b>
<b>q50. The company or organization I belong to rewards participation in educational programmes useful to performance enhancement.</b>	<b>84</b>	<b>205</b>	<b>14</b>
<b>q51. The company or organization I belong to assesses our educational/training needs before allowing us to participate in any educational/training program/course.</b>	<b>264</b>	<b>367</b>	<b>28</b>
<b>q52. The company or organization I belong to reviews the benefits of our participation in training programmes/courses.</b>	<b>287</b>	<b>435</b>	<b>29</b>
<b>q53. The company or organization I belong to evaluates the benefit of participation in educational or training courses in relation to the cost after completion of the program.</b>	<b>-346</b>	<b>324</b>	<b>17</b>

Table 4.17 *Continued*

<b>q54. The company or organization I belong to measures the outcomes of our participation in learning activities, monitored by our manager or people in charge of our work-team.</b>	<b>-98</b>	<b>229</b>	<b>15</b>
<b>q55. The company or organization I belong to evaluates the learning outcomes of training courses in order that they are in alignment with the training goals set by the provider of learning activities.</b>	<b>145</b>	<b>329</b>	<b>18</b>

Thus, the fifth factorial axis  $e_5$  is the composite variable, which owes its construction to items q52, q51, q55, q53, q54, q50 and can be named *Evaluation policy of participation in educational programmes*.

#### **Interpretation of the sixth factorial axis $e_6$**

The sixth factorial axis  $e_6$ , with eigenvalue 0.0084714, interprets 10.31% percent of the total dispersion of data. The sixth axis  $e_4$  is constructed and interpreted on the basis of items q69, q59, q66, q63, q67, q58 (Table 4.18) in order of significance.

Concerning the factorial axis  $e_6$ , respondents state that they prefer learning through critical thinking activities (q69) (Cor=645, Ctr=42), self-managed learning (q59) (Cor=532, Ctr=36), as well as learning through social relationships or networking, without any kind of discrimination (q66) (Cor=464, Ctr=29). The respondents don't regard formal educational activities (e.g. in schools; in universities) as necessarily positive or enjoyable learning activities (q63) (Cor=329, Ctr=21), rather, they prefer learning through use of technology (q67) (Cor=216, Ctr=19), learning through problem solving (q58). (Cor=201, Ctr=14), as well as setting their personal learning goals, even they differ from those of other participants (q62) (Cor=211, Ctr=14).

Items q56, q57, q60, q61, q64, q65, q68, q70 contribute to construction of the sixth factorial axis  $e_6$  with low values of correlation and contribution (under 200 and 13 respectively), and they do not satisfy criterion 2 or criterion 3 nor both of them together (Anastasiadou, 2006). For this reason, their removal from the analysis is deemed necessary.

More specifically, the omitted items refer to what extent employees prefer: Learning through loosely-structured learning activities (q56) (Cor=204, Ctr=6) or in flexible mentoring environments (q57) (Cor=105, Ctr=0); through semi-structured learning activities, with creative interaction but without great effort (q60) (Cor=175, Ctr=4); or learning in simple, safe, and structured environments with low control by the learner that helps him/her to reach easily-achievable goals (q61) (Cor=89, Ctr=9); learning through working with others toward shared goals (q64) (Cor=34, Ctr=5); learning through benchmarking (information about best practices) and comparison with others' performance (q65) (Cor=123, Ctr=9); learning either through face-to-face interaction or via internet (q68) (Cor=168, Ctr=6); and, finally, they prefer learning when there is a pressing need for it (q70) (Cor=210, Ctr=10).

**Table 4.18** Pilot study: Variables referring to Orientation of the trainee towards lifelong learning

	#F1	COR	CTR
<b>q56. I prefer learning through loosely-structured learning activities.</b>	423	204	6
<b>q57. I prefer learning in flexible mentoring environments.</b>	142	105	0
<b>Q58. I prefer learning through problem solving.</b>	-56	201	14
<b>q59. I prefer self-managed learning.</b>	458	532	36
<b>q60. I prefer the semi-structured learning activities, with creative interaction but without great effort.</b>	45	175	4
<b>q61. I prefer simple, safe, and structured environments with low control by the learner that help him/her to reach easily-achievable goals.</b>	-102	89	9
<b>Q62. I prefer setting my personal learning goals, even they differ from those of other participants.</b>	-74	211	14
<b>q63. I do not regard formal educational activities (e.g. in schools; in universities) as necessarily positive or enjoyable learning activities.</b>	320	329	21
<b>q64. I prefer learning through working with others toward shared goals.</b>	-269	34	5
<b>q65. I prefer learning through benchmarking (information about best practices) and comparison with others' performance.</b>	-245	123	9

**Table 4.18** *Continued*

<b>q66. I prefer learning through social relationships or networking without any kind of discrimination.</b>	<b>-564</b>	<b>464</b>	<b>29</b>
<b>q67. I prefer learning through use of technology.</b>	<b>187</b>	<b>168</b>	<b>6</b>
<b>q68. I prefer learning either in face-to-face interaction or via internet.</b>	87	654	31
<b>q69. I prefer learning through critical thinking activities.</b>	<b>645</b>	<b>565</b>	<b>42</b>
<b>q70. I prefer learning when there is a pressing need for it.</b>	-52	210	10

Thus, the sixth factor-axis  $e_6$  is the composite variable the construction of which is based on items q69, q59, q66, q63, q67, q58 and can be named *The orientation of trainee (learner) towards lifelong learning*.

#### **Interpretation of the seventh factorial axis $e_7$**

The seventh factorial axis  $e_7$ , with eigenvalue 4,408, interprets 6.09% of the total dispersion of the data. The seventh axis  $e_7$  is constructed and interpreted on the basis of items q71, q75, q76, q74, q72 (Table 4.19) in order of significance.

Factorial axis  $e_7$  is comprised of statements related to: Whether respondents make an active effort to participate, by expressing their feelings when they take part in collaborative learning, in which discussion, active learning or role playing are selected as learning methods (q71) (Cor=301, Ctr=21); whether they hide their real emotions when they are required to share them, during a learning activity in which they are talking about personal experience (q75) (Cor=287, Ctr=20); whether they deny expressing their emotions when they take part in learning activities, based on active learning or simulation of real events (q76) (Cor=265, Ctr=20); whether they compromise authenticity by expressing feelings that they do not really have (q74) (Cor=241, Ctr=17); and, finally, whether they make an effort to show their emotions when actively participating in learning activities (q72) (Cor=213, Ctr=16).

Items q73, q77, q78, q79, q80, with low values of correlation and contribution (under 200 and 13 respectively), also contribute to the construction of the seventh factorial axis. However, these items do not satisfy criterion 2 or criterion 3 nor both of them simultaneously (Anastasiadou, 2006), they must be removed from the analysis.

In particular, the omitted items deal with: To what extent respondents make an effort to understand the emotions of other participants, in order to enjoy collaborative learning (q73) (Cor=109, Ctr=6); whether the provision of qualitative LL requires certification (q77) (Cor=21, Ctr=0); whether human capital is related to self-directed learning, but not necessarily organizational learning (q78) (Cor=112, Ctr=11); whether collaborative learning is developed to a high extent when it is supported by computer and via the internet (q79) (Cor=31, Ctr=5); and whether they believe that knowledge acquisition should be included in a LL strategy (q80) (Cor=198, Ctr=10).

**Table 4.19** Pilot study: Variables referring to Emotional identity of the trainee

	#F1	COR	CTR
<b>q71. I really make an active effort to participate, by expressing my feelings when I take part in collaborative learning, in which discussion, active learning or role playing are selected as learning methods.</b>	721	301	21
<b>q72. I really make an effort to show my emotions when actively participating in learning activities.</b>	-289	213	16
<b>q73. I make an effort to understand the emotions of other participants, in order to enjoy collaborative learning.</b>	21	109	5
<b>q74. I compromise authenticity by expressing feelings that I do not really have.</b>	-195	241	17
<b>q75. I hide my real emotions when I am required to share them, during a learning activity in which I am talking about personal experience.</b>	536	287	20
<b>q76. I avoid expressing my emotions when I take part in learning activities, based on active learning or simulation of real events.</b>	407	265	20
<b>q77. The provision of qualitative lifelong learning requires certification.</b>	72	21	0
<b>q78. Human capital is related to self-directed learning, but not necessarily organizational learning.</b>	-324	112	11
<b>q79. Collaborative learning is developed to a high extent when it is supported by computer and via the internet.</b>	-32	31	5
<b>q80. Knowledge acquisition should be included in a lifelong learning strategy.</b>	321	198	10

As a result, the seventh factorial axis  $e_7$  is the composite variable which owes its construction to items q71, q75, q76, q74, q72 and can be named *Emotional identity of the trainee (learner)*.

Therefore, after the reliability control by implementation of five models, including Model Alfa (Cronbach's  $\alpha$ ), Model Spit-Half, Model Guttman, Model Parallel and Model Strict Parallel (Giossi, 2012) and the validity of the factorial structure of the research scale of the pilot study of 80-items questionnaire, a new 42-items questionnaire was formulated for the use of the main research.

#### **4.5 Main research: Reliability of the LLEHUREDE Scale**

In order to investigate the impact of LL and its methods on HRD, after the fulfillment of the pilot study, a 42-item questionnaire was designed and named LLEHUREDE Scale (Appendix A, Table A.1).

Concerning the application of LLEHUREDE Scale in the main research, the data entered into the analysis was measured on an equal-spaced 5-point Likert scale, ranging from 1-Strongly Disagree to 5-Strongly Agree. The sample was randomly chosen and all measurements were independent.

Every pair of variables had a bivariate normality. Each item was linearly correlated with the total amount of all items, which indicate the additive character of the designed scale (additive model). In addition, statistical errors were not correlated among the different variables on the scale. Reliability was examined through the application of the Model Alfa (Cronbach's  $\alpha$ ), which measures the reliability of a measurement scale, particularly its internal consistency, is based on the average of all variables' correlations per twos; and is independent of the order of items.

Examination of the reliability of the main research instrument was carried out twice, firstly for managers and employers and secondly for employees.

#### 4.5.1 Part A: Managers and employers

##### 4.5.1.1 Reliability test of the scale

Descriptive statistics was used to examine central tendency (location) of the data by the mean and dispersion (variability) of the data by the variance and its square root, the standard deviation.

Table 4.20 indicates the means and standard deviations of all cases included in the reliability analysis of the scale of 42 items, applied on 150 questionnaires representing managers and employers of the sample population.

**Table 4.20** Main research: Mean and standard deviation of the variables (Item Statistics) of Part A: Managers and employers

	Mean	Std. Deviation	N
q1	3,24	1,394	150
q2	2,63	1,108	150
q3	3,96	,858	150
q4	3,91	,810	150
q5	3,75	,861	150
q6	3,84	,828	150
q7	4,00	,934	150
q8	4,06	,779	150
q9	4,43	,572	150
q10	3,93	,748	150
q11	3,55	,848	150
q12	3,95	,727	150
q13	3,97	,794	150
q14	4,13	,682	150
q15	3,38	,960	150
q16	2,03	,893	150
q17	3,80	,882	150
q18	3,82	,905	150
q19	3,99	,781	150
q20	3,80	,777	150
q21	4,14	,844	150
q22	3,87	,730	150
q23	3,84	,860	150

**Table 4.20** *Continued*

q24	3,79	,762	150
q25	3,93	,743	150
q26	3,30	,968	150
q27	3,58	,846	150
q28	3,73	,851	150
q29	3,33	,895	150
q30	3,24	,953	150
q31	3,45	,901	150
q32	3,60	1,074	150
q33	3,19	1,064	150
q34	3,05	1,048	150
q35	3,69	,926	150
q36	3,21	,924	150
q37	4,05	,722	150
q38	3,85	,781	150
q39	3,85	,754	150
q40	2,19	,865	150
q41	3,90	,896	150
q42	2,30	,939	150

The following Table 4.21 shows the Summary Item Statistics. Specifically, the items have a mean value with a width which fluctuates from 2,033 to 4,433 units. Thus, the spread of mean-values (range) measuring the attitudes of the managers and employers (or shareholders) reaches to 2,400 units.

**Table 4.21** Main research: Summary Item Statistics of Part A: Managers and employers

	Mean	Minimum	Maximum	Range	Maximum/ Minimum	Variance	N of Items
Item Means	3,602	2,033	4,433	2,400	2,180	,281	42

Table 4.22 (Case Processing Summary) provides the information from all 150 questionnaires distributed to the 150 respondents included in the research data. This means

that 150 managers, employers (or shareholders) successfully completed the questionnaire and, thus, 150 valid cases were included and none were excluded from the scale.

**Table 4.22** Main research: Case Processing Summary of Part A: Managers and employers

		N	%
Cases	Valid	150	100,0
	Excluded <sup>a</sup>	0	,0
	Total	150	100,0

a. Listwise deletion based on all variables in the procedure.

Table 4.23 (Reliability Statistics) shows that the value of the coefficient  $\alpha$  of Cronbach on the main research scale is  $0.859=85.9\%$ . This surpasses  $80\%$ , which is extremely good value of the internal consistency of the notional construct of the examined scale (Anastasiadou, 2011b; Anastasiadou & Anastasiadis, 2011a). If we consider the release of units, i.e. the standard values of variables, then the coefficient  $\alpha$  of Cronbach has a value of  $\alpha=0.869$ , i.e. it demonstrates a very slight increase. Thus, if we increase the number of items-variables Cronbach  $\alpha$  have the value of  $0.869$ .

**Table 4.23** Main research: Reliability Statistics of Part A: Managers and employers

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
	,859	

Table 4.24 (Scale Statistics) provides us with the scores in relation to the entire scale. The mean scale was of the order of  $151.29\%$  and the standard deviation at a level (class) of  $14.185$  units.

**Table 4.24** Main research: Scale Statistics of Part A: Managers and employers

Mean	Variance	Std. Deviation	N of Items
151,29	201,226	14,185	42

Table 4.25 (Items-Total Statistics) provides important information, concerning mean and variance, analyzed as follows:

**Table 4.25** Main research: Item-Total Statistics of Part A: Managers and employers

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
q1	148,05	192,394	,178	,862
q2	148,65	192,147	,256	,858
q3	147,33	192,141	,351	,856
q4	147,37	192,101	,377	,855
q5	147,54	195,941	,189	,859
q6	147,45	196,839	,159	,859
q7	147,29	192,958	,285	,857
q8	147,23	192,687	,367	,855
q9	146,85	195,374	,345	,856
q10	147,35	194,351	,303	,857
q11	147,74	192,328	,348	,856
q12	147,33	196,559	,203	,858
q13	147,31	190,861	,444	,854
q14	147,15	193,674	,373	,856
q15	147,91	195,750	,170	,860
q16	149,25	205,143	-,184	,867
q17	147,49	190,198	,421	,854
q18	147,47	189,351	,444	,854
q19	147,29	188,678	,556	,852
q20	147,49	188,547	,566	,852
q21	147,15	187,589	,559	,851
q22	147,42	188,755	,595	,852
q23	147,45	185,873	,623	,850
q24	147,49	188,050	,602	,851
q25	147,36	187,682	,638	,851
q26	147,99	184,027	,619	,849
q27	147,71	187,725	,552	,852
q28	147,56	188,020	,535	,852
q29	147,95	189,307	,451	,854

**Table 4.25** *Continued*

q30	148,05	185,602	,567	,851
q31	147,84	187,249	,534	,852
q32	147,69	190,082	,337	,856
q33	148,10	193,715	,215	,859
q34	148,23	194,932	,178	,860
q35	147,59	192,780	,295	,857
q36	148,07	193,625	,262	,858
q37	147,23	196,059	,230	,858
q38	147,43	194,462	,283	,857
q39	147,43	194,261	,304	,857
q40	149,09	203,709	-,131	,865
q41	147,39	195,407	,200	,859
q42	148,99	204,577	-,158	,867

In particular, the second column of this specific LLEHUREDE Scale presents the following mean values: 148,05, 148,65, 147,33, 147,37, 147,54, 147,45, 147,29, 147,23, 146,85, 147,35, 147,74, 147,33, 147,31, 147,15, 147,91, 149,25, 147,49, 147,47, 147,29, 147,49, 147,15, 147,42, 147,45, 147,49, 147,36, 147,99, 147,71, 147,56, 147,95, 148,05, 147,84, 147,69, 148,10, 148,23, 147,59, 148,07, 147,23, 147,43, 147,43, 149,09, 147,39, 148,99 units. These mean values present a decrease, and in particular: 3,24, 2,24, 3,86, 3,92, 3,75, 3,84, 4, 4,06, 4,44, 3,94, 3,55, 3,96, 3,98, 4,14, 3,38, 2,04, 3,8, 3,82, 4, 3,8, 4,14, 3,87, 3,84, 3,8, 3,93, 3,3, 3,58, 3,73, 3,34, 3,24, 3,45, 3,6, 3,19, 3,06, 3,7, 3,12, 4,06, 3,86, 3,86, 2,2, 3,9, 2,3 units in case the following items q1, q2, q3 q4, q5, q6 q7, q8, q9, q10, q11, q12, q13, q14, q15, q16, q17, q18, q19, q20, q21, q22, q23, q24, q25, q26, q27, q28, q29, q30, q31, q32, q33, q34, q35, q36, q37, q38, q39, q40, q41, q42 are removed from the scale. The numbers in the fourth column, i.e. 0,178, 0,256, 0,351, 0,377, 0,189, 0,159, 0,285, 0,367, 0,345, 0,303, 0,348, 0,203, 0,444, 0,373, 0,170, -,0,184, 0,421, 0,444, 0,556, 0,566, 0,566, 0,559, 0,595, 0,623, 0,602, 0,638, 0,619, 0,552, 0,535, 0,535, 0,451, 0,567, 0,534, 0,337, 0,215, 0,178, 0,295, 0,262, 0,230, 0,283, 0,304, -,0,131, 0,200, -,0,158, show the Pearson coefficient of correlation at a class of 17.8%, 25.6% 35.1%, 37.7%, 18.9%, 15.9%, 28.5%, 36.7%, 34.5%, 30.3%, 34.8%, 20.3%, 44.4%,

37.3%, 17.0%, -18.4%, 42.1%, 44.4%, 55.6%, 56.6%, 56.65, 55.9%, 59.5%, 62.3%, 60.2%, 63.8%, 61.9%, 55.2%, 53.5%, 53.5%, 45.1%, 56.7%, 53.4%, 33.75, 215%, 17.8%, 29.5%, 26.2%, 23%, 28.3%, 30.4% -13.1%, 20%, -15.8% with the sum of the rest of the variables remaining in the scale while items q1, q2, q3 q4, q5, q6 q7, q8, q9, q10, q11, q12, q13, q14, q15, q16, q17, q18, q19, q20, q21, q22, q23, q24, q25, q26, q27, q28, q29, q30, q31, q32, q33, q34, q35, q36, q37, q38, q39, q40, q41, q42 disappear, each one separately, from the scale. Thus, it is evident that the coefficient of correlation for all the variables (items) has values ranging from very good to high, and thus, variables could not be removed from the scale.

Finally, if items q16 και q42 in the last column are removed, the reliability of the Cronbach  $\alpha$  scale will be increased slightly and thus, it will have a value of 0.867 rather than 0.859. Thus, omitting items q16 and q42 does not confer significant benefit, and as a result it was decided to remain at the scale.

#### 4.5.1.2 Tukey's Test for Nonadditivity

The Tukey's Test for Nonadditivity evaluates the zero hypothesis  $H_0$  or, in other words, whether the scale shows additivity. Table 4.26, presenting Tukey's Test for Nonadditivity (ANOVA with Tukey's Test for Nonadditivity), indicates a relatively adequate level of statistical significance and therefore,  $H_0$  is characterized as acceptable and thus, the model has additivity.

**Table 4.26** Main research: ANOVA with Tukey's Test for Nonadditivity of Part A: Managers and employers

		Sum of Squares	df	Mean Square	F	Sig	
Between People		713,873	149	4,791			
Within People	Between Items	1725,140	41	42,077	62,324	,000	
	Residual	Nonadditivity	34,713 <sup>a</sup>	1	34,713	51,844	,000
		Balance	4089,648	6108	,670		
		Total	4124,360	6109	,675		
Total		5849,500	6150	,951			
Total		6563,373	6299	1,042			

Grand Mean = 3.60

a. Tukey's estimate of power to which observations must be raised to achieve additivity = -0.518.

Tests of significance, Hotelling's T-Squared Test and F Test were carried out for the reliability control of the LLEHUREDE Scale as shown in Table 4.27 and Table 4.28 respectively.

**Table 4.27** Main research: Hotelling's T-Squared Test of Part A: Managers and employers

Hotelling's T-Squared	F	df1	df2	Sig
1845,329	32,925	41	109	,000

**Table 4.28** Main research: Intraclass Correlation Coefficient of Part A: Managers and employers

	Intraclass Correlation <sup>a</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	,127 <sup>b</sup>	,101	,161	7,097	149	6109	,000
Average Measures	,859 <sup>c</sup>	,825	,890	7,097	149	6109	,000

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. Type intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

b. The estimator is the same, whether the interaction effect is present or not.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

The reliability control was followed by the validity of the LLEHUREDE Scale through different tests, which were selected as suitable to the sample of the present research.

#### 4.5.1.3 Sample sufficiency test and sphericity test

Table 4.29 provides information about the two hypotheses of factor analysis and shows that sample sufficiency index KMO (Kaiser-Meyer-Olkin), comparing the sizes of the observed correlation coefficients with the sizes of the partial correlation

coefficients for the sum of analysis variables, is 76.6%, and thus, is reliable as it surpasses 60% significantly. In addition, supposition test of sphericity using the Bartlett test ( $H_0$ : All correlation coefficients are not quite far from zero) is rejected on the level of statistical significance  $p < 0.0005$ ,  $df = 861$ , for Approx. Chi-Square = 2895,266. Consequently, the coefficients are not all zero, thus the second approach (acceptance) of factor analysis is satisfied. As a result, both acceptances for conducting factor analysis are satisfied and we may proceed with it.

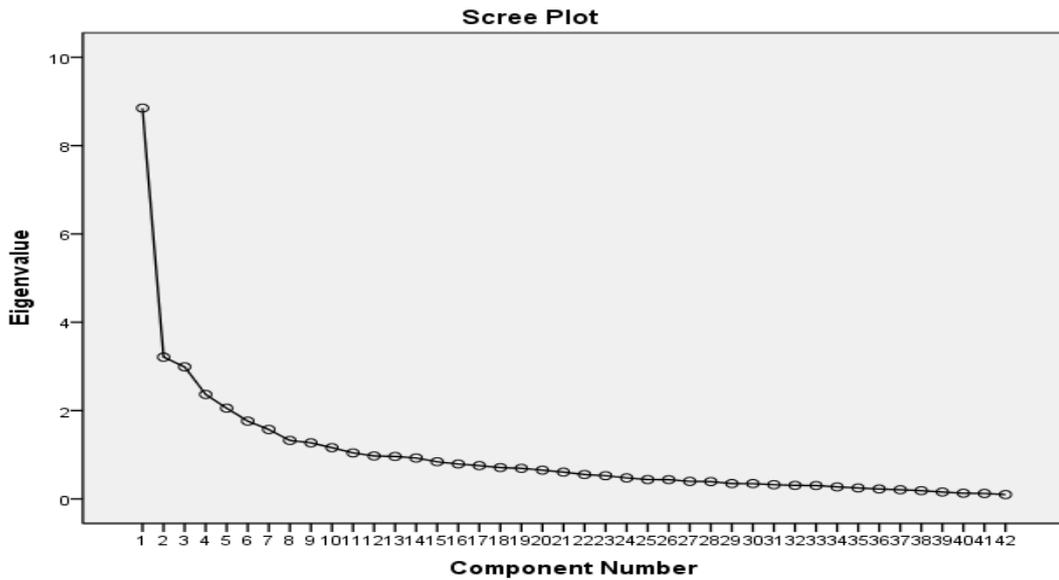
**Table 4.29** Main research: KMO and Bartlett's Test of Part A: Managers and employers

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,766
Bartlett's Test of Sphericity	Approx. Chi-Square	2895,266
	df	861
	Sig.	,000

Through this analysis, seven uncorrelated factors were revealed, explaining 54.301% of the total inertia of the data,. These are described separately later. The coefficient of internal consistency (reliability of Crobach's  $\alpha$ ) is statistically significant and is equal to 85.9% of the total number of items. Hence, the 42-item scale was considered to be reliable in terms of internal consistency of the notional construct, which was formulated for the measurement of the impact of LL on HRD.

### **The Graph Scree Plot A**

Figure 4.1, presenting a graphic interpretation of the eigenvalues, is helpful in determining the exact number of essential factorial axes.



**Figure 4.1** The Scree Plot A

This graph presents a noticeable break until the seventh factor, after which the eigenvalues' curve follows an almost linear path. Taking into consideration the eigenvalues, which are all over 1 and in particular 8,850, 3,211, 2,991, 2,366, 2,054, 1,762, 1,572 for the 1<sup>o</sup>, 2<sup>o</sup>, 3<sup>o</sup>, 4<sup>o</sup>, 5<sup>o</sup>, 6<sup>o</sup> and 7<sup>o</sup> factor respectively, it may be concluded that they interpret the data in a satisfactory way.

Finally, from the communalities for each (question) item presented in Table 4.30 we may ascertain that the majority of the items have a value higher than 0.40, which indicates that the quality of the measurements of the seven factors is satisfactory.

**Table 4.30** Main research: Communalities of Part A: Managers and employers

	Initial	Extraction
q1	1,000	,519
q2	1,000	,532
q3	1,000	,717
q4	1,000	,643
q5	1,000	,483
q6	1,000	,479
q7	1,000	,382
q8	1,000	,526
q9	1,000	,503
q10	1,000	,470

**Table 4.30** *Continued*

q11	1,000	,512
q12	1,000	,510
q13	1,000	,500
q14	1,000	,475
q15	1,000	,272
q16	1,000	,406
q17	1,000	,407
q18	1,000	,628
q19	1,000	,669
q20	1,000	,678
q21	1,000	,725
q22	1,000	,612
q23	1,000	,707
q24	1,000	,604
q25	1,000	,619
q26	1,000	,566
q27	1,000	,549
q28	1,000	,659
q29	1,000	,582
q30	1,000	,708
q31	1,000	,717
q32	1,000	,633
q33	1,000	,437
q34	1,000	,427
q35	1,000	,286
q36	1,000	,478
q37	1,000	,518
q38	1,000	,676
q39	1,000	,670
q40	1,000	,477
q41	1,000	,257
q42	1,000	,585

Extraction Method: Principal Component Analysis.

In the following Table 4.31 (Total Variance Explained), where total variance is explained the seven factors and their loadings are presented in detail.

**Table 4.31** Main research: Total Variance Explained of Part A: Managers and employers

	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
1	8,850	21,071	21,071	8,850	21,071	21,071	6,093	14,508	14,508
2	3,211	7,646	28,716	3,211	7,646	28,716	3,462	8,242	22,750
3	2,991	7,122	35,839	2,991	7,122	35,839	2,992	7,123	29,874
4	2,366	5,634	41,472	2,366	5,634	41,472	2,730	6,501	36,374
5	2,054	4,891	46,363	2,054	4,891	46,363	2,549	6,069	42,444
6	1,762	4,195	50,558	1,762	4,195	50,558	2,536	6,038	48,482
7	1,572	3,742	54,301	1,572	3,742	54,301	2,444	5,819	54,301
8	1,324	3,152	57,452						
9	1,269	3,022	60,475						
10	1,160	2,762	63,237						
11	1,042	2,480	65,718						
12	,973	2,317	68,034						
13	,962	2,290	70,324						
14	,926	2,205	72,529						
15	,842	2,004	74,533						
16	,790	1,882	76,414						
17	,753	1,793	78,207						
18	,710	1,689	79,897						
19	,693	1,650	81,547						
20	,651	1,551	83,098						
21	,607	1,445	84,542						
22	,552	1,315	85,858						
23	,526	1,253	87,111						
24	,475	1,132	88,242						
25	,438	1,043	89,286						
26	,436	1,038	90,323						
27	,397	,945	91,268						
28	,393	,935	92,203						
29	,348	,829	93,032						
30	,346	,825	93,857						
31	,322	,767	94,624						
32	,307	,730	95,355						
33	,303	,722	96,076						
34	,272	,648	96,724						
35	,248	,591	97,315						
36	,225	,536	97,851						
37	,208	,494	98,345						
38	,187	,445	98,790						
39	,156	,371	99,161						
40	,129	,308	99,470						
41	,124	,295	99,764						
42	,099	,236	100,000						

Extraction Method: Principal Component Analysis.

More specifically, based on managers and employers opinions and the factorial analysis of the first axis-factor F1, with eigenvalue 8,850, it is evident that this axis-factor explains, after the varimax rotation, 14.508% of total dispersion (as shown in the above Table 4.31 (Total Variance Explained).

Table 4.32 (Rotated Component Matrix) includes mainly questions q20, q21, q22, q23, q24, q25, with high loadings (0.795, 0.822, 0.617, 0.728, 0.702, 0.670 respectively). Thus, the derived axis was entitled '*Corporate strategy, value system and ethical perceptions*'.

The second factor, which has eigenvalue 3,211 and explains 8.242% of total dispersion (Table 4.31) (Total Variance Explained), includes questions q26, q27, q28, q29, q30, q31 especially with high loadings (0.515, 0.571, 0.690, 0.690, 0.736, 0.777) (Table 4.32) (Rotated Component Matrix). This axis was entitled '*Evaluation policy of the participation in educational programmes*'.

The third factor F3, which has eigenvalue 2,991 and explains 7.123% of the total dispersion (Table 4.31) (Total Variance Explained) includes questions q32, q33, q34, q35, q36, q37 especially with high loadings (0.769, 0.649, 0.597, 0.697, 0.647, 0.466) (Table 4.32) (Rotated Component Matrix). This axis was entitled '*Learner orientation towards lifelong learning*'.

The fourth factor F4, which has eigenvalue 2,366 and explains 6.501% of total dispersion (Table 4.31) (Total Variance Explained), includes questions q10, q11, q12, q13, q14, q19 certainly with high loadings (0.510, 0.672, 0.697, 0.607, 0.456) (Table 4.32) (Rotated Component Matrix). This axis was entitled '*Culture of lifelong learning*'.

The fifth factor, which has eigenvalue 2,054 and explains 6.069% of total dispersion (Table 4.31) (Total Variance Explained), includes questions q1, q2, q3, q4, q5, q6 especially with high loadings (0.619, 0.599, 0.750, 0.670, 0.522, 0.519) (Table 4.32) (Rotated Component Matrix). This axis was entitled '*Awareness of lifelong learning*'.

The sixth factor F6, which has eigenvalue 1,762 and explains 6.038% of the total dispersion (Table 4.31) (Total Variance Explained), includes questions q7, q8, q9, q15, q16, q17, q18 especially with high loadings (0.489, 0.491, 0.538, -0.369, 0.555, 0.738) (Table 4.32) (Rotated Component Matrix). This axis was entitled '*Attitudes towards educational, vocational and development policies*'.

The seventh factor F7, which has eigenvalue 1,572 and explains 5.819% of total dispersion (Table 4.31) (Total Variance Explained), includes questions q38, q39, q40, q41, q42 certainly with high loadings (0.686, 0.741, -0.674, 0.574, -0.747) (Table 4.32) (Rotated Component Matrix). This axis was entitled '*Emotional identity of the learner in relation to lifelong learning*'.

**Table 4.32** Main research: Rotated Component Matrix<sup>a</sup> of Part A: Managers and employers

	Component						
	1	2	3	4	5	6	7
q21	,822						
q20	,795						
q23	,728	,380					
q24	,702						
q25	,670						
q22	,617			,356			
q26	,313	,515	,415				
q31	,302	,777					
q30		,736					
q28	,407	,690					
q29		,690					
q27		,571		,319			
q32			,769				
q33			,649				
q36			,647				
q34			,597				
q37			,466		-,304	,433	
q35							
q12				,697			
q11				,672			
q13				,607			
q10				,510		,364	
q14				,456		,438	
q19							
q3					,750		

**Table 4.32** *Continued*

q4					,670		
q1					,619		
q2					,599		
q5					,522		
q6			,391		,519		
q18						,738	
q17						,555	
q9	,396					,538	
q8	,345					,491	
q7						,489	
q15							
q16	-,312					-,369	
q42							-,747
q39							,741
q38				,327			,686
q40							-,674
q41							,574

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 13 iterations.

Therefore, LLEHUREDE Scale of the main research was constituted by seven axes.

## 4.5.2 Part B: Employees

### 4.5.2.1 Reliability test of the scale

Besides the Part A of the main research sample concerning 150 managers and employers, reliability control of the LLEHUREDE Scale was also examined through the sample of 271 employees constituting Part B of the main research sample. Through descriptive statistics central tendency (location) of the data by the mean and dispersion (variability) of the data by the variance and its square root, the standard deviation were examined.

Table 4.33 indicates the means and standard deviations and the total number of cases, included in the reliability analysis of Part B of the sample concerning employees.

**Table 4.33** Main research: Mean and standard deviation of the variables (Item Statistics) of Part B: Employees

	Mean	Std. Deviation	N
q1	2,94	1,344	271
q2	2,66	1,130	271
q3	3,85	,829	271
q4	3,77	,825	271
q5	3,63	,909	271
q6	3,78	,776	271
q7	3,94	,987	271
q8	3,90	,891	271
q9	4,24	,637	271
q10	3,86	,813	271
q11	3,70	3,188	271
q12	4,00	,805	271
q13	3,88	,786	271
q14	4,01	,733	271
q15	3,37	1,144	271
q16	2,45	1,060	271
q17	3,41	,973	271
q18	3,49	,981	271
q19	3,75	,786	271
q20	3,54	,889	271
q21	3,89	,845	271
q22	3,59	,801	271
q23	3,65	,864	271
q24	3,52	,910	271
q25	3,67	,834	271
q26	3,21	1,004	271
q27	3,30	,983	271
q28	3,45	,937	271
q29	3,25	,896	271
q30	3,10	,918	271
q31	3,27	,937	271
q32	3,85	2,591	271

**Table 4.33** *Continued*

q33	3,31	,996	271
q34	3,34	1,017	271
q35	3,61	,997	271
q36	3,44	,933	271
q37	3,99	,683	271
q38	3,92	,728	271
q39	3,84	,808	271
q40	2,42	,981	271
q41	3,72	1,002	271
q42	2,45	,949	271

In table 4.34 (Summary Item Statistics) and in particular the second column, we observe that the variables have a mean value that fluctuates from 2,421 to 4,240 units. Thus, the spread of mean values (range), measuring the employees' attitudes, reaches 1,819.

**Table 4.34** Main research: Summary Item Statistics of Part B: Employees

	Mean	Minimum	Maximum	Range	Max/Minimum	Variance	NofItems
Item Means	3,523	2,421	4,240	1,819	1,752	,191	42
Item Variances	1,204	,405	10,164	9,759	25,084	2,889	42
Inter-Item Covariances	,113	-,397	,753	1,150	-1,894	,021	42
Inter-Item Correlations	,129	-,307	,755	1,062	-2,456	,029	42

Table 4.35 (Case Processing Summary), verifies that all 271 questionnaires distributed to 271 employees in different enterprises and organizations, were successfully completed. Thus, 271 valid cases were included in the research scale.

**Table 4.35** Main research: Case Processing Summary of Part B: Employees

		N	%
Cases	Valid	271	100,0
	Excluded <sup>a</sup>	0	,0
	Total	271	100,0
a. Listwise deletion based on all variables in the procedure.			

Table 4.36 (Reliability statistics) demonstrates that the value of coefficient  $\alpha$  of Cronbach on the research scale is 0.813=81.38%. This value surpasses 80% percent, and thus, is an extremely good validation of internal consistency of the notional construct of the examined scale (Anastasiadou, 2011b). If we consider the release of units, i.e. the standard values of variables, then coefficient  $\alpha$  of Cronbach has a value of  $\alpha=0.861$ , which indicates a very slight increase; thus, if we increase the number of variables, Cronbach  $\alpha$  will have a value of 0.861.

**Table 4.36** Main research: Reliability Statistics of Part B: Employees

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,813	,861	42

Table 4.37 (Scale Statistics) provides us with the scores, related to the entire scale, the mean value of which was of the order of 147.96 % and its standard deviation 15,655 units.

**Table 4.37** Main research: Scale Statistics of Part B: Employees

Mean	Variance	Std. Deviation	N of Items
147,96	245,069	15,655	42

Table 4.38 (Item-Total Statistics) indicates a good positive correlation with the rest of the variables and thus, the item cannot be removed from the scale.

**Table 4.38** Main research: Item-Total Statistics of Part B: Employees

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q1	145,02	233,925	,227	,413	,811
q2	145,30	233,425	,300	,441	,809
q3	144,11	237,716	,261	,641	,810
q4	144,19	237,279	,280	,646	,810
q5	144,33	236,666	,271	,352	,810
q6	144,18	239,549	,205	,315	,811
q7	144,02	232,314	,392	,389	,806
q8	144,06	235,559	,319	,431	,808
q9	143,72	240,773	,197	,357	,812
q10	144,10	236,446	,318	,346	,809
q11	144,25	227,946	,172	,114	,843
q12	143,96	236,206	,332	,394	,808
q13	144,08	237,260	,297	,453	,809
q14	143,95	241,064	,152	,427	,812
q15	144,59	234,132	,275	,311	,809
q16	145,51	245,325	-,142	,454	,818
q17	144,55	229,627	,491	,549	,804
q18	144,46	228,309	,533	,611	,802
q19	144,21	231,759	,530	,640	,804
q20	144,42	228,111	,602	,677	,801
q21	144,07	231,502	,500	,536	,804
q22	144,37	230,255	,583	,662	,803
q23	144,31	228,785	,594	,740	,802
q24	144,44	227,440	,612	,652	,801
q25	144,29	230,132	,563	,681	,803
q26	144,75	226,802	,570	,533	,801
q27	144,66	227,440	,562	,595	,802
q28	144,51	229,414	,521	,634	,803
q29	144,71	230,074	,522	,659	,803

**Table 4.38** *Continued*

q30	144,86	228,104	,581	,706	,802
q31	144,69	226,947	,611	,711	,801
q32	144,11	224,062	,184	,139	,824
q33	144,65	239,132	,160	,448	,813
q34	144,62	238,748	,168	,489	,812
q35	144,35	240,443	,117	,229	,814
q36	144,52	241,036	,109	,352	,814
q37	143,97	241,729	,135	,316	,813
q38	144,04	241,813	,120	,461	,813
q39	144,12	240,630	,151	,472	,812
q40	145,54	241,820	,175	,363	,815
q41	144,24	240,496	,115	,169	,814
q42	145,51	243,110	,136	,484	,816

The second column of the specific measurement scale LLEHUREDE presents the following mean values: 145,02, 145,30, 144,11, 144,19, 144,33, 144,18, 144,02, 144,06, 143,72, 144,10, 144,25, 143,96, 144,08, 143,95, 144,59, 145,51, 144,55, 144,46, 144,21, 144,42, 144,07, 144,37, 144,31, 144,44, 144,29, 144,75, 144,66, 144,51, 144,71, 144,86, 144,69, 144,11, 144,65, 144,62, 144,35, 144,52, 143,97, 144,04, 144,12, 145,54, 144,24, 145,51 units. These mean values present a decrease, as follows: 2,94, 2,66, 3,85, 3,77, 3,66, 3,76, 3,90, 4,24, 3,86, 3,71, 4, 3,88, 4,01, 3,77, 2,45, 3,41, 3,5, 3,75, 3,54, 3,89, 3,59, 3,65, 3,52, 3,77, 3,21, 3,3, 3,45, 3,25, 3,10, 3,27, 3,85, 3,31, 3,34, 3,61, 3,44, 4,02, 3,92, 3,84, 2,42, 3,72, 2,45 units in case the specific items q1, q2, q3 q4, q5, q6 q7, q8, q9, q10, q11, q12, q13, q14, q15, q16, q17, q18, q19, q20, q21, q22, q23, q24, q25, q26, q27, q28, q29, q30, q31, q32, q33, q34, q35, q36, q37, q38, q39, q40, q41, q42 are removed from the scale. The numbers in the fourth column 0.227, 0.300, 0.261, 0.280, 0.271, 0.205, 0.392, 0.319, 0.197, 0.318, 0.172, 0.332, 0.297, 0.152, 0.275, -0.142, 0.491, 0.533, 0.530, 0.602, 0.500, 0.583, 0.594, 0.612, 0.563, 0.570, 0.562, 0.521, 0.522, 0.581, 0.611, 0.184, 0.160, 0.168, 0.117, 0.109, 0.135, 0.120, 0.151, 0.175, 0.115, 0.136 indicate that the specific items q1, q2, q3 q4, q5, q6 q7, q8, q9, q10, q11, q12, q13, q14, q15, q16, q17, q18, q19, q20, q21, q22, q23, q24, q25, q26, q27, q28, q29, q30, q31, q32, q33, q34, q35, q36, q37, q38, q39, q40, q41, q42 present the Pearson coefficient of

correlation of the order of 22.7%, 30%, 26.1%, 28%, 27.1%, 20.5%, 39.2%, 31.9%, 19.7%, 31.8%, 17.2%, 33.2%, 29.7% 15.2%, 27.5%, -14.2%, 49.1%, 53.3%, 53%, 60.2, 50%, 58.3%, 59.4%, 61.2%, 56.3%, 57%, 56.2%, 52.1%, 52.2%, 58.1%, 61.1%, 18.45, 16%, 16.8%, 11.7%, 10.9%, 13.5%, 12%, 15.1%, 17.5%, 11.5%, 13.6% when the sum of the rest of the variables remains to scale if the items q1, q2, q3 q4, q5, q6 q7, q8, q9, q10, q11, q12, q13, q14, q15, q16, q17, q18, q19, q20, q21, q22, q23, q24, q25, q26, q27, q28, q29, q30, q31, q32, q33, q34, q35, q36, q37, q38, q39, q40, q41, q42 are removed, each separately, from the scale. Therefore, it is evident that the coefficient of correlation for all variables attains values from good to high and, as a result, no variables were removed from the scale.

In addition, from the last column it is evident that when item q11 is removed from the scale, the reliability of Crobach  $\alpha$  has a value of 0.843 instead of 0.813, i.e. a minimal increase. Consequently, as the removal of q11 does not confer additional benefit, it was decided to retain it in the scale.

#### 4.5.2.2 Tukey's Test for Nonadditivity

The Tukey's Test for Nonadditivity (Table 4.39) evaluates the zero hypothesis  $H_0$ , i.e. whether the scale presents additivity. This table ANOVA with Tukey's Test for Nonadditivity indicates an adequate level of statistical significance and therefore  $H_0$  is regarded as acceptable and thus, the model has additivity.

**Table 4.39** Main research: ANOVA with Tukey's Test for Nonadditivity of Part B: Employees

		Sum of Squares	df	Mean Square	F	Sig	
Between People		1575,442	270	5,835			
Within People	Between Items	2127,457	41	51,889	47,572	,000	
	Residual	Nonadditivity	,804 <sup>a</sup>	1	,804	,737	,391
		Balance	12073,857	11069	1,091		
		Total	12074,662	11070	1,091		
Total		14202,119	11111	1,278			
Total		15777,561	11381	1,386			

Grand Mean = 3,52

a. Tukey's estimate of power to which observations must be raised to achieve additivity =0.816.

In addition, two different tests, Hotelling's T-Squared test and F test were also carried out for the reliability control of the main research scale, which are presented in detail below.

**Table 4.40** Main research: Hotelling's T-Squared Test of Part B: Employees

Hotelling's T-Squared	F	df1	df2	Sig
1413,688	29,372	41	230	,000

**Test 4.41** Main research: Intraclass Correlation Coefficient of Part B: Employees

	Intraclass Correlation <sup>a</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	,094 <sup>b</sup>	,078	,114	5,349	270	11070	,000
Average Measures	,813 <sup>c</sup>	,780	,844	5,349	270	11070	,000

Two-way mixed effects model where people effects are random and measures effects are fixed.

- a. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.
- b. The estimator is the same, whether the interaction effect is present or not.
- c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

After the fulfilment of the reliability examination, validity examination follows through different ways.

#### 4.5.2.3 Sample sufficiency test and sphericity test

Table 4.42 provides information about the two hypotheses of factor analysis. It demonstrates that sample sufficiency index KMO (Kaiser-Meyer-Olkin), comparing the sizes of the observed correlation coefficients with the sizes of the partial correlation coefficients for the sum of analysis variables, is 81.7%, and thus is reliable as it surpasses 60% significantly. In addition, a supposition test of sphericity using the Bartlett test ( $H_0$ : All correlation coefficients are not far from zero) is rejected on the level of statistical significance  $p < 0.0005$ ,  $df = 861$ , for Approx. Chi-Square = 4636,413. Consequently, the coefficients are not all zero, thus the second approach of factor analysis is satisfied. As a result, both approaches of conducting factor analysis are satisfied and we may proceed with it.

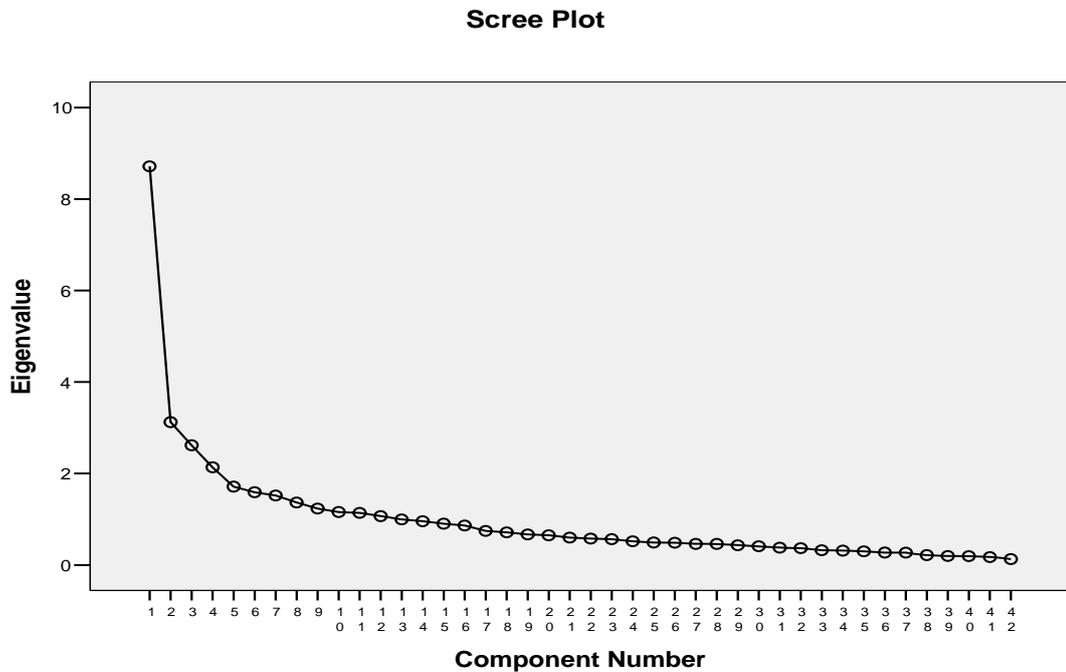
**Table 4.42** Main research: KMO and Bartlett's Test of Part B: Employees

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,817
Bartlett's Test of Sphericity	Approx. Chi-Square	4636,413
	df	861
	Sig.	,000

Through this analysis, seven uncorrelated factor were revealed, explaining 50.988% of the total inertia of the data. These are described separately later. The coefficient of internal consistency (reliability of Crobach's  $\alpha$ ) is statistically significant and equals 81.3% of the total number of items. Hence, the 42-item scale was considered reliable in terms of the internal consistency of the notional construct which was formulated for the measurement of the impact of LL on HRD.

**The Graph Scree Plot B**

Figure 4.2, which presents the graphic interpretation of the eigenvalues, is helpful in determining the exact number of essential factorial axes concerning employees.



**Figure 4.2** The Scree Plot B

The graph presents a noticeable break until the seventh factor, after which the eigenvalues' curve follows an almost linear path. Taking into consideration the eigenvalues, which are all over 1 for all seven factors and in particular, 8,716, 3,123, 2,617, 2,135, 1,713, 1,592, 1,519 for the 1<sup>o</sup>, 2<sup>o</sup>, 3<sup>o</sup>, 4<sup>o</sup>, 5<sup>o</sup>, 6<sup>o</sup> and 7<sup>o</sup> factor respectively, it may be concluded that they interpret the data in a satisfactory way.

Finally, from the communalities for each (question) item presented in Table 4.43 we may ascertain that the majority of items have a value higher than 0.40, which indicates that the quality of the measurement of the seventh factors is satisfactory. Also, Table 4.44 indicates the total variance explained and the loading of the seven axes.

**Table 4.43** Main research: Communalities of Part B: Employees

	Initial	Extraction
q1	1,000	,487
q2	1,000	,457
q3	1,000	,762
q4	1,000	,763
q5	1,000	,401
q6	1,000	,489
q7	1,000	,488
q8	1,000	,446
q9	1,000	,443
q10	1,000	,344
q11	1,000	,499
q12	1,000	,468
q13	1,000	,522
q14	1,000	,475
q15	1,000	,543
q16	1,000	,521
q17	1,000	,477
q18	1,000	,538
q19	1,000	,661
q20	1,000	,648
q21	1,000	,517
q22	1,000	,596

q23	1,000	,700
q24	1,000	,591
q25	1,000	,637
q26	1,000	,544
q27	1,000	,539
q28	1,000	,635
q29	1,000	,675
q30	1,000	,670
q31	1,000	,679
q32	1,000	,149
q33	1,000	,489
q34	1,000	,631
q35	1,000	,290
q36	1,000	,405
q37	1,000	,365
q38	1,000	,626
q39	1,000	,636
q40	1,000	,394
q41	1,000	,216
q42	1,000	,599

**Table 4.44** Main research: Total Variance Explained of Part B: Employees

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8,716	20,752	20,752	8,716	20,752	20,752	8,179	19,475	19,475
2	3,123	7,437	28,188	3,123	7,437	28,188	2,760	6,572	26,047
3	2,617	6,232	34,420	2,617	6,232	34,420	2,388	5,685	31,732
4	2,135	5,084	39,504	2,135	5,084	39,504	2,284	5,438	37,170
5	1,713	4,079	43,583	1,713	4,079	43,583	2,074	4,939	42,109
6	1,592	3,790	47,373	1,592	3,790	47,373	1,952	4,647	46,756
7	1,519	3,616	50,988	1,519	3,616	50,988	1,778	4,233	50,988
8	1,366	3,253	54,241						
9	1,232	2,934	57,175						
10	1,158	2,757	59,933						
11	1,139	2,712	62,644						
12	1,068	2,543	65,187						
13	,996	2,372	67,559						
14	,957	2,279	69,839						
15	,903	2,150	71,989						
16	,863	2,055	74,044						
17	,746	1,775	75,819						
18	,714	1,700	77,520						
19	,667	1,588	79,108						
20	,650	1,547	80,655						
21	,599	1,426	82,081						
22	,578	1,375	83,456						
23	,564	1,343	84,800						
24	,518	1,233	86,032						
25	,491	1,170	87,202						
26	,487	1,160	88,363						
27	,461	1,098	89,460						
28	,461	1,097	90,557						
29	,430	1,025	91,582						
30	,409	,975	92,556						
31	,378	,899	93,455						
32	,367	,875	94,330						
33	,322	,767	95,097						
34	,315	,749	95,846						
35	,298	,710	96,556						
36	,271	,646	97,202						
37	,269	,640	97,843						
38	,215	,511	98,354						
39	,197	,469	98,823						
40	,194	,462	99,285						
41	,173	,412	99,696						
42	,128	,304	100,000						

More specifically, based on employees' opinions and the factorial analysis of the first axis-factor F1, with eigenvalue 8.850, which explains, after the varimax rotation, 19.475% of the total dispersion (as shown in the above Table 4.44) (Total Variance Explained), includes mainly questions q20, q21, q22, q23, q24, q25, with high loadings (0.756, 0.670, 0.739, 0.792, 0.712, 0.719, respectively) (as shown in Table 4.45 below) (Rotated Component Matrix). Thus, the derived axis entitled '*Corporate strategy, value system and ethical perceptions*'.

The second factor, which has eigenvalue 3,123 and explains 6.572% of the total dispersion Table 4.44 (Total Variance Explained), includes questions q26, q27, q28, q29, q30, q31 especially with high loadings (0.691, 0.696, 0.766, 0.701, 0.697, 0.784) (as shown in Table 4.45 below) (Rotated Component Matrix). This axis was entitled '*Evaluation policy of the participation in educational programmes*'.

The third factor F3, which has eigenvalue 2,617 and explains 5.685% of the total dispersion Table 4.44 (Total Variance Explained), includes questions q10, q11, q12, q13, q14, q19 with high loadings (0.596, 0.708, 0.655, 0.667, 0.624, 0.697) (Table 4.45) (Rotated Component Matrix) This axis was entitled '*Culture of lifelong learning*'.

The fourth factor F4, which has eigenvalue 2,135 and explains 5.438% of the total dispersion, as shown in Table 4.44 (Total Variance Explained), includes questions q38, q39, q40, q41, q42 with high loadings (0.736, 0.743, 0.585, 0.584, 0.613) (Table 4.45) (Rotated Component Matrix). This axis was entitled '*Emotional identity of the learner in relation to lifelong learning*'.

The fifth factor F5, which has eigenvalue 1,713 and explains 4.939% of the total dispersion (Table 4.44) (Total Variance Explained), includes questions q1, q2, q3, q4, q5, q6 with high loadings (0.745,-0.507, 0.860, 0.859, 0.794, 0.675) (Table 4.45) (Rotated Component Matrix). This axis was entitled '*Awareness of lifelong learning*'.

The sixth factor F6, which has eigenvalue 1,592 and explains 4.647% of the total dispersion (Table 4.44) (Total Variance Explained), includes questions q32, q33, q34, q35, q36, q37 with high loadings (0.544, 0.677, 0.774, 0.537, 0.574, 0.547) (Table 4.45) (Rotated Component Matrix). This axis was entitled '*Learner orientation towards lifelong learning*'.

The seventh factor F7, which has eigenvalue 1,519 and explains 4.233% of the total dispersion (Table 4.44) (Total Variance Explained) includes questions q7, q8, q9, q15, q16, q17, q18 with high loadings (0.526, 0.578, 0.545, -0.569, 0.667, 0.653, 0.687) (Table 4.45) (Rotated Component Matrix). This axis was entitled '*Attitudes towards educational, vocational and development policies*'.

**Table 4.45** Main research: Rotated Component Matrix of Part B: Employees

	Component						
	1	2	3	4	5	6	7
q23	,792						
q20	,756						
q22	,739						
q25	,719						
q24	,712						
q21	,670						
q31		,784					
q28		,766					
q29		,701					
q30		,697					
q27		,696					
q26		,691					
q11			,708				
q19			,697	-,325			
q13			,667				
q12			,655				
q14			,624				
q10			,596				
q39				,743			
q38				,736			-,402
q42				,613			
q40				,585			
q41				,584			
q3					,860		
q4					,859		,324
q5					,794		
q1					,745		
q6		,391			,675		
q2					-,507		
q34						,774	
q33						,677	
q36						,574	
q37			-,332			,547	
q32						,544	
q35						,537	

**Table 4.45** *Continued*

q18							,687
q16						-,444	,667
q17							,653
q8							,578
q15		,489	,300				-,569
q9			-,331				,545
q7		,332					,526

#### **4.6 Quantitative approach of the main research**

After the reliability and validity of the main research instrument LLEHUREDE Scale, this scale was distributed to employers, managers and employees of enterprises and organizations that are active exporters, potential exporters or being get involved in intervening procedures of the export process. All were members of SEVE, the main purpose of which is to promote the involvement of Greek enterprises and organizations in export activities.

For the present research, data collected from 421 (150 employers and managers and 271 employees) respondents of the survey questionnaire which represents the quantitative approach.

##### **4.6.1 Data collection**

The main body of the research, was based on a total of 421 questionnaires, which were then subject to statistical elaboration and further analysis. Of the valid and fully completed questionnaires, more precisely, 150 were collected from managers and employers and 271 from employees and thus, the sample research group was limited to a total of 421 respondents, which permits generalization of the results.

The data collection procedure proved difficult, as the questionnaires were distributed and collected personally by the researcher. Another challenge was that many enterprises and organizations in the research target group were distributed across different regions in which active or potential exporters develop their entrepreneurial activity.

#### **4.6.2 Data analysis: Demographic elements**

Within data analysis variables representing both qualitative and quantitative data were considered. Variables, or in other words characteristics of participants in the research sample, such as marital status, academic grades and business type (qualitative variables) and age (quantitative) were analyzed..

Apart from the demographics-personal data some other elements concerning the enterprise or the organization to which the research respondents belong, manage or owe were analyzed. Personal data was related to job location, age, gender, educational level, marital status, employment type, company type, sector of employment, business activity, job position, company constitution, company size, responsibility position, employment contract and duration of recent employment. General information data was related to the existence of HRD department and involvement in export activities.

Analysis of data carried out twice, the first was about managers and employers (Part A) and the second about employees (Part B).

##### **4.6.2.1 Part A: Managers and employers**

First analysis (Part A) referred to the personal data and general data of demographic elements of managers and employers.

###### **(1) Managers and employers: Job location**

The breakdown of managers, and employers (or shareholders) by job location was as follows: Thessaloniki 85 (56.7%), Chios 20 (13.3%), Chalkidiki 16 (10.7%), Giannitsa 1 (0.7%), Crete 2 (1.3%), Kastoria 1 (0.7%), Ellassona 1 (0.7%), Drama 1 (0.7%), Athens 5 (3.3%) and Kavala 18 (12 %). More details of job location distribution illustrated in Appendix B, Table B.1.

###### **(2) Managers and employers: Age**

Among the 150 managers and employers of the main research sample 9 (6%) were in the range 18-29 years old (y. o.), 35 (23.3%) were 30-39 (y. o.), 64 (42.7%) were 40-49 (y. o.), 40 (26.7%) were 50-59 (y. o.), 2 (1.3%) were 60-69 (y. o.). More details of age distribution illustrated in Appendix B, Table B.2.

**(3) Managers and employers: Gender**

Concerning the gender, 96 (64%) of the 150 respondents (managers and employers) were men, while the remaining 52 (34.7%) were women, and while 2 (1.3%) did not give a response. More details of gender distribution illustrated in Appendix B, Table B.3.

**(4) Managers and employers: Educational level**

Referring to the educational level of managers and employers 1 (0.7%) had completed middle school, 21 (14%) had completed high school, 11 (7.3%) were graduates of Institutions of Vocational Training, named IEK, or other Vocational Training Institutions, 15 (10%) were graduates of Technological Educational Institutions (T.E.I.), 69 (46%) were university graduates, 30 (20%) held a masters degree and 2 (1.3%) a doctorate, while 1 (0.7%) had a low level education, such as completing elementary school. More details of educational level of managers and employers illustrated in Appendix B, Table B.4.

**(5) Managers and employers: Marital status**

Of the managers and employers 16 (10.7%) were single persons, 29 (19.3%) were in a steady relationship or married without children, 100 (66.7%) were married with children, 2 (1.3%) were divorced, and 3 (2%) were divorced with children. More details of marital status illustrated in Appendix B, Table B.5.

**(6) Managers and employers: Nature of employment**

The great majority 139 (92.7%) of managers and employers were employed in a company or an organization, while the remaining 11 (7.3%) were in other kinds of employment (e.g. self-employed). More details concerning nature of employment illustrated in Appendix B, Table B.6.

**(7) Managers and employers: Company type**

Of the managers, employers (or shareholders), 87 (58%) belonged to or owned a Greek company, 21 (14%) were in a multinational company, 26 (17.3%) worked in a family company, 7 (4.7%) owned their own company, 8 (5.3%) were self-employed or freelancers and, finally, 1 (0.7%) was a retired person with a specific work employment contract. More details of company type distribution illustrated in Appendix B, Table B.7.

**(8) Managers and employers: Sector of employment**

Referring to the sector of employment, 7 (4.7%) respondents belonged to public sector companies and organizations, while the largest proportion 141 ( 94%) of the 150 respondents were working in the private sector, with 2 (1.3%) percent in organizations with a different legal structure, neither public nor private sector. More details of employment sector illustrated in Appendix B, Table B.8.

**(9) Managers and employers: Business activity**

Data analysis revealed that of the managers and employers 68 (45.3%) were employed in service provision companies, 7 (4.7%) in commodity production, 37 (24,7%) in mixed activities-both production and trading of products, and, finally, 38 (25.3%) in a complex activity, such as a combination of service provision and commodity production. More details of business activity illustrated in Appendix B, Table B.9.

**(10) Managers and employers: Job position**

Referring to job position, 30 (20%) respondents were involved in managerial activities, 33 (22%) in financial issues, 11 (7.3%) in production, 5 (3.3%) in computer and information technology, 7 (4.7%) in supportive services, 2 (1.3%) in education and training, 3 (2%) in personnel issues, 2 (1.3%) in quality issues, 38 (25.3%) in sales, the 2 (1.3%) in marketing, 5 (3.3%) in consulting services and, finally, 12 (8%) in a variety of other issues. More details of job position illustrated in Appendix B, Table B.10.

**(11) Managers and employers: Company constitution**

In terms of legal entity, 12 (8%) respondents were owners of their own private company, 124 (82.7%) were employed in a company of limited responsibility-Limited Liability Company (LTD), 8 (5.3%) in societe anonyme (S.A.), 6 (5.3%) in ordinary partnership or in limited partnership and, finally, 6 (4%) in other public bodies. More details of company constitution illustrated in Appendix B, Table B.11.

**(12) Managers and employers: Existence of HRD department**

50 (33.3%) managers and employers stated that their company did not have a specific department or person responsible for HRD, while 100 (66.7%) stated that their company did. More details of whether there was an HRD department or not illustrated in Appendix B, Table B.12.

**(13) Managers and employers: Company size**

25 (16.7%) managers and employers responded that their company employed less than 10 persons, 31 (20.7%) were in a company of less than 50 persons, 32 (21.3%) were in a company of less than 250 persons and 62 (41.3%) were in a company with more than 250 persons. More details of company size illustrated in Appendix B, Table B.13.

**(14) Managers and employers: Responsibility position**

15 (10%) were general managers, 3 (2%) were assistant managers, 16 (10.7%) were deputy managers, 32 (21.3%) were department managers, 1 (0.7%) was a supportive services manager, 52 (34.7%) were heads of departments, 3 (2%) were not formal heads, 4 (2.7%) were consultants, 1 (0.7%) was an external collaborator, 3 (2%) were shareholders, 10 (6.7%) were employers and 10 (6.7%) were collaborators with various administrative support responsibilities not included in the above-mentioned categories. More details of responsibility position illustrated in Appendix B, Table B.14.

**(15) Managers and employers: Employment contract**

139 (92.7%) respondents were on a permanent contract, 1 (0.7%) was on a limited contract (in terms of time and duration), 2 (1.3%) were on seasonable work contracts, 1 (0.7%) was on a part-time work contract, 6 (4%) were on specialized contracts or work agreements and, finally, 1 (0.7%) had a simple agreement. It was important to note that the percent of 92.7% (139 respondents) included managers on a permanent contract and employers who owned a company. More details of employment contract illustrated in Appendix B, Table B.15.

**(16) Managers and employers: Duration of recent employment**

Of managers and employers 4 (2.7%) had been employed for less than 1 year, 11 (7.3%) between 1 and 4 years, 31 (20.7%) between 5 and 9 years, 30 (20%) between 10 and 14 years, 22 (14.7%) between 15 and 19 years and 52 (34.7%) for more than 20 years. More details of duration of recent employment illustrated in Appendix B, Table B.16.

**(17) Managers and employers: Involvement in export activity**

99 (66%) managers and employers stated that their company had not yet started export transactions, whereas 51 (34%) had already exported their products or services. More details of involvement in export activity illustrated in Appendix B, Table B.17.

#### **4.6.2.2 Part B: Employees**

Analysis of demographic elements concerning both personal data and general data of employees (Part B) followed the corresponding, above presented, analysis of managers and employers.

##### **(1) Employees: Job location**

The breakdown of employees, by job location, was as follows: Thessaloniki 137 (50,6%), Florina 31 (11,4%), Chios 38 (14%), Chalkidiki 17 (6,3%), Kastoria 1 (0,4%), Ellassona 2 (0,7%), Athens 10 (3,7%), Kavala 33 (12,2%), Serres 1 (0,4%) and Patra 1 (0,4%). More details of job location distribution illustrated in Appendix B, Table B.18.

##### **(2) Employees: Age**

Of the employees 70 (25,8%) were in the range 18-29 years old (y. o.), 82 (30,3%) were 30-39 (y. o.), 76 (28%) were 40-49(y. o.), 43 (15,9%) were 50-59 (y. o.). More details of age distribution illustrated in Appendix B, Table B.19.

##### **(3) Employees: Gender**

Referring to gender 141 (52%) of the 271 employees were men, while the remaining 130 (48%) were women. More details of gender illustrated in Appendix B, Table B.20.

##### **(4) Employees: Educational level**

Concerning educational level, 3 (1,1%) employees had completed elementary school, 3 (1,1%) had completed middle school, 93 (34,3%) had completed high school, 28 (10,3%) were graduates of Institutions of Vocational Training, named IEK, or other Vocational Training Institutions, 42 (15,5%) were graduates of Technological Educational Institutions (T.E.I.), 76 (28%) were university graduates, and 24 (8,9%) held a masters degree and 2 (0,7%) a doctorate. More details of educational level of employees illustrated in Appendix B, Table B.21.

##### **(5) Employees: Marital status**

Of the employees 75 (27,7%) were single persons, 65 (24%) were in a steady relationship or were married without children, 120 (44,3%) were married with children, 8 (3%) were divorced, and 3 (1,1%) were divorced with children. More details of marital status illustrated in Appendix B, Table B.22.

**(6) Employees: Nature of employment**

The great majority 254 (93.7%) of respondents (employees) were employed in a company or an organization, while the remaining 17 (6.3%) were in other kinds of employment (e.g. self-employed). More details of nature of employees' employment illustrated in Appendix B, Table B.23.

**(7) Employees: Company type**

Of the employees, 207 (76.4%) were employed in a Greek company, 41 (15.1%) were employed in a multinational company, 18 (6.6%) were employed in a family company, 2 (0.7%) were employed in their own company, 2 (0.7%) were self-employed or freelancers and, finally, 1 (0.4%) was in a retirement period with a specific work contract. More details of company type illustrated in Appendix B, Table B.24.

**(8) Employees: Sector of employment**

The great majority 257 (94.8%) of the 271 employees were employed in companies and organizations in the private sector, while the least 13 (4.8%) were employed in companies and organizations in the public sector, while 1 (0.4%) in organizations with a different legal structure. More details of sector of employment illustrated in Appendix B, Table B.25.

**(9) Employees: Business activity**

Data analysis revealed that 115 (42.4%) respondents (employees) were employed in service provision companies, 3 (1.1%) in commodity production, 67 (24.7%) in mixed activities-both production and trading of products, and, finally, 86 (31.7%) in a complex activity, such as a combination of service provision and commodity production. More details of business activity illustrated in Appendix B, Table B.26.

**(10) Employees: Job position**

13 (4.8%) employees were involved in managerial activities, 44 (16.2%) dealt with financial issues, the 28 (10.3%) percent with production, the (00 (3.7%) in computer and information technology, 46 (17%) in supportive services, 8 (3%) in education and training, 45 (16.6%) in personnel issues, 3 (1.1%) in quality issues, 39 (14.45%) in sales, 9 (3.3%) in marketing, 5 (1.8%) in consulting services and, finally, 21 (7.7%) in a variety of other issues. More details of business activity illustrated in Appendix B, Table B.27.

**(11) Employees: Company constitution**

In terms of legal entity, of the employees 7 (2.6%) were employed in a personal private company, 6 (2.2%) were employed in a company of limited responsibility-Limited Liability Company (LTD), 231 (85,2%) in societe anonyme (S.A.), 15 (5.5%) in an ordinary or limited partnership and, finally, 12 (4.4%) in other public bodies. More details of company institution illustrated in Appendix B, Table B.28.

**(12) Employees: Existence of HRD department**

80 (29.5%) of employees stated that their employing company did not have a specific department or person responsible for HRD, 190 (70.1%) stated that their company did, while 1 (0.4%) did not answer that question. More details of existence of HRD department illustrated in Appendix B, Table B.29.

**(13) Employees: Company size**

38 (14%) employees responded that their company employed less than 10 persons, 54 (19.9%) were in a company of less than 50 persons, 49 (18.1%) were in a company of less than 250 persons and 130 (48%) were in a company with more than 250 persons. More details of company size illustrated in Appendix B, Table B.30.

**(14) Employees: Responsibility position**

2 (0.7%) employees were informal heads, 250 (92.3%) were employees, 1(0.4%) was a consultant, 10 (3.7%) were external collaborators, 1 (0.4%) was a shareholder, and 7 (2.6%) were people responsible for various responsibilities not included in the above-mentioned categories. More details of responsibility position illustrated in Appendix B, Table B.31.

**(15) Employees: Employment contract**

212 (78.2%) employees were on a permanent contract, 24 (8.9%) were on a limited contract (in terms of time and duration), 9 (3.3%) were on seasonable work contracts, 8 (3%) were on a part-time work contract, 14 (5.2%) were on specialized contracts and, finally, 4 (1.5%) had a simple agreement. More details of employment contract illustrated in Appendix B, Table B.32.

**(16) Employees: Duration of recent employment**

33 (12.2%) employees had been employed for less than 1 year, 65 (24%) between 1 and 4 years, 47 (17.3%) between 5 and 9 years, 33 (12.2%) between 10 and 14 years, 46 (17%) between 15 and 19 years and 47 (17.3%) for more than 20 years. More details of duration of recent employment illustrated in Appendix B, Table B.33.

**(17) Employees: Involvement in export activity**

193 (71.2%) employees stated that their company had not yet started export transactions, whereas 78 (28.8%) had already exported their products or services. More details of duration of involvement in export activity illustrated in Appendix B, Table B.34.

From the double analysis of the demographics, the first concerning managers and employers and the second concerning employees, mainly qualitative elements of the qualitative data approach collected. All these demographics correlated to the variables of the seven axes and results of correlation were presented in Chapter 5.

**4.7 Qualitative approach of the main research**

Apart from quantitative approach, qualitative approach was also decided to be accomplished. Comparing quantitative and qualitative research approaches, the first emphasizes the measurement and analysis of casual relationships between variables, but not processes and the second put an emphasis on the qualities of entities and on process and meanings that are not experimentally examined or measured in terms of quality, intensity and frequency. Generally, we can argue that the nature of inquiry in the quantitative approach can be characterized as value-free while in the qualitative approach as value-laden (Denzin & Lincoln, 2005, p. 10). In the literature, under the category of qualitative research there are various methods and approaches among which there are case studies, politics and ethics, participatory inquiry, interviewing, participant observations, visual methods and interpretive analysis (Denzin & Lincoln, 2005, p. 2).

Among these qualitative methods, interviewing is one of the common and popular qualitative methods and refers to understanding of human beings and their actions. Different forms of interviewing exist where face-to-face individual verbal interchange is the most preferable and commonly used, apart from the face-to-face

group interchange and telephone surveys. The reason for its popularity is that interviewing, either it is structured, semi-structured or unstructured, is a measurement and a kind of gathering information through active interaction between two or more individuals where negotiation and contextual analysis could characterize its results (Fontana & Frey, 2005, p. 698).

Participant observation is also a very common method of qualitative research and especially, in the research conducted by social scientists there are three ways of observation, which are not clearly distinguished as separate and one can overlap the other. These are participant observation, reactive observation and nonreactive observation. Participant observation is based on a considerable close emotional relationship between the researcher and the community and requires a long term observation of the everyday life of the community. The reactive observation is based on settings controlled by the research design elements, participants are aware of being observed and are amenable to react to researcher's intervention. The nonreactive observation is conducted on the basis of participants unawareness of being observed and studied (Angrosino, 2005, p. 732). Furthermore, all forms of observational research have three levels in their procedures, which are: descriptive observation, where the observer describes everything with all the details and thus, he/she collects a large amount of data, part of which will be proved to be useless, but the most important thing is that he/she does not take anything for granted; focused observation, where the observer is concentrated on specific issues usually concerning well-defined group activities; selective observation, where the observer focuses on a specific category of events or activities. Another issue that Angrosino (2005) takes into consideration is the matter of ethics in observation-based research. For him, ethics deals with the standards upon which universities or research institutions have decided to govern the work of researchers and with what values researchers seek to use their knowledge from observation-based research (p. 734).

For the purpose of the present research study, interviewing and participant observation were chosen to be the qualitative methods, methodology and data collection is described in the following paragraphs while results of both qualitative methods are presented in chapter six.

#### **4.7.1 Methodology and data collection**

Observations and interviewing were the selected methods of the qualitative approach. Two sets of observations and six semi-structured interviews were carried out. Observations were selected to take part firstly, in some specialized seminars concerning export activities and secondly, in workshops on gaining the skill of extroversion. Six interviews of people representing all groups such as managers, employers and employees were accomplished.

The validity of the qualitative methods was verified by the review of the research scientific committee, a second reading of results from the interviewees, in cases of interviews, and the coordinators and the scientific responsible team, in case of the two set of observations. In addition, the considerable time spent on observations and data analysis and the interpretation of the finding increase the validity of the two qualitative methods.

##### **4.7.1.1 Observations**

Observations concerned specific and specialized programmes related to preparing enterprises and organizations to develop export activities. Observations took place in the context of two different kinds of continuing education programmes, organized and carried out by SEVE within its LL philosophy. The first observation related to a training programme that consisted of a series of seminars, two series of which were observed, while the second to a specific European-funded programme in its pilot study phase.

The first observation concerned a programme that consisted of a series of seminars for export companies and potential export companies and organizations, with the aim of enhancing their capacity to export Greek products and services worldwide. Four series of seminars were planned and implemented between 7 April and 12 December 2011. Each seminar series usually consisted of six modules, with a wide range of themes related to export activities. In addition, each series of seminars was implemented on the request of SEVE members and further to a training needs' analysis. The key characteristic of these series of seminars was that every new series was developed further to evaluation of the foregoing seminar series, by the organizing committee of SEVE seminars. This could enable the necessary

corrections and improvements to be made before organization of the following seminar series. This analysis of results and decision-making following implementation of each seminar series, specialized in export trade, in conformity with the standards and requirements of the quality management system ELOT EN ISO 9001: 2000 which SEVE has adopted. As a result, SEVE is committed to continuous improvement. The observation of a series of seminars was decided upon following completion of the first series, such that observation could benefit from monitoring the improvements made. The evaluation report of the first seminar series and the proposed improvements to the second seminar series were analyzed before the first observation took place, during the second and the third series of seminars.

The second series of seminars took place between 16 - 31 May 2011 and the observation followed the seven modules of the specific seminar series: Eight steps to export; export processes; export marketing; custom and taxation issues; market research in foreign countries; preparation for participation in trade fairs and business missions; financial tools for exports.

The third series of seminars took place 7 October - 4 November 2011 and consisted of six modules: Eight steps to export; export processes; export marketing; social networking and the contemporary synchronous enterprise; quality management en ISO 9001: 2008; design and internalization.

The key elements observed in the second and third series of seminars were: Curriculum, trainer/educator, trainee/learner, teaching/learning methods, place, time and duration of the seminar. In particular, more attention was paid to the teaching style and learning methods conducted and used by each educator/trainer, how far the curriculum responded to the participants' needs and, chiefly, the participants' role as learners, since this is considered to be the most significant determinant and core of all learning procedures.

The second observation concerned a European funding programme, at its pilot phase of implementation, aimed at skills acquisition and upskilling of Greek enterprises in terms of their extroversion. More specifically, the second observation was related to a project in the context of the NSRF 2007-2013 of European funded programmes, entitled 'Strategic plan for the improvement of the competitive

operation of enterprises through development of new skills for extroversion'. The key issues addressed were:

Phase 1: Study of the extroversion of Greek enterprises and the enhancement of their export skills.

- 1.1 Review of Greek exports and analysis of research elements
- 1.2 Review of national strategy and national policies for exports as well as analysis of the national policy for extroversion
- 1.3 Review of the national system for extroversion of selected member-states of the European Union
- 1.4 Determination of needs and design of a plan in the exports sector, with an emphasis on the development of human potential and extroversion more widely

Phase 2: Pilot programme of cooperative support and know-how transfer

- 2.1 Planning of the pilot programme
- 2.2 Implementation of the pilot programme
- 2.3 Collection and analysis of the results of the pilot programme
- 2.4 Implementation of the results

Phase 3: Dissemination of results

- 3.1 Dissemination activities

(Retrieved from <http://www.seve.org.gr/Uploads/pdf/Exostreifeia.pdf>, in Greek)

The second observation took place during the implementation of the pilot programme (phase 2.2) and, thus, it monitored the three main phases of the pilot programme. Each phase included a weekend workshop on a different theme. The first workshop took place 13 - 14 May 2011, the second 27 - 28 May 2011 and the third 10 - 11 June 2011. The fourth and last workshop was devoted to the assessment of the pilot programme.

Observation as a method is data collection information without direct questions on the part of the researcher (Verma & Mallick, 1999, p. 129) and thus, it is preferable to be combined with other methods. In this case, interview was selected to be the second method.

#### **4.7.1.2 Interviews**

In order an interview to be accomplished a plan was designed. The context of interview, criteria of interviewee' selection, the purpose of the interview and the method of data collection were outlined. In particular, the context of the interview was formulated on the basis of giving more information and in depth analysis and better understanding of participants (Verma & Mallick, 2004) regarding the impact of LL on HRD. Location, length and date of each interview was under the agreement of both parts, interviewer and interviewee. The location of the interview was selected to be each enterprise or organization's premises.

Concerning the method of selecting the possible interviewees, it was decided to come from enterprises and organizations that have already got involved in export activities, tend to become potential exporter in the near future or participate in the intervening procedures of the export activities. Thus, they were selected from the lists of SEVE, main and complementary, of export companies, and potential export companies, more including the personnel of the SEVE that supports export trade.

The basic criteria for the selection of the interviewees were: To come, if it is possible, from the questionnaire sample main research participants in order results of the questionnaire survey could be better clarified; to exist a representative from each group, such as an employer, a manager and an employee; to participate in a volunteer basis; to exist a representative of an enterprise or organization that has already export its products or services or a potential export enterprise in the near future; to represent staff of an enterprise as well as staff of an organization.

The purpose of the interviews was mainly to give a deeper understanding of the corporate strategy concerning the value of HR and the LL culture, which was the content of the second, third and sixth research questions, the educational and evaluation policy of learning activities' participation in terms of learning method and outcome, which was the content of the fourth and fifth research questions. In addition, the identity of each interviewee as a LLL was determined through their response concerning the ways of enhancing motivation to learn (see Appendix E-Interview protocol).

The data collected from six interviews. Interviewees, who accepted to participate, represented four different export enterprises, among which three

companies were active export companies and the fourth was about to become an export company as well as one organization. In total, the interviewees were six from whom, the first was an export and quality manager of a food industry, the second was a deputy manager in an organization responsible for promoting foreign trade, the third was an owner of a chemical and cosmetics industry, the fourth was a financial top manager of an enterprise providing high-technology services, the fifth was an employee of an export chemical and cosmetics industry and the sixth was an employee of an industry producing package materials and providing advertising services.

Semi-structured interviews were carried out in the interviewees' location. Every appointment was scheduled some days before in order time spent on interview not to bring any inconvenience during the working time. Every interview lasted almost one hour and a half as most questions were well structured. The main interest in interviews was to give the interviewees the opportunity to feel free to express their attitudes and feelings, especially to describe their role as LLLs and their attitudes towards LL and the benefits of a LL culture and strategy.

Even though, a tape recording is considered to be a favourite option (Verma & Mallick, 1999, p. 127; Verma & Mallick, 2004) or video- taping, participants did not agree with this procedure as they thought that it would have made them feel inconvenient and under control. Assurance of confidentiality and anonymity was verified through an oral agreement between the interviewer and the interviewee.

In order a profile of the interview sample be drawn up, a brief and relevant background data on the interview considered useful (Verma & Mallick, 1999). Thus, before the interview meeting from every enterprise and organization an organization chart was required where the position of each interviewee was made clear.

The interview construct was based on the following variables: Educational policy, evaluation policy and QoL, taking shape of training, motivation for LL activities. The analysis of them could offer suggestions for building a LL culture.

## **Chapter 5**

### **RESULTS**

#### **5.1 Quantitative approach**

Data analysis gave results that followed the seven factors constructed from the LLEHUREDE Scale (see Appendix A, Table A.1). Each group of questions constituted one of the seven factors, which were: (1) Awareness of lifelong learning; (2) Attitudes towards educational, vocational and development policies; (3) Culture of lifelong learning, (4) Corporate strategy, value system and ethical perceptions; (5) Evaluation policy of participation in educational programmes; (6) Learner orientation towards lifelong learning; (7) Emotional identity of the learner in relation to lifelong learning.

Firstly, analysis of the results followed the meaning of the group of questions per factor. Secondly, analysis referred to participation in four different kinds of LL activities such as seminars, training programmes, one-day education event and miscellaneous learning activities not included in the other three selected activities.

Analysis of the results consisted of analysis per factor and analysis with respect to participation in LL activities. This analysis took place twice and thus it consisted of two parts, where Part A referred to managers and employers and Part B the employees..

##### **5.1.1 Part A/Managers and employers: Results per factor**

The total scores of the measurements of the above mentioned groups of questions were used for the data analysis, in order to establish the level of convergence and the standard deviation of each group. The above-mentioned groups resulted from Factor Analysis. Statistical analysis of t-test and ANOVA were also used with post-hoc

controls for independent samples and the value of axes-groups of questions as dependent variables. In the previous chapter we presented the influence on attitudes of the 150 respondents towards LL and HRD through the examination of variables concerning demographic elements of personal and general data which were the following: Job location; age; gender; educational level; marital status; nature of employment; company type; sector of employment; business activity; job position; company constitution (the legal form of the enterprise); existence of a department or a person in charge of education or HRD; company size; responsibility position; employment contract; duration of recent employment; and, finally, involvement in export activity. The factor of reliability (Crobach' s  $\alpha$ ) for the total of the items in the questionnaire was statistically significant and equal to 0.859%.

Each group of questions analyzed through the factor to which it referred to and presented below separately.

### **(1) Awareness of lifelong learning**

The first group consisted of 6 items-questions, related to *Awareness of lifelong learning*, as presented in Table 5.1:

**Table 5.1** Main research/Part A/Managers and employers: Awareness of lifelong learning

<i>Awareness of lifelong learning</i> q1, q2, q3, q4, q5, q6	$\bar{x}=21,33$	sd=3,371
q1. Lifelong learning is to learn until the retirement period.	3,24	1,394
q2. Lifelong learning is related to work-based learning.	2,63	1,108
q3. The basic aim of lifelong learning is to improve knowledge in a personal, civic, social and/or employment-related perspective.	3,96	,858
q4. The basic aim of lifelong learning is to improve skills in a personal, civic, social and/or employment-related perspective.	3,91	,810
q5. The basic aim of lifelong learning is to bring about behavioural change, as a consequence of the deep understanding attained in fulfillment of a learning activity.	3,75	,861
q6. Lifelong learning includes non-formal and informal learning or otherwise liberal, vocational and social learning.	3,84	,828

The reliability (Crobach's  $\alpha$ ) of the first group was  $\alpha=0.868$  and was considered satisfactory. The respondents to the specific research reflect a high level

of concurrence, concerning the significance level of the first group, as the average of this group was:  $\bar{x}=21,33$  ( $sd=3,371$ ) (Table 5.1).

More specifically, concerning 'Awareness of lifelong learning', the respondents consider lifelong learning to be learning until the retirement period (q1) ( $\bar{x}=3,24$ ,  $sd=1,394$ ). They believe that lifelong learning is related to work-based learning (q2) ( $\bar{x}=2,63$ ,  $sd=1,108$ ) as its basic aims are to improve knowledge (q3) ( $\bar{x}=3,96$ ,  $sd=0,858$ ), and skills (q4) ( $\bar{x}=3,91$ ,  $sd=0,810$ ) in a personal, civic, social and/or employment-related perspective and, as a consequence to bring about behavioural change due to the deep understanding attained through the fulfillment of a learning activity (q5) ( $\bar{x}=3,75$ ,  $sd=0,861$ ). Finally, lifelong learning includes informal and non-formal learning or otherwise liberal, vocational and social learning (q6) ( $\bar{x}=3,84$ ,  $std=0,828$ ).

Through the statistical control t-test we ascertained that the following variables do not influence the attitudes of managers, employers and shareholders towards *Awareness of lifelong learning is concerned*: Gender ( $t=-0,326$ ,  $d=148$ ,  $p=0,745>0,05$ ), nature of employment ( $t=1,527$ ,  $df=148$   $p=0,129>0,05$ ), whether the enterprise has a department or a person responsible for education or HRD ( $t=-0,831$ ,  $df=148$   $p=0,407>0,05$ ), whether the enterprise is involved in export transactions ( $t=-0,489$ ,  $df=127$   $p=0,626>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the following variables do not influence their views about the impact of LL on HRD and, in particular *Awareness of lifelong learning*: City/region where managers, employers and shareholders work ( $F=530$ ,  $p=,851>0,05$ ); the age group they belong to ( $F=1,049$ ,  $p=0,384>0,05$ ), educational level ( $F=0,636$ ,  $p=0,726>0,05$ ), marital status ( $F=0,709$ ,  $p=0,700>0,05$ ), nature of employment ( $F=0,301$ ,  $p=0,973>0,05$ ), sector of employment ( $F=0,686$ ,  $p=0,721>0,05$ ), business activity ( $F=1,131$ ,  $p=0,345>0,05$ ), job position in the enterprise ( $F=1,887$ ,  $p=0,059>0,05$ ), the kind of enterprise they belong to (company constitution) ( $F=1,1162$ ,  $p=0,324>0,05$ ), size of the enterprise ( $F=0,656$ ,  $p=,747>0,05$ ), their position of responsibility ( $F=0,580$ ,  $p=0,812>0,05$ ), the type of work contract ( $F=0,230$ ,

$p=0,990>0,05$ ) and, finally, the duration of their employment in the enterprise ( $F=0,969$ ,  $p=0,469>0,05$ ).

## (2) Attitudes towards educational, vocational and development policies

The second group consisted of 7 items-questions concerning *Attitudes towards educational, vocational and development policies*, as presented in Table 5.2:

**Table 5.2** Main research/Part A/Managers and employers: Attitudes towards educational, vocational and development policies

<i>Attitudes towards educational, vocational and development policies</i> q7, q8, q9, q15, q16, q17, q18	$\bar{x}=25,527$	Sd=2,770
q7. I am responsible for my vocational training.	4,00	,934
q8. I work hard (on my own) towards achieving continuous professional development in order to keep my job.	4,06	,779
q9. I draw on my skills in order to support the achievement of organizational goals of the enterprise or organization I manage (direct).	4,43	,572
q15. The provision of qualitative lifelong learning requires certification.	3,38	,960
q16. The company or organization I manage (direct) believes that new knowledge is not necessary for those with broad experience.	2,03	,893
q17. The company or organization I manage (direct) offers learning opportunities to its employees with the greatest possible financial support, for example through European funded programmes.	3,80	,882
q18. The company or organization I manage (direct) is committed to caring about improving its employees' performance by enhancing their participation in vocational training, for the acquisition of knowledge, skills, competences and behavioral change.	3,82	,905

The reliability (Crobach's  $\alpha$ ) of the second group was  $\alpha=0.771$  and was considered as satisfactory.

The research results in terms of the second group of items-questions demonstrated a high degree of concurrence among them, as the average level of this group was  $\bar{x}=25,527$  ( $sd=2,770$ ) (Table 5.2 above).

In particular, the respondents draw on their skills in order to support the achievement of organizational goals of the enterprise or organization they manage (q9) and this is considered as one of the most weighted variables or in other words one of the most significant important attitudes in relation to educational, vocational and development policies (q9) ( $\bar{x}=4,43$ ,  $sd=0,572$ ). Equally important are attitudes towards working hard on their own to achieve continuous professional development in order to keep their job (q8) ( $\bar{x}=4,064$ ,  $sd=0,779$ ) as well as to be responsible for their vocational training (q7) ( $\bar{x}=4,00$ ,  $sd=0,934$ ).

Moreover, according to the respondents, a necessary prerequisite of the provision of qualitative lifelong learning could be certification (q15) ( $\bar{x}=3,384$ ,  $sd=0,960$ ) and, thus, the company or organization they manage (direct) offers learning opportunities to its employees with the greatest possible financial support, for example through European funded programmes (q17) ( $\bar{x}=3,80$ ,  $sd=0,882$ ). In addition, they perceive the commitment of their company or organization to caring about improving its employees' performance by enhancing their participation in vocational training for the acquisition of knowledge, skills, competences and behavioral change (q18) ( $\bar{x}=3,82$ ,  $sd=0,905$ ). Finally, there is little agreement and rather disagreement with the conviction that their company or organization they manage believes that new knowledge is not necessary for those with broad experience (q16) ( $\bar{x}=2,03$ ,  $sd=0,893$ ).

Through the statistical control t-test we ascertained that the following variables do not influence managers, employers and shareholders' *Attitudes towards educational, vocational and development policies*: Gender ( $t=-0,326$ ,  $df=148$ ,  $p=0,745>0,05$ ), nature of employment ( $t=1,527$ ,  $df=148$   $p=0,129>0,05$ ), whether their enterprise has a department or a person responsible for education or HRD ( $t=-0,831$ ,  $df=148$   $p=0,407>0,05$ ), whether the enterprise is involved in export transactions ( $t=-0,489$ ,  $df=127$   $p=0,626>0,05$ ).

Through ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the following variables: City/region where managers, employers and shareholders work ( $F=530$ ,  $p=,851>0,05$ ), the age group they belong to ( $F=1,049$ ,  $p=0,384>0,05$ ), educational level ( $F=0,636$ ,  $p=0,726>0,05$ ), marital status ( $F=0,709$ ,  $p=0,700>0,05$ ), nature of employment ( $F=0,301$ ,  $p=0,973>0,05$ ), sector of employment ( $F=,686$ ,  $p=0,721>0,05$ ), business activity ( $F=1,131$ ,  $p=0,345>0,05$ ), job position in their enterprise ( $F=1,887$ ,  $p=0,059>0,05$ ), the kind of enterprise they belong to (company constitution) ( $F=1,1162$ ,  $p=0,324>0,05$ ), size of the enterprise ( $F=0,656$ ,  $p=,747>0,05$ ), their position of responsibility in their enterprise ( $F=0,580$ ,  $p=0,812>0,05$ ), the type of work contract ( $F=0,230$ ,  $p=0,990>0,05$ ) and, finally, the duration of their employment in the enterprise ( $F=0,969$ ,  $p=0,469>0,05$ ) were not influenced by their views about the impact of LL on HRD and in particular, by their *Attitudes towards educational, vocational and development policies*.

### (3) Culture of lifelong learning

The third group consisted of 6 items-questions, related to the *Culture of lifelong learning*, as presented in Table 5.3.

**Table 5.3** Main research/Part A/Managers and employers: Culture of lifelong learning

<i>Culture of lifelong learning</i> q10, q11, q12, q13, q14, q19	$\bar{x}=23,53$	sd=2,879
q10. My belief is that lifelong learning leads to the wellbeing of the participants in the learning process.	3,93	,748
q11. My belief is that lifelong learning leads to job satisfaction.	3,55	,848
q12. My belief is that lifelong learning leads to innovative ideas.	3,95	,727
q13. My belief is that lifelong learning leads to better job performance.	3,97	,794
q14. My belief is that involvement in lifelong learning activities reinforces the motivation for learning.	4,13	,682
q19. The company or organization that I manage has a positive attitude towards lifelong learning.	3,99	,781

The reliability (Crobach's  $\alpha$ ) of the third group is  $\alpha=0.782$  and was considered satisfactory.

Regarding the third group of items-questions, the research results indicated a high degree of concurrence among respondents with the items of the specific group, as the average of this group was  $\bar{x}=23,53$  ( $sd=2,879$ ) (Table 5.3 above).

More specifically, the participants in the present research consider as important that lifelong learning leads to the wellbeing of the participants in the learning process (q10) ( $\bar{x}=3,93$ ,  $sd=0,748$ ), to job satisfaction (q11) ( $\bar{x}=3,55$ ,  $sd=0,848$ ), to innovative ideas (q12) ( $\bar{x}=3,95$ ,  $sd=0,727$ ) as well as to better job performance (q13) ( $\bar{x}=3,97$ ,  $sd=0,794$ ).

Furthermore, the respondents believe that their involvement in lifelong learning activities reinforces motivation for learning (q14) and this is considered to be the most weighted variable or, in other words, this is the most significant attitude in the culture of lifelong learning (q14) ( $\bar{x}=4,13$ ,  $sd=0,682$ ). In addition, they consider that the company or organization they manage has a positive attitude towards lifelong learning (q19) ( $\bar{x}=3,99$ ,  $sd=0,781$ ).

Through the statistical control t-test we ascertained that the following variables do not influence the attitudes of managers, employers and shareholders towards the *Culture of lifelong learning*: Gender ( $t=0,011$ ,  $df=148$ ,  $p=0,991>0,05$ ), nature of employment ( $t=1,299$ ,  $df=148$   $p=0,196>0,05$ ), whether their enterprise has a department or person responsible for education or HRD ( $t=-0,591$ ,  $df=148$   $p=0,555>0,05$ ), whether the enterprise is involved in export transactions ( $t=-0,804$ ,  $df=128$   $p=0,423>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the following variables do not influence their views about the impact of LL on HRD and, in particular, the *Culture of lifelong learning*: City/region where managers, employers and shareholders work ( $F=0,677$ ,  $p=0,728>0,05$ ), the age group they belong to ( $F=1,379$ ,  $p=0,244>0,05$ ), educational level ( $F=0,590$ ,  $p=0,763>0,05$ ), marital status ( $F=0,925$ ,  $p=0,576>0,05$ ), nature of employment ( $F=0,623$ ,  $p=0,923>0,05$ ), sector of the enterprise ( $F=0,947$ ,  $p=0,546>0,05$ ), the kind of

enterprise they belong to (company constitution) ( $F=0,533$ ,  $p=,970>0,05$ ), size of the enterprise ( $F=0,995$ ,  $p=0,481>0,05$ ), their position of responsibility in the enterprise ( $F=0,868$ ,  $p=0,655>0,05$ ), the type of work contract ( $F=0,716$ ,  $p=0,842>0,05$ ), and finally, the duration of employment in the enterprise ( $F=1,319$ ,  $p=0,157>0,05$ ).

Through the statistical control ANOVA with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the variables related to business activity ( $F=2,290$ ,  $p=0,001<0,05$ ) and job position in the enterprise ( $F=2,507$ ,  $p=0,000<0,05$ ), influence the perceptions of the managers, employers or shareholders about the *Culture of lifelong learning*.

#### **(4) Corporate strategy, value system and ethical perceptions**

The fourth group consisted of 6 items-questions, concerning the *Corporate strategy, value system and ethical perceptions*, as presented in Table 5.4.

**Table 5.4** Main research/Part A/Managers and employers: Corporate strategy, value system and ethical perceptions

<i>Corporate strategy, value system and ethical perceptions</i> q20, q21, q22, q23, q24, q25	$\bar{x}=23,37$	sd=3,856
q20. The company or organization that I manage tries to make learning accessible to everyone.	3,80	,777
q21. The company or organization that I manage or I own considers its employees as an important asset (employees are its power).	4,14	,844
q22. The company or organization that I manage or I own regards a lifelong learning strategy as a strategy for creating value.	3,87	,730
q23. The company or organization that I manage or I own invests in its staff training, because it considers it necessary for gaining competitive advantage.	3,84	,860
q24. The company or organization that I manage or I own is socially responsible which is clear from its educational policy.	3,79	,762
q25. The company or organization that I manage or I own believes that knowledge is a generic source, the dissemination of which is valuable.	3,93	,743

The reliability (Crobach's  $\alpha$ ) of this group was  $\alpha=0.900$  and considered satisfactory. Research results indicated that the respondents had a high degree of concurrence in the statements of the specific group that refer to corporate strategy, value system and ethical perceptions as the average level of this group was  $\bar{x}=23,37$ , (sd=3,856) (Table 5.4 above). More specifically, the respondents claim that the company or organization that they manage or own tries to make learning accessible to everyone (20) ( $\bar{x}=3,80$ , sd=0,777), considers its employees as an important asset (employees are its power) (21) ( $\bar{x}=4,14$ , sd=0,844), and, moreover, it regards a LL strategy as a strategy for creating value (22) ( $\bar{x}=3,871$ , sd=0,730), it invests in its staff training, because it considers it necessary for gaining competitive advantage (23) ( $\bar{x}=3,84$ , sd=0,860), it is socially responsible which is clear from its educational policy (24) ( $\bar{x}=3,79$ , sd=0,762), and, finally, strongly believe that knowledge is a generic source, the dissemination of which is valuable (25) ( $\bar{x}=3,93$ , sd=0,743).

Through the statistical control t-test we ascertained that the following variables do not influence the attitudes of managers, employers and shareholders towards the *Corporate strategy, value system and ethical perceptions*: Gender (t=-,083, df=148, p=0,934>0,05), nature of employment (t=1,336, df=148 p=0,184>0,05), whether their enterprise has a department or a person responsible for education or HRD (t=-0,614, df=148 p=0,540>0,05), whether the enterprise is involved in export transactions (t=-0,792, df=130 p=0,430>0,05).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the following variables do not influence their views about the impact of LL on HRD and in particular, the *Corporate strategy, value system and ethical perceptions*: City/region where managers, employers and shareholders work (F=0,598, p=0,797>0,05), the age group they belong to (F=1,350, p=0,254>0,05), educational level (F=0,589, p=0,764>0,05), marital status (F=0,973, p=0,531>0,05), nature of employment (F=0,689, p=0,922>0,05), business activity (F=1,302, p=0,135>0,05), the kind of enterprise they belong to (company constitution) (F=1,069, p=0,382>0,05), size of the enterprise (F=1,207, p=0,214>0,05), position of responsibility in the enterprise (F=1,837, p=0,006<0,05), type of work contract

( $F=0,507$ ,  $p=0,995>0,05$ ), and finally, duration of employment in the enterprise ( $F=1,264$ ,  $p=0,164>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that sector of the enterprise ( $F=1,591$ ,  $p=0,027<0,05$ ), and job position in the enterprise ( $F=1,845$ ,  $p=0,005<0,05$ ), influence the perceptions of managers, employers or shareholders towards the *Corporate strategy, value system and ethical perceptions*.

### (5) Evaluation policy of participation in educational programmes

The fifth group consisted of 6 items-questions related to *Evaluation policy of participation in educational programmes*, as follows (Table 5.5):

**Table 5.5** Main research/Part A/Managers and employers: Evaluation policy of participation in educational programmes

<b><i>Evaluation policy of participation in educational programmes</i></b> q26, q27, q28, q29, q30, q31	$\bar{x}=24,55$	sd=4,648
q26. The company or organization that I manage or I own rewards our participation in educational programmes that contribute to improving our performance.	3,30	,968
q27. The company or organization that I manage or I own assesses our educational/training needs before allowing us to participate in any educational/training programme/course.	3,58	,846
q28. The company or organization that I manage or I own reviews the benefits of our participation in training programmes/courses.	3,73	,851
q29. The company or organization that I manage or I own on completion of any training course, evaluates the benefit of participation against cost (cost-benefit analysis).	3,33	,895
q30. The company or organization that I manage or I own measures the outcomes of our participation in learning activities monitored by our manager or people in charge of our work-team.	3,24	,953
q31. The company or organization that I manage or I own evaluates whether the learning outcomes of training courses are in alignment with the training goals set by the providers of learning activities.	3,45	,901

The reliability (Crobach's  $\alpha$ ) of this group is  $\alpha = 0.865$  and considered satisfactory. Research results indicated that the degree of respondents' agreement with the statements of the specific group was from medium to high, as the average level of this group was  $\bar{x} = 24,55$  ( $sd = 4,648$ ) (Table 5.5 above).

According to the respondents, the perception that the company or organization rewards participation in educational programmes that contribute to improving performance is moderately significant (26) ( $\bar{x} = 3,30$ ,  $sd = 0,968$ ), it assesses educational/training needs before allowing participation in any educational/training programme/course (27) ( $\bar{x} = 3,58$ ,  $sd = 0,846$ ), it reviews the benefits of participation in training programmes/courses (28) ( $\bar{x} = 3,73$ ,  $sd = 0,851$ ), and on completion of a training course, evaluates the benefit of participation against cost (cost-benefit analysis) (29) ( $\bar{x} = 3,33$ ,  $sd = 0,895$ ). In addition, the agreement, traced to respondents' statements, that the company or the organization they manage or own measures the outcomes of participation in learning activities, monitored by the manager or people in charge of each work-team (30) ( $\bar{x} = 3,88$ ,  $sd = 0,955$ ), and evaluates whether the learning outcomes of training courses are in alignment with the training goals set by the providers of learning activities (31) ( $\bar{x} = 3,45$ ,  $sd = 0,901$ ), is significant.

Through the statistical control t-test, we ascertained that the following variables do not influence the attitudes of managers, employers and shareholders towards the *Evaluation policy of the participation in educational programmes*: Gender ( $t = -0,083$ ,  $df = 148$ ,  $p = 0,934 > 0,05$ ), nature of employment ( $t = 1,336$ ,  $df = 148$ ,  $p = 0,184 > 0,05$ ), whether their enterprise has a department or a person responsible for education or HRD ( $t = -0,614$ ,  $df = 148$ ,  $p = 0,540 > 0,05$ ), whether the enterprise is involved in export transactions ( $t = -0,792$ ,  $df = 130$ ,  $p = 0,430 > 0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the following variables do not influence their views about the impact of LL on HRD and, in particular, the *Evaluation policy of participation in educational programmes*: City/region where managers, employers and shareholders work ( $F = 0,598$ ,  $p = 0,797 > 0,05$ ), the age group they belong to ( $F = 1,350$ ,  $p = 0,254 > 0,05$ ), educational level ( $F = 0,589$ ,  $p = 0,764 > 0,05$ ), marital status ( $F = 0,973$ ,  $p = 0,531 > 0,05$ ),

nature of employment ( $F=0,689$ ,  $p=0,922>0,05$ ), enterprise activity ( $F=1,302$ ,  $p=0,135>0,05$ ), the legal form of the enterprise they belong to (company constitution) the enterprise they belong to ( $F=1,069$ ,  $p=0,382>0,05$ ), size of the enterprise ( $F=1,207$ ,  $p=0,214>0,05$ ), type of the work contract ( $F=0,507$ ,  $p=0,995>0,05$ ), and finally, the duration of employment in the enterprise ( $F=1,264$ ,  $p=0,164>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the variables concerning the sector of the enterprise they belong to ( $F=1,591$ ,  $p=0,027<0,05$ ), job position in the enterprise ( $F=1,845$ ,  $p=0,005<0,05$ ) and position of responsibility in the enterprise ( $F=1,837$ ,  $p=0,006<0,05$ ), influence the perceptions of managers, employers or shareholders towards the *Corporate strategy, value system and ethical perceptions*.

#### **(6) Learner orientation towards lifelong learning**

The sixth group consisted of 6 items-questions related to *Learner orientation towards lifelong learning*, as follows (Table 5.6):

**Table 5.6** Main research/Part A/Managers and employers: Learner orientation towards lifelong learning

<i>Learner orientation towards lifelong learning</i> q32, q33, q34, q35, q36, q37	$\bar{x}=20,80$	sd=3,649
q32. I prefer learning through problem solving.	3,60	1,074
q33. I prefer self-managed learning.	3,19	1,064
q34. I prefer to set my personal learning goals, even though they are different from other participants' goals.	3,05	1,048
q35. I consider formal educational activities, such as studies in schools, universities e.t.c., to be positive, necessary but not enjoyable learning activities.	3,69	,926
q36. I prefer learning through social relationships or networking without any kind of discrimination.	3,21	,924
q37. I prefer learning through critical thinking activities.	4,05	,722

The reliability (Crobach's  $\alpha$ ) of this group was  $\alpha =0.794$  and considered satisfactory. Research results indicated that the respondents expressed medium to

high concurrence with the statements of the specific group, as the average level of this group was  $\bar{x}=20,80$  ( $sd=3,649$ ) (Table 5.6 above).

Research respondents prefer learning through problem solving (32) ( $\bar{x}=3,60$ ,  $sd=1,074$ ), as well as the self-managed learning (33) ( $\bar{x}=3,19$ ,  $sd=1,064$ ). They also prefer to set their own personal learning goals, even though they are different from other participants' goals (34) ( $\bar{x}=3,05$ ,  $sd=1,048$ ) and they consider formal educational activities, such as studies in schools, universities e.t.c., positive, necessary but not enjoyable learning activities (35) ( $\bar{x}=3,69$ ,  $sd=0,926$ ). Finally, they prefer learning through social relationships or networking without any kind of discrimination (36) ( $\bar{x}=3,21$ ,  $sd=0,924$ ) and learning through critical thinking activities (37) ( $\bar{x}=4,05$ ,  $sd=,722$ ).

Through the statistical control t-test, we ascertained that the following variables do not influence the attitudes of managers, employers and shareholders towards the *Learner orientation towards lifelong learning*: Gender ( $t=-,097$ ,  $df=148$ ,  $p=,923>0,05$ ), nature of employment ( $t=1,353$ ,  $df=148$   $p=0,178>0,05$ ), whether enterprise has a department or a person responsible for education or HRD ( $t=-0,635$ ,  $df=148$   $p=0,527>0,05$ ), whether enterprise is involved in export transactions ( $t=-0,762$ ,  $df=130$   $p=0,430>0,05$ ).

Through the ANOVA statistical control with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the following variables do not influence their views towards the *Learner orientation towards lifelong learning*: City/region where managers, employers and shareholders work ( $F=0,598$ ,  $p=0,797>0,05$ ), the age group they belong to ( $F=1,322$ ,  $p=0,265>0,05$ ), educational level ( $F=0,594$ ,  $p=0,760>0,05$ ), marital status ( $F=0,925$ ,  $p=0,623>0,05$ ), nature of employment ( $F=0,770$ ,  $p=0,859>0,05$ ), business activity ( $F=1,311$ ,  $p=0,122>0,05$ ), the legal form of the enterprise they belong to (constitution) ( $F=1,113$ ,  $p=0,320>0,05$ ), size of the enterprise ( $F=0,887$ , company  $p=0,686>0,05$ ), type of work contract ( $F=0,536$ ,  $p=0,994>0,05$ ), and finally, duration of employment in the enterprise ( $F=1,169$ ,  $p=0,250>0,05$ ).

Through the ANOVA statistical control with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we

found out that the variables concerning sector of the enterprise ( $F=1,595$ ,  $p=0,026<0,05$ ), job position in the enterprise ( $F=1,626$ ,  $p=,019<0,05$ ), and position of responsibility in the enterprise ( $F=1,690$ ,  $p=0,012<0,05$ ) influence the perceptions of managers, employers or shareholders towards the *Learner orientation towards lifelong learning*.

### (7) Emotional identity of the learner in relation to lifelong learning

The seventh group consisted of 5 items-questions which refer to the *Emotional identity of the learner in relation to lifelong learning*, as presented in Table 5.7:

**Table 5.7** Main research/Part A/Managers and employers: Emotional identity of the learner in relation to lifelong learning

<i>Emotional identity of the learner in relation to lifelong learning</i>	$\bar{x}=16,1$	sd=1,874
q38, q39, q40, q41, q42		
q38. I try to participate actively by expressing my emotions when discussion, or action or role playing are being selected as learning methods.	3,85	,781
q39. In every learning activity I have the desire to express my emotions because I want to participate in an active way.	3,85	,754
q40. I pretend to act interactively (influence and be influenced by others) when I am learning with other people, while hiding my real emotions.	2,19	,865
q41. I feel emotionally satisfied when I transfer my knowledge, over a long period of time, to someone who has less knowledge and experience than me, because I have a chance to help him/her to develop his/her talents.	3,90	,896
q42. I avoid expressing my emotions when I take part in learning activities based on active learning or simulation of real events.	2,30	,939

The reliability (Crobach's  $\alpha$ ) of this group was  $\alpha=0.701$  and considered satisfactory. Research results indicated that the respondents expressed from medium to high agreement with the statements of the specific group, as the average level of this group was  $\bar{x}=16,10$ , (sd=1,874) (Table 5.7 above).

In terms of the emotional identity of the learner in regard to LL, the respondents strongly believe that they try to participate actively by expressing their emotions when discussion, or action or role playing are being selected as learning methods (38) ( $\bar{x}=3,85$ ,  $sd=0,781$ ), in every learning activity they have the desire to express their emotions because they want to participate in an active way (39) ( $\bar{x}=3,85$ ,  $sd=0,754$ ) and they feel emotionally satisfied when they transfer their knowledge, over a long period of time, to someone who has less knowledge and experience than them because they have a chance to help him/her to develop his/her talents (41) ( $\bar{x}=3,90$ ,  $sd=0,896$ ). Finally, they vigorously disagree with pretending to act interactively when they learn with other people, while hiding their real emotions (40) ( $\bar{x}=2,19$ ,  $sd=0,865$ ), and avoiding expression of their emotions when they take part in learning activities based on active learning or simulation of real events (42) ( $\bar{x}=3,62$ ,  $sd=0,939$ ).

Through the statistical control t-test, we ascertained that the following variables do not influence the attitudes of managers, employers and shareholders towards the *Emotional identity of the learner in relation to lifelong learning*: Gender ( $t=-0,092$ ,  $df=148$ ,  $p=0,927>0,05$ ), nature of employment ( $t=1,3501$ ,  $df=148$   $p=0,179>0,05$ ), whether the enterprise has a department or a person responsible for the education or HRD ( $t=-0,631$ ,  $df=148$   $p=0,529>0,05$ ), whether the enterprise is involved in export transactions ( $t=-0,767$ ,  $df=130$   $p=0,445>0,05$ ).

Through the statistical control ANOVA with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the following variables do not influence their views about the impact of LL on HRD and, in particular, the *Emotional identity of the learner in regard to lifelong learning*: City/region where managers, employers and shareholders work ( $F=0,600$ ,  $p=0,796>0,05$ ), the age group they belong to ( $F=1,327$ ,  $p=0,263>0,05$ ), educational level ( $F=,594$ ,  $p=0,760>0,05$ ), marital status ( $F=0,874$ ,  $p=0,709>0,05$ ), nature of employment ( $F=0,765$ ,  $p=0,867>0,05$ ), business activity ( $F=1,282$ ,  $p=0,142>0,05$ ), the legal form of the enterprise they belong to (company constitution) ( $F=1,166$ ,  $p=0,253>0,05$ ), size of the enterprise ( $F=0,969$ ,  $p=0,547>0,05$ ), the type of work contract ( $F=0,507$ ,  $p=0,995>0,05$ ), and finally, the duration of employment in the enterprise ( $F=1,1240$ ,  $p=0,176>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the variables related to the sector of the enterprise they belong to ( $F=1,489$ ,  $p=0,043<0,05$ ), job position in the enterprise ( $F=1,650$ ,  $p=0,016<0,05$ ), and position of responsibility in the enterprise ( $F=1,667$ ,  $p=0,014<0,05$ ) influence the perceptions of managers, employers or shareholders towards the *Emotional identity of the learner in regard to lifelong learning*.

### **5.1.2 Part A/Managers and employers: Results with respect to participation in lifelong learning activities**

Participation in LL activities were examined through four selected examples. The first was seminars, the second training programmes, the third one-day educational events and the fourth other miscellaneous activities different from the other three categories of activities. The key points of the examination of each category were: Participation, theme of the recent activity, learning method, learning outcome such as self-esteem, professional development, job performance, personal development and desire for further learning. Self-esteem and personal development were referred to personal life, professional development and job performance to professional life and desire for further learning was characterized as the most important driver of LL. Participation in the four selected categories of LL activities were presented analytically below, firstly concerning managers and employers and secondly concerning employees.

#### **5.1.2.1 Part A/Managers and employers: Seminars**

##### **5.1.2.1.1 Participation in seminars**

It is evident from the table below that of the managers and employers, being respondents of the present research, 102 (68%) had participated in seminars, whereas 48 (32%) had not participated in any seminar.

**Table 5.8** Managers and employers: Seminar participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	102	68,0	68,0	68,0
	2	48	32,0	32,0	100,0
	Total	150	100,0	100,0	

### 5.1.2.1.2 Theme of the most recent seminar

Concerning the theme of the most recent seminar in which managers and employers had participated, 1 (0.7%) had participated in a seminar on ECDL, 1 (0.7%) on management, 1 (0.7%) on cloud computing, 1 (0.7%) on e-commerce, 2 (1.3%) on ISO 9001:2008, 1 (0.7%) on level of protection analysis, 2 (1.3%) on management, 1 (0.7%) on MS project, 1 (0.7%) on negotiation skills, 1 (0.7%) on negotiation skills and sales marketing, 1 (0.7%) on project management, 1 (0.7%) on Reach, 1 (0.7%) on changes in income taxation, 2 (1.3%) on taxation changes, 1 (0.7%) on development and sales techniques in crisis, 1 (0.7%) on development of marketing skills, 1 (0.7%) on work rewards, 1 (0.7%) on evaluation and performance, 1 (0.7%) on effective customer-oriented leadership, 1 (0.7%) on BASIL II, 1 (0.7%) on wine testing, 1 (0.7%) on negotiation-body language, 1 (0.7%) on management of work-related stress, 1 (0.7%) on complaint management and negotiation, 1 (0.7%) on expanded control of municipalities, 1 (0.7%) on management, 1(0.7%) on management issues, 1 (0.7%) on an introduction to systemic psychotherapy, 1 (0.7%) on an introduction to financial analysis, 1 (0.7%) on returns, 1 (0.7%) on Turkish language, 1 (0.7%) on ELOT 1429 Managerial capability of organizations implementing projects of public interest-quality, 1 (0.7%) on energy efficiency of buildings, 1 (0.7%) on export, 1 (0.7%) on export procedures in USA, 1 (0.7%) on export alertness, 2 (1.3%) on export marketing, 2 (1.3%) on customer services and problem solving, 1 (0.7%) on customer service and sales, 1 (0.7%) on communication, 1 (0.7%) on communication between people and the computer, 2 (1.3%) on supervision of online processes, 1 (0.7%) on supervision of cashier- accountants, 1 (0.7%) on work issues, 1 (0.7%) on grants, 1 (0.7%) on computers, 1 (0.7%) on leadership, 1 (0.7%) on computer processes, 1 (0.7%) on auditing issues of the Hellenic Food Authority, 1 (0.7%) on statutory framework and money laundering, 1 (0.7%) on personnel code of employees in local administration, 1 (0.7%) on operational risks, 1 (0.7%) on international accounting standards, 1 (0.7%) on

management, 1 (0.7%) on marketing, 1 (0.7%) on fashion in hair-style, 1 (0.7%) on new technology, 1 (0.7%) on money laundering, 1 (0.7%) on financial activation in Europe, 1 (0.7%) on organization and business administration, 1 (0.7%) on organization and supply chain management, 1 (0.7%) on environment, 1 (0.7%) on environment effects, 1 (0.7%) on hair treatment, 1 (0.7%) on accounting auditors, 1 (0.7%) on production planning, 1 (0.7%) on supplies, 1 (0.7%) on EL0T 1429 Managerial capability of organizations to implement projects of public interest in quality, 1 (0.7%) on fire safety, 4 (2.7%) on sales, 1 (0.7%) on sales and negotiations, 1 (0.7%) on how a Greek company faces the crisis, 1 (0.7%) on the work out of liabilities, 3 (2%) on housing solutions, 1 (0.7%) on consulting and development of innovation, 1 (0.7%) on emotional intelligence, 1 (0.7%) on technical issues, 1 (0.7%) on negotiation techniques, 2 (1.3%) on sales techniques, 1 (0.7%) on negotiation techniques, 1 (0.7%) on tourist marketing, 1 (0.7%) on banking services, 1 (0.7%) on banking and insurance services, 1 (0.7%) on taxation, 1 (0.7%) on income taxation, 1 (0.7%) on income taxation-basic changes, 1 (0.7%) on taxation changes, 2 (1.3%) on financial services, 1 (0.7%) on youth psychology. All this data analysis illustrated in more detail in Appendix C, Table C.1.

### 5.1.2.1.3 Learning methods

Concerning the learning methods, 34 (22.7%) of respondents (managers and employers) stated that the selected method was a lecture, 32 (21.3%) a discussion, 24 (16%) role-playing and 8 (5.3%) something other than the methods featured in the questionnaire choices. 2 (1.3%) of them did not answer this question. 48 (32%) of employers have not participated in any seminars during the last three years.

**Table 5.9** Managers and employers: Seminar learning method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	34	22,7	34,0	34,0
	2	32	21,3	32,0	66,0
	3	24	16,0	24,0	90,0
	4	8	5,3	8,0	98,0
	5	2	1,3	2,0	100,0
	Total	100	66,7	100,0	
Missing	System*	50	33,3		
Total		150	100,0		

\* Missing system value represents the non-participation in learning activities and not refusal of answering the question

### 5.1.2.1.4 Learning outcomes

#### (1) Positive influence on self-esteem

Concerning learning outcomes and in particular, whether the most recent seminar had had a positive influence on managers and employers' self-esteem and to what extent, 2 (1.3%) strongly disagreed, 8 (5.3%) disagreed, 23 (15.3%) neither agreed nor disagreed, 43 (28.7%) agreed, and 26 (17.3%) strongly agreed. The remaining 48 (32%) of respondents had not participated in any seminars.

**Table 5.10** Managers and employers: Seminar learning outcome-Self-esteem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	2,0	2,0
	2	8	5,3	7,8	9,8
	3	23	15,3	22,5	32,4
	4	43	28,7	42,2	74,5
	5	26	17,3	25,5	100,0
	Total	102	68,0	100,0	
Missing	System*	48	32,0		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### (2) Professional development

Concerning learning outcomes and in particular, whether the most recent seminar had contributed to managers and employers' professional development, data analysis shows that 3 (2%) strongly disagreed, 4 (2.7%) disagreed, 20 (13.3%) neither agreed nor disagreed, 51 (34%) agreed, and 24 (16%) strongly agreed. The remaining 48 (32%) of respondents had not participated in any seminars.

**Table 5.11** Managers and employers: Seminar learning outcome- Professional development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	2,0	2,9	2,9
	2	4	2,7	3,9	6,9
	3	20	13,3	19,6	26,5
	4	51	34,0	50,0	76,5
	5	24	16,0	23,5	100,0
	Total	102	68,0	100,0	
Missing	System*	48	32,0		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### 3) Improvement in job performance

Asked whether the most recent seminar had helped managers and employers to do their job better, data analysis shows that 2 (1.3%) of respondents strongly disagreed, 5 (3.3%) disagreed, 15 (10%) neither agreed nor disagreed, 52 (34.7%) agreed, and 28 (18.7%) strongly agreed. The remaining 48 (32%) of respondents had not participated in any seminars.

**Table 5.12** Managers and employers: Seminar learning outcome- Job performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	2,0	2,0
	2	5	3,3	4,9	6,9
	3	15	10,0	14,7	21,6
	4	52	34,7	51,0	72,5
	5	28	18,7	27,5	100,0
	Total	102	68,0	100,0	
Missing	System*	48	32,0		
Total		150	100,0		

\* Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (4) Personal development

Asked whether the latest seminar had contributed to managers and employers' personal development, data analysis shows that 3 (2%) of respondents strongly disagreed, 13 (8.7%) disagreed, 30 (20%) neither agreed nor disagreed, 35 (23.3%) agreed, and 21 (14%) strongly agreed. The remaining 48 (32%) of respondents had not participated in any seminars.

**Table 5.13** Managers and employers: Seminar learning outcome- Personal development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	2,0	2,9	2,9
	2	13	8,7	12,7	15,7
	3	30	20,0	29,4	45,1
	4	35	23,3	34,3	79,4
	5	21	14,0	20,6	100,0
	Total	102	68,0	100,0	
Missing	System*	48	32,0		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

**(5) Enhancement of desire for further learning**

Asked whether the latest seminar had enhanced their desire for further learning, of managers and employers 2 (1.3%) strongly disagreed, 9 (6%) disagree, 20 (13.3%) neither agreed nor disagreed, 41 (27.3%) agreed and 29 (19.3%) strongly agreed. One of the respondents (0,7%) did not give an answer to this question. The remaining 48 (32%) of respondents had not participated in any seminars.

**Table 5.14** Managers and employers: Seminar learning outcome- Desire for further learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	2,0	2,0
	2	9	6,0	8,9	10,9
	3	20	13,3	19,8	30,7
	4	41	27,3	40,6	71,3
	5	29	19,3	28,7	100,0
	Total	101	67,3	100,0	
Missing	System*	49	32,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

**5.1.2.2 Part A/Managers and employers: Training programmes**

**5.1.2.2.1 Participation in training programmes**

Of the respondents managers and employers, 44 (29.3%) had participated in training programmes, whereas 106 (70.7%) had not.

**Table 5.15** Managers and employers: Training programme participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	44	29,3	29,3	29,3
	2	106	70,7	70,7	100,0
	Total	150	100,0	100,0	

**5.1.2.2.2 Theme of the most recent training programme**

Concerning the theme of the last training programme in which managers and employers had participated, 1 (0.7%) participated in a programme on assessment management, 1 (0.7%) on CFA, 1 (0.7%) on diploma in logistics, 2 (1.3%) on management, 1 (0.7%) on RTE SIMATIC 57-300 STEP 7, 1 (0.7%) on VMWARE, 1

(0.7%) on English language, 1 (0.7%) on change in the legal auditing of municipalities, 1 (0.7%) on use of insecticides, 1 (0.7%) on negotiations, 2 (1.3%) on team management, 1 (0.7%) on bond management, 1 (0.7%) on personnel management, 1 (0.7%) on international trade, 1 (0.7%) on business administration, 1 (0.7%) on personnel management and taxation, 1 (0.7%) on Turkish language, 1 (0.7%) on energy auditors, 1 (0.7%) on specialization in information systems, 2 (1.3%) on extroversion of enterprises, 2 (1.3%) on computers, 1 (0.7%) on Italian language, 2 (1.3%) on management, 3 (2%) on money laundering, 1 (0.7%) on wine topography and the global market, 1 (0.7%) on warehouse management, 1(0.7%) on information systems in education, 1 (0.7%) on banking services, 2 (1.3%) on sales, 1 (0.7%) on sales philosophy, 1 (0.7%) on service of agricultural machines, 1 (0.7%) on quality management systems, 1 (0.7%) on AUTOCAD design, 1 (0.7%) on cash planning and auditing, 1 (0.7%) on technical knowledge, 1 (0.7%) on psychology.

All this data analysis illustrated in more detail in Appendix C, Table C.2.

### 5.1.2.2.3 Learning methods

Concerning the learning methods used, 12 (8%) of respondents (managers and employers) stated that the selected method was a lecture, 15 (10%) a discussion, 5 (3.3%) role-playing and 12 (8%) something other than the methods featured in questionnaire choices. 106 (70.7%) of respondents had not participated in any training programmes during the last three years.

**Table 5.16** Managers and employers: Training programme learning method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	8,0	27,3	27,3
	2	15	10,0	34,1	61,4
	3	5	3,3	11,4	72,7
	4	12	8,0	27,3	100,0
	Total	44	29,3	100,0	
Missing	System*	106	70,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### 5.1.2.2.4 Learning outcomes

#### (1) Positive influence on self-esteem

Concerning learning outcomes and, in particular, whether the most recent training programme had had a positive influence on managers and employers' self-esteem and to what extent, 3 (2%) disagreed, 9 (6%) neither agreed nor disagreed, 19 (12.7%) agreed, and 13 (8.7%) strongly agreed. The remaining 106 (70.7%) of respondents had not participated in any training programmes.

**Table 5.17** Managers and employers: Training programme learning outcome- Self-esteem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	2,0	6,8	6,8
	3	9	6,0	20,5	27,3
	4	19	12,7	43,2	70,5
	5	13	8,7	29,5	100,0
	Total	44	29,3	100,0	
Missing	System*	106	70,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### (2) Professional development

Concerning learning outcomes and in particular, whether the most recent training programme had contributed to managers and employers' professional development, data analysis shows that 1 (0.7%) disagreed, 10 (6.7%) neither agreed nor disagreed, 24 (16%) agreed, and 9 (6%) strongly agreed. The remaining 106 (70.7%) of respondents had not participated in any training programmes.

**Table 5.18** Managers and employers: Training programme learning outcome- Professional development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	,7	2,3	2,3
	3	10	6,7	22,7	25,0
	4	24	16,0	54,5	79,5
	5	9	6,0	20,5	100,0
	Total	44	29,3	100,0	
Missing	System*	106	70,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (3) Improvement in job performance

Asked whether the latest training programme had helped them to do their job better, data analysis shows that 3 (2%) disagreed, 3 (2%) neither agreed nor disagreed, 25 (16.7%) agreed, and 13 (8.7%) strongly agreed. The remaining 106 (70.7%) of respondents had not participated in any training programmes.

**Table 5.19** Managers and employers: Training programme learning outcome- Job performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	2,0	6,8	6,8
	3	3	2,0	6,8	13,6
	4	25	16,7	56,8	70,5
	5	13	8,7	29,5	100,0
	Total	44	29,3	100,0	
Missing	System*	106	70,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (4) Personal development

Asked to whether the latest training programme had contributed to managers and employers' personal development, data analysis shows that 3 (2%) strongly disagreed, 3 (2%) disagreed, 11 (7.3%) neither agreed nor disagreed, 18 (12%) agreed and 6 (9%) strongly agreed. The remaining 106 (70.7%) of respondents had not participated in any training programmes.

**Table 5.20** Managers and employers: Training programme learning outcome- Personal development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	2,0	6,8	6,8
	2	3	2,0	6,8	13,6
	3	11	7,3	25,0	38,6
	4	18	12,0	40,9	79,5
	5	9	6,0	20,5	100,0
	Total	44	29,3	100,0	
Missing	System*	106	70,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (5) Enhancement of desire for further learning

Asked whether the most recent training programme had enhanced their desire for further learning, of the managers and employers 2 (3%) strongly disagreed, 2 (1.3%) disagreed, 4 (2.7%) neither agreed nor disagreed, 21 (14%) agreed and 15 (10%) strongly agreed. One of the respondents (0,7%) did not give an answer to this question. The remaining 106 (70.7%) of respondents had not participated in any training programmes.

**Table 5.21** Managers and employers: Training programme learning outcome- Desire for further learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	4,5	4,5
	2	2	1,3	4,5	9,1
	3	4	2,7	9,1	18,2
	4	21	14,0	47,7	65,9
	5	15	10,0	34,1	100,0
	Total	44	29,3	100,0	
Missing	System*	106	70,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### 5.1.2.3 Part A/Managers and employers: One-day educational events

#### 5.1.2.3.1 Participation in one-day educational events

Asked whether they had participated in one day-educational events during the last three years, 47 (31,3%) of managers and employers had participated in a one day-educational event, whereas 103 (68.7%) had not.

**Table 5.22** Managers and employers: One day-educational event participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	47	31,3	31,3	32,2
	2	103	68,7	68,7	100,0
	Total	150	100	100,0	
Missing	System*	0	0		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### 5.1.2.3.2 Theme of the most recent one day-educational event

Concerning the theme of the most recent one day educational event in which managers and employers had participated, 1 (0.7%) participated in an event on management, 1 (0.7%) on international conference ECR Hellas, 1 (0.7%) on Cisco Securex resolving data, 1 (0.7%) on Do it yourself, 1 (0.7%) on ECR, 1 (0.7%) on KPMG IT Forum, 1 (0.7%) on VAT changes, 1 (0.7%) on foreigner-citizenship, 1 (0.7%) on wine tasting with a meal, 1 (0.7%) on elevators, 1 (0.7%) on female entrepreneurship, 1 (0.7%) on international trade, 2 (1.3%) on international accounting standards, 1 (0.7%) on bullying and violence in schools, 1 (0.7%) on market control, 1 (0.7%) on intra-EC transactions-VAT, 1 (0.7%) on energy returns, 2 (1.3%) on building energy returns, 1 (0.7%) on energy auditors, 1 (0.7%) on export letters of credit, 1 (0.7%) on energy saving, 1 (0.7%) on business environment, 1 (0.7%) on supply chain, 1 (0.7%) on potato enemies in Nevrokopi, 2 (1.3%) on the consumer psychology day, 1 (0.7%) on banking, 1 (0.7%) on HR issues, 1 (0.7%) on institution and insurance conscience, 1 (0.7%) on wine, 1(0.7%) on leadership behavior styles, 1 (0.7%) on production of goods, 1 (0.7%) on sales, 1 (0.7%) on work out of housing loans, 1 (0.7%) on congress tourism, 1 (0.7%) on supplies, 3 (2%) on technical issues, 1 (0.7%) on structural materials, 2 (1.3%) on taxation, 2 (1.3%) on income taxation and VAT, 1 (0.7%) on photovoltaic systems. All this data analysis illustrated in more detail in Appendix C, Table C.3.

### 5.1.2.3.3 Learning methods

Concerning learning methods, 17 (11.3%) of respondents (managers and employers) stated that the selected method was a lecture, 17 (11.3%) a discussion, 13 (8.7%) an enhanced presentation. 103 (68.7%) of respondents had not participated in a one day educational event.

**Table 5.23** Managers and employers: One day-educational event learning method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	17	11,3	36,2	36,2
	2	17	11,3	36,2	72,3
	3	13	8,7	27,7	100,0
	Total	47	31,3	100,0	
Missing	System*	103	68,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.2.3.4 Learning outcomes

##### (1) Positive influence on self-esteem

Concerning learning outcomes and, in particular, whether the most recent one day educational event had a positive influence on their self-esteem and to what extent, of the managers and employers 3 (2%) strongly disagreed, 8 (5.3%) disagreed, 9 (6%) neither agreed nor disagreed, 18 (12%) agreed and 9 (6%) strongly agreed. The remaining 103 (68.7%) of respondents had not participated in any one day educational events.

**Table 5.24** Managers and employers: One day-educational event learning outcome-Self-esteem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	2,0	6,4	6,4
	2	8	5,3	17,0	23,4
	3	9	6,0	19,1	42,6
	4	18	12,0	38,3	80,9
	5	9	6,0	19,1	100,0
	Total	47	31,3	100,0	
Missing	System*	103	68,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

##### (2) Professional development

Concerning learning outcomes and in particular, whether the most recent one day educational event had contributed to their professional development, data analysis shows that 2 (1.3%) strongly disagreed, 3 (2%) disagreed, 7 (4.7%) neither agreed nor disagreed, 25 (16.7%) agreed and 10 (6.7%) strongly agreed. The remaining 103 (68.7%) of respondents (managers and employers) had not participated in any one day educational events.

**Table 5.25** Managers and employers: One day-educational event learning outcome-Professional development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	4,3	4,3
	2	3	2,0	6,4	10,6
	3	7	4,7	14,9	25,5
	4	25	16,7	53,2	78,7
	5	10	6,7	21,3	100,0
	Total	47	31,3	100,0	
Missing	System*	103	68,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (3) Improvement in job performance

Asked whether the latest one day educational event had helped them to do their job better, data analysis shows that 1 (0.7%) strongly disagreed, 4 (2.7%) disagreed, 9 (6%) neither agreed nor disagreed, 23 (15.3%) agreed and 10 (6.7%) strongly agreed. The remaining 103 (68.7%) of respondents (managers and employers) had not participated in any one day educational events.

**Table 5.26** Managers and employers: One day-educational event learning outcome-Job performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,7	2,1	2,1
	2	4	2,7	8,5	10,6
	3	9	6,0	19,1	29,8
	4	23	15,3	48,9	78,7
	5	10	6,7	21,3	100,0
	Total	47	31,3	100,0	
Missing	System*	103	68,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### (4) Personal development

Asked whether the latest one day educational event had contributed to their personal development, data analysis shows that 5 (3.3%) strongly disagreed, 8 (5.3%) disagreed, 13 (8.7%) neither agreed nor disagreed, 13 (8.7%) agreed and 8 (5.3%) strongly agreed. The remaining 103 (68.7%) of respondents (managers and employers) had not participated in any one day educational events.

**Table 5.27** Managers and employers: One day-educational event learning outcome-Personal development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	3,3	10,6	10,6
	2	8	5,3	17,0	27,7
	3	13	8,7	27,7	55,3
	4	13	8,7	27,7	83,0
	5	8	5,3	17,0	100,0
	Total	47	31,3	100,0	
Missing	System*	103	68,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### (5) Enhancement of desire for further learning

Asked whether the most recent one day educational event had enhanced their desire for further learning, data analysis shows that 2 (1.3%) strongly disagreed, 4 (2.7%) disagreed, 11 (7.3%) neither agreed nor disagreed, 21 (14%) agreed and 9 (6%) strongly agreed. The remaining (103) 68.7% of respondents (managers and employers) had not participated in any one day educational events.

**Table 5.28** Managers and employers: One day-educational event learning outcome-Desire for further learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	4,3	4,3
	2	4	2,7	8,5	12,8
	3	11	7,3	23,4	36,2
	4	21	14,0	44,7	80,9
	5	9	6,0	19,1	100,0
	Total	47	31,3	100,0	
Missing	System*	103	68,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### 5.1.2.4 Part A/Managers and employers: Miscellaneous learning activities

#### 5.1.2.4.1 Participation in miscellaneous learning activities

Asked whether they had been involved in any other learning activities, 29 (19.3%) of respondents (managers and employers) had, whereas 121 (80.7%) had not.

**Table 5.29** Managers and employers: Miscellaneous learning activity participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	29	19,3	19,3	19,5
	2	121	80,7	80,7	100,0
	Total	149	99,3	100,0	
Missing	System*	0	0		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.2.4.2 Theme of any other most recent learning activity

Concerning the theme of the most recent involvement in miscellaneous learning activities, of managers and employers 1 (0.7%) had participated in a learning activity on auto-moto, 1 (0.7%) on bank stock, 1 (0.7%) on Detrop-Wine, 1 (0.7%) on IT shop, 1 (0.7%) on management, 1 (0.7%) on money show, 1 (0.7%) on photo-programme, 1 (0.7%) on wincor world, 1(0.7%) on product recycling, 1 (0.7%) on consumable products, 1(0.7%) on insurance, 1 (0.7%) on industrial products, 1 (0.7%) on book reading of management and marketing, 2 (1.3%) on miscellaneous issues of personal interest, 1 (0.7%) on business and organization management, 1 (0.7%) on heating materials, 1 (0.7%) on arts, 1 (0.7%) on product fair, 2 (1.3%) on exhibition in Germany, 1 (0.7%) on English language, 1 (0.7%) on familiarization with the social network of facebook, 1 (0.7%) on communication, 1 (0.7%) on social events, 1 (0.7%) on social image, 1 (0.7%) on postgraduate programmes and vocational training, 1 (0.7%) on internet piloting, 1 (0.7%) on quality and 1 (0.7%) on photovoltaic systems.

All this data analysis illustrated in more detail in Appendix C, Table C.4.

#### 5.1.2.4.3 Learning methods

Concerning learning methods, 3 (2%) of managers and employers stated that the selected method was social networking (e.g. facebook, twitter), 6 (4%) involvement in a social event, 10 (6.7%) participation in a specialized fair, 9 (6%) internet piloting while 1 (0.7%) something other than the methods featured in questionnaire choices. 121 (80.7%) of respondents had not involved in any learning activities during the last three years.

**Table 5.30** Managers and employers: Miscellaneous learning activity learning method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	2,0	10,3	10,3
	2	6	4,0	20,7	31,0
	3	10	6,7	34,5	65,5
	4	9	6,0	31,0	96,6
	5	1	,7	3,4	100,0
	Total	29	19,3	100,0	
Missing	System	121	80,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.2.4.4 Learning outcomes

##### (1) Positive influence on self-esteem

Concerning learning outcomes and, in particular, whether their involvement in miscellaneous learning activities had a positive influence on their self-esteem and to what extent, 2 (1.3%) strongly disagreed, 4 (2.7%) disagreed, 6 (4%) neither agreed nor disagreed, 13 (8.7%) agreed and 4 (2.7%) strongly agreed. The remaining 121 (80.7%) of respondents (managers and employers) had not participated in any other learning activities.

**Table 5.31** Managers and employers: Miscellaneous learning activity learning outcome-  
Self-esteem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	6,9	6,9
	2	4	2,7	13,8	20,7
	3	6	4,0	20,7	41,4
	4	13	8,7	44,8	86,2
	5	4	2,7	13,8	100,0
	Total	29	19,3	100,0	
Missing	System*	121	80,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (2) Professional development

Concerning learning outcomes and, in particular, whether their involvement in miscellaneous learning activities had contributed to their professional development, 2 (1.3%) strongly disagreed, 6 (4%) neither agreed nor disagreed, (17) 11.3% agreed, and 4 (2.7%) strongly agreed. The remaining 121 (80.7%) of respondents (managers and employers) had not participated in any other learning activities.

**Table 5.32** Managers and employers: Miscellaneous learning activity learning outcome-  
Professional development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	6,9	6,9
	3	6	4,0	20,7	27,6
	4	17	11,3	58,6	86,2
	5	4	2,7	13,8	100,0
	Total	29	19,3	100,0	
Missing	System*	121	80,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (3) Improvement in job performance

Asked whether their involvement in miscellaneous learning activities had helped them to do their job better, data analysis shows that of managers and employers 2 (1.3%) strongly disagreed, 6 (4%) neither agreed nor disagreed, 17 (11.3%) agreed

and 4 (2.7%) strongly agreed. The remaining 121 (80.7%) of respondents had not participated in any other learning activities.

**Table 5.33** Managers and employers: Miscellaneous learning activity learning outcome-Job performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	1,3	6,9	6,9
	3	6	4,0	20,7	27,6
	4	17	11,3	58,6	86,2
	5	4	2,7	13,8	100,0
	Total	29	19,3	100,0	
Missing	System*	121	80,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### (4) Personal development

Asked whether their most recent involvement in miscellaneous learning activities had contributed to their personal development, 1 (0.7%) disagreed, 7 (4.7%) neither agreed nor disagreed, of managers and employers 17 (11.3%) agreed and 4 (2.7%) strongly agreed. The remaining 121 (80.7%) of respondents had not participated in any other learning activities.

**Table 5.34** Managers and employers: Miscellaneous learning activity learning outcome: Personal development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	,7	3,4	3,4
	3	7	4,7	24,1	27,6
	4	17	11,3	58,6	86,2
	5	4	2,7	13,8	100,0
	Total	29	19,3	100,0	
Missing	System	121	80,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

**(5) Enhancement of desire for further learning**

Asked whether their most recent involvement in miscellaneous learning activities had enhanced their desire for further learning, 1 (0.7%) strongly disagreed, 1 (0.7%) disagreed, 4 (2.7%) neither agreed nor disagreed, 16 (10.7%) agreed and 7 (4.7%) strongly agreed. The remaining 121 (80.7%) of respondents (managers and employers) had not involved in any other learning activities.

**Table 5.35** Managers and employers: Miscellaneous learning activity learning outcome-Desire for further learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,7	3,4	3,4
	2	1	,7	3,4	6,9
	3	4	2,7	13,8	20,7
	4	16	10,7	55,2	75,9
	5	7	4,7	24,1	100,0
	Total	29	19,3	100,0	
Missing	System*	121	80,7		
Total		150	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

**5.1.3 Part B/ Employees: Results per factor**

Following the same analysis of the results by factor to the group of employees, statistical analysis of t-test and ANOVA were used, with post-hoc controls for independent samples and the value of axes-groups of questions as dependent variables. In the previous chapter we presented the influence on attitudes of the 271 respondents towards LL and HRD through the examination of the following variables: Job location (city/ region in which they work); age; gender; educational level; marital status; nature of employment; company type; sector of employment; business activity; job position; company constitution (the legal form of the enterprise); existence of a department or a person in charge of education or HRD; company size; responsibility position; employment contract; duration of recent employment; and, finally, involvement in export activity. The factor of reliability (Crobach's  $\alpha$ ) for the total of the items-questions of the questionnaire was statistically important and equal to 0.813%.

Each group of questions analyzed through the factor to which it referred to and presented below separately.

**(1) Awareness of lifelong learning**

The first group consisted of 6 items-questions, related to *Awareness of lifelong learning*, as presented in Table 5.36.

**Table 5.36** Main research/Part B/Employees: Awareness of lifelong learning

Awareness of lifelong learning q1, q2, q3, q4, q5, q6	$\bar{x}=20,62$	sd=3,441
q1. Lifelong learning is to learn until the retirement period.	2,94	1,344
q2. Lifelong learning is related to work-based learning.	2,66	1,130
q3. The essential aim of lifelong learning is to improve knowledge in a personal, civic, social and/or employment-related perspective.	3,85	,829
q4. The essential aim of lifelong learning is to improve skills in a personal, civic, social and/or employment-related perspective.	3,77	,825
q5. The essential aim of lifelong learning is to bring about behavioural change, as a consequence of the deep understanding attained in the fulfillment of a learning activity.	3,63	,909
q6. Lifelong learning includes non-formal and informal learning or otherwise liberal, vocational and social learning.	3,78	,776

The reliability (Crobach’s  $\alpha$ ) of the first group was  $\alpha=0,604$  and was considered satisfactory. The respondents to the specific research reflect a high level of concurrence, concerning the significance level of the first group, as the average of this group was:  $\bar{x}=20,62$  (sd=3,441) (Table 5.36).

More specifically, concerning ‘Awareness of lifelong learning’, the respondents consider lifelong learning to be learning until the retirement period ( $\bar{x}=2,94$ , sd=1,344) (q1). They believe that lifelong learning is related to work-based learning ( $\bar{x}=2,66$ , sd=1,130) (q2) as its essential aims are to improve knowledge ( $\bar{x}=3,85$ , sd=0,829) (q3) and skills ( $\bar{x}=3,77$ , sd=0,825) (q4) in a personal, civic, social and/or employment-related perspective and, as a consequence to bring about behavioural change due to the deep understanding attained on the fulfillment of a

learning activity ( $\bar{x}=3,63$ ,  $sd=0,909$ ) (q5). Finally, lifelong learning includes informal and non-formal learning or otherwise liberal, vocational and social learning ( $\bar{x}=3,78$ ,  $std=0,776$ ) (q6).

Through the statistical control t-test we ascertained that the following variables do not influence the attitudes of employees towards the *Awareness of lifelong learning*: Gender ( $t=0,673$ ,  $d=269$ ,  $p=0,501<0,05$ ), nature of employment ( $t=-1,195$ ,  $df=269$ ,  $p=0,233>0,05$ ), whether the enterprise has a department or a person responsible for education or HRD ( $t=-0,112$ ,  $df=268$ ,  $p=0,911>0,05$ ), whether the enterprise is involved in export transactions ( $t=1,274$ ,  $df=269$ ,  $p=0,204>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we found that the following variables do not influence their views about the impact of lifelong learning on the human resource development and specifically their *awareness of lifelong learning*: Age of the employees ( $F=1,255$ ,  $p=0,262>0,05$ ), educational level ( $F=1,117$ ,  $p=0,352>0,05$ ), marital status ( $F=0,298$ ,  $p=0,879>0,05$ ), nature of employment ( $F=0,297$ ,  $p=0,914>0,05$ ), the sector of the enterprise they belong to ( $F=1,115$ ,  $p=0,330>0,05$ ), business activity ( $F=2,607$ ,  $p=0,052>0,05$ ), job position in the enterprise ( $F=0,648$ ,  $p=0,787>0,05$ ), the legal form of the enterprise they belong to (company constitution) ( $F=0,495$ ,  $p=0,739>0,05$ ), size of the enterprise ( $F=0,250$ ,  $p=0,862>0,05$ ), position of responsibility in the enterprise ( $F=0,758$ ,  $p=0,581>0,05$ ), type of work contract ( $F=0,311$ ,  $p=0,906>0,05$ ) and finally, duration of the employment in the enterprise ( $F=1,621$ ,  $p=0,155>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and with the values of the axes-groups as dependent variables, we also found that the variable concerning city/region where employees work ( $F=61,518$ ) influences their views related to the *Awareness of lifelong learning*.

## **(2) Attitudes towards educational, vocational and development policies**

The second group consisted of 7 items-questions concerning *Attitudes towards educational, vocational and development policies*, as presented in Table 5.37.

**Table 5.37** Main research/Part B/Employees: Attitudes towards educational, vocational and development policies

<i>Attitudes towards educational, vocational and development policies</i> q7, q8, q9, q15, q16, q17, q18	$\bar{x}=24,81$	Sd=3,287
q7. I am responsible for my vocational training.	3,94	,987
q8. I work hard (on my own) toward achieving continuous professional development in order to keep my job.	3,90	,891
q9. I draw on my skills in order to support the achievement of organizational goals of the enterprise or organization I belong to.	4,24	,637
q15. The provision of qualitative lifelong learning requires certification.	3,37	1,144
q16. The company or organization I belong to believes that new knowledge is not necessary for those with broad experience.	2,45	1,060
q17. The company or organization I belong to offers learning opportunities to its employees with the greatest possible financial support, for example through European funded programmes.	3,41	,973
q18. The company or organization I belong to is committed to care for improving its employees' performance through enhancing their participation into vocational training for the acquirement of knowledge, skills, competences, and behavior change.	3,49	,981

The reliability (Crobach's  $\alpha$ ) of the second group is  $\alpha=0.463$  and was considered unsatisfactory.

The research results in terms of the second group items-questions demonstrated a high degree of concurrence among the items of the specific group, as the average level of this group is  $\bar{x}=24,81$  (sd=3,287) (Table 5.37 above).

In particular, the respondents draw on their skills in order to support the achievement of organizational goals of the enterprise or organization they belong to (q9) and this is considered as one of the most weighted variable or, in other words, one of the most important attitudes towards educational, vocational and development policies (q9) ( $\bar{x}=4,24$ , sd=0,637). Equally important are their attitudes towards

working hard on their own to achieve professional development in order to keep their job (q8) ( $\bar{x}=3,90$ ,  $sd=,891$ ) and their responsibility for their vocational training (q7) ( $\bar{x}=3,94$ ,  $sd=0,987$ ).

Moreover, respondents believe that necessary prerequisite of the provision of qualitative lifelong learning is certification (q15) ( $\bar{x}=3,37$ ,  $sd=1,144$ ) and thus, the company or the organization they belong to offers learning opportunities to its employees with the greatest possible financial support, for example through European funded programmes (q17) ( $\bar{x}=3,41$ ,  $sd=0,973$ ). Also, it is committed to caring about improving its employees' performance through enhancing their participation in vocational training for the acquisition of knowledge, skills, competences, and behavioral change (q18) ( $\bar{x}=3,49$ ,  $sd=0,981$ ). In addition, it is less agreement with whether the company or organization they belong to believes that new knowledge is not necessary for those with broad experience (q16) ( $\bar{x}=2,45$ ,  $sd=1,060$ ).

Through the statistical control t-test, we ascertained that the following variables do not influence the views of the employees in relation to the *Attitudes towards educational, vocational and development policies*: Gender ( $t=1,615$ ,  $df=269$ ,  $p=0,107 >0,05$ ), nature of employment ( $t=1,205$ ,  $df=269$ ,  $p=0,229 >0,05$ ), whether the enterprise is involved in export transactions ( $t=1,568$ ,  $df=269$ ,  $p=0,118 >0,05$ ).

In addition, through the statistical control t-test, we ascertained that the variable, Whether the enterprise they belong to has a department or a person responsible for education or HRD ( $t=-2,054$ ,  $df=268$ ,  $p=0,041 <0,05$ ), influences the employees' points of view concerning the *Attitudes towards educational, vocational and development policies*.

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the following variables do not influence the employees views referring to the *Attitudes towards educational, vocational and development policies*: Educational level ( $F=1,195$ ,  $p=0,306 >0,05$ ), marital status ( $F=0,418$ ,  $p=0,795 >0,05$ ), nature of employment ( $F=1,206$ ,  $p=,307 >0,05$ ), sector of the enterprise they belong to ( $F=1,809$ ,  $p=,166 >0,05$ ), the legal form of the enterprise they belong to ( $F=0,412$ ,

$p=0,800>0,05$ ), the position of responsibility in the enterprise ( $F=1,218$ ,  $p=0,301>0,05$ ) and finally, the type of work contract ( $F=2,019$ ,  $p=0,076>0,05$ ).

Through the ANOVA statistical control ,with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the variables concerning the city/region where employees work ( $F=6,444$ ,  $p=0,000<0,05$ ), age group they belong to ( $F=3,128$ ,  $p=0,026<0,05$ ), enterprise activity ( $F=12,698$ ,  $p=0,000<0,05$ ), job position in the enterprise ( $F=2,546$ ,  $p=0,005<0,05$ ), size of the enterprise ( $F=4,055$ ,  $p=,008<0,05$ ), and finally, duration of the employment in the enterprise ( $F=2,924$ ,  $p=0,014<0,05$ ), influence their views in relation to the *Attitudes towards educational, vocational and development policies*.

### (3) Culture of lifelong learning

The third group consisted of 6 items-questions, related to the *Culture of lifelong learning*, as presented in Table 5.38.

**Table 5.38** Main research/Part B/Employees: Culture of lifelong learning

<i>Culture of lifelong learning</i> q10, q11, q12, q13, q14, q19	$\bar{x}=22,95$	sd=4,253
q10. My belief is that lifelong learning leads to the wellbeing of the participants in learning process.	3,86	,813
q11. My belief is that lifelong learning leads to job satisfaction.	3,70	3,188
q12. My belief is that lifelong learning leads to innovative ideas.	4,00	,805
q13. My belief is that lifelong learning leads to better job performance.	3,88	,786
q14. My belief is that involvement in lifelong learning activities reinforces the motivation for learning.	4,01	,733
q19. The company or the organization that I belong to has a positive attitude towards lifelong learning.	3,49	,981

The reliability (Crobach's  $\alpha$ ) of the third group is  $\alpha=0.798$  and was considered satisfactory.

Regarding the third group of items-questions, the research results indicated a high degree of concurrence among the items of the specific group, as the average level of this group is  $\bar{x}=22,95$  ( $sd=4,253$ ) (Table 5.38 above).

More specifically, the participants of the present research consider as important that lifelong learning leads to the wellbeing of the participants in learning process (q10) ( $\bar{x}=3,86$ ,  $sd=,813$ ), to job satisfaction (q11) ( $\bar{x}=3,70$ ,  $sd=3,188$ ), to innovative ideas (q12) ( $\bar{x}=4,00$ ,  $sd=0,805$ ) as well as to better job performance (q13) ( $\bar{x}=3,88$ ,  $sd=0,786$ ).

Furthermore, the respondents believe that their involvement in lifelong learning activities reinforces the motivation for learning (q14) and this is considered to be the most weighted variable or in other words this is the most important attitude towards the culture of lifelong learning (q14) ( $\bar{x}=4,01$ ,  $sd=0,733$ ). In addition, they consider that the company or the organization they belong to has a positive attitude towards lifelong learning (q19) ( $\bar{x}=3,49$ ,  $sd=0,981$ ).

Through the statistical control t-test, we ascertained that the following variables do not influence the attitudes of employees towards the *Culture of lifelong learning*: Gender ( $t=-0,091$ ,  $df=269$ ,  $p=0,927>0,05$ ), employment ( $t=,769$ ,  $df=269$ ,  $p=0,443>0,05$ ), whether their enterprise has a department or a person responsible for education or HRD ( $t=-0,801$ ,  $df=268$ ,  $p=0,424>0,05$ ), whether the enterprise is involved in export transactions ( $t=1,476$ ,  $df=269$ ,  $p=0,141>0,05$ ).

Through the ANOVA statistical control with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the following variables do not influence their views about the impact of LL on HRD and, in particular the *Culture of lifelong learning*: City/region where employees work ( $F=1,099$ ,  $p=0,364>0,05$ ), the age group they belong to ( $F=2,126$ ,  $p=0,097>0,05$ ), educational level ( $F=1,856$ ,  $p=0,077>0,05$ ), marital status ( $F=,735$ ,  $p=0,569>0,05$ ), nature of employment ( $F=0,657$ ,  $p=0,657>0,05$ ), the sector of the enterprise they belong to ( $F=,981$ ,  $p=0,376>0,05$ ), enterprise activity ( $F=2,013$ ,  $p=0,112>0,05$ ), job position in the enterprise ( $F=1,766$ ,  $p=,060>0,05$ ), the kind of enterprise they belong to ( $F=0,161$ ,  $p=0,958>0,05$ ), size of the enterprise ( $F=1,000$ ,  $p=0,393>0,05$ ), the position of responsibility in the enterprise ( $F=0,831$ ,  $p=0,528>0,05$ ), the type of work contract

( $F=1,342$ ,  $p=0,247>0,05$ ), and finally, the duration of the employment in the enterprise ( $F=1,325$ ,  $p=0,254>0,05$ ).

#### (4) Corporate strategy, value system and ethical perceptions

The fourth group consisted of 6 items-questions, concerning the *Corporate strategy, value system and ethical perceptions*, as presented in Table 5.39.

**Table 5.39** Main research/Part B/Employees: Corporate strategy, value system and ethical perceptions

<i>Corporate strategy, value system and ethical perceptions</i> q20, q21, q22, q23, q24, q25	$\bar{x} =$ 21,86	sd=4,145
q20. The company or organization that I belong to tries to make learning accessible to everyone.	3,54	,889
q21. The company or organization that I belong to considers its employees as an important asset (employees are its power).	3,89	,845
q22. The company or organization that I belong to regards lifelong learning strategy as a strategy for creating value.	3,59	,801
q23. The company or the organization that I belong to invests in its staff training, because it considers it necessary for gaining competitive advantage.	3,65	,864
q24. The company or organization that I belong to is socially responsible which is clear from its educational policy.	3,52	,910
q25. The company or organization that I belong to believes that knowledge is a generic source, the dissemination of which is valuable.	3,67	,834

The reliability (Crobach's  $\alpha$ ) of this group was  $\alpha =0.892$  and considered satisfactory. Research results indicated the respondents had a high degree of concurrence in the statements of the specific group that refer to the corporate strategy, value system and ethical perceptions as the average level of this group was  $\bar{x}=21,86$ , (sd=4,145) (Table 4.56 above). More specifically, the respondents claim that the company or organization that they belong to tries to make learning accessible

to everyone (20) ( $\bar{x}=3,54$ ,  $sd=0,889$ ), considers its employees as an important asset (employees are its power) (21) ( $\bar{x}=3,89$ ,  $sd=0,845$ ), and moreover, it regards lifelong learning strategy as a strategy for creating value (22) ( $\bar{x}=3,59$ ,  $sd=0,801$ ), it invests in its staff training, because it considers it necessary for gaining competitive advantage (23) ( $\bar{x}=3,65$ ,  $sd=0,864$ ), it is socially responsible which is clear from its educational policy (24) ( $\bar{x}=3,523$ ,  $sd=0,910$ ), and finally, strongly believe that knowledge is a generic source, the dissemination of which is valuable (25) ( $\bar{x}=3,67$ ,  $sd=0,834$ ).

Through the statistical control t-test, we ascertained that the following variables do not influence the attitudes of employees towards the *Corporate strategy, value system and ethical perceptions*: Gender ( $t=0,488$ ,  $df=269$ ,  $p=0,593>0,05$ ), nature of employment ( $t=0,638$ ,  $df=17$ ,  $p=0,532>0,05$ ), whether the enterprise is involved in export transactions ( $t=1,931$ ,  $df=269$ ,  $p=0,055>0,05$ ).

Through the statistical control t-test, we ascertained that whether their enterprise has a department or a person responsible for education or HRD ( $t=-2,569$ ,  $df=268$ ,  $p=0,011<0,05$ ) influences the attitudes of the employees towards the *Corporate strategy, value system and ethical perceptions*.

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the following variables do not influence their attitudes towards the *Corporate strategy, value system and ethical perceptions*: Age group they belong to ( $F=1,986$ ,  $p=0,116>0,05$ ), educational level ( $F=1,203$ ,  $p=0,302>0,05$ ), marital status ( $F=0,321$ ,  $p=0,864>0,05$ ), nature of employment ( $F=0,311$ ,  $p=0,906>0,05$ ), the sector of the enterprise they belong to ( $F=1,504$ ,  $p=0,224>0,05$ ), the kind of enterprise they belong to ( $F=0,638$ ,  $p=0,638>0,05$ ), size of the enterprise ( $F=1,664$ ,  $p=0,175>0,05$ ), position of responsibility in the enterprise ( $F=1,144$ ,  $p=0,338>0,05$ ), and finally, the duration of the employment in the enterprise ( $F=0,789$ ,  $p=0,558>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the variables, such as the city/region where employees work ( $F=3,268$ ,  $p=0,001<0,05$ ), enterprise activity ( $F=6,049$ ,  $p=0,001<0,05$ ), type of the work contract

( $F=2,843$ ,  $p=0,016<0,05$ ), and finally, job position in the enterprise ( $F=2,517$ ,  $p=0,005<0,05$ ), influence the perceptions of employees concerning the *Corporate strategy, value system and ethical perceptions*.

### (5) Evaluation policy of participation in educational programmes

The fifth group consists of 6 items-questions that refer to the Evaluation policy of the participation in educational programmes and these are the following (Table 5.40)

**Table 5.40** Main research/Part B/Employees: Evaluation policy of participation in educational programmes

<i><b>Evaluation policy of participation in educational programmes</b></i> q26, q27, q28, q29, q 30, q31	$\bar{x}=19,57$	sd=4,540
q26. The company or organization that I belong to rewards our participation in educational programmes that contribute to improving our performance.	3,21	1,004
q27. The company or organization that I belong to assesses our educational/training needs before allowing us to participate in any educational/training programme/course.	3,30	,983
q28. The company or organization that I belong to reviews the benefits of our participation in training programmes/courses.	3,45	,937
q29. The company or organization that I manage or I own on completion of any training course, evaluates the benefit of participation against cost (cost-benefit analysis).	3,25	,896
q30. The company or organization that I belong to measures the outcomes of our participation in learning activities monitored by our manager or people in charge of our work-team.	3,10	,918
q31. The company or organization that I belong to evaluates whether the learning outcomes of training courses are in alignment with the training goals set by the providers of learning activities.	3,27	,937

The reliability (Crobach's  $\alpha$ ) of this group was  $\alpha = 0.892$  and was considered satisfactory. Research results indicated that the degree of respondents' agreement with the statements of the specific group was from medium to high, as the average level of this group was  $\bar{x}=19,57$  (sd=4,540) (Table 5.40 above).

According to the respondents, the perception that the company or organization rewards participation in educational programmes that contribute to improving performance is moderately significant (q26) ( $\bar{x}=3,21$ ,  $sd=1,004$ ), it assesses educational/training needs before allowing participate in any educational/training programme/course (27) ( $\bar{x}=3,30$ ,  $sd=0,983$ ), it reviews the benefits of participation in training programmes/courses (28) ( $\bar{x}=3,45$ ,  $sd=0,937$ ), and then, on completion of a training course, evaluates the benefit of participation against cost (cost-benefit analysis) (29) ( $\bar{x}=3,25$ ,  $sd=0,896$ ). In addition, the agreement, traced to respondents' statements, that the company or the organization they belong to measures the outcomes of participation in learning activities monitored by the manager or people in charge of each work-team (30) ( $\bar{x}=3,10$ ,  $sd=0,918$ ), ( $\bar{x}=3,88$ ,  $sd=0,955$ ), and evaluates whether the learning outcomes of training courses are in alignment with the training goals set by the providers of learning activities (31) ( $\bar{x}=3,27$ ,  $sd=0,937$ ) is significant.

Through the statistical control t-test, we ascertained that the nature of employment ( $t=0,202$ ,  $df=269$ ,  $p=0,840>0,05$ ) does not influence the attitudes of employees concerning the *Evaluation policy of participation in educational programmes*.

In addition, through the statistical control t-test, we ascertained that variables such as gender ( $t=2,017$ ,  $df=269$ ,  $p=0,045<0,05$ ), whether the enterprise has a department or a person responsible for education or HRD ( $t=-3,658$ ,  $df=122$ ,  $p=0,000<0,05$ ), whether the enterprise is involved in export transactions ( $t=2,182$ ,  $df=269$ ,  $p=0,030<0,05$ ) influence the attitudes of employees concerning the *Evaluation policy of participation in educational programmes*.

Through the ANOVA statistical control with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the following variables do not influence employees' views concerning the *Evaluation policy of the participation in educational programmes*: The age group they belong to ( $F=1,353$ ,  $p=0,258>0,05$ ), educational level ( $F=1,504$ ,  $p=0,166>0,05$ ), nature of employment ( $F=0,801$ ,  $p=0,550>0,05$ ), the sector of the enterprise they belong to ( $F=1,894$ ,  $p=0,153>0,05$ ), kind of the enterprise ( $F=0,0588$ ,  $p=0,672>0,05$ ), position of responsibility in the enterprise ( $F=1,215$ ,  $p=0,302>0,05$ ),

type of the work contract ( $F=1,165$ ,  $p=0,327>0,05$ ), and finally, the duration of the employment in the enterprise ( $F=0,713$ ,  $p=0,614>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that variables such as the city/region where employees work ( $F=3,262$ ,  $p=,001<0,05$ ), marital status ( $F=2,449$ ,  $p=0,047<0,05$ ), enterprise activity ( $F=6,613$ ,  $p=0,000<0,05$ ), job position in the enterprise ( $F=2,287$ ,  $p=0,011>0,05$ ), and the size of the enterprise ( $F=6,036$ ,  $p=0,001<0,05$ ), influence the perceptions of employees concerning the *Corporate strategy, value system and ethical perceptions*.

### (6) Learner orientation towards lifelong learning

The sixth group consists of 6 items-questions concerning *Learner's orientation towards lifelong learning* and they are the following (Table 5.41).

**Table 5.41** Main research/Part B/Employees: Learner's orientation towards lifelong learning

<i>Learner orientation towards lifelong learning</i> q32, q33, q34, q35, q36, q37	$\bar{x}=21,55$	sd=4,116
q32. I prefer learning through problem solving.	3,85	2,591
q33. I prefer self-managed learning.	3,31	,996
q34. I prefer to set my personal learning goals even though they are different from other participants' goals.	3,34	1,017
q35. I consider formal educational activities, such as studies in schools, universities e.t.c., to be positive, necessary but not enjoyable learning activities.	3,61	,997
q36. I prefer learning through social relationships or networking without any kind of discrimination.	3,44	,933
q37. I prefer learning through critical thinking activities.	3,99	,683

The reliability (Crobach's  $\alpha$ ) of this group was  $\alpha =0.416$  and was considered satisfactory. Research results indicated that the respondents expressed medium to high concurrence with the statements of the specific group, as the average level of this group was  $\bar{x}=21,55$  (sd=4,116) (Table 5.41 above).

Research respondents prefer learning through problem solving (32) ( $\bar{x}=3,85$ , sd=2,591), as well as the self-managed learning (33) ( $\bar{x}=3,31$ , sd=0,996). They also

prefer to set their personal learning goals, even though they are different from other participants' goals (34) ( $\bar{x}=3,34$ ,  $sd=1,017$ ) and they consider formal educational activities, such as studies in schools, universities e.t.c., positive, necessary but not enjoyable learning activities (35) ( $\bar{x}=3,61$ ,  $sd=0,997$ ). Finally, they prefer learning through social relationships or networking without any kind of discrimination (36) ( $\bar{x}=3,44$ ,  $sd=0,933$ ) and learning through critical thinking activities (37) ( $\bar{x}=3,99$ ,  $sd=0,683$ ).

Through the statistical control t-test we ascertained that the gender ( $t=2,141$ ,  $df=269$ ,  $p=0,033<0,05$ ), employment ( $t=-0,226$ ,  $df=269$ ,  $p=0,822>0,05$ ), whether their enterprise has a department or a person responsible for the education or the human resource development ( $t=-0,488$ ,  $df=268$ ,  $p=0,626>0,05$ ), do not influence the attitudes of employees concerning the *Learner orientation towards lifelong learning*.

Through the statistical control t-test, we ascertained that whether the enterprise is involved in export transactions ( $t=2,454$ ,  $df=269$ ,  $p=0,015<0,05$ ) influences the attitudes of employees concerning the *Learner orientation towards lifelong learning*.

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the following variables do not influence their views concerning the *Learner orientation towards lifelong learning*: The age group they belong to ( $F=0,096$ ,  $p=0,962>0,05$ ), educational level ( $F=0,933$ ,  $p=,481>0,05$ ), marital status ( $F=0,501$ ,  $p=0,735>0,05$ ), sector of the enterprise ( $F=0,354$ ,  $p=0,702>0,05$ ), enterprise activity ( $F=1,141$ ,  $p=0,333>0,05$ ), job position in the enterprise ( $F=1,228$ ,  $p=0,269>0,05$ ), the kind of enterprise they belong to ( $F=0,597$ ,  $p=0,665>0,05$ ), size of the enterprise ( $F=2,728$ ,  $p=0,044<0,05$ ), position of responsibility in the enterprise ( $F=0,479$ ,  $p=0,792>0,05$ ), type of the work contract ( $F=0,250$ ,  $p=0,939>0,05$ ), and finally, the duration of the employment in the enterprise ( $F=1,169$ ,  $p=0,250>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the variables concerning the city/region where employees work ( $F=2,591$ ,  $p=0,007<0,05$ ) and the nature of employment ( $F=3,599$ ,  $p=0,004<0,05$ ) influence their views concerning the *Learner orientation towards lifelong learning*.

**(7) Emotional identity of the learner in relation to lifelong learning**

The seventh group consists of 5 items-questions which refer to the *Emotional identity of the learner in relation to lifelong learning*, as presented in Table 5.42.

**Table 5.42** Main research/Part B/Employees: Emotional identity of the learner in relation to lifelong learning

<b><i>Emotional identity of the learner in relation to lifelong learning</i></b> q38, q39, q40, q41, q42	$\bar{x}=16,35$	sd=2,270
q38/37. I try to participate actively by expressing my emotions when discussion, or action or role playing are being selected as learning methods.	3,92	,728
q39/38. In every learning activity I have the desire to express my emotions because I want to participate in an active way.	3,84	,808
q40/39/40. I pretend to act interactively (influence and be influenced by others) when I am learning with other people while hiding my real emotions.	2,42	,981
q41. I feel emotionally satisfied when I transfer my knowledge for a long period of time, to someone who has less knowledge and experience than me, because I have a chance to help him/her to develop his/her talents.	3,72	1,002
q42/41. I avoid expressing my emotions when I take part in learning activities based on active learning or simulation of real events.	2,45	,949

The reliability (Crobach's  $\alpha$ ) of this group was  $\alpha=0.768$  and was considered satisfactory. Research results indicated that the respondents expressed from medium to high agreement with the statements of the specific group, as the average level of this group was  $\bar{x}=16,35$ , (sd=2,270) (Table 5.42 above).

In terms of the emotional identity of the learner regarding lifelong learning, the respondents strongly believe that they try to participate actively by expressing their emotions when discussion, or action or role playing are being selected as learning methods (38) ( $\bar{x}=3,92$ , sd=,728), in every learning activity they have the desire to express their emotions because they want to participate in an active way (39)

( $\bar{x}=3,84$ ,  $sd=0,808$ ) and they feel emotionally satisfied when they transfer their knowledge for a long period of time, to someone who has less knowledge and experience than them because they have a chance to help him/her to develop his/her talents (41) ( $\bar{x}=3,72$ ,  $sd=1,002$ ). Finally, they vigorously disagree with pretending to act interactively when they learn with other people, while hiding their real emotions (40) ( $\bar{x}=2,42$ ,  $sd=1,002$ ), and avoiding expression of their emotions when they take part in learning activities based on active learning or simulation of real events (42) ( $\bar{x}=2,45$ ,  $sd=0,949$ ).

Through the statistical control t-test, we ascertained that the following variables do not influence the attitudes of employees towards the *Emotional identity of the learner in relation to lifelong learning*: Gender ( $t=1,238$ ,  $df=269$ ,  $p=0,217>0,05$ ), nature of employment ( $t=-1,784$ ,  $df=269$   $p=0,076>0,05$ ), whether their enterprise has a department or a person responsible for education or HRD ( $t=-1,784$ ,  $df=268$   $p=0,230>0,05$ ), whether the enterprise is involved in export transactions ( $t=-0,528$ ,  $df=269$ ,  $p=0,598>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the following variables do not influence their views concerning the impact of LL on HRD and, in particular, the *Emotional identity of the learner in relation to lifelong learning*: The sector of the enterprise they belong to ( $F=1,944$ ,  $p=0,145>0,05$ ), size of the enterprise ( $F=2,285$ ,  $p=,079>0,05$ ), and the position of responsibility in the enterprise ( $F=,929$ ,  $p=,463>0,05$ ).

Through the ANOVA statistical control, with post-hoc controls for independent sample groups and the values of the axes-groups as dependent variables, we found that the following variables influence employees' views concerning the *Emotional identity of the learner in relation to lifelong learning*: The city/region where employees work ( $F=5,950$ ,  $p=0,000<0,05$ ), the age group they belong to ( $F=4,607$ ,  $p=0,004<0,05$ ), educational level ( $F=2,484$ ,  $p=0,017<0,05$ ), marital status ( $F=2,680$ ,  $p=0,032<0,05$ ), nature of employment ( $F=2,470$ ,  $p=0,033<0,05$ ), enterprise activity ( $F=5,154$ ,  $p=0,002<0,05$ ), the kind of enterprise they belong to ( $F=3,144$ ,  $p=0,001<0,05$ ), the type of work contract ( $F=2,331$ ,  $p=0,043<0,05$ ), and finally, the duration of the employment in the enterprise ( $F=3,295$ ,  $p=0,007<0,05$ ).

Indeed, the analysis of the results per factor, described above, provided important information and knowledge about the impact of LL on HRD.

#### **5.1.4 Part B/ Employees: Results with respect to participation in lifelong learning activities**

After the analysis per factor, result analysis followed the same path as for the managers and employers. Thus, in particular, participation in LL activities were examined through four selected examples such as seminars, training programmes, one-day educational events and other miscellaneous activities different from the other three categories of activities. The key points of the examination of each category were: Participation, theme of the recent activity, learning method, learning outcome such as self-esteem, professional development, job performance, personal development and desire for further learning. Self-esteem and personal development were referred to personal life, professional development and job performance to professional life and desire for further learning was characterized as the most important driver of LL. Participation in the four selected categories of LL activities were presented analytically below.

##### **5.1.4.1 Part B/ Employees: Seminars**

###### **5.1.4.1.1 Participation in seminars**

Of the respondents (in this case employees' group), 142 (52.4%) had participated in seminars during the last three years, whereas 129 (47.6%) had not.

**Table 5.43** Employees: Seminar participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	142	52,4	52,4	52,4
	2	129	47,6	47,6	100,0
	Total	271	100,0	100,0	

###### **5.1.4.1.2 Theme of the most recent seminar**

Concerning the theme of the most recent seminar in which employees had participated, 1 (0.4%) had participated in a seminar on coaching, 1 (0.4%) on ECDL

Expert-Access, 1 (0.4%) on financial reporting and improvement of share image, 1 (0.4%) on inverters, 1 (0.4%) on management and sales, 1 (0.4%) on PLC-Scada, 1 (0.4%) on SMA Tripower, 1 (0.4%) on social media, 1 (0.4%) on social media marketing-public relations, 1 (0.4%) on SOLYNDIZA, 1 (0.4%) on Su-Jok, 3 (1.1%) on Office Word, 1 (0.4%) on English language, literature & poetry of the 19<sup>th</sup> century, 1 (0.4%) on changes in income taxation, 1 (0.4%) on unit trust, 1 (0.4%) on anti-thunder protection, 1 (0.4%) on effective team & leadership, 1 (0.4%) on safety in work, 1 (0.4%) on insurance-urgent cases, 3 (1.1%) on insurance, 1 (0.4%) on fire insurance, 1 (0.4%) on automation Siemens Simatic S7, 1 (0.4%) on data and quality management of ISO 9001, 1 (0.4%) on basics of insurance, 1 (0.4%) on basic origins of economy, 1 (0.4%) on publicity and public relations, 2 (0.7%) on export processes, 1 (0.4%) on negotiations, 1 (0.4%) on project management, 1 (0.4%) on personnel management and motivation, 1 (0.4%) on crisis management, 1 (0.4%) on class control in schools, 4 (1.5%) on administrative issues, 1 (0.4%) on initial education, 1 (0.4%) on education in C++ language-Adonet-Sqlserver, 1 (0.4%) on educational and employment policies, 1 (0.4%) on policies of standardization educators, 1 (0.4%) on intimidation in schools, 1 (0.4%) on intra-EC transactions, 1 (0.4%) on intra-EC legislation and VAT, 1 (0.4%) on energy issues, 2 (0.7%) on energy auditing, 2 (0.7%) on export, 1 (0.4%) on export methods, 3 (1.1%) on export marketing, 1 (0.4%) on customer services and product promotion, 1 (0.4%) on labour issues, 2 (0.7%) on labour relations, 1 (0.4%) on market research/export processes, 2 (0.7%) on corporate issues for products, 1 (0.4%) on flexible work forms, 1 (0.4%) on Hellenic Food Authority, 2 (0.7%) on computers, 1 (0.4%) on theatrical education, 1 (0.4%) on innovation and enterprises, 1 (0.4%) on consumer loans, 1 (0.4%) on KEMAK, 1 (0.4%) on Capital 4, 1 (0.4%) on code of ethics for employees, 3 (1.1%) on operational risks, 1 (0.4%) on management, 1 (0.4%) on methodology, 1 (0.4%) on studies of photovoltaic parks, 1 (0.4%) on work forms-leaves, 1 (0.4%) on work forms-leaves-benefits, 1 (0.4%) on foreign language (Turkish), 2 (0.7%) on money laundering, 1 (0.4%) on economy issuesfor non economists, 1 (0.4%) on financial and technical study, 1 (0.4%) on warehouse organizations and reserve management, 1 (0.4%) on organization and management of sales, 1 (0.4%) on work out of business loans, 1 (0.4%) on food hygiene conditions,

2 (0.7%) on customer-centered approach, 2 (0.7%) on environment, 1 (0.4%) on business financial capability, 3 (1.1%) on credit cards, 1 (0.4%) on information technology, 1 (0.4%) on information technology-learning difficulties, 1 (0.4%) on product protection-intellectual property, 1 (0.4%) on standards: ISO 9001:2008/14001, 1 (0.4%) on fire security, 5 (1.8%) on sales, 4 (1.5%) on sales and trade, 1 (0.4%) on sales and after sale service, 1 (0.4%) on work out of consumer loans, 3 (1.1%) on housing loans, 3 (1.1%) on consulting, 1 (0.4%) on career guidance counseling, exchange (foreign currency-falseness), 1 (0.4%) on design programmes, 1 (0.4%) on school counseling, 1 (0.4%) on Tiresias S.A., 1 (0.4%) on technical issues-workequipment, 1 (0.4%) on technical sales, 1 (0.4%) on marketing in crisis period, 1 (0.4%) on Turkish language, 2 (0.7%) on banking services, 1 (0.4%) on taxation, 1 (0.4%) on taxation issues, 1 (0.4%) on taxation changes, 1 (0.4%) on tax consulting services, 1 (0.4%) on VAT, 2 (0.7%) on photovoltaic installations, 1 (0.4%) on technical issues about products.

All this data analysis illustrated in more detail in Appendix C, Table C.5.

#### 5.1.4.1.3 Learning methods

Concerning learning methods, 65 (24%) of respondents (employees) stated that the selected method was a lecture, 51(18.8%) a discussion, 15 (5.5%) role-playing and 11 (4.1%) something other than the methods featured in the questionnaire choices. 129 (47.6%) of employees had not participated in any seminars during the last three years.

**Table 5.44** Employees: Seminar learning method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	65	24,0	45,8	45,8
	2	51	18,8	35,9	81,7
	3	15	5,5	10,6	92,3
	4	11	4,1	7,7	100,0
	Total	142	52,4	100,0	
Missing	System*	129	47,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.4.1.4 Learning outcomes

##### (1) Positive influence on self-esteem

Concerning learning outcomes and, in particular, whether the most recent seminar had had a positive influence on their self-esteem and to what extent, of employees 8 (3%) strongly disagreed, 15 (5.5%) disagreed, 37 (13.7%) neither agreed nor disagreed, 67 (24.7%) agreed and 15 (5.5%) strongly agreed. The remaining 129 (47.6%) of respondents had not participated in any seminars.

**Table 5.45** Employees: Seminar learning outcome-Self-esteem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	3,0	5,6	5,6
	2	15	5,5	10,6	16,2
	3	37	13,7	26,1	42,3
	4	67	24,7	47,2	89,4
	5	15	5,5	10,6	100,0
	Total	142	52,4	100,0	
Missing	System*	129	47,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

##### (2) Professional development

Concerning learning outcomes and in particular, whether the most recent seminar had contributed to their professional development, data analysis shows that 2 (0.7%) strongly disagreed, 13 (4.8%) disagreed, 23 (8.5%) neither agreed nor disagreed, 88 (32.5%) agreed and 16 (5.9%) strongly agreed. The remaining 129 (47.6%) of employees had not participated in any seminars.

**Table 5.46** Employees: Seminar learning outcome- Professional development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,7	1,4	1,4
	2	13	4,8	9,2	10,6
	3	23	8,5	16,2	26,8
	4	88	32,5	62,0	88,7
	5	16	5,9	11,3	100,0
	Total	142	52,4	100,0	
Missing	System*	129	47,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (3) Improvement in job performance

Asked whether the latest seminar had helped them to do their job better, data analysis shows that 2 (0.7%) strongly disagreed, 10 ( 3.7%) disagreed, 19 (7%) neither agreed nor disagreed, 86 (31.7%) agreed and 25 (9.2%) strongly agreed. The remaining 129 (47.6%) of respondents (employees) had not participated in any seminars.

**Table 5.47** Employees: Seminar learning outcome- Job performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,7	1,4	1,4
	2	10	3,7	7,0	8,5
	3	19	7,0	13,4	21,8
	4	86	31,7	60,6	82,4
	5	25	9,2	17,6	100,0
	Total	142	52,4	100,0	
Missing	System*	129	47,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (4) Personal development

Asked whether the most recent seminar had contributed to their personal development, data analysis shows that of employees 1 (0.4%) strongly disagreed, 17 (6.3%) disagreed, 20 (7.4%) neither agreed nor disagreed, 83 (30.6%) agreed and 20 (7.4%) strongly agreed. One of the respondents (0.4%) did not answer this question. The remaining 129 (47.6%) of respondents had not participated in any seminars.

**Table 5.48** Employees: Seminar learning outcome- Personal development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	,7	,7
	2	17	6,3	12,0	12,7
	3	20	7,4	14,1	26,8
	4	83	30,6	58,5	85,2
	5	20	7,4	14,1	99,3
	35	1	,4	,7	100,0
	Total	142	52,4	100,0	
Missing	System*	129	47,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (5) Enhancement of desire for further learning

Asked whether the latest seminar had enhanced their desire for further learning, of employees 2 (0.7%) strongly disagreed, 9 (3.3%) disagreed, 12 (4.4%) neither agreed nor disagreed, 89 (32.8%) agreed and 30 (11.1%) strongly agreed. One of the respondents (0,7%) did not give an answer to this question. The remaining 129 (47.6%) of respondents had not participated in any seminars.

**Table 5.49** Employees: Seminar learning outcome- Desire for further learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,7	1,4	1,4
	2	9	3,3	6,3	7,7
	3	12	4,4	8,5	16,2
	4	89	32,8	62,7	78,9
	5	30	11,1	21,1	100,0
	Total	142	52,4	100,0	
Missing	System*	129	47,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### 5.1.4.2 Part B/ Employees: Training programmes

#### 5.1.4.2.1 Participation in training programmes

Of the respondents (employees), 63 (23.2%) had participated into training programmes, whereas 190 (70.1%) had not. 18 (6.65) of respondents did not answer this question.

**Table 5.50** Employees: Training programme participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	63	23,2	24,9	24,9
	2	190	70,1	75,1	100,0
	Total	253	93,4	100,0	
Missing	System*	18	6,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.4.2.2 Theme of the most recent training programme

Concerning the theme of the last training programme in which employees had participated, 1 (0.4%) participated in a programme on business academy, 2 (0.7%) on ECDL, 1(0.4%) on executive secretary excellence, 1 (0.4%) on KNX, 1 (0.4%) on product marketing, 1 (0.4%) on web developer, 3 (1.1%) on life insurance, 3 (1.1%) on insurance services, 1 (0.4%) on hair styling and colouring, 1 (0.4%) on team management, 1 (0.4%) on customer management, 1 (0.4%) on international trade, 1 (0.4%) on managerial issues, 1 (0.4%) on volunteerism in social services, 1 (0.4%) on special education, 2 (0.7%) on foreign languages, 1 (0.4%) on adult education, 1 (0.4%) on energy auditing, 1 (0.4%) on customer service, 1 (0.4%) on food, 1 (0.4%) on corporate sales, 2 (0.7%) on computers, 5 (1.8%) on safety issues, 2 (0.7%) on safety and fire safety issues, 1 (0.4%) on special education issues, 1 (0.4%) on social insurance, 1 (0.4%) on foreign languages, 2 (0.7%) on economy issues, 1 (0.4%) on group insurance contracts, 1 (0.4%) on product presentation, 1 (0.4%) on provision of investment contracts, 1 (0.4%) on certification for computers, 1 (0.4%) on information technology, 1 (0.4%) on culture-tourism-regional development, 1 (0.4%) on specialized programme for special education, 1 (0.4%) on stimulation of dealing room, 1 (0.4%) on modern cleaning of food devices, 1 (0.4%) on counseling, 1 (0.4%) on

counseling, 1 (0.4%) on design, 1 (0.4%) on AUTOCAD design, 1 (0.4%) on technical issues, 1 (0.4%) on sales techniques, 1 (0.4%) on technology, 1 (0.4%) on food hygiene, 1 (0.4%) on hygiene services and cleanliness of food products, 1 (0.4%) on computers, 1 (0.4%) on photovoltaic systems, 1 (0.4%) on photovoltaic systems, 1 (0.4%) on computer handling, 1 (0.4%) on use of Office in enterprises.

All this data analysis illustrated in more detail in Appendix C, Table C.6.

#### 5.1.4.2.3 Learning methods

Concerning learning methods used in training programmes, 16 (5.9%) of employees stated that the selected method was a lecture, 21 (7.7%) a discussion, 12 (4.4%) role-playing and 15 (5.5%) something other than the methods featured in the questionnaire choices. 207 (76.4%) of respondents had not participated in any training programmes during the last three years.

**Table 5.51** Employees: Training programme learning method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	5,9	25,0	25,0
	2	21	7,7	32,8	57,8
	3	12	4,4	18,8	76,6
	4	15	5,5	23,4	100,0
	Total	64	23,6	100,0	
Missing	System*	207	76,4		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.4.2.4 Learning outcomes

##### (1) Positive influence on self-esteem

Concerning learning outcomes and, in particular, whether the most recent training programme had a positive influence on their self-esteem and to what extent, of employees 5 (1.8%) strongly disagreed, 5 (1.8%) disagreed, 10 (3.7%) neither agreed nor disagreed, 32 (11.8%) agreed and 12 (4.4%) strongly agreed. The remaining 207 (76.4%) of respondents had not participated in any training programmes.

**Table 5.52** Employees: Training programme learning outcome- Self-esteem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	1,8	7,8	7,8
	2	5	1,8	7,8	15,6
	3	10	3,7	15,6	31,3
	4	32	11,8	50,0	81,3
	5	12	4,4	18,8	100,0
	Total	64	23,6	100,0	
Missing	System*	207	76,4		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (2) Professional development

Concerning learning outcomes and, in particular, whether the latest training programme had contributed to their professional development, data analysis shows that 1 (0.4%) strongly disagreed, 4 (1.5%) disagreed, 7 (2.6%) neither agreed nor disagreed, 32 (11.8%) agreed and 20 (7.4%) strongly agreed. The remaining 207 (76.4%) of respondents (employees) had not participated in any training programmes.

**Table 5.53** Employees: Training programme learning outcome- Professional development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	1,6	1,6
	2	4	1,5	6,3	7,8
	3	7	2,6	10,9	18,8
	4	32	11,8	50,0	68,8
	5	20	7,4	31,3	100,0
	Total	64	23,6	100,0	
Missing	System*	207	76,4		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (3) Improvement in job performance

Asked whether the most recent training programme had helped them to do their job better, data analysis shows that 1 (0.4%) strongly disagreed, 3 (1.1%) disagreed, 5 (1.8%) neither

agreed nor disagreed, 36 (13.3%) agreed and 19 (7%) strongly agreed. The remaining 129 (47.6%) of respondents (employees) had not participated in any training programmes.

**Table 5.54** Employees: Training programme learning outcome- Job performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	1,6	1,6
	2	3	1,1	4,7	6,3
	3	5	1,8	7,8	14,1
	4	36	13,3	56,3	70,3
	5	19	7,0	29,7	100,0
	Total	64	23,6	100,0	
Missing	System*	207	76,4		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### (4) Personal development

Asked whether the latest training programme had contributed to their personal development, data analysis shows that of employees 6 (2.2%) strongly disagreed, 3 (1.1%) disagreed, 9 (3.3%) neither agreed nor disagreed, 33 (12.2%) agreed and 13 (4.8%) strongly agreed. The remaining 207 (76.4%) of respondents had not participated in any training programmes.

**Table 5.55** Employees: Training programme learning outcome- Personal development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	2,2	9,4	9,4
	2	3	1,1	4,7	14,1
	3	9	3,3	14,1	28,1
	4	33	12,2	51,6	79,7
	5	13	4,8	20,3	100,0
	Total	64	23,6	100,0	
Missing	System*	207	76,4		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (5) Enhancement of desire for further learning

Asked whether the most recent training programme had enhanced their desire for further learning, of employees 3 (1.1%) strongly disagreed, 3 (1.1%) disagreed, 6 (2.2%) neither agreed nor disagreed, 34 (12.5%) agreed and 18 (6.6%) strongly agreed. The remaining 207 (76.4%) of respondents had not participated in any training programmes.

**Table 5.56** Employees: Training programme learning outcome- Desire for further learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	1,1	4,7	4,7
	2	3	1,1	4,7	9,4
	3	6	2,2	9,4	18,8
	4	34	12,5	53,1	71,9
	5	18	6,6	28,1	100,0
	Total	64	23,6	100,0	
Missing	System*	207	76,4		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### 5.1.4.3 Part B/ Employees: One-day educational events

#### 5.1.4.3.1 Participation in one-day educational events

Asked whether they had participated in one day-educational events during the last three years, 38 (14%) of respondents (employees) had participated in a one day-educational event, whereas 215 (79.3%) had not. 18 (6.6%) of respondents did not give an answer to this question.

**Table 5.57** Employees: One day-educational event participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	38	14,0	15,0	15,0
	2	215	79,3	85,0	100,0
	Total	253	93,4	100,0	
Missing	System*	18	6,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.4.3.2 Theme of the last one day-educational event

Concerning the theme of the most recent one day educational event in which employees had participated, 1 (0.4%) participated in a event on ESCO, 1 (0.4%) on alcoholism, 1 (0.4%) on renewable energy sources, 1 (0.4%) on insurance services, 1 (0.4%) on international markets, 1 (0.4%) on international accounting standards, 1 (0.4%) on volunteerism, 2 (0.7%) on special education, 1 (0.4%) on export, 4 (1.5%) on extroversion of enterprises, 1 (0.4%) on market research, 1 (0.4%) on Europe: where are you going?, 1 (0.4%) on career days, 1(0.4%) on building heat insulation, 1 (0.4%) on history, 1 (0.4%) on career, 1 (0.4%) on Law No 3556/2007, 1 (0.4%) on economics, 1 (0.4%) on the great crash of 1929 until the crisis of today, 2 (0.7%) on holistic architecture, 1 (0.4%) on coast front, 1 (0.4%) on presentation of financial programmes, 1 (0.4%) on contemporary technologies, 1 (0.4%) on TEE F/B Systems, 1 (0.4%) on customs procedure-e-customs, 1 (0.4%) on health and safety in work, 1 (0.4%) on hygiene and cleanliness rules, 2 (0.7%) on taxation, 1 (0.4%) on photovoltaic systems, 1 (0.4%) on chemical technology, 1 (0.4%) on psychology. All this data analysis illustrated in more detail in Appendix C, Table C.7.

#### 5.1.4.3.3 Learning methods

Concerning learning methods, 26 (9.6%) of respondents (employees) stated that the selected method was a lecture, 5 (1.8%) a discussion, 5 (1.8%) an enhanced presentation and 1 (0,4%) stated other than the methods featured in this questionnaire. 223 (86.3%) of respondents had not participated in a one day educational event.

**Table 5.58** Employees: One day-educational event learning method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	26	9,6	70,3	70,3
	2	5	1,8	13,5	83,8
	3	5	1,8	13,5	97,3
	4	1	,4	2,7	100,0
	Total	37	13,7	100,0	
Missing	System*	234	86,3		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.4.3.4 Learning outcomes

##### (1) Positive influence on self-esteem

Concerning learning outcomes and, in particular, whether the most recent one day educational event had a positive influence on their self-esteem and to what extent, of employees 1 (0.4%) strongly disagreed, 2 (0.7%) disagreed, 13 (4.8%) neither agreed nor disagreed, 15 (5.5%) agreed and 6 (2.2%) strongly agreed. The remaining 234 (86.3%) of respondents had not participated in a one day educational event.

**Table 5.59** Employees: One day-educational event learning outcome-Self-esteem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	2,7	2,7
	2	2	,7	5,4	8,1
	3	13	4,8	35,1	43,2
	4	15	5,5	40,5	83,8
	5	6	2,2	16,2	100,0
	Total	37	13,7	100,0	
Missing	System*	234	86,3		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

##### (2) Professional development

Concerning learning outcomes and, in particular, whether the most recent one day educational event had contributed to their professional development, data analysis shows that of employees 2 (0.7%) strongly disagreed, 4 (1.5%) disagreed, 12 (4.4%) neither agreed nor disagreed, 12 (4.4%) agreed and 7 (2.6%) strongly agreed. The remaining 234 (86.3%) of respondents had not participated in any one day educational events.

**Table 5.60** Employees: One day-educational event learning outcome-Professional development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,7	5,4	5,4
	2	4	1,5	10,8	16,2
	3	12	4,4	32,4	48,6
	4	12	4,4	32,4	81,1
	5	7	2,6	18,9	100,0
	Total	37	13,7	100,0	
Missing	System*	234	86,3		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (3) Improvement in job performance

Asked whether the latest one day educational event had helped them to do their job better, data analysis shows that of employees 2 (0.7%) strongly disagreed, 6 (2.2%) disagreed, 12 (4.4%) neither agreed nor disagreed, 11 (4.1%) agreed and 6 (2.2%) strongly agreed. The remaining 234 (86.3%) of respondents had not participated in any one day educational events.

**Table 5.61** Employees: One day-educational event learning outcome-Job performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,7	5,4	5,4
	2	6	2,2	16,2	21,6
	3	12	4,4	32,4	54,1
	4	11	4,1	29,7	83,8
	5	6	2,2	16,2	100,0
	Total	37	13,7	100,0	
Missing	System*	234	86,3		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### (4) Personal development

Asked whether the most recent one day educational event had contributed to their personal development, data analysis shows that of employees 4 (1.5%) strongly disagreed, 13 (4.8%) disagreed, 16 (5.9%) neither agreed nor disagreed, 4 (1.5%)

agreed and 13 (4.8%) strongly agreed. The remaining 234 (86.3%) of respondents had not participated in any one day educational events.

**Table 5.62** Employees: One day-educational event learning outcome-Personal development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	4	1,5	10,8	10,8
	3	13	4,8	35,1	45,9
	4	16	5,9	43,2	89,2
	5	4	1,5	10,8	100,0
	Total	37	13,7	100,0	
Missing	System*	234	86,3		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

### **(5) Enhancement of desire for further learning**

Asked whether the latest one day educational event had enhanced their desire for further learning, data analysis shows that 4 (1.5%) disagreed, 6 (2.2%) neither agreed nor disagreed, 19 (7%) agreed and 8 (3%) strongly agreed. The remaining 234 (86.3%) of respondents (employees) had not participated in any one day educational events.

**Table 5.63** Employees: One day-educational event learning outcome-Desire for further learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	4	1,5	10,8	10,8
	3	6	2,2	16,2	27,0
	4	19	7,0	51,4	78,4
	5	8	3,0	21,6	100,0
	Total	37	13,7	100,0	
Missing	System*	234	86,3		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.4.4 Part B/ Employees: Miscellaneous learning activities

##### 5.1.4.4.1 Participation in miscellaneous learning activities

Asked whether they had been involved in any other learning activities, 36 (13.3%) of respondents (employees) had, whereas 217 (80.1%) have not. 18 (6.6%) of respondents did not give an answer to this question.

**Table 5.64** Employees: Miscellaneous learning activity participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	36	13,3	14,2	14,2
	2	217	80,1	85,8	100,0
	Total	253	93,4	100,0	
Missing	System*	18	6,6		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

##### 5.1.4.4.2 Theme of the most recent other learning activity

Concerning the theme of their most recent involvement in miscellaneous learning activities, of employees 1 (0.4%) had participated in a learning activity on celebration, 2 (0.7%) on miscellaneous issues, 1 (0.4%) on international trade, 1 (0.4%) on heating materials, 1 (0.4%) on certification in computer programmes, 1 (0.4%) on learning a foreign language and photography, 2 (0.7%) on foreign language, 1 (0.4%) on training for the production switchboard, 1 (0.7%) on product recycling, 1 (0.7%) on consumable products, 1 (0.7%) on exports, 1 (0.4%) on communication, 1 (0.4%) on visit to a new technology industry, 1 (0.4%) on theater in education, 1 (0.7%) on hair-dressing issues, 5 (1.8%) on social contacts, 2 (0.7%) on social networking-internet, 1 (0.4%) on social responsibility, 1 (0.4%) on accounting and stock exchange issues, 1 (0.4%) on marketing, 1 (0.4%) on musical synthesis, 1 (0.4%) on foreign language, 1 (0.4%) on certification in computers, 1 (0.4%) on information systems, 1 (0.4%) on ECDL, 1 (0.4%) on clothes, 1 (0.4%) on fashion studies, 1 (0.4%) on continuing education, 1 (0.4%) on internet services, 2 (0.7%) on computers.

All this data analysis illustrated in more detail in Appendix C, Table C.8.

##### 5.1.4.4.3 Learning methods

Concerning learning methods used in any other learning activities, 7 (2.6%) of respondents (employees) stated that the selected method was social networking (e.g.

facebook, twitter), 4 (1.5%) involvement in a social event, 6 (2.2%) participation in a specialized fair, 14 (5.2%) internet piloting and 5 (1.8%) something other than the methods featured in the questionnaire choices. 235 (86.7%) of respondents had not involved in any learning activities during the last three years.

**Table 5.65** Employees: Miscellaneous learning activity learning method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	2,6	19,4	19,4
	2	4	1,5	11,1	30,6
	3	6	2,2	16,7	47,2
	4	14	5,2	38,9	86,1
	5	5	1,8	13,9	100,0
	Total	36	13,3	100,0	
Missing	System*	235	86,7		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### 5.1.4.4.4 Learning outcomes

##### (1) Positive influence on self-esteem

Concerning learning outcomes and, in particular, whether their involvement in miscellaneous learning activities had a positive influence on their self-esteem and to what extent, of employees (1) 0.4% strongly disagreed, 3 (1.1%) disagreed, 5 (1.8%) neither agreed nor disagreed, 16 (5.9%) agreed and 11(4.1%) strongly agreed. The remaining 235 (86.7%) of respondents had not participated in any other learning activities.

**Table 5.66** Employees: Miscellaneous learning activity learning outcome-Self-esteem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	2,8	2,8
	2	3	1,1	8,3	11,1
	3	5	1,8	13,9	25,0
	4	16	5,9	44,4	69,4
	5	11	4,1	30,6	100,0
	Total	36	13,3	100,0	
Missing	System*	235	86,7		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

## (2) Professional development

Concerning learning outcomes and, in particular, whether their involvement in miscellaneous learning activities had contributed to their professional development, of employees 1 (0.4%) strongly disagreed, 4 (1.5%) disagreed, 10 (3.7%) neither agreed nor disagreed, 12 (4.4%) agreed and 9 (3.3%) strongly agreed. The remaining 235 (86.7%) of respondents had not participated in any learning activity.

**Table 5.67** Employees: Miscellaneous learning activity learning outcome-Professional development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	,4	2,8	2,8
	2	4	1,5	11,1	13,9
	3	10	3,7	27,8	41,7
	4	12	4,4	33,3	75,0
	5	9	3,3	25,0	100,0
	Total	36	13,3	100,0	
Missing	System*	235	86,7		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

## (3) Improvement in job performance

Asked whether their involvement in miscellaneous learning activities had helped them to do their job better, data analysis shows that of employees 2 (0.7%) strongly disagreed, 5 (1.8%) disagreed, 5 (1.8%) neither agreed nor disagreed, 10 (3.7%) agreed and 14 (5.2%) strongly agreed. The remaining 235 (86.7%) of respondents had not participated in any other learning activities.

**Table 5.68** Employees: Miscellaneous learning activity learning outcome-Job performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,7	5,6	5,6
	2	5	1,8	13,9	19,4
	3	5	1,8	13,9	33,3
	4	10	3,7	27,8	61,1
	5	14	5,2	38,9	100,0
	Total	36	13,3	100,0	
Missing	System*	235	86,7		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### (4) Personal development

Asked whether their involvement in miscellaneous learning activities had contributed to their personal development, of employees 2 (0.7%) strongly disagreed, 2 (0.7%) disagreed, 5 (1.8%) neither agreed nor disagreed, 18 (6.6%) agreed and 9 (3.3%) strongly agreed. The remaining 235 (86.7%) of respondents had not participated in any other learning activities.

**Table 5.69** Employees: Miscellaneous learning activity learning outcome: Personal development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	,7	5,6	5,6
	2	2	,7	5,6	11,1
	3	5	1,8	13,9	25,0
	4	18	6,6	50,0	75,0
	5	9	3,3	25,0	100,0
	Total	36	13,3	100,0	
Missing	System*	235	86,7		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

#### (5) Enhancement of desire for further learning

Asked whether their involvement in miscellaneous learning activities had enhanced their desire for further learning, of employees 3 (1.1%) disagreed, 3 (1.1%) neither agreed nor disagreed, 17 (6.3%) agreed and 13 (4.8%) strongly agreed. The

remaining 235 (86.7%) of respondents had not involved in any other learning activities.

**Table Table 5.70** Employees: Miscellaneous learning activity learning outcome-Desire for further learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	1,1	8,3	8,3
	3	3	1,1	8,3	16,7
	4	17	6,3	47,2	63,9
	5	13	4,8	36,1	100,0
	Total	36	13,3	100,0	
Missing	System*	235	86,7		
Total		271	100,0		

\*Missing system value represents the non-participation in learning activities and not refusal of answering the question

## 5.2 Qualitative approach

Due to the complexity and breadth of the problem under study in the present research as well as the limited ability of qualitative methods to shed light on all the influencing factors, in detail and in depth, a quantitative approach was decided upon.

A qualitative approach was considered necessary to carry out observations and interviews, as deep understanding of learning events could not be achieved through numerical data alone. Observations of important learning activities selected to provide answers to questions on the reasons for selection of specific learning methods and the way they could be implemented in real learning events in relation to the expected learning outcomes, while interviews gave a thorough understanding of the attitudes, beliefs and values of employers, managers and employees about LL and its impact on HRD.

### 5.2.1 Observations

Indisputably, the significance of adult education programmes is mainly dependent on the way they are implemented in practice and how they are experienced by participants. In order to have a clear understanding of what really takes place in the everyday routines of adult education and investigate the influence of the selected learning method on learning outcomes, a series of different observations was decided

upon: The way in which the participants take part, the manner in which instruction takes place, in terms of the selected learning method, how learners respond to the whole learning activity and in particular, whether they achieve in having the expected learning outcomes, were extensively recorded and analysed. Therefore, observations are considered to be a good method of providing the appropriate information.

Another reason for choosing observation as the main qualitative method was the inadequate capacity of a quantitative approach to give answers to some of the research questions: More precisely, the research questions concerning the influence of LL methods on the outcomes of learning activities in which employees, managers and employers engage and their learning identity in LL activities.

The kind of observation considered appropriate was the nonreactive observation, where participants were aware that they were observed, in order that they did not change their natural behavior or participation just because someone was observing their actions and reflection in the learning process.

Observations were carried out in different kinds of learning activity on the condition that they dealt with export activities, in particular, export procedures and the skills necessary to develop export capacity. The first set of observations were seminars offered by SEVE to its active and potential members. As SEVE has realized that the only solution for Greek enterprises and organizations to survive, particularly in the present period of economic crisis, is to have the opportunity to export their products and services, it decided to support them through specific and intensive seminars, with experts in the export trade as trainers at a low cost and for a limited period of time. The second set of observations concerned a series of workshops, aimed at preparing enterprises to be competitive through the development of export skills.

The first set of observations were related to a series of specialized seminars, entitled “Express seminar for exports”, the basic aim of which was to prepare enterprises to become active, rather than potential exporters, in order to face the economic crisis in an effective way by expanding their business activities beyond natural borders. Each series of seminars comprised of six or seven modules, according to the decisions made following assessment of the implementation of each

previous series, delivered over six or seven days respectively. Secondly, observations related to a European-funded programme, focusing on the Development of Human Potential, in the context of the NSRF 2007-2013, in particular though developing export skills.

First observation related to the second and third series of specific seminars organized by SEVE. Each series of seminars were planned on the basis of evaluation of the previous series and recommended improvements.

The settings for these series of seminars was a specially-prepared meeting room at SEVE. The duration of each module was four hours and they were run outside working hours and during the evenings.

The two series had three modules in common, and these were: Eight steps to export; export processes; export marketing. The additional modules in the second series were custom and taxation issues; market research in foreign countries; preparation for participation in trade fairs and business missions; financial tools for exports; while social networking and contemporary synchronous enterprise, quality management en ISO 9001: 2008; and design and internalization, were included in the third series. Each module had been decided through analysis of a certain evaluation measurement of previous seminars where the recommendations of participants about issues of their interest were mentioned.

Concerning the criteria for selection of trainers, the responsible committee makes decisions on the basis of broad experience of trainers in export and other issues related to foreign trade, their reputation as experts on specific issues, either as trainers or as practitioners, and their previous experience as trainers in SEVE seminars. The majority of trainers were members as well as executive managers of SEVE administration body, characterised as internal trainers, whose experience was not in question. In addition, external collaborators, characterised as external trainers, were specialized and certified.

The application form, attempts to identify the main professional attributes of the potential applicants, as they want to have a combination of both experienced and inexperienced people in the same group.

Of 25 participants in the second series, 80% were managers and 20% graduate students planning to get involved in export activities in the near future.

Participants in the third series were 23.70% were managers, 30% graduate students with an export orientation in their career.

Both internal and external trainers had significant expertise, which comes from solving problems of exporter-members of SEVE in case of internal trainers, and from knowledge and experience in exports, through involvement in different export processes, in terms of external trainers.

Participants were very interested in asking question about the problems they face in their everyday involvement in different export processes and they required immediate answers. On the one hand, the experienced managers of SEVE were eager and well prepared to respond to any question according to their specialization. They also had information available from the data base of SEVE, which was a great advantage. They quite often tried to strengthen their relations with participants and ensure future collaboration. On the other hand, external trainers were specialized experts, communicative and tried to attract their audience through impressive presentations.

Concerning learning methods, both internal and external trainers, selected lectures, enhanced presentation and discussion. Unfortunately, less time was spent on discussion, as often happens at the end of a seminar, and dealt with specific problems faced by some of the participants. Trainers tried to give as much information as possible in the limited period of time, regardless of its absorption by the participants. At the end of each module participants felt satisfied and were looking forward to having extra information via their emails, as promised by the trainers.

The second observation dealt with a pilot study of a European funding program in the context of the NSRF 2007-2013, specialized in HRD and, in particular, on developing export skills to improve enterprises' competitiveness, through extroversion. That observation included three workshops, each of which took place during a weekend, on Friday from afternoon to evening and on Saturday from morning to afternoon.

The workshops were carried out in a conference room in a luxury hotel. Each workshop, apart from presentations by internal and external trainers at SEVE, included presentations by an experienced and successful manager or employer of an export company with extensive experience in export activities worldwide.

From analysis of workshop evaluations by participants, it was evident that the choice of bringing in exporters with particular expertise to present the challenges they had faced and their achievements was a good example to imitate.

The subject matter of presentations was selected in accordance with participants' needs. All instructors applied enhanced presentation as a learning method to offer knowledge as much as possible, without examining the acquisition of it. Where this knowledge was related to legal issues, customs and requirements of different countries, and the potential for Greek companies to expand their export activities, it was a good choice. But where participants wanted to learn how to acquire the skill of expanding their export capability to different countries, the choice of enhanced presentation was found not to be appropriate method. In addition, participants expressed strong interest in learning about the difficulties they might face when deciding to export their products and services to niche (specialized but profitable corner of the market) trade markets. The urgency of their interest was justified on the basis of their alertness to move faster than their competitors, and not find themselves in an inferior position in the markets. Despite the expertise of the instructors, both internal and external, it seemed that none of them could offer this particular knowledge. On the contrary, experienced exporters were more appropriate, as they presented and explained their own real life case examples. In particular, whenever an exporter started to describe his experience, participants forgot about break time and their tiredness and continued to ask questions related to their own interest and experience.

Concerning the learning environment, in particular the atmosphere in class, participants seemed not to be competitive but collaborative and thus, felt free to express either their agreement or disagreement with the views of instructors and other participants. Despite the difficult working hours they arrived punctually on Friday afternoon (first day of each workshop) and overcame any inconvenience to their personal life on Saturdays (second day of each workshop) demonstrating such self-motivation that nobody decided to leave before the end of the workshop. The workshop room was spacious and sunny, with a large screen where refreshments, water, soft drinks and cookies were served at specified intervals. Hence, they had the feeling that they could enjoy their learning time.

Analysis of the overall completed evaluations made clear their satisfaction with the organization and administration of all the workshops, the coherence of their subject matter, enabling continuous concentration through the learning process. They appreciated the expertise of all the trainers but asked for more people presenting their real life case experiences. They evaluated the knowledge offered as essential to the future development of their export skills. In particular, concerning the question of whether the workshop offered them real connection between theory and practice, the majority of the participants responded that, indeed, there was a close relation between what they learnt and what they actually face, but this did not prepare them to develop or expand their export activities the day after completing the workshops. Three of the twenty participants made the comment that the workshops could not offer a sole solution that would motivate Greek enterprises towards extroversion. Specific governmental policies should enhance the orientation of Greek enterprises towards export activities, in addition to particular courses on the different role that managers have to adopt in order to be successful.

### **5.2.2 Interviews**

Semi-structured, individual face to face, interviews were carried out with managers, or those in charge of personnel development, who, in many cases, were the employers or the entrepreneurs themselves, as well as a number of employees in the selected enterprises and organizations. More precisely, two of the interviewees were export managers, the first a manager in an export enterprise and the second in a related organization. Two employers participated in the interviews, one was responsible for personnel in addition to her other main responsibilities and the second was responsible for financial issues, in addition to ownership and management of the enterprise. The last two interviews concerned two employees, one belonging to an export enterprise and the other working in an enterprise preparing to develop export activities.

The first interviewee was an export and quality manager in the food industry with a good history in export transactions. To the question concerning educational policy and opportunities for continuous learning, he answered that his company was dedicated to improving employee performance and was committed to this as a

consequence of the ISO management systems implementation. For them, quality, training and continuous improvement had been their essential values and the core of their corporate culture and strategy. In addition, he believed that their background in the implementation of quality systems accelerated their development in export activities. Concerning his professional development, he voluntarily got involved in learning activities, mostly in those related to management, as he was interested in updating his knowledge. In this field, he often did not pay attention to learning methods but to outcomes. He considered distance learning to be the best option, due to its low cost and time flexibility. His attitude towards a LL culture and strategy was that his enterprise was on the right road as their involvement in activities focused on continuous improvement was compatible with the LL philosophy.

The second interviewee was an export manager in an organization whose aim was to support the export activities of Greek enterprises and organizations. His organization's educational policy was export-oriented and focused on low-cost specialized learning. To date, he has not participated in any formal learning activities since his university graduation and rarely did he participate in other informal or non-formal activities. He believed that distance learning is quite a good choice but limited free time meant he could not manage it, and when he could find some time he spent it on entertainment. He felt that his organization had some kind of LL culture, as it had been involved in some European funded programmes with great success.

The third interviewee was one of two main shareholders in a chemical and cosmetics industry, while the second was her husband. In this family enterprise, the interviewee had responsibility of the personnel, including training and development. Her educational policy dealt with work-based learning and mainly with on-the-job training and the transfer of knowledge and skills from the experienced to the less experienced. In answer to the question as to whether their employees were interested in participating in other learning activities, she said that nobody was interested in anything and she thought that it would be helpful to her company for them to remain less informed and, thus, less risky because they would not attempt to negotiate better rewards, high level responsibilities and learning during working hours. She said that she preferred networking and participating in trade fairs related to social learning and

work-based learning respectively. She asserted that training, development and learning are part of their strategy and culture in LL.

The fourth interviewee referred to the financial head of an enterprise providing high-technology services. Concerning their educational policy, they motivate and enhance the interest of their people to participate in LL activities, and they also tried to secure financing as far as possible through European funded programmes. Apart from formal learning, he had participated in many diverse learning events, but in most cases he had interrupted or left them unfinished. In his view, designers and providers of training courses did not devote sufficient attention to the learning method as a means of knowledge acquisition and he himself did not know which method might be the best and for what reason. Hence, he felt insecure about participation in a training course, when he was unsure of the appropriate method of achieving the expected outcomes. On the one hand, he was referring to learning activities in high technology, sales and corporate social responsibility (CSR) and on the other hand, children's learning in the context of his parental role. Their corporate strategy and culture was based on continuous and LL, motivated by the fact that if they delayed in updating their knowledge, technological development would overtake them and they could lose their competitive advantage and sustainable development.

The fifth interview was with an employee in an export company in the chemical and cosmetics sector whose educational policy was conducive to LL, but not during working hours. He complained that he repeatedly asked for his company's finance seminars to be focused on improving performance, but he had never succeeded in persuading his manager to accept. He takes care of his personal development, with stress management, time management and opportunities for achieving wellbeing among his choices. He believed that his employers needed to be LLL themselves in order to understand that LL was an ongoing activity and only when they understand its value could a real LL corporate strategy and culture be built.

The sixth interviewee was an employee of an industry producing packaging materials and providing advertising services. Her company had decided to export its products and services worldwide and at that stage was in the preparatory phase.

Thus, its learning strategy was to support and enhance employee participation in any seminar, training course or learning event on export trade. She did not think that her employer examined how the expected outcomes could be achieved and whether the appropriate method had been selected. In addition, her employer never spent time on evaluating the results of employee participation in learning activities and whether he had spent or wasted money without any benefit. Her company believed in the power of learning and had accepted it as a means of preparing employees to become capable of running the export process. She did not have free time for her own development due to her caring responsibilities, as a mother of two small children. In her view, what her company needed was to build a LL strategy and culture from the outset and, thus, establish criteria to evaluate learning outcomes in relation to cost and the way learning occurs, and to adopt this strategy to address any new entrepreneurial challenge.

Despite the limited number of interviews, they helped to deeper understanding and interpretation of the beliefs of employers, managers and employees, towards their LL strategy and culture and how they appreciate their role as LLL.

The main benefit of the six interviews was a detailed description about interviewees' identity as LLL which revealed helpful information about themselves and mainly about their attitudes towards learning. This information could be useful in building a LL culture and strategy, not only for employers and managers but also for employees, if the former gave them the opportunity to express their opinion, and discover and understand their identity as LLL. Another benefit was that, in most cases, no serious attention was paid to evaluation and learning method in relation to learning outcomes. In addition, their suggestions about LL strategy and culture demonstrated their understanding of the value of LL and their preferences for LL activities that could take place in a limited period of time and in comfortable situations. Also, in the case of the third interviewee, there was an evident contradiction between the LL philosophy she purported to have adopted and what she applied in practice, inner emphasis on non participation in LL activities during working hours and the danger of changes in the future behaviour of employees due to

their participation in learning activities. This could certainly not have been evident through any quantitative approach.

Explanation of all the results of both qualitative and quantitative approaches will be presented in the next chapter.

## **Chapter 6**

### **CONCLUSIONS AND DISCUSSION**

#### **6.1 Conclusions and discussion**

The present research study aimed to investigate the impact of LL and its methods on HRD, in an attempt to identify whether emphasis on HR value, LL culture can be aligned with corporate strategy for gaining competitive advantage and sustainability, especially in a period of economic crisis. The complexity and the breadth of the problem under study imposed the implementation of both quantitative and qualitative research methods. The limited ability of quantitative methods to provide answers to all the influencing factors, in detail and in depth, meant that implementation of a qualitative approach was also necessary. Thus, collecting and analyzing quantitative (numerical) and qualitative (narrative) data proved useful in overcoming the limitations of using either the former or the latter exclusively (Creswell, 2003). In addition, the two approaches together combined to contribute answers to the research questions.

Results from the quantitative and qualitative research methods indicated convergent and divergent perspectives, which validated the choice of the two approaches. Participants and, in particular, questionnaire respondents, of whom 150 were employers and managers and 271 employees, gave answers to research questions, while participants in observations and interviews clarified and completed the meaning of the answers.

For quantitative data collection, Component Factor Analysis was applied to the main research instrument, LLEHUREDE Scale, and disclosed the seven factors: Awareness of lifelong learning; attitudes towards educational, training and development policies; culture of lifelong learning; corporate strategy, value system

and ethical perceptions; evaluation policy concerning participation in educational programmes; orientation of trainee (learner) towards lifelong learning; emotional identity of the trainee (learner).

A summary of the responses received in the present research concerning the impact of LL and its methods on HRD, which focused on the context of the above seven factors, provide an outline of most of the main conclusions and justification of its importance. Analysis of the quantitative data through these seven factors provided answers to all the research questions, except for the fifth question. Emphasis will be placed on the impact of factors, and on demographic elements worthy of note in the presentation of the conclusions. The first description concerns managers and employers and the second concerns employees.

Following presentation of the impacts of the seven factors and demographic elements, participation in different learning activities, with a focus on the selected learning methods in relation to learning outcomes will be presented. Analysis of participation in the four LL activities, selected for the purpose of the present research, and the influence of each learning method on the learning outcomes provided answers to the fifth research question. Conclusions follow the presentation of the results, methodology and research procedures, and will be presented separately, firstly for managers and employers and secondly for employees. The experience of the researcher in the world of enterprises and her twofold role, firstly as an employee and secondly as an executive manager, in financial and foreign trade departments of a leading bank in her earlier career, as well as her role as quality consultant and adult educator in her present career, contributed to provision trustworthy and unique interpretations of the research findings.

According to the results of this research and in terms of demographics, job location, age, gender, level of education, marital status, nature of employment, and legal form of the enterprise (company constitution) to which managers and employers belong, appeared to have no influence on the seven factors. In particular, the location in which managers and employers work, their gender, their age, educational and marital status, and the kind of enterprise in which they work do not raise their awareness of the meaning and aims of LL, nor their understanding of educational and evaluation policies, the corporate strategy in terms of value placed

on HR, and the culture of LL. In addition, there was no relationship between these particular demographic elements and managers' and employers' learning identity and orientation towards LL.

The sector of the enterprise did not influence awareness of lifelong learning, attitudes towards educational, training and development policies nor culture of lifelong learning. On the other hand, the sector of the enterprise had an effect on: Corporate strategy, value system and ethical perceptions; evaluation policy concerning participation in educational programmes; orientation of trainee towards lifelong learning; emotional identity of the trainee. Whether an enterprise is active in the private sector, or not, influences the corporate strategy, ethics and the value system, the evaluation policy of learning, as well as learning environment in which learners act. One explanation could be that in private sector, responsibilities such as building and implementing corporate strategy, as well as design and application of evaluation policy, concern employers and managers, while in the public sector, these are usually part of governmental policies and strategy and the main responsibility of managers is merely their implementation.

Furthermore, orientation of employers and managers towards LL and their emotional identity as learners seemed to be influenced by the sector of the enterprise. The rationale that being a manager in a private enterprise, rather than in a public organization, and the consequent job insecurity presses managers to see involvement and participation in LL activities as a necessity and thus, they appeared to be continuously oriented towards LL and adopt the emotional identity of a LLL.

Business activity influenced culture of LL, according to employers and managers. Indeed, intensive market competition forces enterprises and organizations to be interested in gaining skills and competences, and in creating innovative ideas, in order to compete successfully. Consequently, they adopt a culture of LL as a defence mechanism. Furthermore, in the case of an enterprise that trades in high technology products and services, adaptation to rapid technological change requires continuous and constant participation in LL activities, whereas trading of packing or agricultural products is not so demanding.

From the point of view of the enterprise, job position of managers affected: Culture of lifelong learning; corporate strategy, value systems and ethical perception;

evaluation policy of participation in educational programmes; while from the learner's point of view, these factors had an effect on learner orientation towards lifelong learning and emotional identity.

In particular, there are differences between managers in charge of a production department, a HRD department or quality management department. For instance, for managers responsible for a quality management department, strategic planning, evaluation procedures, staff education and continuous improvement are all quite well developed, as part of the implementation of quality systems and philosophies.

All enterprises, in particular export enterprises are oriented towards the implementation of quality systems for their products and services, as well as their organization and management. Focus on quality and quality management is not a choice but a necessity for enterprises and organizations in the contemporary globalized market. Therefore, in order to enhance their competitiveness and mainly, in order to accomplish exports, enterprises adopt a quality system, the implementation of which, in most cases, is a strict prerequisite for foreign trade.

Their decision to implement a quality management system means that they have resolved to follow the eight quality management principles: Customer focus; leadership; involvement of people; process approach; system approach to management; continual improvement; factual approach to decision making; mutually beneficial supplier relationships (Retrieved from 15, April, 2012 [http://www.iso.org/iso/home/standards/management-standards/iso\\_9000.htm](http://www.iso.org/iso/home/standards/management-standards/iso_9000.htm)).

Concerning the ISO family of quality systems, emphasis is placed on one of the best known standards, the ISO 9001: 2008 standard, which sets out the requirements of a quality management system and can be used by any organization, large or small, regardless of its field of activity. Its use also ensures consistent good quality products and services and brings to organizations many business benefits.

Selecting three of the eight principles, such as leadership, involvement of people and continual improvement, the impact of these three on better personal and organizational performance is searching out. In organizations where ISO 9001: 2008 has been adopted, leadership is based on the establishment of unity and the setting of challenging goals, expected to be achieved through a flourishing internal

environment in which all individuals get involved. This kind of leadership prompts the creation and sustainability of shared values, fairness and ethical roles at all levels of the organization (quality management principle: Leadership). The involvement of all individuals enhances their responsibility for solving problems, their evaluation of performance against personal goals and enables them to become aware of the importance of their contribution (quality principle: Involvement of people). Continual improvement constitutes a permanent objective. It develops individuals trained in methods and tools of ongoing improvement and offers the organization a performance advantage through improved organizational capabilities (quality principle: Continual improvement). Among the quality management principles, evaluation has a key role and is often controlled by quality managers or managers of other departments who have the responsibility for quality control.

Similar to ISO and its principles is the philosophy of Total Quality Management (TQM). Some of its principles are to institute training, to teach and institute leadership and encourage education and self-improvement for everyone (Evans & Lindsay, 2002, p. 92). Thus, TQM places emphasis on individuals and their contribution to the achievement of consistently high quality.

It is evident that evaluation, education and training, as well as continual improvement, are key elements of the philosophy of quality management systems. Thus, any manager with responsibilities of that kind is involved in and influences corporate strategy and evaluation policy pertaining to participation in learning activities.

Furthermore, according to one of the fourteen points of Deming's philosophy of quality management, the institution of a vigorous programme of education and training for everyone is demanded in every organization (Deming, 2000, p. 23-24). Thus, we may conclude that quality management systems and TQM philosophy focus on the individual and on the continual improvement of both systems and individuals. As a result, everyone, whether a manager or employer, can be considered a learner in the long run and, as a consequence, he/she may gain the orientation and emotional identity of a LLL.

The legal form of the enterprise, its size, the type of work contract, duration of recent employment as well as the existence of a department or person responsible

for HRD and involvement in export activities, did not have an impact on any of the seven factors. In particular, company constitution influences its monetary policy and financial transactions and, thus, it has nothing to do with HRD and HRM. In addition, the size of enterprise, the type of work contract, and duration of recent employment did not influence culture of LL, corporate strategy, educational or evaluation policies, as these seemed to be mainly part of the personal value system, philosophy, and leadership style, of the employer or manager. Furthermore, where the employer or manager is in the role of a learner, awareness of LL, the learner's orientation towards learning and his/her emotional identity, do not depend on business factors. A HRD department in large companies usually has an impersonal character, which is not the case in SMEs. Thus, as the majority of the enterprises in the research sample do not employ a large number of employees, this justifies the absence of impact on the seven factors.

Export activities are mainly decided by the employers and managers. As the research sample of enterprises and organizations seemed to indicate a low level of involvement in export activities, this justifies the absence of their influence on corporate strategy, educational and evaluation policies and LL culture and orientation.

Finally, position of responsibility influenced the evaluation policy pertaining to participation in educational programmes, orientation towards LL and emotional identity of the learner. Whether we refer to heads of department, managers, top managers or even employers, they all seem to develop a different evaluation policy of participation in educational programmes, as they address their role from a different perspective. For employers, immediate results as well as ROI are the expected benefits on completion of a programme or course, and thus, they have a result-oriented evaluation policy. For managers, evaluation is considered to be the last phase of a learning activity, followed, in some cases, by a cost-benefit analysis. Hence, they seem to be more process-oriented than result-oriented.

In terms of orientation towards LL and the learner's emotional identity, when managers or employers become learners themselves, they demand outcomes of their learning activities that are easily transferable to practice, as they assess them either as a means of career progression or as a means of financial benefit. Thus, their

participation in learning activities seems to have a lifelong orientation, as well as being characterized by an active and emotionally sensitive way of learning.

In comparison to employers and managers, employees indicated a different set of influences on different factors: Employees' job location is did not influence culture of LL, but it influenced all the other factors. Age did not influence awareness of LL, culture of LL, corporate strategy, value system, ethical perceptions or orientation of LL but, on the contrary, it did affect evaluation policy pertaining to educational programmes and the emotional identity of the learner. The gender of the employee in the research sample had an impact on the evaluation policy pertaining to educational programmes, but no impact on the other factors.

Educational level influenced the emotional identity of the learner, where employees who had completed high school and those that were university graduates, appeared to be willing to express their feelings and pursue a mentoring relationship, in order to explore and develop their talents. This can be explained by their educational background in formal education where many learning activities are based on an instructor-learner relationship in the long run, something similar to the mentor-mentee relationship.

Marital status influenced evaluation policy pertaining to participation in educational programmes, but more so the emotional identity of the learner. Employees who were married with children seemed to prefer to participate in an active way, expressing their emotions freely and showing satisfaction with a mentoring relationship, as this role resembles their parental role.

Nature of employment and type of company did not influence any of the seven factors. Sector of employment, however, influenced them all. In terms of private sector employees as recipients of immediate stimuli from the internal and external business environments, and equally as respondents to them, they can play a determinant role in corporate strategy, value system and ethical perspectives, educational and evaluation policies and LL culture. The threat of losing their job forces employees to react effectively and hence, take responsibility for their own learning in the long run and become LLL. Whether they work in private sector or not, also influences their attitudes towards learning and their awareness of LL, its aims and its culture.

Business activity and job position did not influence awareness of LL, culture of LL or orientation towards LL, but they did influence the remaining four of the seven factors: Attitudes towards educational, vocational and development policies; corporate strategy, value system and ethical perspectives; evaluation policy of educational programmes and learner's emotional identity. The influence of business activity can easily be explained when, for example, an enterprise is a technology business. In this case, corporate strategy should be oriented towards continuous updating of knowledge to keep pace with rapid technological change. This also determines its learning strategy and its evaluation policy concerning participation in different educational programmes or courses, where learning outcomes should have an immediate effect. In addition, where the basic learning purpose of diverse educational programmes or courses is the acquisition of computer skills, then educational programmes are expected to have a particular design and setting, capable of facilitating learner interaction through self-directed learning, networking and problem solving.

The legal form of the enterprise was related to the learner's emotional identity but none of the other six factors: Employees of *societe anonyme* enterprises are willing to be active participants, express their feelings and are satisfied with their involvement in a mentoring relationship, since they often face similar situations in their daily working life. This can be explained by the fact that the *societe anonyme* enterprise often has a dedicated department or person responsible for HRD and the enhancement of participation in learning activities is a reality. In addition, the dissemination of knowledge and experience from more experienced to less experienced individuals is common.

The existence of a person or a department dedicated to HRD affected attitudes towards educational, vocational development policies, corporate strategy, value system and ethical perspectives as well as the evaluation policy pertaining to participation in educational programmes. The interpretation of this influence is that when HRD becomes an essential responsibility of one person or a department, then it becomes part of the strategic planning of an enterprise and is closely related to the implementation of its corporate strategy. Furthermore, emphasis placed on HR confers distinction.

Size of the enterprise played a role in attitudes towards educational, vocational and development policies and the evaluation policy pertaining to participation in educational programmes, since enterprises in the research sample that employed more than 50 persons often has a particular person or department responsible for HRD. As a consequence, they have a certain system of monitoring, planning, implementing and evaluating different learning activities.

Employees' position of responsibility did not influence any of the seven factors, as employees quite often get involved in administrative transactions and thus, they play a minor role in decision making, policy shaping, strategy and culture building, as all these initiatives are considered to be under the authority and responsibility of managers and employers.

Type of work contract had an influence on corporate strategy, value system and ethical perspectives as well as the emotional identity of the employee, when he/she is characterized as a learner. Permanent work contracts reflect a certain corporate strategy in relation to the value of HR and a strong interest of the enterprise in investing in learning and development of its employees: Firstly, for their own sake and secondly, for the benefit of the enterprise. This may ensure employee retention and secure their loyalty to the company. To the same effect is the duration of recent career development, which influences attitudes towards educational, vocational and development policies and the emotional identity of the employee, when he/she is regarded as a learner.

Finally, participation in export activities affected evaluation policy pertaining to educational programmes and learner orientation towards LL. This influence can be justified by the fact that export activities are complex and demand continuous updating of information, in terms of customs, legal procedures and other related issues. In this way, outcomes of the appropriate learning activities are of great importance. In addition, involvement in export activities is catalytic to the way an enterprise faces economic crises.

Furthermore, in addition to the above interpretation of the relationship of the seven factors to demographic elements, a brief summary of the results concerning participation in LL activities, firstly of managers and employers and secondly of employees, follows. Understanding of the findings of the quantitative research was

enhanced by their comparison with the results of qualitative research, such as interviews and participant observations. An attempt to compare the results of the present research to those of other studies (even though they were limited in number) enhanced the significance of the accomplishment of this inquiry.

An understanding of the influence of LL and its methods on the outcomes of LL activities, which is the content of the fifth research question, was gained through analysis of participation in four kinds of learning activities, such as seminars, training programmes, one day educational events and other miscellaneous activities. These were considered to be the most representative activities relating to the informal and non-formal character of LL. LL methods were studied in terms of their influence on self-esteem, job performance, professional development, personal development and desire for further learning. These five learning outcomes were decided upon for human resource development in the present research.

Concerning the interest of managers or employers in participating in seminars, 68% of them participated, where the theme they selected was relevant to their position, as well as to the activity of the enterprise they manage or own. The most popular themes were sales, management, negotiation skills, customer-oriented services and leadership, as well as specific subjects relating the particular field of activity of each enterprise.

The most commonly-used learning methods were lectures and discussion and to a lesser extent role playing. This reflects an emphasis on teacher-centered methods by the seminar instructors. The selection of teacher-centered methods indicated in the findings of the quantitative approach converged with those selected by the instructors in the two series of seminars organized by SEVE, as well as the workshops of the particular project, selected for observation.

The majority of instructors seemed to have the tendency to adopt the learning methods they had experienced in their past, when they were students in formal education, rather ignoring the learning methods appropriate to adult education, as well as the learner-centered methods which represent LL and self-regulated learning. In addition, in a number of cases instructors overestimate their expertise and believe it is enough, whatever the learning method selected to transfer their knowledge and experience. This was also very clear from the participant observation, carried out in

the context of the present research study. More specifically, in the observations of both seminars and workshops, the majority of instructors selected were executive managers and people with great expertise in the export trade, who tried to transfer their knowledge and experience through extensive lectures, with small intervals for limited discussions, often demanded by their audience. The inadequacy of the selection of lecture and discussion, the most frequently adopted learning methods, was also verified in the evaluation forms, completed by participants after each workshop. In the evaluation form participants were asked to declare whether they had acquired the skills to accomplish export activities. The majority of them commented on the disadvantages of passive participation, through lectures and discussions, compared with active participation through the use of other learning methods, such as role playing, case studies and interactive learning, which was evident in their suggestion for improvements in future workshops. In particular, they recommended more real life case studies to enable them to actually take export initiatives following the development of their capacity for critical thinking on real problems and challenges that they might face.

Concerning learning outcomes, the use of lecture, discussion and rarely role playing influenced the learning outcomes from participation in seminars in a different way. The majority of managers and employers believed in the value of their participation in seminars, and that these two methods had a positive influence on their self-esteem (46.2%); professional development (50%); job performance (53.4%); personal development (37.3%); desire for further learning (46.6%). According to managers and employers, job performance and professional development seemed to be the most important benefits of participating in seminars. One explanation could be that they are often mainly concerned with goal achievement, ROI and career progression. Also, according to their responses, their participation enhanced their desire for further learning to a great extent, and fortunately, this could be a prerequisite and foundation for gaining the identity of a LLL.

Regarding training programmes, 29.3% of managers and employers participated in these, with discussion and lectures were the most common learning methods and themes related to the specific interests of participants, where

management, quality systems, exports and foreign trade were the most common choices.

In relation to learning outcomes of participation in training programmes, the vast majority of managers and employers agreed that discussion and lectures had had greater influence on their job performance and desire for further learning and less on their professional development, self-esteem and personal development. The subject of the training programmes was commonly focused on acquisition of knowledge, skills and learning related to tasks, projects and responsibilities with the aim of improving job performance.

Enhancement of the desire for further learning could be explained as a consequence of participation in training programmes as well to the natural tendency of human beings to improve. In terms of managers and employers, the desire for further learning could also be characterized as one of the drivers of their career progression.

Concerning participation in one day educational events, 31.3% of the managers and employers participated in such events. The selected learning methods were chiefly lectures, discussion and to a lesser extent enhanced presentation. The themes selected were specialized and connected, either to the enterprise activity or the personal interest of managers and employers.

According to managers and employers, the use of lectures and discussion to a greater extent and enhanced presentation to a lesser extent, in the one-day educational events, had a more positive influence on their professional development (23.4%), job performance (22%), desire for further learning (20%) than on self-esteem (18%) and personal development (14%).

Only 19.3% of the managers or employers participated in other miscellaneous learning activities, the common themes of which were management, social events, communication and other issues of personal interest. In these activities, the selected learning methods were presentation in a specialized fair, social networking (facebook; twitter etc), internet piloting and social learning.

Concerning the influence of the learning methods (such as presentation in a specialized fair, social networking, internet piloting and social learning) on the learning outcomes, managers and employers agreed that these had a positive effect

more on their professional development, job performance and personal development than on their desire for further learning and self-esteem. This could be explained by their interest in learning usually being limited to their immediate needs for temporary information and the skills necessary to fulfill their work. Indeed, every learner, including managers and employers, is influenced by the learning environment when he/she adopts the role of a learner. When this environment involves facebook, twitter or networking of some kind, it liberates the learner to feel free to express his/her emotions. In addition, there is always the possibility to have a mentor or a coach to enhance active participation by the learner, throughout the learning process. Thus, even though it was not easy for managers and employers to realize it, this kind of activity may enhance the desire for further learning in the long run.

Just over half of employees (52.4%), participated in seminars, the main themes of which were administrative issues, computer programmes, income taxation, the export process and marketing, operational risks and sales. The selected methods were lectures (24%), discussion (18.8%), role playing (5.5%) and other methods (4.1%).

Concerning learning outcomes of participation in seminars, the use of lectures and discussion had a positive influence more on the desire for further learning (43.4%), job performance (40.9%), professional development (38.4%), personal development (38%), and less on self-esteem (30.2).

Of the employees, 23.6% participated in training programmes where the most popular themes were insurance services, computer programmes and ECDL, economy and energy issues. The selected methods were discussion (7.7%), lectures (5.9%), role playing (4.5) and various other methods (5.5%).

The majority of employees considered that discussion more than lectures to a great extent had a positive influence on professional development (29.2%), self-esteem (26.2%), job performance (20.3%) and to a lesser extent on desire for further learning (19.1%) and personal development (17%). These results emphasize that employees focus on their career and professional life more than their personal life.

In relation to one-day educational events, participation by employees was limited to 13.7%. The themes were extroversion of enterprises, taxation, international markets and market research. Lectures were the most commonly selected method

(9.6%), followed by discussion (1.8%) and enhanced presentation (1.8%). Participation in one-day educational events showed that lectures, the predominant learning method in this kind of event, had a positive influence on learning outcomes, more on desire for further learning (10%) and job performance (6.3%), and less on personal development (4.4%) and self-esteem (5.5%).

Finally, participation in miscellaneous activities was 13.3% mainly on issues related to social contacts, social networking-internet, computers and foreign languages.

Concerning the influence on learning outcomes of presentations in a specialized trade fairs, social networking (facebook; twitter etc), internet piloting, social learning, related to participation in miscellaneous learning activities, these methods were indicated to have a positive effect more on desire for further learning (11.1%), self-esteem (10%), personal development (9.9%), job performance (8.9%) and less on professional development (7.7%). An explanation could be that as employees usually take the responsibility for their own learning, they may often place an emphasis on their personal rather than professional life.

Indeed, the positive influence of participation in various kinds of learning activities on self-esteem, professional development, improved job performance, personal development and mainly enhancement of the desire for further learning, verifies the emergent interest in learning outcomes within a LL orientation. Illeris (2003, p. 396) argued that the increasing expenses for education reflect the high interest in education and LL. In addition, this has given rise to their consideration as determinant factors, especially evident in the fact of global competition. As a consequence, a LL orientation is increasingly apparent, with a growing interest in outcomes of learning.

Apart from the above presented conclusions in relation to the fifth research question and mainly, the influence of learning methods on particular learning outcomes of participation in LL activities, answers to the remaining five research questions were given through the analysis of results by factor.

Concerning awareness of LL (first factor) and the first research question, through which respondents' perception of the content and aims of LL were investigated, managers and employers seemed to have a clear understanding of the

basic aims of LL, and that LL includes non-formal and informal learning, or otherwise liberal, vocational and social learning. Yet they had more doubts as to whether LL is related to work-based learning than to whether it continues until retirement. Similar were the attitudes of employees, who found it more difficult to decide whether LL continues until retirement or whether it refers to work-based learning.

Attitudes towards educational, vocational and development policies which represent the second factor, and constitute part of corporate strategy (which reflects the general content of the second research question), managers and employers appeared to be very responsible for their own vocational training and the achievement of organizational goals. They also claimed that the enterprise they manage or own offers and supports learning opportunities, while they also seemed to be more committed to LL than employees. The explanation for this could be that they are involved in corporate strategy planning and implementation, they strongly feel that they represent their enterprise as leaders and thus, they must promote and communicate its advantages. Employees, on the other hand, seemed to be slightly suspicious of the extent to which their enterprise supports and enhances LL, as they usually attribute responsibility for their learning to the enterprise or organization for which they work.

Moreover, as QoL was characterized as an important part of both educational and evaluation policies of the enterprises and organizations, it was investigated whether could be a significant contributory factor. However, both managers/employers and employees doubted whether QoL requires certification, since for them QoL could not be translated into certificates but into acquisition of knowledge and skills appropriate to their needs, in practice.

For managers and employers, as well as employees, culture of LL, which was the content of the third factor and the third research question, was based on the view that LL deals with the wellbeing of learners, innovative ideas and the enhancement of motivation for learning. Managers and employers more than employees seemed to believe that LL leads to higher levels of performance and that their enterprise takes a positive stance towards LL, which could be explained by the fact that monitoring job performance and creating LL strategy are their main responsibilities. In addition,

they seemed to doubt whether LL leads to job satisfaction, probably because they come from private sector enterprises, where job satisfaction usually connotes tangible and short-term rewards rather than intangible and long-term rewards.

In relation to corporate strategy, value system and ethical perceptions, which was the content of the second research question, there was considerable disagreement between managers/employers and employees, in particular, in relation to whether their enterprise considers employees as an important asset, in other words, that employees are its power. There was similar disagreement over whether their company makes learning accessible to everyone, regards knowledge as a generic source and considers knowledge dissemination valuable. To a lesser extent, they disagreed over whether LL strategy is a strategy that creates value and contributes to gaining competitive advantage.

In relation to the fourth research question, managers and employers disagreed with employees on the extent to which their enterprise assesses educational/training needs before approving participation in training courses, as well as the benefits of their participation. Due to their involvement in evaluation policy pertaining to participation in educational programmes, managers and employers seemed to prettify real facts, while employees seemed to take facts as true meaning. Furthermore, managers and employers, as well as employees, agreed that evaluation policy does not seem to include cost-benefit analysis and evaluation of learning outcomes against training goals set by the provider of learning activities.

Regarding the identity of employees, managers and employers when they participate in LL activities, which was the content of the sixth research question, managers and employers as learners seemed to be more reliant than employees on self-regulated learning. Yet they preferred learning through problem-solving and setting personal learning goals to a lesser extent than employees, despite the diversity of participants' goals. In contrast, employees showed a preference for learning through social relationships or networking (without any kind of discrimination) more than managers and employers, as the latter often do not spend time on this kind of learning and thus, they might not recognize its benefit. However, managers/employers and employees agreed on the value of learning through critical thinking, the former mostly considering it useful for their job performance and experience, the

latter mostly for their development. An explanation for this could be investigated through identification of specific characteristics of critical thinking and learning orientation.

Critical thinking as a learning method is closely related to problem based learning (PBL), differing in terms of learning orientation. Indeed, critical thinking could be enhanced through PBL and converges with the same aspect of learning itself. PBL is also known as student-centered learning and relies on the student's responsibility for his/her own learning as he/she seeks answers to a particular problem assigned. This contrast with subject-based learning, known as traditional learning, where the teacher provides the subject and the answers (Barrows 1986; Hmelo-Silver & Barrows, 2006; Spence, 2001).

PBL is also considered to be an effective learning method, differentiated in terms of orientation. Two types of orientation, learning orientation and performance orientation, are the two different approaches that are apparent in the body of Dweck's work, which was later taken as a basis for investigation and analysis of negative outcomes, especially in simulation games (Gentry, Dickinson, Burns, McGinnis & Park, 2006).

These two orientations also reflect two kinds of implicit theories, entity theory and incremental theory. In terms of entity theory, individuals have traits that are fixed, while in terms of incremental theory they have malleable traits (Levy, Stroessner & Dweck, 1998, p. 1421). Thus, we can argue that managers and employers could be characterized as more performance oriented than employees, as their learning through critical thinking aims to improve job performance, while employees could be characterized as learning oriented, as their learning relies on their own responsibility and aims at their general development.

Concerning the orientation of their employees towards LL, and their emotional identity as learners, managers and employers did not appear to be seriously interested. Training and learning for them is closely related to the dissemination of knowledge and skills transfer from the experienced to the less experienced, through methods such as apprenticeship, mentoring and on-the-job training. Their preference for these particular learning methods was confirmed in the perspectives of the majority of employers and managers, which constituted the

sample group of the present research, in relation to the results of the seventh factor, illustrated in the previous chapter.

According to the present research findings, managers and employers as learners appeared to have an emotional identity. Thus, they do not agree to pretend to act interactively, hide their emotions or avoid expressing themselves. The disagreement of managers and employers in this respect was greater than that of employees. In relation to mentoring, managers and employers also felt emotionally satisfied to adopt the role of a mentor, more while employees felt satisfied with the mentee role. Besides the fact that managers and employers were emotionally satisfied with the role of a mentor, evident in the results of the present research, the personal characteristics of mentors should also be considered. Indeed, mentors need to have certain personal characteristics: Genuine interest to be a mentor; open mind towards change; senior position and wide experience; influence; security of position; time management in face-to-face discussion; good leadership qualities (Megginson & Clutterbuck, 1999, p. 115-116).

Finally, as learners all of the questionnaire respondents, managers, employers, and employees, seemed to have a different LL orientation, learning style and emotional identity, as every individual is unique. Indeed, in considering individual differences in learning, in this research, we confirmed that the context of learning style and learning orientation are differentiated. It is worth mentioning that in this research, the concepts of learning style and learning orientation have not been developed in order to place emphasis on diverse ways of learning, but rather to focus attention on the learner and how he/she learns, in order that instructors or trainers adjust their instruction to the learner's style. Apart from this research focus on learning style and orientation, recognition of these aspects of LL could also help learners to perform better in different learning activities, as well as to appreciate instruction and training itself (Cronbach & Snow, 1977).

Thus, emphasis should be placed on the orientation, style and identity of the learner, founded upon the real meaning of LL in self-regulated learning. In addition, serious attention should be paid to selection of the appropriate learning method. Indeed, development of adult education programmes, courses and other learning activities cannot be based only on the diverse needs of adult participants. A

combination of different approaches appears to be an effective way of achieving learning goals and outcomes based on: Subject, abilities, human characteristics, social functions and individual needs (Kapsalis & Papastamatis, 2000, p. 41-42).

In addition, it should be emphasized that it is the choice of the right combination of learning methods, as well as appropriate learning strategy, evaluation of outcomes of the learning process and the process itself, that can give LL the capacity to offer added value to each employee, manager and employer, eager to play a LLL role.

Beyond this, participation in the learning activities itself, whether for instructors or learners is not sufficient. Instructors have to be able to manage learning processes based on acquisition of skills and competences, adjustable to learning goals and connected to learning outcomes (Giossi & Papastamatis, 2010, p. 125). Learners, on the other hand, have to be active participants and take care to align their personal goals with learning outcomes.

The present research, through investigation of how LL methods can contribute to HRD, concluded and highlighted that seven factors influenced the relationship between HRD and LL: The first factor was awareness of LL (its meaning and its basic aims), which is crucial. It is important to stress that awareness of LL is not only led by how enterprises act but it is also governed by governmental policies towards LL. In fact, different meanings attributed to LL and relevant educational policies in different countries, including Greece, always pose that LL may enhance social exclusion rather than social inclusion (Papastamatis & Giossi, 2011, p. 66), while the existence of a collaborative network appears to be a good antidote to this threat, in order to minimize discrimination. From the point of view of the enterprise, attitudes towards educational, vocational and development policies, culture of LL, corporate strategy, value system and ethical perceptions as well as evaluation policy pertaining to participation in educational programmes have proved to be significant factors in connecting HRD to LL and its methods, while learner orientation towards LL and emotional identity of learner in relation to LL have been the key factors on the learner side.

To a lesser extent, similar findings resulted from a pan-European research project the aim of which was to explore influencing factors on HRD practices and

LL, in learning-orientated organisations in seven European countries. Sambrook and Stewart (1999) highlighted various factors that influence HRD practices and LL, the most important of which were: A lack of motivation, a lack of financial resources and other resources, a lack of time devoted to development, an inadequate learning culture, a HRD role not well defined and the structure of work. Hence, they concluded that the changing role, not only of HRD practitioners but also of other stakeholders, such as managers and other employees, may facilitate the transformation of an organization into a learning organization.

In comparison to their research, the present research highlighted the importance of seven factors: Awareness of lifelong learning, educational, vocational and development policies, culture of lifelong learning, corporate strategy, value system and ethical perceptions, evaluation policy pertaining to participation in educational programmes, learner's orientation towards lifelong learning and the emotional identity of the learner.

Another research conducted through the ELLI project revealed the characteristics of a learner. In particular, ELLI and the consequent projects related to seven dimensions of learning power expanded the idea of learning power to learning energy, where four broad categories of learning have emerged, mainly with a 'learning to learn' orientation. These were: Learning capacities, including dispositions, awareness and skills; learning identity, including beliefs, values and attitudes to learning, self-knowledge held by the learner; learning story, including the socio-cultural formation of learners over time; learning relationships, including the quality and substance of learning relationships (Crick, 2007, p. 139). While this deep investigation of the unique characteristics and attributes of the learner can be useful for sketching his/her learning profile, and although this profile refers to any kind of learner, where the learner is an employee in an enterprise or organization, this profile seems to be inadequate.

Regarding an employee solely as a learner, without paying attention to his/her professional identity as an entrepreneur, employee, manager or employer, threatens his/her unity in the workplace. A holistic approach based on his/her twofold status, simultaneously as an employee and as a learner, should be considered in order that HRD can reach its potential by increasing the value of HR through the prism of LL.

That holistic approach was the concept of the present research, which constitutes its innovative contribution.

In addition, the strategic approach of the present research strengthened its innovative character. This was evident on the one hand, in the emphasis placed on the meaning, strategy and culture of LL, as well as the evaluation policy pertaining to participation in educational programmes; and on the other hand, in highlighting the role of managers, employers and employees as learners, besides their role in the enterprise or organization they belong to. Furthermore, the significance of the orientation and emotional identity of the learner in relation to the outcomes of their participation in various LL activities, with a considerable focus on the selected learning method, was also revealed.

Taking as a starting point the meaning of LL, we revert to the research of Campanelli et al. (1994), where the meaning of training is the subject of investigation. The respondents in their research seemed to have a narrower view of the meaning of training than researchers and policy makers. That finding is consistent with findings of the present research concerning the meaning of LL, as opposed to the meaning of training in the research study by Campanelli et al.

In particular, many respondents in the present research seemed not to have understood the broad meaning of LL. Employers and managers, as well as employees, understood that LL includes non-formal and informal learning or otherwise liberal, vocational and social learning. In addition, employers and managers, more than employees, seemed uncertain whether and to what extent LL is to learn until retirement or whether it is related to work-based learning, due to their linking work-based learning and experience to working until retirement.

Thus, there is a general understanding that LL includes non-formal and informal learning, and this reflects the influence of the promotion of LL in recent years in many European countries, including Greece, evidence of which are the EU funding programmes in the fields of HR and LL. Despite conceptualizing LL, misunderstanding and erroneous conceptual meaning of LL can often exist, due to how the way policy makers, researchers and practitioners use this term.

Similar to what happens in LL conceptualization, is use of the term learning, which recently replaced the term of training, as a consequence of the focus now

placed on learner-centered methods, compatible to LL, rather than teacher-centered methods. Thus, a strong emphasis is placed on learning itself and the different kinds of learning settings, such as everyday work, social interactions with colleagues, clients and customers. This natural appearance of learning was verified by Zuboff (1988, p. 395), who stated that learning is the heart of productive activity or, in other words, learning is the new form of labour.

It is true that policy-makers and headline writers quite often use or produce eye-catching phrases without giving their precise meaning and with little regard to the conceptual distinctions as is the case, for example, with use of the words learning, skills and training. As a result, these terms are often used interchangeably, and some survey results and titles reflect this policy (Felstead, Fuller, Unwin, Ashton, Butler & Lee, 2005, p. 360), without giving the precise meaning of each.

Understanding the meaning and aims of LL as perceived by managers, employers and employees is reflected in their responses in the LLEHUREDE Scale. These responses gave answers to the first of the six research questions the present research, which was presented solely through quantitative approach. Other key research issues, such as corporate strategy concerning the value of HR, culture of LL, evaluation policy, connection of learning methods to learning outcomes and identity of the research participants, which represented answers to the other five research questions, were analysed through both approaches, quantitative and qualitative.

In addition to the above quantitative analysis of research findings, results from interviews and observations proved to be helpful to deeper analysis of some factors crucial to the effective influence of LL on HRD. Corporate strategy and LL culture, the selection of the appropriate method and evaluation policy pertaining to participation in different learning activities, as well as the learner's identity, were regarded as factors conducive to the quality of LL. Thus, these factors were worth mentioning, especially, as they highlight additional, deep information from observations and interviews, in comparison to the quantitative approach.

Concerning corporate strategy and LL culture, even though managers, employers and employees wanted to express a positive attitude towards LL and HRD (evident in the quantitative data), their real actions and beliefs were contradictory. This was evident in the answer of the third interviewee to the question: "Do you

think that your colleagues are interested in participating in learning activities”. Her answer was that “nobody cares about learning and acquisition of knowledge and new skills” and, she continued “this seems to be convenient for the company, as nobody is absent during working hours and there is no threat of being absent using the excuse of participation in learning activities”.

In addition, her positive answer to the question “Are you interested in participating in learning activities and what kind of activities would you prefer” brought out a disagreement between her attitudes as an employer and as a learner herself. This contradiction appears to reflect a defensive mechanism in the face of economic crisis, where extra money and time spent on training, development and learning would be a burden. On the other hand, she feels insecure in the belief that employees are the source of a company’s power, as they may leave at any time. That attitude seems to bear out the points of view of Bogner et al. (1999). They argued that companies are often managed and developed in order to improve performance, and thus, when employees leave, they carry their knowledge and experience to the next job and consequently, companies may lose their competitive advantage.

Answer to the question “Are you interested in the way learning takes place and, in particular, in the selected learning methods” revealed the lack of interest of all interviewees as they considered selection of learning method to be the instructor responsibility. Apart from the interviews, in both observations, the interest of participants in learning methods was implied through their comments on evaluating the profile and presentation of instructors or trainers, their general impression of the seminar or the workshop and the experience of their participation in it.

From the observations, it was apparent that the learning methods selected by the instructors, whether in seminars or workshops, were lectures, discussion and enhanced presentations. This is consistent with the findings from the quantitative approach. The basic explanation for the selection of the particular learning methods is related to the selection of who would be instructors, whether in seminars or workshops. In seminars, instructors selected were managers of SEVE and experienced practitioners without any specialized training, while in workshops instructors were successful entrepreneurs and managers of export-orientated enterprises as well as other executives from consulting enterprises. In order for these

instructors to be capable of adopting student-centered methods, specific preparation through certain education, training and development is needed. This preparation could be conducted in three phases. The first phase constitutes information about adult education, its broad dimensions, learning methods and instructional techniques, curriculum, kinds of programmes, learning assessment and pedagogical principles. The second phase consists of the implementation of learning methods by demonstration and enhancement to be applied by the instructors. Coaching in teaching-learning techniques, easily adopted in a short period of time and mentoring in learning methods and their complete absorption are recommended as best practices. The third phase constitutes assessment of learning appropriate to each learning activity. In addition, feedback requires the adoption and improvement of best practices and the dismissal of bad practices.

Beyond appropriate preparation, the professional development of instructors in adult learning activities should be continuous and evolutionary in order that they are in a position easily to adjust to changes in pedagogy and psychology of adults. To be able to adapt, instructors also need different kinds of knowledge, such as scientific knowledge, pedagogical knowledge, social knowledge and institutional knowledge (Kapsalis & Papastamatis, 2002, p. 121). Adequate knowledge, the right preparation, awareness of adult learning methods and continuous professional development could be the factors of success for practitioners, who might decide to become adult instructors alongside their role as managers and professionals with high expertise, and committed to QoL.

Apart from learning methods, the place and time of educational courses, training programmes and learning activities are considered to be determinant factors of their design (Armstrong, 1999; Papalexandri & Bouradas, 2003). Emphasis was placed on these factors in observations, of the two series of seminars and the workshops in the pilot study of the selected project. Participants, through their evaluation of the venue of the seminars and workshops, assessed SEVE offices as a positive choice for seminars and a luxury hotel for workshops. Time and duration of the programmes were criticized as inconvenient, because they took place outside working hours and took up participants' spare time. Moreover, in the case of

observations, they were also dissatisfied because this meant spending their weekend leisure time in workshops.

Answers concerning QoL and more precisely, how it is influenced by the selected learning methods in LL activities came from the qualitative approach and, in particular, from observations, which provided complementary information to the quantitative approach, where educational and evaluation policies were considered prerequisites of QoL. For the participants in seminars and workshops, QoL dealt with the ability of instructors to transfer their knowledge, the educational material received electronically (through e-mails), and the practical value of the acquired knowledge. No emphasis was placed on how this participation could change their entire professional and personal life, which reflects a broad dimension of QoL.

Evaluation policy, as it emerged through observations, concentrated on the use of the questionnaire as an assessment tool. Using questionnaires to measure the attitudes of trainers and trainees towards any educational programme, training course or other learning activity, reflects a narrow approach to learning, and to the learning process, as a whole. What is required is not an assessment in order to complete the learning process adequately, but to profit from the assessment itself and from the evaluation of learning benefits. This could facilitate decision-making on the improvement of the learning process as a whole.

An attempt to make recommendations further to discussion of the core findings of the present research concludes with consideration of assessment of learning, continuous learning, emphasis on HR, building a LL culture, professional development, self-evaluation, self-esteem and desire for further learning.

In the belief that assessment of learning is not a discrete process, but an integral part of the curriculum, the right curriculum must be designed in an appropriate way. This assessment means that the curriculum must be designed in such a way as to develop the ability to “assess and evaluate information, to apply knowledge to new situations and, importantly, to acquire the prerequisites for continued learning throughout life” (Harlen, 2007a, p. 2). As a consequence, responsibility for each learning activity and its assessment is distributed to all involved, while its negative effects have a serious impact on learning and its continuation.

Continuous learning was emphasized by Drucker (1999a), when he included it in the six factors that he suggested to be crucial for the improvement of knowledge productivity of organizations, in addition to which task, autonomy, continuing innovation, quality and worker asset were also considered.

Inevitably, the realization of the value of the worker as an asset or, in other words, the value of HR, is a crucial issue. Yet whenever the value of the worker can be recognized, the following significant questions may arise: How and for how long can enterprises and organizations expect their people to boost their superiority over competitors, when people, sometimes quite easily, decide to change company for financial or other personal reasons? Indeed, this appears to be a serious threat for any enterprise or organization, especially in a period of economic crisis, and, thus, it must be addressed in a careful and precise way. Investment in LL activities may be one way to keep employees from changing companies because it enhances their thirst for learning in the long run and strengthens loyalty and commitment to their employers. Furthermore, their employers would appreciate their value and thus, provide them with opportunities for continuous learning. In this way, the building of a LL culture can clearly be a possibility. In addition, the development of a learning culture and the correlation between learning activities and performance measures will be a primary source of competitive advantage (Sinkula, Baker and Noordewier 1997, p. 316), while the value and availability of HR can create sustainability.

It is true that a key issue in gaining advantage is the availability of HR, as they are considered to be the most crucial and valuable resources. Johnson & Scholes (2002) attach similar value to people in an organization, when they claim that “people are at the heart of strategy” (p. 477).

Bogner et al., (1999) pointed out that sustaining resource advantages are embedded in people and when key personnel leave enterprises and organizations, they cease to contribute to its development, both present and future, since they take their knowledge and experience with them. They distinguished between unique resources, which give current competitive advantage, and core competencies, which create future unique resources. They highlighted that enterprises and organizations have a limited ability to prevent this from happening and to protect these resources. They proposed that organizational learning (OL), organizational development (OD)

and the building of complex intangible relationships could produce sustainable competitive advantage.

OD is closely connected to both macro and micro changes. In particular, macro changes are related to the effectiveness of an organization as a whole, while micro changes are related to the effectiveness of an individual, a small group or a team (Werner & DeSimone, 2009, p. 11). Therefore, OD can be considered to be a core of HRD and HRM and a determinant factor in the professional and personal life of individuals.

In terms of personal life, development is closely related to self-evaluation, self-esteem and the desire for further learning. Self-esteem is considered to be one of the four traits of the self-concept construct, or, in other words, self-evaluations construct, proposed by Judge, Locke and Durham (1997) in their attempt to link core self-evaluations to job satisfaction. In their view, core evaluations are essential evaluations that individuals hold about themselves, the world, and others. Moreover, even though individuals have core evaluations in different domains it is hard to understand the influence, in particular of their self-evaluations, on their behaviours (Bono & Judge, 2003).

The self-evaluations construct by Judge et al. (1997) comprises four traits: Self-esteem, generalized self-efficacy, locus of control and emotional stability. Self-esteem was considered the core self-evaluator by Judge et al. (1997) as it represents the overall value an individual places on himself/herself. This construct should be related to work motivation and ultimately to job performance (Judge, Erez & Bono, 1998). In their meta-analysis, Judge and Bono (2001) found that although self-esteem displayed the highest average correlation with job performance, the degree to which self-esteem is relevant to job performance is moderated across various other studies (p. 85). Therefore, as positive self-esteem can increase job performance, it seems to be an important learning outcome in the case that participation in diverse learning activities has failed directly to improve job performance.

Concerning professional development, serious attention should be paid to critical impact factors. Important issues in professional development are time and money spent. In addition, investigation is needed to establish whether this spending on various educational and training courses and programmes, as well as on other

learning activities, is worth-while. Indeed, in all educational contexts involving professional development, there is an increasing interest (Christie, 2009; Hill, 2009) in analysis of cost versus time and money expended. Focusing on analysis of professional development in terms of cost, time and money does not seem advisable, particularly during recession periods where things, might go from bad to worse financially. In contrast, attention should be paid to the evaluation of learning activities, in terms of connecting learning goals to learning outcomes, and learning methods to learning outcomes, which are related to both personal and professional development, as this can be considered as alternative approach to learning assessment.

Having in mind that adult education is based on voluntary participation, respect for self-worth, collaboration, praxis, critical reflection and self-directed learning (Brookfield, 1985), consideration of personal development in addition to professional development is of particular value. Hence, expanding the dimensions of assessing LL activities, the perception of HR as a cost encumbering resource could be replaced by the belief that HR are of strategic importance for every enterprise or organization (Iordanoglou, 2008).

In addition, desire for further learning should be considered as a motivator for involvement in LL activities. The law of effect, which is one of the three principles of the process of association in learning, together with contiguity and practice (Werner & DeSimone, 2009), can be valuable for the expansion of learning across the lifespan in the workplace. The reason for this is that positive behaviour following completion of a training course or any learning activity can strengthen the desire for further learning in which law of effect is translated.

Apart from positive behaviour, emotions also strongly influence motivation for learning. Expression and management of emotions within organizations have attracted the attention of many theorists and researchers (Ashford & Humphery, 1995; Goleman, 1995; 1998; Tracey & Robins, 2004), in an attempt to explain diverse issues, such as recruitment and selection (Ashforth & Saks 2002) and leadership (Goleman, 1995; 1998). In the present research, the significance of emotions was highlighted through the emotional identity of the learner, which appeared to be a determinant success factor in LL activities.

Finally, ignorance and oversight of all the vital factors defining the influence of LL and its methods on HRD, as these are presented and measured in the present study, would hinder an organization's efforts to realize the benefits of transforming their employees into LLL and building a LL culture and strategy.

On the contrary, recognition of each individual employee's learning identity could help him/her to gain an organizational identity in relation to LL strategy and culture. Organizational identity refers to employees' points of view about the organization they belong to or, in other words, is the answer to the question 'How do we see ourselves' (Albert & Whetten, 1985). This identity includes the views of employees hold about the central attributes of the organization, its uniqueness through their eyes and its continuity, regardless of changes in the organizational environments.

It is evident that organizational identity has a profound impact on employee behavior and on the functioning of an organization as a whole. Thus, the establishment of a LL strategy and culture can influence their attitudes towards LL and their organizational identification, which refers to the question 'Who am I in relation to the organization' (Pratt, 1998). Finally, organizational identity and identification can be the core concepts where an enterprise or an organization decides to have as a key organizational objective to support employees to gain a LLL identity, either for his/her own sake or to increase the competitiveness of the organization. Furthermore, according to the belief that employees, who are aware of an organization's culture, understand, interpret and behave in a correct way in new situations (Werner & DeSimone, 2009, p. 42), awareness of LL culture can help them to adjust better in flexible and fragile business environments.

In addition, as organizational culture could be a source of sustained competitive advantage (Barney, 1986), it could play a crucial role in motivating employees and managers to share and contribute to organizational objectives. Moreover, the culture of an individual, a basis on which he/she shapes the identity that he/she holds, could have an impact on the organizational culture, too. Organizational learning culture, which can be affected, either positively or negatively, by each employee's learning identity and culture, should be carefully shaped due to its longitudinal horizon. Expanding each employee's learning identity

into developing a corporate LL identity, enterprises and organizations could seek competitive advantage and sustainability. They could also benefit from their employees, through organizational identification and commitment to organizational objectives to which they could fully contribute.

Thus, corporate strategy with an organizational LL culture seems to be a good route to SHRM. In addition, according to the concept that strategic capability of an enterprise or an organization mainly depends on its resource capability in the shape of people, in terms of RBV, the need for a resourcing strategy emerges, through which recruitment and retention of the most capable employees and employment in an effective way are crucial (Armstrong, 2006, 480-483). The reason for this is that the RBV could provide a means to link employee learning to corporate strategy and its sustainable competitive advantage (Kokkonis & Mihiotis, 2009, p. 70).

According to the belief that human resources are the source of competitive advantage (Legge, 1995), investment in their learning in the long run could enhance the core resources and capabilities that are difficult to identify and understand, are not easily imitable, valuable, possessed and controlled by the enterprise (Grant, 1991). Therefore, there is serious reason to protect them and formulate a strategy for their most effective management (Armstrong, 2006).

Consequently, investment in learning, in alignment with a strategy for the promotion of export activities, would be the best solution to the problems of the economic crisis. As a result, there would be great opportunity for enterprises and organizations to protect their HR by giving every employee the chance to develop his/her talents, for the benefit of both the individual and the organization.

## **6.2 Implications of the research**

The results of this research make a contribution to the development of both theory and practice as well as having implications for further research.

The LLEHUREDE scale could be regarded as a valuable assessment tool for both managers and employers, and employees. Its utility is significant, both as a whole and in parts. Another distinction concerns two aspects, the organizational and the personal. The organizational perspective includes awareness of LL, corporate

strategy, value system and ethics, culture of LL and educational and evaluation policies, while the personal perspective includes orientation towards LL and the emotional identity of the learner.

The use of the LLEHUREDE Scale as a whole has the advantage of accounting for the twofold identification of employees, on one hand as a member of the organization, and on the other hand, as a learner. The scale separates the advantages between those useful for the organization and those useful for individuals, where the former are related to organizational identity and the latter to organizational identification. Thus, this scale combines self-evaluation with organizational evaluation.

Furthermore, this scale could be useful to both researchers and practitioners. Researchers can use this measurement tool in different sample groups and focus on a diversity of key concepts such as leadership, assessment and efficiency, connecting the two research fields, education and management. Practitioners can consider it as a tool for recognizing the learning characteristics of their employees and their perceptions of the value given to HRD and LL. On the other hand, employees can identify their learning identity and their orientation towards LL, and this can be helpful to their future participation in any kind of learning activities over the time.

The findings of this research corroborate the significant influence of learning methods on learning outcomes in LL activities. Thus, they have implications for adult education policy makers, programme administrators and those who have responsibility for designing and implementing programmes concerning professional development of different target groups or other learning activities involving personal and social development for every employee.

With regard to evaluation, findings revealed a poor and adequate evaluation system in HR practices within enterprises, and also highlighted that quality of learning depends on evaluation. Thus, learning assessment must be reconsidered and should certainly not be underestimated. Moreover, assessment should be the basic guideline in the pursuit of QoL in the workplace.

It is hoped that, this research provides an important step forward in contemporary thinking, and its results and recommendations can support enterprises

and organizations in their LL strategy and culture building while, employers, managers and employees to become LLL.

### **6.3 Recommendations for further research**

The results of this research raise questions as to whether the building of LL strategy and culture can be easily formulated and differentiated in accordance with the sector and size of each enterprise and organization. Further research in this area direction could provide guidance in the formulation of an appropriate LL strategy and culture such that every enterprise or organization is able to achieve sustainable competitive advantage as an outcome of the creativity and innovation of its human potential.

Moreover, as enterprises and organizations interact with their external environment and this quite often determines an organization's alertness and ability to learn, unlearn and relearn, research with a focus on its impact on HRD and LL could prove to be of serious interest to other researchers.

Further research is recommended that would analyze the LL practices of leaders in an enterprise and organization, besides those whose role and responsibility are in HR. In addition, investigation of the impact of gender in relation to leadership in enterprises with multicultural employees, could shed light on how LL culture might overcome inequality and promote diversity.

Furthermore, as this study found that managers, employers and employees prefer short term learning activities, investigation of their needs for virtual types of learning (through internet) could be carried out.

A comparative study on how SMEs enterprises and large organizations perceive differently the change of a corporate strategy into a strategy oriented to LL, could be interesting.

Research to investigate the development of evaluation tools in alignment with ROI measurements in workplace learning activities could prove to be of great interest.

This study may have opened up further questions for future researchers who might want to investigate critical issues of HRD and LL and re-conceptualize some of the old debates in HRD, as well as the multidisciplinary perspective of LL.

Finally, the study of how requirements for additional education, training and learning by managers, employers and employees change over a considerable time span, such as a three year period, can identify specific areas for change in training content, learning preferences, learning methods and their benefit.

## References

- Abdullah, H. (2009). Definitions of HRD: Key concepts from a national and international context. *European Journal of Social Sciences*, 10(4), 486-495.
- Albert, S., & Whetten, D. A. (1985). Organizational identity. *Research in Organizational Behaviour*, 7, 263-295.
- Alcazar, F. M., Fernandez, P. M. R., & Gardey, G. S. (2005a). Researching on SHRM: An analysis of the debate over the role played by human resources in firm success. *Management Review*, 16, 213-241.
- Alcazar, F. M., Fernandez, P. M. R., & Gardey, G. S. (2005b). Strategic human resource management: Integrating the universalistic, contingent, configurational and contextual perspectives. *International Journal of Human Resource Management*, 16(5), 633-659.
- Alexander, M. W., Zhao, J. J., Truell, A. D., Underwood, R. A., & Wiggins, J. Y. (2006). Participation in lifelong learning: A comparison between administrative professionals in 2000 and 2005. *Journal of Business and Training Education*, 15(Fall), 1-18.
- Alkire, S. (2010). *Human development: Definitions, critiques, and related concepts*. UNDP Human Development Report.
- Anastasiadou, S. (2006). Factorial validity evaluation of a measurement through principal components analysis and implicative statistical analysis. In D. X. Xatzidimou, K. Mpikos, P. A. Stravakou, & K. D. Xatzidimou (Ed.), *5th Pan-Hellenic Conference of Hellenic Educational Society* (pp. 341-348). Thessaloniki: Kyriakidis (in Greek).
- Anastasiadou, S. D. (2008). Exploring intrinsic and extrinsic motivation during a PhD completion with the aid of Confirmatory Factor Analysis and Path Analysis: The case of Greek PhD students. *International Journal of Interdisciplinary Social Sciences*, 3(2), 171-177.
- Anastasiadou, S. D. (2009). The effects of different modes of representation in statistical problems solving: A study with third grade primary school pupils. *The International Journal of Learning*, 16(4), 27-36.
- Anastasiadou, S., & Anastasiadis, L. (2011a). Reliability and validity testing of a new scale for monitoring attitudes toward electronics and electrical constructions subject. *International Journal of Applied Science and Technology*, 1(1), 1-10.
- Anastasiadou, S. (2011b). Reliability and validity testing of a new schale for monitoring attitudes toward learning statistics with technology. *Acta Didactica Napocensia*, 4(1), 1-10.
- Anastasiadou, S., Anastasiadis, L., Vandikas, J., & Angeletos, T. (2010a). Implicative statistical analysis and Principal Component Analysis in recording students' attitudes to electronics and electrical construction subjects. *The International Journal of Technology, Knowledge and Society*, 16(5), 341-356.
- Anastasiadou, S., Anastasiadis, L., Angeletos, T., & Vandikas, J. (2010b). A multidimensional statistical analysis of students' attitudes toward physics. *International Journal of Diversity in Organizations, Communities and Nations*, 16(5), 341-356.

- Anastasiadou, S., & Papadimitriou, I. (2001). An other way to estimate the validity of a questionnaire for measurement of attitudes towards statistics: The case of Greek students. *Learning in Mathematics and Science and Educational Technology, II*, 345-368.
- Angrosino, M. V. (2005). Recontextualizing observation. In N. K. Denzin, & Y. S. Lincoln, *The Sage handbook of qualitative research* (3rd ed.), pp. 729-745. California: Sage Publications.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. New York: Cornell University Press.
- Arab Human Development Report. (2002). *Human development: Definition, concept and longer context*. Retrieved from <http://www.arab-hdr.org/publications/contents/2002/ch1-e.pdf>
- Arends, R. (2007). *Learning to teach* (7th ed.). New York: McGraw-Hill.
- Argyris, C. (1977). Double loop learning in organizations. *Harvard Business Review*, 55(5), 115-125.
- Argyris, C. (1993). *Knowledge for action: A guides to overcoming barriers to organizational change*. San Francisco: Jossey-Bass Publishers.
- Argyris, C., & Schon, D. (1978). *Organizational learning: A theory of action perspective*. Massachusetts: Addison-Wesley Publishing.
- Armstrong, M. (1999). *A handbook of human resource management practice*. London: Kogan Page.
- Armstrong, M. (2000). *Strategic human resource management: A guide to action*. London: Kogan Page.
- Armstrong, M. (2006). *A handbook of human resource management practice* (10th ed.). London: Kogan Page.
- Ashforth, B. E., & Humphrey, R. H. (1995). Emotion in the workplace. *Human Relations*, 48, 97-125.
- Ashforth, B. E., & Mael, F. A. (1996). Organizational identity and strategy as a context for the individual. In J. A. Baum, & J. E. Dutton (Eds.), *Advances in strategic management* (Vol. 13, pp. 19-64). Greenwich: JAI Press.
- Ashforth, B. E., & Saks, A. M. (2002). Feeling your way: Emotions and organizational entry. In R. G. Lord, R. J. Klimoski, & R. Kanfer (Eds.), *Emotions in the workplace: Understanding the structure and the role of emotions in organizational behaviour* (pp. 331-369). San Francisco: Jossey-Bass.
- Assessment Reform Group (1999). *Assessment for learning: Beyond the black box*. Cambridge: University of Cambridge School of Education.
- Assessment Reform Group (2002). *Assessment for Learning: 10 princiles*. Cambridge: University of Cambridge School of Education.
- Bailey, T., Berg, P., & Sandy, C. (2001). The effect of high-performance work practices on employee earnings in the steel, apparel, and medical electronics and imaging industries. *Industrial and Labor Relations Review*, 54(2A), 525-543.
- Bakarat, B., Holler, J., Prettner, K., & Schuster, J. (2010). *The impact of the economic crisis on labour and education in Europe*. Vienna: Vienna Institute of Demography, Austrian Academy of Sciences Retrieved January 21, 2012, from [http://www.oeaw.ac.at/vid/download/WP2010\\_06.pdf](http://www.oeaw.ac.at/vid/download/WP2010_06.pdf)

- Balogun, J., Hailey, V. H., Johnson, G., & Scholes, K. (1999). *Exploring strategic change*. Essex: Pearson Education.
- Bamberger, P., & Meshulam, I. (2000). *Human resource strategy: Formulation, implementation and impact*. California: Sage Publications.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1999). A social cognitive theory of personality. In L. Pervin, & O. John (Eds.), *Handbook of personality* (pp. 154-196). New York: Guilford Publications.
- Bani-Hani, J. S., & AlHawary, F. A. (2009). The impact of core competencies on competitive advantage: Strategic challenge. *International Bulletin of Business Administration*, (6), 93-104.
- Barney, J. B. (1986). Organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review*, 14, 20-39.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120. doi:10.1177/014920639101700108
- Barrows, H. S. (1986). A taxonomy of problem-based learning methods. *Medical Education*, 20, 481-486.
- Becker, E. B., & Huselid, A. M. (2006). Strategic human resource management: where do we go from here? *Journal of Management*, 32(6), 898-925.
- Benzecri, J. P. (1973). *L'Analyse Donnees*. Paris: Dunod.
- Bierema, L. L., & Fenwick, T. J. (2005). Defining critical human resource development. In L. F. Morris, F. M. Nafukho, & C. M. Graham (Ed.), *Annual Conference of the Academy of Human Resource Development* (pp. 574-581). Denver: AHRD.
- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., & Rumble, M. (2012). Defining twenty-first century skills. In P. Griffin, B. McGraw, & E. Care (Eds.), *Assessment and teaching of 21st century* (pp. 17-67). New York: Springer.
- Black, S., & Lynch, L. (1997). *How to compete: The impact of workplace practices and information technology on productivity*. London: Centre for Economic Performance, London School of Economics and Political Science.
- Black, P., & William, D. (1998a). Assessment and classroom learning. *Assessment in Education*, 5, 1-74.
- Black, P., & William, D. (1998b). *Inside the black box*. Slough: NFER-Nelson.
- Blackman, D. A., & Lee-Kelley, L. (2006). The role of human resource development in preventing organisational stagnation. *Management Decision*, 44(5), 628-643.
- Bloom, B. S., Hastings, J. T., & Madaus, G. (1971). *Handbook on formative and summative evaluation of student learning*. New York: McGraw-Hill.
- Bloom, B. S., Madaus, G. F., & Hasting, J. T. (1981). *Evaluation to improve learning*. New York: McGraw-Hill.
- Bogner, W. H., Thomas, H., & McGee, J. (1999). Competence and competitive advantage: Towards a dynamic model. *British Journal of Management*, 10, 275-290.

- Bono, J. E., & Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality, 17*, S13-S18. doi:10.1002/PER.481
- Boselie, Dietz, G., & Boom, C. (2005). Commonalities and contradictions in research on human resource management and performance. *Human resource management, 15*(3), 67-94.
- Botterill, M., Allan, G., & Brooks, S. (2008). Building community: Introducing ePortfolios in university education In Hello! Where are you in the landscape of educational technology? *Ascilite 2008 Melbourne*, (pp. 71-74). Melbourne. Retrieved from <http://www.ascilite.org.au/conferences/melbourne08/procs/botterill-poster.pdf>
- Boud, D., & Feletti, G. (Eds.). (1997). *The challenge of problem-based learning* (2nd ed.). London: Kogan Page.
- Boud, D., Keogh, R., & Walker, D. (1985). *Reflection: Turning experience into learning*. Oxon: RoutledgeFalmer.
- Boxall, P., & Purcell, J. (2003). *Strategy and human resource management*. London: Palgrave Macmillan.
- Bridges, E. M., & Hallinger, P. (1992). *Problem-based learning for administrators*. Eugene: University of Oregon, Educational Resources Information Center.
- Bridges, E. M., & Hallinger, P. (1997). Using problem-based learning to prepare educational leaders. *Peabody Journal of Education, 72*(2), 131-146.
- Brockbank, W. (1999). If HR were really strategically proactive: Present and future directions in HR's contribution to competitive advantage. *Human Resource Management, 38*, 337-352.
- Brookfield, S. (1985). A critical definition of adult education. *Adult Education Quarterly, 36*(1), 44-49.
- Brooks, K., & Nafukho, F. M. (2006). Human resource development, social capital, emotional intelligence: Any link to productivity. *Journal of European Industrial Training, 30*(2), 117-128.
- Brown, J., Elliot, S., Christensen-Hughes, J., Lyons, S., Mann, S., & Zdaniuk, A. (2009). *Using human resource management (HRM) practices to improve productivity in the Canadian tourism sector*. Canadian Tourism Human Resource Council, University of Guelph.
- Bruner, J. S. (1960). *The process of education*. Cambridge, MA: Harvard University Press.
- Bruner, J. S. (1966). *Towards a theory of instruction*. Cambridge, MA: Harvard University Press.
- Bruner, J. S. (1973). *The relevance of education*. New York: Norton.
- Cambridge, D. (2010). *E-portfolios for lifelong learning and assessment*. San Francisco: Jossey-Bass.
- Campanelli, P., Channell, J., McAulay, L., Renouf, A., & Thomas, R. (1994). A cognitive and linguistic exploration of the meaning of training: Implications for survey design. (pp. 1281-1286). Sheffield: UK Employment Department. Retrieved from [http://www.amstat.org/sections/srms/proceedings/papers/1994\\_225.pdf](http://www.amstat.org/sections/srms/proceedings/papers/1994_225.pdf)
- Cartwright, S. (2002). Double-loop learning: A concept and process for leadership educators. *Journal of leadership education, 1*(1), 68-71.

- CEDEFOP. (2008). *Terminology of European education and training policy: A selection of 100 key terms*. Luxembourg: Office for the Official Publications of the European Communities.
- Chalofsky, N. (1992). A unifying definition for the human resource development profession. *Human Resource Development Quarterly*, 3(2), 175-182.
- Chappuis, S., & Chappuis, J. (2008). The best value in formative assessment. *Educational Leadership*, 65, 14-19. Retrieved September 17, 2011, from <http://www.ascd.org>
- Chappuis, S., & Stiggins, R. J. (2002). Classroom assessment for learning. *Educational Leadership*, 60(1), 40-43.
- Christie, K. (2009). Professional development worth paying for. *Phi Delta*, 90(7), 461-462.
- CIPD. (2003). *Managing employee careers: issues, trends and prospects*. London: Chartered Institute of Personnel and Development.
- Clardy, A. (2008). Human resource development and the resource-based model of core competencies: Methods for diagnosis and assessment. *Human Resource Development Review*, 7(4), 387-407.
- Coffield, F. J., Moseley, D. V., Hall, E., & Ecclestone, K. (2004). *Learning styles and pedagogy in post-16 learning: A systematic and critical review*. London: Learning and Skills Research Centre.
- Cook, S., & Yanow, D. (1993). Culture and organizational learning. *Journal of Management Inquiry*, 2(4), 373-390.
- Coombs, P., Prosser, R., & Ahmed, M. (1973). *New paths to learning for children and youth*. New York: International Council for Education Development.
- Conti, G. J. (1985). Assessing teaching style in adult education: How and why. *Lifelong Learning: An Omnibus in Practice and Research*, 9, 7-11.
- Corley, K. G., Harquail, C. V., Pratt, M. G., Glynn, M., Fiol, C. M., & Hatch, M. J. (2006). Guiding organizational identity through aged adolescence. *Journal of Management Inquiry*, 15, 85-99.
- Craig, R. (1976). *Training and development handbook: A guide to human resource development*. New York: McGraw-Hill.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, California: Sage Publications.
- Crick, R. D. (2007). Learning to learn: The dynamic assessment of learning power. *Curriculum Journal*, 18(2), 135-153.
- Crick, R. D., Broadfoot, P., & Claxton, G. (2004). Developing an Effective Lifelong learning Inventory: The ELLI project. *Assessment in Education: Principles, Policy & Practice*, 11(3), 247-272.
- Cronbach, L. J. (1984). *Essentials of psychological testing* (4th ed.). New York: Harper & Row.
- Cronbach, L. J., & Snow, R. E. (1977). *Aptitudes and instructional methods: A handbook for research on aptitude-treatment interaction*. New York: Irvington.
- Crooks, T. J. (1988). The impact of classroom evaluation practices on students. *Review of Educational Research*, 58, 438-481.
- Cross, K. P. (1981). *Adults as learners*. San Francisco: Jossey-Bass.

- Cummings, T. G., & Worley, C. G. (2009). *Organizational development and change* (9<sup>th</sup> ed.). Mason, OH: South-Western Cengage Learning.
- Dafermos, B. (2009). *Factor analysis and confirmator analysis with Lisrel*. Athens: Giourdas (in Greek).
- Dafermos, B. (2011). *Social statistics and research methodology with SPSS*. Thessaloniki: Ziti (in Greek).
- Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review*, 9(2), 284-295.
- Dale, J. A., Glowacki-Dudka, M., & Hyslop-Margison, E. J. (2005). Lifelong learning as human ontology: A Freirean response to human capital education. In R. J. Hill, & R. Kiely (Ed.), *46th Annual Adult Education Research Conference* (pp. 109-114). Athens: University of Georgia.
- Deist, F. D., & Winterton, J. (2005). What is competence. *Human Resource Development International*, 8(1), 27-46.
- Deming, W. E. (2000). *Out of the crisis*. Cambridge: MIT.
- Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin, & Y. S. Lincoln, *The Sage handbook of qualitative research* (pp. 1-32). California: Sage Publications.
- Dimitriadis, E. (2003). *Statistical applications with SPSS*. Athens: Kritiki (in Greek).
- Drucker, P. F. (1993). *Postcapitalist society*. New York: HarperCollins.
- Drucker, P. F. (1999a). Knowledge-worker productivity: The biggest challenge. *California Management Review*, 41(2), 79-94.
- Drucker, P. F. (1999b). *Management challenges for the 21st century*. Oxford: Elsevier Butterworth Heinemann.
- Dunn, K. E., & Mulvenon, S. W. (2009). A critical review of research on formative assessments: The limited scientific evidence of the impact of formative assessment in education. *Practical Assessment Research & Evaluation*, 14(7), 1-11. Retrieved from <http://pareonline.net/getvn.asp?v=14&n=7>
- Education International. (2009). *The global economic crisis and its impact on education*. Brussels: Education International. Retrieved January 18, 2012, [http://download.eiie.org/Docs/WebDepot/Report\\_of\\_the\\_EI\\_Survey\\_on\\_the\\_Impact\\_of\\_the\\_Global\\_Economic\\_Crisis\\_on\\_Education\\_en.pdf](http://download.eiie.org/Docs/WebDepot/Report_of_the_EI_Survey_on_the_Impact_of_the_Global_Economic_Crisis_on_Education_en.pdf)
- Engel, C. E. (1985). Change: A challenge for higher professional education. *Interdisciplinary Science Reviews*, 10, 199-201.
- Evans, J. R., & Lindsay, W. M. (2002). *The management and control of quality* (5th ed.). Ohio: South-Western.
- Farrell, M. A. (2000). Developing a market-oriented learning organisation. *Australian Journal of Management*, 25(2), 201-222.
- Fedler, R. M., & Spurlin, J. (2005). Applications, reliability and validity of the index of learning styles. *International Journal of Engineering Education*, 21(1), 103-112.
- Felder, R. M. (1996). Matters of style. *AEEE Prism*, 6(4), 18-23.
- Felder, R. M., & Silverman, L. K. (1988). Learning and teaching styles in engineering education. *Engineering Education*, 78(7), 674-681.
- Felstead, A., Fuller, A., Unwin, L., Ashton, D., Butler, P., & Lee, T. (2005). Surveying the scene: learning metaphors, survey design and the workplace context. *Journal of Education and Work*, 18(4), 359-383.

- Fenwick, T. (2005). Conceptions of critical HRD: Dilemmas for theory and practice. *Human Resource Development International*, 8(2), 225-238.
- Fenwick, T. J. (2004). Toward a critical HRD in theory and practice. *Adult Education Quarterly*, 54(3), 193-209.
- Field, J. (2006). *Lifelong learning and the new educational order*. Stoke on Trent: Trentham Books.
- Fiol, C. M. (1991). Managing culture as a competitive resource: An identity-based view of sustainable competitive. *Journal of Management*, 17(1), 191-211.
- Fiol, M., Hatch, M. J., & Golden-Biddle, K. (1998). Organizational culture and identity: What's the difference anyway? In D. Whetten, & P. Godfrey (Eds.), *Identity in organizations* (pp. 56-59). Thousand Oaks: Sage Publications.
- Fisher, A. (2001). *Critical thinking: An introduction*. Cambridge: Cambridge University Press.
- Fombrun, C. J., Tichy, N. M., & Devanna, M. A. (1984). *Strategic human resource development*. New York: John Wiley.
- Fontana, A., & Frey, J. H. (2005). The interview: From neutral stance to political involvement. In N. K. Denzin, & Y. S. Lincoln, *The Sage handbook of qualitative research* (pp. 695-727). California: Sage Publications.
- Foss, N. J., & Knudsen, C. (1996). *Towards a competence theory of the firm*. London: Routledge.
- Frank, E. (1988). An attempt at a definition of HRD. *Journal of European Industrial Training*, 12(5), 4-5.
- Freire, P. (2002). *Education for critical consciousness*. New York: The Continuum Publishing .
- French, W. L. (1998). *Human resource management* (4th ed.). Boston: Houghton Mifflin.
- Frye, R. (1999). Assessment, accountability, and student learning outcomes. *DIALOGUE*(2), 1-12.
- Fullan, M. (2007). *Leading in a culture of change*. San Francisco: Jossey Bass.
- Fullan, M. (2008). *The six secrets of change: What the best leaders do to help their organizations survive and thrive*. San Francisco: Jossey Bass.
- Gagne, R. M., & Medsker, K. (1996). *The conditions of learning: Training applications*. New York: Harcourt Brace College Pub.
- Garavan, T. N. (2007). A strategic perspective on human resource development. *Advices in Developing Human Resources*, 9, 11-30.
- Garavan, T. N., Costine, P., & Heraty, N. (1995). *Training and development in Ireland: Context, Policy and Practice*. Dublin: Oak Tree Press.
- Garavan, T. N., Gunnigle, P., & Morely, M. (2000). Contemporary HRD research: A triarchy of theoretical perspectives and their prescriptions for HRD. *Journal of European Industrial Training*, 24(2/3/4), 65-104.
- Garavan, T. N., O'Donnell, D., McGuire, D., & Watson, s. (2007). Exploring perspectives on human resource development: An introduction. *Advances in Developing Human Resources*, 9(1), 3-10.
- Gardner, H. (2006). *Multiple intelligences: New horizons in theory and practice*. New York: Basic Books.
- Gentry, J. W., Dickinson, J. R., Burns, A. C., McGinnis, L., & Park, J. (2006). The role of learning versus performance orientations when reacting to negative

- outcomes in simulation games. *Developments in Business Simulation and Experiential Learning*, 33, 79-84.
- Gergen, K. J. (1991). *The saturated self: Dilemmas of identity in contemporary life*. New York: Basic Books.
- Gergen, K. J. (1994). *Realities and relationships*. Cambridge: Harvard University Press.
- Gilley, J., & Eggland, S. (1989). *Principles of human resource development*. Reading, MA: Addison-Wesley.
- Gilley, J. W., & Maycunich, A. (2000). *Beyond the learning organization: Creating a culture of continuous growth and development through state-of-the-art human resource practices*. New York: Perseus Books.
- Giossi, S. (2011). Recognizing dimensions of effective leadership in a lifelong learning world. In V. Karavakou (Ed.), *Lifelong learning: Interdisciplinary approaches* (pp. 429-442). Thessaloniki: University of Macedonia Publications.
- Giossi, S. (2012a). Reliability testing of a new scale for measuring attitudes towards lifelong learning and human resource development, (LLEHUREDE) scale. *American International Journal of Contemporary Research*, 2(2), 183-193.
- Giossi, S. (2012b). The development and validation of a new scale for monitoring attitudes towards lifelong learning and human resources development. *The International Journal of Learning*, 18(10), 127-148.
- Giossi, S., & Papastamatis, A. (2010). The effective teaching of standards in a lifelong learning world. *7th International Conference-Standardization, prototypes and quality: A means of Balkan countries collaboration* (pp. 118-125). Zlatibor: University of Belgrade, Faculty of Organizational Sciences.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- Good, T. L., Grouws, D. A., & Ebmeier, H. (1983). *Active mathematics teaching*. New York: Longmans.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114-136.
- Hamel, G., & Prahalad, C. K. (1994). *Competing for the future*. Boston: Harvard Business School Press.
- Hamlin, R. G., Ellinger, A. D., & Beattie, R. S. (2009). Toward a profession of coaching? A definitionalexamination of "coaching". "organization development", and "human resource development". *International Journal of Evidence Based Coaching and Mentoring*, 7(1), 13-38.
- Hargreaves, D. H. (2003). *Education epidemic*. London: Demos.
- Harlen, W. (2007a). *Assessment of learning*. Londn: Sage Publications.
- Harlen, W. (2007b). Holding up a mirror to classroom practice. *Primary Science Review*, 100, 29-31.
- Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32, 1199-1228.
- Harrison, J. S., & John, C. H. (2009). *Foundations in strategic management* (5th ed.). Mason: South-Western Cengage Learning.

- Harrison, R. (2005). *Learning and development* (4th ed.). London: CIPD.
- Harrison, R., & Kessels, J. (2004). *Human resource development in a knowledge economy: An organizational view*. New York: Palgrave MacMillan.
- Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review*, 20(4), 986-1014.
- Hartree, A. (1984). Malcolm Knowles' theory of andragogy: A critique. *International Journal of Lifelong Education*, 3, 203-210.
- Hatala, J. P. (2006). Social network analysis in human resource development: a new methodology. *Human Resource Development Review*, 5(1), 45-71.
- Hatch, M. J., & Schultz, M. (2002). The dynamics of organizational identity. *Human Relations*, 55(8), 989-1018.
- Hellenic Organization for Standardization (ELOT S.A.)  
[http://www.elot.gr/30\\_ENU\\_HTML.aspx](http://www.elot.gr/30_ENU_HTML.aspx). (2012, March 10). Retrieved from: www.elot.gr
- Hergenhahn, B. R., & Olson, M. H. (1997). Gestalt theory. In B. R. Hergenhahn, & M. H. Olson, *An introduction to theories of learning* (5th ed., pp. 252-278). New Jersey: Prentice Hall.
- Hertels, E. (2004). Experiential learning portfolios in professional programs: A Canadian perspective. In J. Zubizarreta, *The learning portfolio*. Bolton: Anker Publishing.
- Hill, H. C. (2009). Fixing teacher professional development. *Phi Delta*, 90(7), 470-476.
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2001). *Concepts strategic management: competitiveness and globalization*. Mason: South-Western Cengage Learning.
- Hmelo-Silver, C. E., & Barrows, H. S. (2006). Goals and strategies of a problem-based learning facilitator. *Interdisciplinary Journal of Problem-based Learning*, 1(1), 21-39.
- Holton, E. F., Swanson, R. A., & Naquin, S. (2001). Andragogy in practice: Clarifying the andragogical model of adult learning. *Performance Improvement Quarterly*, 14(1), 118-143.
- Honey, P., & Mumford, A. (2000). *The learning styles helper's guide*. Essex: Peter Honey Publications. Retrieved from www.peterhoney.com
- Hough, L. M. (1984). Development and evaluation of the "accomplishment record" method of selecting and promoting professionals. *Journal of Applied Psychology*, 69(1), 135-146.
- Hoskisson, R. E., Hitt, M. A., Ireland, R. D., & Harrison, J. S. (2008). *Competing for advantage* (2nd ed.). Mason: Thomson Learning.
- Hough, L. M. (1984). Development and evaluation of the "accomplishment record" method of selecting and promoting professionals. *Journal of Applied Psychology*, 69(1), 135-146.
- Illeris, K. (2003). Towards a contemporary and comprehensive theory of learning. *International Journal of Lifelong Education*, 22(4), 396-406.
- Illeris, K. (2004). *Adult education and adult learning*. Florida: Krieger Publishing Company.
- International Organization for Standardization (ISO)  
[http://iso.org/iso/home/about/iso\\_member\\_body.htm?member\\_id=175](http://iso.org/iso/home/about/iso_member_body.htm?member_id=175).

- (2011, April 8). Retrieved from <http://www.iso.org/iso/home/about.htm>:  
www.iso.org
- International Greek Business Association (SEVE)  
<http://www.seve.gr/default.aspx?lang=en-US&page=569>. (2010, June 15).  
Retrieved from <http://www.seve.gr>.
- Iordanoglou, D. (2008). *Human resource management in modern organizations: New trends and practices*. Athens: Kritiki (in Greek).
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29(6), 963-998. doi:10.1016/50149-2063\_03\_00086-2
- Jacobs, R. L. (1990). Human resource development as an interdisciplinary body of knowledge. *Human Resource Development Quarterly*, 1(1), 65-71.
- Jacobs, R. L. (2002). Understanding workforce development: Definition, conceptual boundaries, and future perspectives. *International Conference on Technical and Vocational Education and Training* (pp. 1-22). Manitoba: Canadian Vocational Association and UNEVOC .
- Jarvis, P. (1995). *Adult and continuing education: Theory and practice* (2nd ed.). New York: Routledge.
- Jarvis, P. (2007a). *Globalisation, lifelong learning and the learning society: Sociological perspectives*. New York: Routledge.
- Jarvis, P. (2007b). Adult education: An ideal for modernism. In P. Jarvis (Ed.), *The founders of adult education* (pp. 25-38). Athens: Metaixmio (in Greek).
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Johnson, G., & Scholes, K. (2002). *Exploring corporate strategy: Text and cases* (6th ed.). Essex: Pearson Education.
- Jones, J. (1981). The organizational universe. In J. Jones, & J. Pfeiffer (Eds.), *The 1981 annual handbook for group facilitators*. San Diego, CA: University Associates.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits-self-esteem, generalized self-efficacy, locus of control, and emotional stability-with job satisfaction and job performance: A meta analysis. *Journal of Applied Psychology*, 86(1), 80-92.
- Judge, T. A., Erez, A., & Bono, J. E. (1998). The power of being positive: The relationship between positive self-concept and job performance. *Human Performance*, 11, 167-187.
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluation approach. *Research in Organizational Behaviour*, 19, 151-188.
- Kang, D. J. (2007). Rhizoactivity: Toward a postmodern theory of lifelong learning. *Adult Education Quarterly*, 57(3), 205-220.
- Kapsalis, A. G. (2008). *Evaluation and marking in primary school*. Athens: Gutenberg (in Greek).
- Kapsalis, A., & Papastamatis, A. (2000). *Adult education: Instruction of adults* (Vol. 2). Thessaloniki: University of Macedonia Publications (in Greek).
- Kapsalis, A., & Papastamatis, A. (2002). *Adult education: General introductory issues* (Vol. 1). Thessaloniki: University of Macedonia Publications (in Greek).

- Karapistolis, D. (2000). *Methodes d'Analyse des Donnees (MAD)*. Thessaloniki: Anikoula (in Greek).
- Karavakou, V. (2011). Introduction: Spectrum and challenge of lifelong learning. In V. Karavakou (Ed.), *Lifelong learning: Interdisciplinary approaches* (pp. 1-32). Thessaloniki: University of Macedonia Publications (in Greek).
- Kaufman, B. E. (2001). The theory and practice of strategic HRM and participative management: Antecedents in early industrial relations. *Human Resource Management Review*, 11(4), 505-533.
- Keep, E. (2003). *Training in the current economic climate*. London: Chartered Institute of Personnel and Development. Retrieved November 30, 2011, from [http://www.cipd.co.uk/NR/rdonlyres/A48C741E-6E0A-403A-B939-D2922375E54C/0/reflections\\_trdev2003.pdf](http://www.cipd.co.uk/NR/rdonlyres/A48C741E-6E0A-403A-B939-D2922375E54C/0/reflections_trdev2003.pdf)
- King, D. B., & Wertheimer, M. (2009). *Max Wertheimer and Gestalt theory*. New Jersey: Transaction Publishers.
- Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254-284.
- Knowles, M. S. (1950). *Informal adult education*. New York: Association Press.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Englewood Cliffs: Prentice Hall.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (2nd ed.). New York: Cambridge Books.
- Knowles, M. S. (1984). *The adult learner: A neglected species* (3rd ed.). Houston: Gulf Publishing.
- Knowles, M. S. (1990). *Tthe adult learner: A neglected species* (4th ed.). Houston: Gulf Publishing.
- Koffka, K. (1935/1963). *Principles of Gestalt psychology*. New York: Harcourt, Brace & World.
- Kohler, W. (1947). *Gestalt psychology*. New York: Liveright Pub.
- Kokkonis, P., & Mihiotis, A. (2009). Considerations supporting the business case for training employees in corporations. *International Bulletin of Business Administration*(6), 59-72.
- Kolb, D. A. (1984). *Experiential learning*. Englewood Cliffs: Prentice Hall.
- Kolb, D. A. (1985). *Learning style inventory*. Boston: McBer.
- Kurosawa, M., Ohtake, F., & Ariga, K. (2005). Productivity, training, and human resource management practices-disentangling complex interactions using a survey of Japanese manufacturing firms. *Journal of Economic Literature*, 1-42. Retrieved from <http://www2.e.u-tokyo.ac.jp/~seido/output/Ariga/ariga005.pdf>
- Lado, A. A., & Wilson, M. C. (1994). Human resource systems and sustained competitive advantage: a competency-based perspective. *Academy of Management Review*, 19(4), 699-727.
- Laevers, F. (Ed.). (1994). *Defining and assessing quality in early childhood education* (Vol. Studia Paedagogica). Leuven: Leuven University Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lebel, J. (1978). Beyond andragogy to gerogogy. *Lifelong Learning: The Adult Years*, 1, 16-18.

- Lee, M. (1997). The development approach: A critical reconsideration. In J. Burgoyne, & M. Reynolds (Eds.), *Management Learning* (pp. 199-214). London: Sage Publications.
- Lee, M. (2000). *A refusal to define HRD*. Retrieved January 22, 2012, from <http://nrl.northumbria.ac.uk/2678/1/A%20Refusal%20to%20define%20HRD.pdf>
- Legge, K. (1978). *Power, innovation, and problem-solving in personnel management*. London: McGraw-Hill.
- Legge, K. (1995). *Human resource management: Rhetorics and realities*. London: Macmillan
- Lehtinen, E. (2002). Developing models for distributed problem-based learning: Theoretical and methodological reflection. *Distance Education*, 23(1).
- Lengnick-Hall, C. A., & Lengnick-Hall, M. L. (1988). Strategic human resources management: A review of the literature and a proposed typology. *Academy of Management Review*, 13(3), 454-470.
- Lengnick-Hall, M. L., & Lengnick-Hall, C. A. (2003). *Human resource management in the knowledge economy*. San Francisco: Berett-Koehler Publishers.
- Lengnick-Hall, M. L., Lengnick-Hall, C. A., Andrade, L. S., & Drake, B. (2009). Strategic human resources management: The evolution of the field. *Human Resource Management Review*, 19(2), 64-85.
- Leonard, D. C. (2002). *Learning theories A to Z*. Westport: Greenwood Publishing Group.
- Levy, S. R., Stroessner, S. J., & Dweck, C. S. (1998). Stereotype formation and endorsement: The role of implicit theories. *Journal of Personality and Social Psychology*, 74(6), 1421-1436.
- Luthans, F., & Jensen, S. M. (2002). Hope: A new positive strength for human resource development. *Human Resource Development Review*, 1(3), 304-322.
- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5), 387-401.
- Mandl, H., Gruber, H., & Renkl, A. (1994). Knowledge application in complex situations. In S. Vosniadou, E. De Corte, & H. Mandl (Eds.), *Technology based learning environments: Psychological and educational foundations* (pp. 40-47). Berlin: Springer
- Margolis, J. (2009). *Culture and cultural entities: Toward a new unity of science* (2nd ed.). New York: Springer.
- Martinez, M. (1999). Research design, models, and methodologies for examining how individuals successfully learn on the Web. *Specia Research in Technological Communication*, 46(4), 470-487.
- Matthews, J. J., Megginson, D., & Surtees, M. (2004). *Human resource management* (3rd ed.). London: Kogan Page.
- McGuire, D. (2010). *Foundations of Human Resource Development*. (2011, March 21). Retrieved from [http://www.sagepub.com/upm-data/36589\\_01\\_McGuire\\_CH\\_01.pdf](http://www.sagepub.com/upm-data/36589_01_McGuire_CH_01.pdf)
- McGuire, D., & Jorgensen, K. M. (2011). *Book review: Human resource development*. London: Sage.
- McGuire, D., Cross, C., & O' Donnell, D. (2005). Why humanistic practices in HRD won't work. *Human Development Quarterly*, 16(1), 131-137.

- McGuire, D., O'Donnell, D., Garavan, T., & Murphy, J. (2001). Framing human resource development: An exploration of definitional perspectives using discourse analysis. *Irish Academy of Management Conference* (pp. 1-20). Ulster: University of Ulster. Retrieved from <http://eresearch.qmu.ac.uk/384/>
- McLean, G. N. (2006). *Organization development*. San Francisco: Brett-Koehler Publishers.
- McLean, G. N., & McLean, L. (2001). If we can't define HRD in one country, how can we define it in an international context? *Human Resource Development International*, 4(3), 313-326.
- McLean, L. D. (2005). Organizational culture's influence on creativity and innovation: A review of the literature and implications for human resource development. *Advances in Developing Human Resources*, 7(2), 226-246.
- McMillan, J. H. (2007). Formative classroom assessment: The key to improving student achievement. In J. H. McMillan (Ed.), *Formative classroom assessment: Theory into practice* (pp. 1-7). New York: Teachers College Press.
- Megginson, D., & Clutterbuck, D. (1999). *Mentoring in action: A practical guide for managers*. London: Kogan Page.
- Merrill, M. D. (1999). Instructional Transaction Theory (ITT): Instructional design based on knowledge objects. In C. M. Reigeluth (Ed.), *Instructional-design theories and models* (Vol. II, pp. 397-425). New Jersey: Lawrence Erlbaum Associates.
- Merrill, M. D. (2008). A task-centered instructional strategy. *Journal of research on Technology in Education*, 40(1), 5-22.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey Bass.
- Mezirow, J. (1997). Transformative learning: Theory to practice. *New directions for adult and continuing education*, 74(Summer), 5-12.
- Milner, R., & Stinson, J. (1995). Educating leaders for the new competitive environment. In W. Gijsselaers, D. Tempelaar, P. Keizer, J. Blommaert, E. Bernard, & H. Kasper (Eds.), *Educational innovation in economics and business administration: The case of problem-based learning* (pp. 30-38). Dordrecht: Kluwer Academic Publishers.
- Mitrani, A., Dalziel, M., & Fitt, D. (1992). *Competency based human resource management*. London: Kogan Page.
- Murphy, A., & Garavan, T. N. (2009). The adoption and diffusion of an NHRD standard: A conceptual framework. *Human Resource Development Review*, 8(1), 3-21.
- Nadler, L. (1970). *Developing human resources*. Houston, TX: Gulf Publishing.
- Nadler, L. (Ed.). (1984). *The handbook of human resource development*. New York: Wiley.
- Nadler, L., & Nadler, Z. (Eds.). (1989). *Developing human resources* (3rd ed.). San Francisco: Jossey Bass.
- Nadler, L., & Nadler, Z. (Eds.). (1990). *The handbook of human resource development* (2nd ed.). San Francisco: Jossey-Bass.
- Nadler, D., & Tushman, M. (1998). *Competing by design: The power of organizational architectures*. New York: Oxford University Press.

- Nadler, L., & Wiggs, G. (1986). *Managing human resource development: A practical guide*. San Francisco: Jossey-Bass.
- National Strategic Reference Framework (NSRF) 2007-2013, Retrieved May 12, 2012 from <http://www.anaptyxi.gov.gr/Default.aspx?tabid=41&language=en-US>
- Natriello, G. (1987). The impact of evaluation processes on students. *Educational Psychologist*, 22, 155-175.
- Norman, G. R., & Schmidt, H. G. (2000). Effectiveness of problem-based learning curricula: theory, practice and paper darts. *Medical Education*, 34, 721-728.
- NSRF Observatory. (2009). *General conception of the NSRF strategic monitoring progress*. Portugal: National Strategic Reference Framework (NSRF) Observatory.
- Nunnally, J. (1978). *Psychometric Theory*. New York: McGraw-Hill.
- OECD. (2007). *Understanding the social outcomes of learning*. Paris: OECD Publishing.
- OECD. (2010). *Summary of the initial education today crisis survey: Impact of the economic crisis on education. EDU Working Paper 43*. Paris: OECD.
- Ogden, C. K. (2001). *Principles of Gestalt psychology*. London: Routledge.
- Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the schools*, 13(1), 48-63.
- Papadimitriou, I. (2002). Data Analysis in Greece. *Data Analyses Annals*, 1, 5-11.
- Papadimitriou, I. (2007). *Data Analysis*. Athens: Typothito (in Greek).
- Papalexandri, N. A., & Bourantas, D. K. (2003). *Human resource management*. Athens: Benou (in Greek).
- Papastamatis, A. (2010). *Adult education: Foundations of teaching practice*. Athens: Sideris (in Greek).
- Papastamatis, A., & Giossi, S. (2011). Lifelong learning in a globalized society. In V. Karavakou (Ed.), *Lifelong learning: Interdisciplinary approaches*. University of Macedonia Publications (in Greek).
- Pavlov, I. (1927). *Conditioned reflexes: An investigation of the psychological activity of the cerebral cortex*. London: Oxford University Press.
- Pedler, M., Boydell, T., & Burgoyne, J. (1988). *Learning company project report*. Sheffield: Manpower Services Commission.
- Phillimore, J., Craig, L., Goodson, L., & Sankey, S. (2006). *Employability initiatives for refugees in Europe: Looking at, and learning from, good practice*. Edgbaston Birmingham: The Centre for Urban and Regional Studies, The University of Birmingham.
- Phillips, J. J. (2003). *Return on investment in training and performance improvement programs* (2nd ed.). Burlington: Elsevier Science.
- Piaget, J. (1932). *The moral judgment of the child*. London: Routledge & Kegan Paul.
- Piaget, J. (1936). *Origins of intelligence in the child*. London: Routledge & Kegan Paul.
- Piaget, J. (1945). *Play, dreams and imitation in childhood*. London: Heinemann.
- Piaget, J. (1950). *The psychology of intelligence*. London: Routledge & Kegan Paul.
- Piaget, J. (1957). *Construction of reality in the child*. London: Routledge & Kegan Paul.

- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: Free Press.
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 82(May-June), 79-91.
- Pratt, M. G. (1998). To be or not to be: Central questions in organizational identification. In D. A. Whetten, & P. C. Godfrey (Eds.), *Identity in organization* (pp. 171-207). Thousand Oaks: Sage Publications.
- Proctor, J. H., & Thornton, W. M. (1961). *Training: A handbook for line managers*. New York: American Management Association.
- Rachal, J. (1983). The andragogy-pedagogy debate: Another voice in the fray. *Life-long Learning: An Omnibus of Practice and Research*, 6, 14-15.
- Ravasi, D., & Schultz, M. (2006). Responding to organizational identity threats: Exploring the role of organizational culture. *Academy of Management Journal*, 49(3), 433-458.
- Reeves, D. B. (2004). *Accountability for learning: How teachers and school leaders can take charge*. Alexandria: Association for Supervision and Curriculum Development (ASCD).
- Reid, G. (2005). *Learning styles and inclusion*. London: Paul Chapman Publishing.
- Report, T. A. (2002). *Human development: Definition, concept and longer context*. Retrieved from <http://www.arab-hdr.org/publications/contents/2002/ch1-e.pdf>
- Resnick, L. B. (Ed.). (1989). *Knowing, learning and instruction: Essays in honor of Robert Glaser*. New Jersey: Lawrence Erlbaum Associates.
- Rigg, C., Stewart, J., & Trehan, K. (Eds.). (2007). *Critical human resource development: Beyond orthodoxy*. Essex: Pearson Education.
- Rothwell, W. J., & Sullivan, R. L. (Eds.). (2005). *Practicing organization development: A guide for consultants* (2nd ed.). San Francisco: Pfeiffer.
- Ruona, W. E., & Gibson, S. K. (2004). The making of twenty-first-century HR: An analysis of the convergence of HRM, HRD, and OD. *Human Resource Management*, 43(1), 49-66. doi:10.1002/hrm.20002
- Sackett, P. R., Schmitt, N., Ellingson, J. E., & Kabin, M. B. (2001). High-stakes testing in employment, credentialing, and higher education: Prospects in a post-affirmative-action world. *American Psychologist*, 56(4), 302-318.
- Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18, 119-144.
- Sambrook, S. (2004). A "critical" time for HRD? *Journal of European Industrial Training*, 28(8/9), 621-624.
- Sambrook, S. (2008). Critical HRD: a concept analysis. *Personnel Review*, 38(1), 61-73.
- Sambrook, S., & Stewart, J. (1999). Influencing factors on lifelong learning and HRD practices: Comparison of seven European countries. *Conference on Educational Research*. Lahti. Retrieved February 8, 2010, from <http://www.leeds.ac.uk/educol/documents/000001160.htm>
- Sambrook, S., & Stewart, J. (2005). A critical review of researching Human Resource Development. In C. Elliot, & S. Turnbull (Eds.), *Critical thinking in Human Resource Development* (pp. 67-84). Oxon: Routledge.

- Savaneviciene, A., & Stankeviciute, Z. (2010). The models exploring the "black box" between HRM and organizational performance. *Engineering Economics*, 426-434.
- Savery, J. R., & Duffy, T. M. (1994). Problem based learning: An instructional model and its constructivist framework. *Educational Technology*, 8, 31-38.
- Savery, J. R., & Duffy, T. M. (1996). Problem based learning: An instructional model and its constructivist framework. In B. G. Wilson, & B. G. Wilson (Ed.), *Constructivist learning environments : Case studies in instructional design* (pp. 107-119). New Jersey: Educational Technology Publications.
- Schein, E. H. (2009). *The corporate culture survival guide*. San Francisco: Jossey-Bass.
- Schmidt, S. W. (2007). The relationship between satisfaction with workplace training and overall job satisfaction. *Human Resource Development Quarterly*, 18(4), 481-498.
- Schuler, R. S., & Jackson, S. E. (2007). *Strategic human resource management*. Blackwell.
- Schwandt, D. R., & Marquardt, M. J. (2000). *Organizational learning: From world-class theories to global best practices*. Boca Raton: St. Lucie Press.
- Scriven, M. (1967). The methodology of evaluation. In R. E. Stake (Ed.), *Perspectives of curriculum evaluation* (Vol. 1, pp. 39-55). Chicago: Rand McNally.
- Shepard, L. A. (2000). The role of assessment in a learning culture. *Educational Researcher*, 29(7), 4-14.
- Shipton, J. (2005). Human resource management. In J. P. Wilson, *Human resource development: Learning and training for individuals and organizations*. London: Kogan Page.
- Shute, V. J. (2007). *Focus on formative feedback*. Princeton, NJ: ETS Research and Development.
- Silver, H., Strong, R., & Perini, M. (1997). Integrating learning styles and multiple intelligences. *Educational Leadership*, 55(1), 22-27.
- Sinkula, J. M., Baker, W., & Noordewier, T. (1997). A framework for market-based organisational learning: Linking values, knowledge, and behaviour. *Journal of the Academy of Marketing Science*, 25, 305-318.
- Skinner, B. F. (1953). *Science and human behavior*. New York: Macmillan.
- Skinner, B. F. (1974). *About behaviorism*. New York: Knopf.
- Slater, S., & Narver, J. (1995). Market orientation and the learning organisation. *Journal of Marketing*, 59(3), 63-74.
- Slavin, R. E. (1995). *Cooperative learning: Theory, research, and practice* (2nd ed.). Boston: Allyn & Bacon.
- Smith, M. K. (2002). Malcolm Knowles, informal and adult educationand, self-directionand adragogy. Retrieved February 5, 2012 from <http://www.infed.org/thinkers/et-knowl.htm>
- Smith, R. (1988). *Human resource development: An overview*. Washington, DC: Office of Educational Research and Improvement.
- Spence, L. D. (2001). Problem based learning: Lead to learn, learn to lead. *School of Information Sciences and Technology*. Retrieved March 10, 2012, from <http://www.studygs.net/pblhandbook.doc>

- Stein, S., & Farmer, S. (Eds.). (2004). *Connative learning: The trainer's guide to learning theories and their practical application to training design*. Iowa: Kendall/Hunt Publishing.
- Stern, E., & Sommerlad, E. (1999). *Workplace learning culture and performance*. London: Chartered Institute of Personnel and Development.
- Sternberg, R. J. (1985). *Beyond IQ: A triarchic theory of human intelligence*. New York: Cambridge University Press.
- Stiggins, R. J. (2002). Assessment crisis: The absence of assessment for learning. *Phi Delta Kappan*, 758-765. Retrieved from <http://electronicportfolios.org/afl/Stiggins-AssessmentCrisis.pdf>
- Stiggins, R. J., Arter, J., Chappuis, J., & Chappuis, S. (2004). *Classroom assessment for student learning: Doing it right-using it well*. Portland, OR: Assessment Training Institute.
- Swanson, P. A., & Holton, E. F. (2009). *Foundations of human resource development* (2nd ed.). San Francisco: Berrett-Koehler.
- Swanson, P., & Holton, E. I. (1997). *Human resource development research handbook: Linking research and practices*. San Francisco: Berrett-Koehler Publishers.
- Swanson, R. (1998). The discipline of human resource development. In R. Swanson, *Foundations of human resource development* (pp. 880-887). San Francisco: Berrett-Koehler.
- Swanson, R. A. (1996). *Training for performance system: Field handbook*. St. Paul, MN: Swanson & Associates.
- Swanson, R. A. (1999). HRD theory, real or imagined? *Human Resource Development International*, 2(1), 2-5.
- Swanson, R. A. (2001). Human resource development and its underlying theory. *Human Resource Development International*, 4(3), 299-312.
- Swanson, R. A., & Arnold, D. E. (1996). The purpose of human resource development is to improve organizational performance. *New Directions for Adult and Continuing Education*, 72, 13-20.
- Taylor, E. (2005). Teaching belief of non-formal consumer educators: A perspective in home improvement retail store in the United States. *International Journal of Consumer Studies*, 29(5), 448-457.
- Taylor, E. (2006). Making meanings of local nonformal education: Practitioner's perspective. *Adult Education Quarterly*, 56(4), 291-307.
- Taylor, E. W., & Caldarelli, M. (2004). Teaching beliefs of non-formal environmental educators: A perspective from state and local parks in the United States. *Environmental Education Research*, 10(4), 451-469.
- Theriou, G. N., & Chatzoglou, P. D. (2009). Exploring the best practices-performance relationship: An empirical approach. *Journal of Workplace Learning*, 21(8), 614-646.
- Thorpe, M., Edwards, R., & Hanson, A. (Eds.). (1993). *Culture and processes of adult learning*. London: Routledge.
- Torraco, R. J. (2004). Challenges and choices for theoretical research in human resource development. *Human Resource Development Quarterly*, 15(2), 171-188.
- Towler, A. J., & Dipboye, R. L. (2003). Development of a learning style orientation measure. *Organizational Research Methods*, 6(2), 216-235.

- Tracey, J. L., & Robins, R. W. (2004). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry*, 15, 103-125.
- Tuckman, B. W. (1999). *Conducting Educational Research* (5th ed.). Belmont: Wadsworth Group.
- United States Office of Personnel Management. (2008). *Best practices: Mentoring*. Washington: United States Office of Personnel Management.
- Verma, G. K., & Mallick, K. (1999). *Researching education*. London: Falmer Press.
- Verma, G., & Mallick, K. (2004). *Educational research*. Athens: Typothito (in Greek).
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological process*. Cambridge, MA: Harvard University Press.
- Waight, C. (2005). Exploring connections between human resource development and creativity. *Advances in Developing Human Resources*, 7(2), 151-159.
- Wallick, W. G. (1999). Human resource development (HRD) professionals role evolution: Shifting the paradigm from introspective to extrospective. *Journal of Health Sciences Management and Public Health*, 70-78. Retrieved from [www.medportal.ge/journal/n1/13.pdf](http://www.medportal.ge/journal/n1/13.pdf)
- Wang, G. G., Dou, Z., & Li, N. (2002). A systems approach to measuring return on investment for HRD interventions. *Human Resource Development Quarterly*, 13(2), 203-224.
- Watkins, K. (1989). Business and industry. In S. Merriam, & P. Cunningham, *Handbook of adult and continuing education* (pp. 422-430). San Francisco: Josey-Bass.
- Watson, J. B. (1930). *Behaviourism*. Chicago: University of Chicago Press.
- Weinberger, L. (1998). Commonly held theories of human resource development. *Human Resource Development International*, 1(1), 75-93.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization*, 7(2), 225-248.
- Werner, J. M., & DeSimone, R. L. (2009). *Human resource development* (5th ed.). Mason: South-Western Cengage Learning.
- Werner, J. M., & DeSimone, R. L. (2012). *Human resource development* (6th ed.). Mason: South-Western Cengage Learning.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.
- Wernerfelt, B. (1995). The resource-based view of the firm: Ten years after. *Strategic Management Journal*, 16(3), 171-174.
- Wertheimer, M. (1924). *Gestalt theory: The originals*. Hayes Barton Press.
- Wertheimer, M. (1945). *Productive thinking*. New York: Harper.
- Whetten, D. A. (2006). Albert and Whetten revised: Strengthening the concept of organizational identity. *Journal of Management Inquiry*, 15(3), 219-234.
- William, D. (2007). *What does research say the benefits of formative assessment are?* Reston: National Council of Teachers of Mathematics. Retrieved October 10, 2010, from [http://www.nctm.org/uploadedFiles/Research\\_News\\_and\\_Advocacy/Research/Clips\\_and\\_Briefs/Research\\_brief\\_05\\_-\\_Formative\\_Assessment.pdf](http://www.nctm.org/uploadedFiles/Research_News_and_Advocacy/Research/Clips_and_Briefs/Research_brief_05_-_Formative_Assessment.pdf)

- Williams, C. (2007). Research methods. *Journal of Business & Economics Research*, 5(3), 65-72.
- Williamson, K. J., Coughlin, A., Small, T., & Thompson, J. (2008). *My learning power using ELLI in higher education: A guide to understanding learning power with the Effective Lifelong Learning Inventory-ELLI*. Bristol: ViTAL Partnerships.
- Wilson, B. G. (1996). *Constructivist learning environments: Case studies in instructional design*. New Jersey: Educational Technology Publications.
- Wilson, P. J. (2005). *Human resource development: learning and training for individuals and organizations* (2nd ed.). London: Kogan Page.
- Wlodkowski, R. (2008). *Enhancing adult motivation to learn: a comprehensive guide for teaching all adults*. San Francisco: Jossey-Bass.
- Wong, K. Y., & Aspinwall, E. (2005). An empirical study of the important factors for knowledge-management adoption in the SME sector. *Journal of Knowledge Management*, 9(3), 64-82.
- Wright, P., McMahan, G., & McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *The International Journal of Human Resource Management*, 5(2), 301-326.
- Wright, P. M., & Snell, S. A. (1998). Toward a unifying framework for exporing fit and flexibility in strategic human resource management. *The Academy of Management Review*, 23(4), 756-772.
- Yeo, G. (1982). Eldergogy: A specialized approach to education for elders. *Lifelong Learning: The Adult Years*, 5(5), 4-7.
- Zackrisson, K. S., & Assarsson, L. (2008). Adult learner identities under construction. In A. Fejes, & K. Nicoll (Eds.), *Foucault and lifelong learning: Governing the subject* (pp. 114-125). Oxon: Routledge.
- Zuboff, S. (1988). *In the age of the smart machine the future of work and power*. New York: Basic Books.

## Appendix A

### RESEARCH SCALES

**Table A.1** Main research instrument: LLEHUREDE Scale

q1. Lifelong learning is to learn until the retirement period.
q2. Lifelong learning is related to work-based learning.
q3. The basic aim of lifelong learning is to improve knowledge in a personal, civic, social and/or employment-related perspective.
q4. The basic aim of lifelong learning is to improve skills in a personal, civic, social and/or employment-related perspective.
q5. The basic aim of lifelong learning is to bring about behavioural change, as a consequence of the deep understanding attained in fulfillment of a learning activity.
q6. Lifelong learning includes non-formal and informal learning or otherwise liberal, vocational and social learning.
q7. I am responsible for my vocational training.
q8. I work hard (on my own) towards achieving continuous professional development in order to keep my job.
q9. I draw on my skills in order to support the achievement of organizational goals of the enterprise or organization I manage (direct).
q10. My belief is that lifelong learning leads to the wellbeing of the participants in the learning process.
q11. My belief is that lifelong learning leads to job satisfaction.
q12. My belief is that lifelong learning leads to innovative ideas.
q13. My belief is that lifelong learning leads to better job performance.
q14. My belief is that involvement in lifelong learning activities reinforces the motivation for learning.
q15. The provision of qualitative lifelong learning requires certification.

**Table A.1** *Continued*

q16. The company or organization I manage (direct) believes that new knowledge is not necessary for those with broad experience.
q17. The company or organization I manage (direct) offers learning opportunities to its employees with the greatest possible financial support, for example through European funded programmes.
q18. The company or organization I manage (direct) is committed to caring about improving its employees' performance by enhancing their participation in vocational training, for the acquisition of knowledge, skills, competences and behavioural change.
q19. The company or organization that I manage has a positive attitude towards lifelong learning.
q20. The company or organization that I manage tries to make learning accessible to everyone.
q21. The company or organization that I manage or I own considers its employees as an important asset (employees are its power).
q22. The company or organization that I manage or I own regards a lifelong learning strategy as a strategy for creating value.
q23. The company or organization that I manage or I own invests in its staff training, because it considers it necessary for gaining competitive advantage.
q24. The company or organization that I manage or I own is socially responsible which is clear from its educational policy.
q25. The company or organization that I manage or I own believes that knowledge is a generic source, the dissemination of which is valuable.
q26. The company or organization that I manage or I own rewards our participation in educational programmes that contribute to improving our performance.
q27. The company or organization that I manage or I own assesses our educational/training needs before allowing us to participate in any educational/training programme/course.
q28. The company or organization that I manage or I own reviews the benefits of our participation in training programmes/courses.
q29. The company or organization that I manage or I own on completion of any training course, evaluates the benefit of participation against cost (cost-benefit analysis).
q30. The company or organization that I manage or I own measures the outcomes of our participation in learning activities monitored by our manager or people in charge of our work-team.
q31. The company or organization that I manage or I own evaluates whether the learning outcomes of training courses are in alignment with the training goals set by the providers of learning activities.
q32. I prefer learning through problem solving.

**Table A.1** *Continued*

q33. I prefer self-managed learning.
q34. I prefer to set my personal learning goals, even though they are different from other participants' goals.
q35. I consider formal educational activities, such as studies in schools, universities etc, to be positive, necessary but not enjoyable learning activities.
q36. I prefer learning through social relationships or networking without any kind of discrimination.
q37. I prefer learning through critical thinking activities.
q38. I try to participate actively by expressing my emotions when discussion, or action or role playing is being selected as learning methods.
q39. In every learning activity I have the desire to express my emotions because I want to participate in an active way.
q40. I pretend to act interactively (influence and be influenced by others) when I am learning with other people, while hiding my real emotions.
q41. I feel emotionally satisfied when I transfer my knowledge, over a long period of time, to someone who has less knowledge and experience than me, because I have a chance to help him/her to develop his/her talents.
q42. I avoid expressing my emotions when I take part in learning activities based on active learning or simulation of real events.

**Table A.2** Research scale of the pilot study

q1. I know what lifelong learning is.
q2. Lifelong learning is to learn through the life span.
q3. Lifelong learning is to learn until retirement.
q4. Lifelong learning is clearly connected with schools and universities.
q5. Lifelong learning is clearly connected with what people permanently learn from life (or better from the University of Life).
q6. Lifelong learning is related to work-based learning.
q7. Lifelong learning is all learning activities undertaken throughout life.
q8. The basic aim of lifelong learning is to improve knowledge from a personal, civic, social and/or employment-related perspective.
q9. The basic aim of lifelong learning is to improve skills from a personal, civic, social and/or employment-related perspective.
q10. The basic aim of lifelong learning is to improve competences from a personal, civic, social and/or employment-related perspective.
q11. The basic aim of lifelong learning is to lead to behaviour change, following the deep understanding gained from completion of the learning process.
q12. Lifelong learning is considered to be planned, purposeful, and systematic learning.
q13. Lifelong learning is worthwhile for every employee as it contributes to his/her development.
q14. Lifelong learning includes non-formal and informal learning or otherwise liberal, vocational and learning with social dimensions.
q15. I am responsible for my vocational training.
q16. I work hard (on my own) toward achieving continuous professional development.
q17. I get involved in lifelong learning activities as I contribute to organizational learning.
q18. I draw on my skills in order to contribute to the achievement of organizational goals.
q19. I am interested in participating in lifelong learning initiatives in order to develop my skills continuously.
q20. The company or organization I belong to is focused on customer service and thus, training is similarly focused..
q21. The company or organization I belong to continually invest in the education, training and development of its personnel.
q22. The company or organization I belong to believes that we are well skilled through training by our managers or other employees with better experience.

**Table A.2** *Continued*

q23. The company or organization I belong to want us to update our knowledge outside working hours.
q24. The company or organization I belong to believes that new knowledge is not necessary for those with broad experience.
q25. The company or organization I belong to wants to have responsibility for our education, training and development.
q26. The company or organization I belong to offer us opportunities to learn with its financial support.
q27. The company or organization I belong to chooses the educational/training programmes/courses it supports without assessment of employees' educational needs.
q28. The company or organization I belong to is committed to improving its employees' performance (knowledge, skills, competences, behaviour) through training courses financially supported by EC or other particular bodies.
q29. The company or organization I belong to has a positive attitude towards lifelong learning.
q30. The company or organization I belong to has nothing to do with lifelong learning.
q31. The company or organization I belong to considers lifelong learning as useless when sales go down.
q32. My belief is that lifelong learning leads to greater wellbeing of participants in the learning process.
q33. My belief is that lifelong learning leads to a change in attitude towards the value of work.
q34. My belief is that lifelong learning should promote each employee's creativity.
q35. My belief is that lifelong learning leads to job satisfaction.
q36. My belief is that lifelong learning leads to innovative ideas.
q37. My belief is that lifelong learning leads to better job performance.
q38. My belief is that involvement in lifelong learning activities reinforces motivation for learning.
q39. My belief is that experience leads to better job performance.
q40. The company or organization I belong to strives to make learning accessible to everyone.
q41. The company or organization I belong to considers its employees as an important asset.
q42. The company or organization I belong to considers mentoring as suitable to the development of employees' talents.
q43. The company or organization I belong to considers that, whatever the change, it can be successful when accompanied by mentoring programmes.
q44. The company or organization I belong to regards mentoring as the most important means for any employee to achieve peak job performance.

**Table A.2** *Continued*

q45. The company or organization I belong to regards lifelong strategy as a strategy that creates value.
q46. The company or organization I belong to promotes teamwork and fosters an environment conducive to the exchange of ideas useful to improving work-related performance.
q47. The company or organization I belong to invests in its staff training because it considers it vital to gaining competitive advantage.
q48. The company or organization I belong to is socially responsible, which is clear in its educational policy.
q49. The company or organization I belong to believes that knowledge is of generic value, the dissemination of which is significant.
q50. The company or organization I belong to rewards participation in educational programmes useful to performance enhancement.
q51. The company or organization I belong to assesses our educational/training needs before allowing us to participate in any educational/training program/course.
q52. The company or organization I belong to reviews the benefits of our participation in training programmes/courses.
q53. The company or organization I belong to evaluates the benefit of participation in educational or training courses in relation to the cost after completion of the program.
q54. The company or organization I belong to measures the outcomes of our participation in learning activities, monitored by our manager or people in charge of our work-team.
q55. The company or organization I belong to evaluates the learning outcomes of training courses in order that they are in alignment with the training goals set by the provider of learning activities.
q56. I prefer learning through loosely structured learning activities.
q57. I prefer learning in flexible mentoring environments.
q58. I prefer learning through problem solving.
q59. I prefer self-managed learning.
q60. I prefer the semi-structured learning activities with creative interaction but without great effort.
q61. I prefer simple, safe, and structured environments with low control by the learner that help him/her to reach easily achievable goals.
q62. I prefer setting my personal learning goals, even they differ from those of other participants.
q63. I do not regard formal educational activities (e.g. in schools; in universities) as necessarily positive or enjoyable learning activities.
q64. I prefer learning through working with others toward shared goals.
q65. I prefer learning through benchmarking (information about best practices) and comparison with others' performance.

**Table A.2** *Continued*

q66. I prefer learning through social relationships or networking without any kind of discrimination.
q67. I prefer learning through use of technology.
q68. I prefer learning either in face- to-face interaction or via internet.
q69. I prefer learning through critical thinking activities.
q70. I prefer learning when there is a pressing need for it.
q71. I really make an active effort to participate, by expressing my feeling when I take part in collaborative learning, in which discussion, active learning or role playing role are selected as learning methods.
q72. I really make an effort to show my emotions when actively participating in learning activities.
q73. I make an effort to understand the emotions of other participants, in order to enjoy collaborative learning.
q74. I compromise authenticity by expressing feelings that I do not really have.
q75. I hide my real emotions when I am required to share them, during a learning activity in which I am talking about personal experience.
q76. I avoid expressing my emotions when I take part in learning activities, based on active learning or simulation of real events.
q77. The provision of qualitative lifelong learning requires certification.
q78. Human capital is related to self-directed learning, but not necessarily to organizational learning.
q79. Collaborative learning is developed at a high extent when it is supported by computer and via the internet.
q80. Knowledge acquisition should be included in a lifelong learning strategy.

## Appendix B

### DEMOGRAPHIC ELEMENTS

**Table B.1** Managers and employers-Demographic element: Job location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	85	56,7	56,7	56,7
	3	20	13,3	13,3	70,0
	4	16	10,7	10,7	80,7
	5	1	,7	,7	81,3
	6	2	1,3	1,3	82,7
	7	1	,7	,7	83,3
	8	1	,7	,7	84,0
	9	1	,7	,7	84,7
	10	5	3,3	3,3	88,0
	11	18	12,0	12,0	100,0
	Total	150	100,0	100,0	

**Table B.2** Managers and employers-Demographic element: Age distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	6,0	6,0	6,0
	2	35	23,3	23,3	29,3
	3	64	42,7	42,7	72,0
	4	40	26,7	26,7	98,7
	5	2	1,3	1,3	100,0
	Total	150	100,0	100,0	

**Table B.3** Managers and employers-Demographic element: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	96	64,0	64,0	64,0
	2	52	34,7	34,7	98,7
	6	2	1,3	1,3	100,0
	Total	150	100,0	100,0	

**Table B.4** Managers and employers-Demographic element: Educational level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	,7	,7	,7
	3	21	14,0	14,0	14,7
	4	11	7,3	7,3	22,0
	5	15	10,0	10,0	32,0
	6	69	46,0	46,0	78,0
	7	30	20,0	20,0	98,0
	8	2	1,3	1,3	99,3
	1	1	,7	,7	100,0
	Total	150	100,0	100,0	

**Table B.5** Managers and employers-Demographic element: Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	10,7	10,7	10,7
	2	29	19,3	19,3	30,0
	3	100	66,7	66,7	96,7
	4	2	1,3	1,3	98,0
	5	3	2,0	2,0	100,0
	Total	150	100,0	100,0	

**Table B.6** Managers and employers-Demographic element: Nature of Employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	139	92,7	92,7	92,7
	2	11	7,3	7,3	100,0
	Total	150	100,0	100,0	

**Table B.7** Managers and employers-Demographic element: Company type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	87	58,0	58,0	58,0
	2	21	14,0	14,0	72,0
	3	26	17,3	17,3	89,3
	4	7	4,7	4,7	94,0
	5	8	5,3	5,3	99,3
	6	1	,7	,7	100,0
	Total	150	100,0	100,0	

**Table B.8** Managers and employers-Demographic element: Sector of employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	4,7	4,7	4,7
	2	141	94,0	94,0	98,7
	3	2	1,3	1,3	100,0
	Total	150	100,0	100,0	

**Table B.9** Managers and employers-Demographic element: Business activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	68	45,3	45,3	45,3
	2	7	4,7	4,7	50,0
	3	37	24,7	24,7	74,7
	4	38	25,3	25,3	100,0
	Total	150	100,0	100,0	

**Table B.10** Managers and employers-Demographic element: Job position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	30	20,0	20,0	20,0
	2	33	22,0	22,0	42,0
	3	11	7,3	7,3	49,3
	4	5	3,3	3,3	52,7
	5	7	4,7	4,7	57,3
	6	2	1,3	1,3	58,7
	7	3	2,0	2,0	60,7
	8	2	1,3	1,3	62,0
	9	38	25,3	25,3	87,3
	10	2	1,3	1,3	88,7
	11	5	3,3	3,3	92,0
	12	12	8,0	8,0	100,0
	Total	150	100,0	100,0	

**Table B.11** Managers and employers-Demographic element: Company constitution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	8,0	8,0	8,0
	3	124	82,7	82,7	90,7
	4	8	5,3	5,3	96,0
	5	6	4,0	4,0	100,0
	Total	150	100,0	100,0	

**Table B.12** Managers and employers-Demographic element: Existence of HRD department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	50	33,3	33,3	33,3
	2	100	66,7	66,7	100,0
	Total	150	100,0	100,0	

**Table B.13** Managers and employers-Demographic element: Company size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	25	16,7	16,7	16,7
	2	31	20,7	20,7	37,3
	3	32	21,3	21,3	58,7
	4	62	41,3	41,3	100,0
	Total	150	100,0	100,0	

**Table B.14** Managers and employers-Demographic element: Responsibility position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	10,0	10,0	10,0
	2	3	2,0	2,0	12,0
	3	16	10,7	10,7	22,7
	4	32	21,3	21,3	44,0
	5	1	,7	,7	44,7
	6	52	34,7	34,7	79,3
	7	3	2,0	2,0	81,3
	8	4	2,7	2,7	84,0
	9	1	,7	,7	84,7
	10	3	2,0	2,0	86,7
	11	10	6,7	6,7	93,3
	12	10	6,7	6,7	100,0
	Total	150	100,0	100,0	

**Table B.15** Managers and employers-Demographic element: Employment contract

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	139	92,7	92,7	92,7
	2	1	,7	,7	93,3
	3	2	1,3	1,3	94,7
	4	1	,7	,7	95,3
	5	6	4,0	4,0	99,3
	6	1	,7	,7	100,0
	Total	150	100,0	100,0	

**Table B.16** Managers and employers-Demographic element: Duration of recent employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	2,7	2,7	2,7
	2	11	7,3	7,3	10,0
	3	31	20,7	20,7	30,7
	4	30	20,0	20,0	50,7
	5	22	14,7	14,7	65,3
	6	52	34,7	34,7	100,0
	Total	150	100,0	100,0	

**Table B.17** Managers and employers-Demographic element: Involvement in export activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	99	66,0	66,0	66,0
	2	51	34,0	34,0	100,0
	Total	150	100,0	100,0	

**Table B.18** Employees-Demographic element: Job location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	137	50,6	50,6	50,6
	2	31	11,4	11,4	62,0
	3	38	14,0	14,0	76,0
	4	17	6,3	6,3	82,3
	7	1	,4	,4	82,7
	8	2	,7	,7	83,4
	10	10	3,7	3,7	87,1
	11	33	12,2	12,2	99,3
	12	1	,4	,4	99,6
	13	1	,4	,4	100,0
	Total	271	100,0	100,0	

**Table B.19** Employees-Demographic element: Age distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	70	25,8	25,8	25,8
	2	82	30,3	30,3	56,1
	3	76	28,0	28,0	84,1
	4	43	15,9	15,9	100,0
	Total	271	100,0	100,0	

**Table B.20** Employees-Demographic element: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	141	52,0	52,0	52,0
	2	130	48,0	48,0	100,0
	Total	271	100,0	100,0	

**Table B.21** Employees-Demographic element: Educational level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	1,1	1,1	1,1
	2	3	1,1	1,1	2,2
	3	93	34,3	34,3	36,5
	4	28	10,3	10,3	46,9
	5	42	15,5	15,5	62,4
	6	76	28,0	28,0	90,4
	7	24	8,9	8,9	99,3
	8	2	,7	,7	100,0
	Total	271	100,0	100,0	

**Table B.22** Employees-Demographic element: Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	75	27,7	27,7	27,7
	2	65	24,0	24,0	51,7
	3	120	44,3	44,3	95,9
	4	8	3,0	3,0	98,9
	5	3	1,1	1,1	100,0
	Total	271	100,0	100,0	

**Table B.23** Employees-Demographic element: Nature of employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	254	93,7	93,7	93,7
	2	17	6,3	6,3	100,0
	Total	271	100,0	100,0	

**Table B.24** Employees-Demographic element: Company type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	207	76,4	76,4	76,4
	2	41	15,1	15,1	91,5
	3	18	6,6	6,6	98,2
	4	2	,7	,7	98,9
	5	2	,7	,7	99,6
	6	1	,4	,4	100,0
	Total	271	100,0	100,0	

**Table B.25** Employees-Demographic element: Sector of employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	4,8	4,8	4,8
	2	257	94,8	94,8	99,6
	3	1	,4	,4	100,0
	Total	271	100,0	100,0	

**Table B.26** Employees-Demographic element: Business activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	115	42,4	42,4	42,4
	2	3	1,1	1,1	43,5
	3	67	24,7	24,7	68,3
	4	86	31,7	31,7	100,0
	Total	271	100,0	100,0	

**Table B.27** Employees-Demographic element: Job position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	4,8	4,8	4,8
	2	44	16,2	16,2	21,0
	3	28	10,3	10,3	31,4
	4	10	3,7	3,7	35,1
	5	46	17,0	17,0	52,0
	6	8	3,0	3,0	55,0
	7	45	16,6	16,6	71,6
	8	3	1,1	1,1	72,7
	9	39	14,4	14,4	87,1
	10	9	3,3	3,3	90,4
	11	5	1,8	1,8	92,3
	12	21	7,7	7,7	100,0
	Total	271	100,0	100,0	

**Table B.28** Employees-Demographic element: Company constitution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	2,6	2,6	2,6
	2	6	2,2	2,2	4,8
	3	231	85,2	85,2	90,0
	4	15	5,5	5,5	95,6
	5	12	4,4	4,4	100,0
	Total	271	100,0	100,0	

**Table B.29** Employees-Demographic element: Existence of HRD department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	80	29,5	29,5	29,5
	2	190	70,1	70,1	99,6
	4	1	,4	,4	100,0
	Total	271	100,0	100,0	

**Table B.30** Employees-Demographic element: Company size

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	38	14,0	14,0	14,0
	2	54	19,9	19,9	33,9
	3	49	18,1	18,1	52,0
	4	130	48,0	48,0	100,0
	Total	271	100,0	100,0	

**Table B.31** Employees-Demographic element: Responsibility position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	2	,7	,7	,7
	7	250	92,3	92,3	93,0
	8	1	,4	,4	93,4
	9	10	3,7	3,7	97,0
	10	1	,4	,4	97,4
	12	7	2,6	2,6	100,0
	Total	271	100,0	100,0	

**Table B.32** Employees-Demographic element: Employment contract

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	212	78,2	78,2	78,2
	2	24	8,9	8,9	87,1
	3	9	3,3	3,3	90,4
	4	8	3,0	3,0	93,4
	5	14	5,2	5,2	98,5
	6	4	1,5	1,5	100,0
	Total	271	100,0	100,0	

**Table B.33** Employees-Demographic element: Duration of recent employment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	33	12,2	12,2	12,2
	2	65	24,0	24,0	36,2
	3	47	17,3	17,3	53,5
	4	33	12,2	12,2	65,7
	5	46	17,0	17,0	82,7
	6	47	17,3	17,3	100,0
	Total	271	100,0	100,0	

**Table B.34** Employees-Demographic element: Involvement in export activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	193	71,2	71,2	71,2
	2	78	28,8	28,8	100,0
	Total	271	100,0	100,0	

## Appendix C

### THEMES OF LIFELONG LEARNING ACTIVITIES

**Table C.1** Managers and employers: Theme of the last seminar

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		48	32,0	32,0	32,0
	ECDL	1	,7	,7	32,7
	Management	1	,7	,7	33,3
	Cloud computing	1	,7	,7	34,0
	E-Commerce	1	,7	,7	34,7
	ISO 9001:2008	2	1,3	1,3	36,0
	Level of protection analysis	1	,7	,7	36,7
	Management	2	1,3	1,3	38,0
	MS Project	1	,7	,7	38,7
	Negotiation skills	1	,7	,7	39,3
	Negotiation skills & sales marketing	1	,7	,7	40,0
	Project management	1	,7	,7	40,7
	Reach	1	,7	,7	41,3
	Changes in income taxation	1	,7	,7	42,0
	Taxation changes	2	1,3	1,3	43,3
	Development & sales techniques in crisis	1	,7	,7	44,0
	Development of marketing skills	1	,7	,7	44,7
	Work rewards	1	,7	,7	45,3
	Evaluation and performance	1	,7	,7	46,0

**Table C.1** *Continued*

Effective customer-oriented leadership	1	,7	,7	46,7
Basil II	1	,7	,7	47,3
Wine testing	1	,7	,7	48,0
Negotiation-body language	1	,7	,7	48,7
Management of work-related stress	1	,7	,7	49,3
Complaint management & negotiation	1	,7	,7	50,0
Expanded control of municipalities	1	,7	,7	50,7
Management	1	,7	,7	51,3
Management issues	1	,7	,7	52,0
Introduction to systemic psychotherapy	1	,7	,7	52,7
Introduction to financial analysis	1	,7	,7	53,3
Returns	1	,7	,7	54,0
Turkish language	1	,7	,7	54,7
EAOT 1429-Administrative sufficiency	1	,7	,7	55,3
Energy efficiency of buildings	1	,7	,7	56,0
Export	1	,7	,7	56,7
Export procedures in USA	1	,7	,7	57,3
Export alertness	1	,7	,7	58,0
Export marketing	2	1,3	1,3	59,3
Customer services & problem solving	2	1,3	1,3	60,7
Customer service & sales	1	,7	,7	61,3
Communication	1	,7	,7	62,0
Communication between people & the computer	1	,7	,7	62,7
Supervision of online processes	2	1,3	1,3	64,0
Supervision of cashier-accountants	1	,7	,7	64,7

**Table C.1** *Continued*

Work issues	1	,7	,7	65,3
Grant	1	,7	,7	66,0
Computers	1	,7	,7	66,7
Leadership	1	,7	,7	67,3
Computer processes	1	,7	,7	68,0
Auditing issues from the Hellenic Food Authority	1	,7	,7	68,7
Statutory framework & money laundering	1	,7	,7	69,3
Personnel code of employees in local administration	1	,7	,7	70,0
Operational risks	1	,7	,7	70,7
International accounting standards	1	,7	,7	71,3
Management	1	,7	,7	72,0
Marketing	1	,7	,7	72,7
Fashion in hair-style	1	,7	,7	73,3
New technology	1	,7	,7	74,0
Money laundering	1	,7	,7	74,7
Financial activation in Europe	1	,7	,7	75,3
Organization & business administration	1	,7	,7	76,0
Organization & supply chain management	1	,7	,7	76,7
Environment	1	,7	,7	77,3
Environment effects	1	,7	,7	78,0
Hair treatment	1	,7	,7	78,7
Accounting auditors	1	,7	,7	79,3
Production planning	1	,7	,7	80,0
Supplies	1	,7	,7	80,7
ELOT 1429 Managerial Capability of Organizations to Implement Projects of Public Interest-Quality	1	,7	,7	81,3
Fire safety	1	,7	,7	82,0
Sales	4	2,7	2,7	84,7
Sales & negotiations	1	,7	,7	85,3

**Table C.1** *Continued*

How a Greek company faces the crisis	1	,7	,7	86,0
Work out of liabilities	1	,7	,7	86,7
Housing solutions	3	2,0	2,0	88,7
Consulting & development of innovation	1	,7	,7	89,3
Emotional intelligence	1	,7	,7	90,0
Technical issues	1	,7	,7	90,7
Negotiation techniques	1	,7	,7	91,3
Sales techniques	2	1,3	1,3	92,7
Negotiation techniques	1	,7	,7	93,3
Tourist marketing	1	,7	,7	94,0
Banking services	1	,7	,7	94,7
Banking & insurance services	1	,7	,7	95,3
Taxation	1	,7	,7	96,0
Income taxation	1	,7	,7	96,7
Income taxation-basic changes	1	,7	,7	97,3
Taxation changes	1	,7	,7	98,0
Financial services	2	1,3	1,3	99,3
Youth psychology	1	,7	,7	100,0
Total	150	100,0	100,0	

**Table C.2** Managers and employers: Theme of the last training programme

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		106	70,7	70,7	70,7
	Category and assessment management	1	,7	,7	71,3
	CFA	1	,7	,7	72,0
	Diploma in logistics	1	,7	,7	72,7
	Management	2	1,3	1,3	74,0
	RTE SIMATIC 57-300 STEP 7	1	,7	,7	74,7
	VMWARE	1	,7	,7	75,3
	English language	1	,7	,7	76,0
	Change in the legal auditing of municipalities	1	,7	,7	76,7
	Use of insecticides	1	,7	,7	77,3
	Negotiations	1	,7	,7	78,0
	Team management	2	1,3	1,3	79,3
	Bond management	1	,7	,7	80,0
	Personnel management	1	,7	,7	80,7
	International trade	1	,7	,7	81,3
	Business administration	1	,7	,7	82,0
	Personnel management & taxation	1	,7	,7	82,7
	Turkish language	1	,7	,7	83,3
	Energy auditors	1	,7	,7	84,0
	Specialization in information systems	1	,7	,7	84,7
	Extroversion of enterprises	2	1,3	1,3	86,0
	Computers	2	1,3	1,3	87,3
	Italian language	1	,7	,7	88,0
	Management	2	1,3	1,3	89,3
	Money laundering	3	2,0	2,0	91,3
	Wine topography & the global market	1	,7	,7	92,0
Warehouse management	1	,7	,7	92,7	
Information systems in education	1	,7	,7	93,3	

**Table C.2** *Continued*

Banking services	1	,7	,7	94,0
Sales	2	1,3	1,3	95,3
Philosophy	1	,7	,7	96,0
Service of agricultural machines	1	,7	,7	96,7
Quality management systems	1	,7	,7	97,3
AUTOCAD design	1	,7	,7	98,0
Cash planning & auditing	1	,7	,7	98,7
Technical knowledge	1	,7	,7	99,3
Psychology	1	,7	,7	100,0
Total	150	100,0	100,0	

**Table C.3** Managers and employers: Theme of the last one day-educational event

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	103	68,7	68,7	68,7
Management	1	,7	,7	69,3
International conference ECR Hellas	1	,7	,7	70,0
Cisco Securex resolving data	1	,7	,7	70,7
Do it yourself	1	,7	,7	71,3
ECR	1	,7	,7	72,0
KPMG IT Forum	1	,7	,7	72,7
VAT changes	1	,7	,7	73,3
Foreigner-citizenship	1	,7	,7	74,0
Wine tasting with a meal	1	,7	,7	74,7
Elevators	1	,7	,7	75,3
Female entrepreneurship	1	,7	,7	76,0
International trade	1	,7	,7	76,7
International accounting standards	2	1,3	1,3	78,0
Bulling & violence in schools	1	,7	,7	78,7
Market control	1	,7	,7	79,3
Intra-EC transactions-VAT	1	,7	,7	80,0
Energy returns	1	,7	,7	80,7
Building energy returns	2	1,3	1,3	82,0
Energy auditors	1	,7	,7	82,7
Export letters of credit	1	,7	,7	83,3
Energy saving	1	,7	,7	84,0
Business environment	1	,7	,7	84,7
Supply chain	1	,7	,7	85,3
Potato enemies in Nevrokopi	1	,7	,7	86,0
Consumer's psychology day	2	1,3	1,3	87,3
Banking	1	,7	,7	88,0
HR issues	1	,7	,7	88,7
Institution & insurance conscience	1	,7	,7	89,3
Wine	1	,7	,7	90,0

**Table C.3** *Continued*

Leadership behavior styles	1	,7	,7	90,7
Production of goods	1	,7	,7	91,3
Sales	1	,7	,7	92,0
Work out of housing loans	1	,7	,7	92,7
Congress tourism	1	,7	,7	93,3
Supplies	1	,7	,7	94,0
Technical issues	3	2,0	2,0	96,0
Structural materials	1	,7	,7	96,7
Taxation	2	1,3	1,3	98,0
Income taxation & VAT	2	1,3	1,3	99,3
Photovoltaic systems	1	,7	,7	100,0
Total	150	100,0	100,0	

**Table C.4** Managers and employers: Theme of the most recent learning activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		121	80,7	80,7	80,7
	Auto-Moto	1	,7	,7	81,3
	Bank stock	1	,7	,7	82,0
	Detrop -Wine	1	,7	,7	82,7
	IT Shop	1	,7	,7	83,3
	Management	1	,7	,7	84,0
	Money show	1	,7	,7	84,7
	Photoprogramme	1	,7	,7	85,3
	Wincor world	1	,7	,7	86,0
	Product recycling	1	,7	,7	86,7
	Consumable products	1	,7	,7	87,3
	Insurance	1	,7	,7	88,0
	Industrial products	1	,7	,7	88,7
	Book reading of management and marketing	1	,7	,7	89,3
	Miscellaneous issues of personal interest	2	1,3	1,3	90,7
	Business and organization management	1	,7	,7	91,3
	Heating materials	1	,7	,7	92,0
	Arts	1	,7	,7	92,7
	Product fair	1	,7	,7	93,3
	Exhibition in Germany	1	,7	,7	94,0
	English language	1	,7	,7	94,7
	Familiarization with the social network of facebook	1	,7	,7	95,3
	Communication	1	,7	,7	96,0
	Social events	1	,7	,7	96,7
	Social image	1	,7	,7	97,3
	Postgraduate programmes and vocational training	1	,7	,7	98,0
	Internet piloting	1	,7	,7	98,7
	Quality	1	,7	,7	99,3
	Photovoltaic systems	1	,7	,7	100,0
	Total		150	100,0	100,0

**Table C.5** Employees: Theme of the last seminar

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	129	47,6	47,6	47,6
Coaching	1	,4	,4	48,0
ECDL Expert- Access	1	,4	,4	48,3
Financial reporting and improvement of share image	1	,4	,4	48,7
Inverters	1	,4	,4	49,1
Management and Sales	1	,4	,4	49,4
PLC-Scada	1	,4	,4	49,8
SMA Tripower	1	,4	,4	50,2
Social media	1	,4	,4	50,6
Social media marketing- Public relations	1	,4	,4	50,9
SOLYNDIZA	1	,4	,4	51,3
Su-Jok	1	,4	,4	51,7
Office Word	3	1,1	1,1	52,8
English language, literature and poetry of the 19 <sup>th</sup> century	1	,4	,4	53,1
Changes in income taxation	3	1,1	1,1	54,2
Unit trust	1	,4	,4	54,6
Anti-thunder protection	1	,4	,4	55,0
Effective team and leadership	1	,4	,4	55,4
Safety in work	1	,4	,4	55,7
Insurance –urgent cases	1	,4	,4	56,1
Insurance	3	1,1	1,1	57,2
Fire Insurance	1	,4	,4	57,6
Automation Siemens Simatic S7	1	,4	,4	57,9
Data & quality management ISO 9001	1	,4	,4	58,3
Basics of insurance	1	,4	,4	58,7
Basic origins of economy	1	,4	,4	59,0
Publicity and public relations	1	,4	,4	59,4
Export processes	2	,7	,7	60,1

**Table C.5** *Continued*

Negotiations	1	,4	,4	60,5
Project management	1	,4	,4	60,9
Personnel management and motivation	1	,4	,4	61,3
Crisis management	1	,4	,4	61,6
Class control in schools	1	,4	,4	62,0
Administrative issues	4	1,5	1,5	63,5
Initial education	1	,4	,4	63,8
Education in C++ language, -Adonet-Sqlserver	1	,4	,4	64,2
Educational and employment policies	1	,4	,4	64,6
Policies of standardization educators	1	,4	,4	64,9
Intimidation in schools	1	,4	,4	65,3
Intra-EC transactions	1	,4	,4	65,7
Intra-EC legislation and VAT	1	,4	,4	66,1
Energy issues	1	,4	,4	66,4
Energy auditing	2	,7	,7	67,2
Export	2	,7	,7	67,9
Export-Methods	1	,4	,4	68,3
Export marketing	3	1,1	1,1	69,4
Customer services and product promotion	1	,4	,4	69,7
Labour issues	1	,4	,4	70,1
Labour relations	2	,7	,7	70,8
Market research/ Export processes	1	,4	,4	71,2
Corporate issues for products	2	,7	,7	72,0
Flexible work forms	1	,4	,4	72,3
Hellenic Food Authority	1	,4	,4	72,7
Computers	2	,7	,7	73,4
Theatrical education	1	,4	,4	73,8
Innovation and enterprises	1	,4	,4	74,2
Consumer loans	1	,4	,4	74,5
KEMAK	1	,4	,4	74,9

**Table C.5** *Continued*

Capital 4	1	,4	,4	75,3
Code of ethics for employees	1	,4	,4	75,6
Operational risks	3	1,1	1,1	76,8
Management	1	,4	,4	77,1
Methodology	1	,4	,4	77,5
Studies of photovoltaic parks	1	,4	,4	77,9
Work forms - Leaves	1	,4	,4	78,2
Work forms – Leaves- Benefits	1	,4	,4	78,6
Foreign language (Turkish)	1	,4	,4	79,0
Money laundering	2	,7	,7	79,7
Economy issues for non economists	1	,4	,4	80,1
Financial and technical study	1	,4	,4	80,4
Warehouse organizations and reserve management	1	,4	,4	80,8
Organization and management of sales	1	,4	,4	81,2
Work out of business loans	1	,4	,4	81,5
Food hygiene conditions	1	,4	,4	81,9
Customer-centered approach	2	,7	,7	82,7
Environment	2	,7	,7	83,4
Business financial capability	1	,4	,4	83,8
Credit cards	3	1,1	1,1	84,9
Information technology	1	,4	,4	85,2
Information technology- Learning difficulties	1	,4	,4	85,6
Product protection – Intellectual property	1	,4	,4	86,0
Standards: ISO 9001:2008/14001	1	,4	,4	86,3
Fire security	1	,4	,4	86,7
Sales	5	1,8	1,8	88,6

**Table C.5** *Continued*

Sales and trade	4	1,5	1,5	90,0
Sales and after sale service	1	,4	,4	90,4
Work out of consumer loans	1	,4	,4	90,8
Housing loans	3	1,1	1,1	91,9
Consulting	3	1,1	1,1	93,0
Career guidance counselling	1	,4	,4	93,4
Exchange (foreign currency-falseness)	1	,4	,4	93,7
Design programmes	1	,4	,4	94,1
School counseling	1	,4	,4	94,5
Tiresias S.A.	1	,4	,4	94,8
Technical issues – work equipment	1	,4	,4	95,2
Technical sales	1	,4	,4	95,6
Marketing in the crisis period	1	,4	,4	95,9
Turkish language	1	,4	,4	96,3
Banking services	2	,7	,7	97,0
Taxation	1	,4	,4	97,4
Taxation issues	1	,4	,4	97,8
Taxation changes	1	,4	,4	98,2
Tax consulting services	1	,4	,4	98,5
VAT	1	,4	,4	98,9
Photovoltaic installations	2	,7	,7	99,6
Technical issues about products	1	,4	,4	100,0
Total	271	100,0	100,0	

**Table C.6** Employees: Theme of the last training programme

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	207	76,4	76,4	76,4
Business Academy	1	,4	,4	76,8
ECDL	2	,7	,7	77,5
Executive secretary excellence	1	,4	,4	77,9
KNX	1	,4	,4	78,2
Product marketing	1	,4	,4	78,6
Web developer	1	,4	,4	79,0
Life insurance	3	1,1	1,1	80,1
Insurance services	3	1,1	1,1	81,2
Hair styling & colouring	1	,4	,4	81,5
Team management	1	,4	,4	81,9
Customer management	1	,4	,4	82,3
International trade	1	,4	,4	82,7
Managerial issues	1	,4	,4	83,0
Volunteerism in social services	1	,4	,4	83,4
Special education	1	,4	,4	83,8
Foreign languages	2	,7	,7	84,5
Adult education	1	,4	,4	84,9
Energy auditing	1	,4	,4	85,2
Customer service	1	,4	,4	85,6
Food	1	,4	,4	86,0
Corporate sales	1	,4	,4	86,3
Computers	2	,7	,7	87,1
Safety issues	5	1,8	1,8	88,9
Safety and fire safety issues	2	,7	,7	89,7
Special education issues	1	,4	,4	90,0
Social insurance	1	,4	,4	90,4
Foreign languages	1	,4	,4	90,8
Economy issues	2	,7	,7	91,5
Group insurance contracts	1	,4	,4	91,9
Product presentation	1	,4	,4	92,3
Provision of investment contracts	1	,4	,4	92,6

**Table C.6** *Continued*

Certification for computers	1	,4	,4	93,0
Information technology	1	,4	,4	93,4
Culture-Tourism – Regional development	1	,4	,4	93,7
Specialized programme for special education	1	,4	,4	94,1
Stimulation of dealing room	1	,4	,4	94,5
Modern cleaning of food devices	1	,4	,4	94,8
Counseling	1	,4	,4	95,2
Counseling	1	,4	,4	95,6
Design	1	,4	,4	95,9
AUTOCAD design	1	,4	,4	96,3
Technical issues	1	,4	,4	96,7
Sales techniques	1	,4	,4	97,0
Technology	1	,4	,4	97,4
Food hygiene	1	,4	,4	97,8
Hygiene services and cleanliness of food products	1	,4	,4	98,2
Computers	1	,4	,4	98,5
Photovoltaic systems	1	,4	,4	98,9
Photovoltaic systems	1	,4	,4	99,3
Computer handling	1	,4	,4	99,6
Use of Office in enterprises	1	,4	,4	100,0
Total	271	100,0	100,0	

**Table C.7** Employees: Theme of the last one day-educational event

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	234	86,3	86,3	86,3
ESCO	1	,4	,4	86,7
Alcoholism	1	,4	,4	87,1
Renewable energy sources	1	,4	,4	87,5
Insurance services	1	,4	,4	87,8
International markets	1	,4	,4	88,2
International accounting standards	1	,4	,4	88,6
Volunteerism	1	,4	,4	88,9
Special education	2	,7	,7	89,7
Export	1	,4	,4	90,0
Extroversion of enterprises	4	1,5	1,5	91,5
Market research	1	,4	,4	91,9
Europe: where are you going?	1	,4	,4	92,3
Career days	1	,4	,4	92,6
Building heat insulation	1	,4	,4	93,0
History	1	,4	,4	93,4
Career	1	,4	,4	93,7
Law No 3556/2007	1	,4	,4	94,1
Economics	1	,4	,4	94,5
The great crash of 1929 until the crisis of today	1	,4	,4	94,8
Holistic architecture	2	,7	,7	95,6
Coast front	1	,4	,4	95,9
Presentation of financial programmes	1	,4	,4	96,3
Contemporary technologies	1	,4	,4	96,7
TEE F/B Systems	1	,4	,4	97,0
Customs procedure-e-customs	1	,4	,4	97,4
Health and safety in work	1	,4	,4	97,8
Hygiene and cleanliness rules	1	,4	,4	98,2
Taxation	2	,7	,7	98,9

**Table C.7** *Continued*

	Photovoltaic systems	1	,4	,4	99,3
	Chemical metrology	1	,4	,4	99,6
	Psychology	1	,4	,4	100,0
	Total	271	100,0	100,0	

**Table C.8** Employees: Theme of the most recent learning activity

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	235	86,7	86,7	86,7
Celebration	1	,4	,4	87,1
Miscellaneous issues	2	,7	,7	87,8
International trade	1	,4	,4	88,2
Heating materials	1	,4	,4	88,6
Certification in computers' programmes	1	,4	,4	88,9
Learning of a foreign language and photograph	1	,4	,4	89,3
Foreign language	2	,7	,7	90,0
Training for the production switchboard	1	,4	,4	90,4
Exports	1	,4	,4	90,8
Communication	1	,4	,4	91,1
Visit to an industry of new technology	1	,4	,4	91,5
Theater in education	1	,4	,4	91,9
Hair-dressing issues	1	,4	,4	92,3
Social contacts	5	1,8	1,8	94,1
Social networking-Internet	2	,7	,7	94,8
Social responsibility	1	,4	,4	95,2
Accounting and Stock Exchange issues	1	,4	,4	95,6
Marketing	1	,4	,4	95,9
Musical synthesis	1	,4	,4	96,3
Foreign language	1	,4	,4	96,7
Certification in computers	1	,4	,4	97,0
Information systems	1	,4	,4	97,4
ECDL	1	,4	,4	97,8
Clothes	1	,4	,4	98,2
Fashion studies	1	,4	,4	98,5
Continuing education	1	,4	,4	98,9
Internet services	1	,4	,4	99,3
Computers	2	,7	,7	100,0
Total	271	100,0	100,0	

**Appendix D**  
**RESEARCH SCOPE AND**  
**LETTER OF CONFIDENTIALITY**



## Research scope and letter of confidentiality

To whom it may concern

Inevitably, nowadays more than any other periods of time the estimate of human resources as a dominant driver of the development of enterprises and organizations emerges as necessary and urgent. The rapid obsolescence of knowledge and skills combined with technological and social changes show off the importance of continuing education, training and learning for all employees as individuals and as members of the same team in the frame of the enterprise or organization to which they belong to.

The survival and development of enterprises and organizations in the recent economic crisis and the shortage of financial resources transfer the interest of people from money to knowledge as a safe means to the development of competitive advantage. Knowledge is closely connected not only to learning but also to scientific research, the value of which is often devaluated by ignoring its capability of providing essential knowledge which is necessary for practice.

In my point of view, in order knowledge to be useful should be supported from the beliefs and experiences of the world of entrepreneurs and organizations.

This research study is being accomplished under the supervision of Dr. Adamantios Papastamatis, Associate Professor in the department of Educational and Social Policy, University of Macedonia.

Your participation would be highly appreciated and would be helpful to the fulfillment of my thesis. Research results would be available to everyone being interested in them.

The issues of confidentiality and anonymity are important things to our cooperation to which I would be seriously committed.

With the certainty that your responses would be tied in your real points of view, I would like to thank you in advance.

Yours faithfully,  
Stella Giossi

**Appendix E**  
**INTERVIEW PROTOCOL**

## Interview protocol

### **General information:**

Business activity

Position (Details about the organization chart/Main responsibilities)

Duration of recent employment

Educational status

Implementation of any quality management system

### **Main questions on key issues**

#### **Key issue: Corporate strategy/Culture of LL**

Is one of your HR practices the transfer of knowledge from the more experienced to less experienced employees?

Do you think that your colleagues are interested in participating in various learning activities?

Are you interested in participating in learning activities?

What are your preferable subjects?

How often do you take the initiative to participate in lifelong learning activities?

#### **Key issue: Learning in practice/Learning method**

Are you interested in the way learning takes place and especially, in regard to the learning method?

#### **Key issue: Quality of learning**

According to your point of view, what does determine the quality of learning activities?

- Place
- Time
- Duration
- Instructor
- Learning method
- Content
- Learning outcomes
- Evaluation

**Key issue: Enhancement of participation in lifelong learning activities**

How motivation to learn can be enhanced on your suggestion?

- Financial support
- Obligatory participation once a year
- Participation in e-learning activities

**Appendix F**  
**MAIN RESEARCH INSTRUMENT**  
**(LLEHUREDE Scale)**  
**IN GREEK**

## Ερευνητικό εργαλείο κύριας έρευνας: Κλίμακα ΔιΒιΜαΑΑΠ

Εκδοχή (Α): Στελέχη και Εργοδότες



Έρευνα για τη δια βίου μάθηση και τους ανθρώπινους πόρους (Α)

Εκφράστε το βαθμό διαφωνίας ή συμφωνίας σας, βάζοντας X στην αντίστοιχη επιλογή:

[1]= ΔΕ = Διαφωνώ Έντονα

[2]= Δ = Διαφωνώ

[3]= ΔΕΣ = Δεν Είμαι Σίγουρος-η

[4]= Σ = Συμφωνώ

[5]= ΣΑ = Συμφωνώ Απολύτως

	Παρακαλώ, επιλέξτε μόνο μία από τις πέντε επιλογές	ΔΕ 1	Δ 2	ΔΕΣ 3	Σ 4	ΣΑ 5
1	Η δια βίου μάθηση είναι να μαθαίνεις μέχρι την περίοδο της συνταξιοδότησης.					
2	Η δια βίου μάθηση σχετίζεται με τη μάθηση που βασίζεται στην εργασία (δουλειά).					
3	Βασικός σκοπός της δια βίου μάθησης είναι: α) να βελτιώνει τη γνώση στα πλαίσια μιας προσωπικής, πολιτικής, κοινωνικής, και σχετικής με την απασχόληση αντίληψης.					
4	Βασικός σκοπός της δια βίου μάθησης είναι: α) να βελτιώνει τις δεξιότητες στα πλαίσια μιας προσωπικής, πολιτικής, κοινωνικής, και σχετικής με την απασχόληση αντίληψης.					
5	Βασικός σκοπός της δια βίου μάθησης είναι: α) να οδηγεί σε αλλαγή συμπεριφοράς μετά τη βαθύτερη κατανόηση που συντελείται με την ολοκλήρωση της δραστηριότητας μάθησης.					
6	Η δια βίου μάθηση περιλαμβάνει την άτυπη και μη τυπική μάθηση ή με άλλα λόγια την ελεύθερη, επαγγελματική και με κοινωνικές διαστάσεις μάθηση.					
7	Είμαι υπεύθυνος για την επαγγελματική μου κατάρτιση.					
8	Δουλεύω σκληρά (από μόνος/-η μου) με στόχο να αναπτύσσομαι συνεχώς επαγγελματικά, ώστε να διατηρήσω τη θέση εργασίας μου.					
9	Χρησιμοποιώ τις ικανότητές μου για να βοηθήσω στην επίτευξη των στόχων της επιχείρησης ή του οργανισμού τον οποίο διευθύνω.					
10	Η πεποίθησή μου είναι ότι η δια βίου μάθηση οδηγεί στην ευημερία (ευζωία) των συμμετεχόντων στη διαδικασία μάθησης.					
11	Η πεποίθησή μου είναι ότι η δια βίου μάθηση οδηγεί στην ικανοποίηση από την εργασία.					
12	Η πεποίθησή μου είναι ότι η δια βίου μάθηση οδηγεί σε καινοτόμες ιδέες.					

13	Η πεποίθησή μου είναι ότι η δια βίου μάθηση οδηγεί σε μεγαλύτερη εργασιακή απόδοση.					
14	Η πεποίθησή μου είναι ότι η εμπλοκή σε δραστηριότητες δια βίου μάθησης ενδυναμώνουν το κίνητρο (παρακίνηση) για μάθηση.					
15	Η παροχή ποιοτικής δια βίου μάθησης απαιτεί πιστοποίηση.					
16	Η εταιρεία (ή ο οργανισμός) που διευθύνω έχει την πεποίθηση ότι η νέα γνώση δεν είναι απαραίτητη σε αυτούς που έχουν πλατιά εμπειρία.					
17	Η εταιρεία (ή ο οργανισμός) που διευθύνω προσφέρει ευκαιρίες μάθησης στους εργαζομένους της, τις οποίες χρηματοδοτεί στο μεγαλύτερο βαθμό (π.χ. μέσω προγραμμάτων της Ευρωπαϊκής Ένωσης, ΟΑΕΔ/ΛΑΕΚ κ.ά.)					
18	Η εταιρεία (ή ο οργανισμός) που διευθύνω έχει τη δέσμευση να φροντίζει για τη βελτίωση της απόδοσης των εργαζομένων της, ενισχύοντας τη συμμετοχή τους σε προγράμματα κατάρτισης για την απόκτηση γνώσεων, δεξιοτήτων, ικανοτήτων και αλλαγής συμπεριφοράς.					
19	Η εταιρεία (ή ο οργανισμός) που διευθύνω έχει θετική στάση απέναντι στη δια βίου μάθηση.					
20	Η εταιρεία (ή ο οργανισμός) που διευθύνω προσπαθεί να κάνει τη μάθηση προσβάσιμη σε όλους.					
21	Η εταιρεία (ή ο οργανισμός) που διευθύνω θεωρεί τους εργαζόμενους ως σπουδαίο κεφάλαιο (οι εργαζόμενοι αποτελούν τη δύναμή της).					
22	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω θεωρεί ότι η στρατηγική δια βίου μάθησης είναι στρατηγική που δημιουργεί αξία.					
23	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω επενδύει σε κατάρτιση, γιατί πιστεύει ότι αυτή είναι απαραίτητη στην απόκτηση ανταγωνιστικού πλεονεκτήματος.					
24	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω έχει κοινωνική ευθύνη, πράγμα που φαίνεται από την εκπαιδευτική πολιτική της.					
25	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω πιστεύει ότι η γνώση είναι πρωταρχικής σημασίας, οπότε η διάχυσή της είναι πολύτιμη.					
26	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω αμείβει τη συμμετοχή μας σε εκπαιδευτικά προγράμματα χρήσιμα για την αύξηση της απόδοσής μας.					
27	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω αξιολογεί τις εκπαιδευτικές ανάγκες των εργαζομένων, πριν επιτρέψει τη συμμετοχή τους σε οποιοδήποτε εκπαιδευτικό πρόγραμμα.					
28	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω εξετάζει τα οφέλη από τη συμμετοχή των εργαζομένων της σε εκπαιδευτικά προγράμματα.					

29	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω εξετάζει, μετά το τέλος του προγράμματος, τα οφέλη σε σχέση με το κόστος της συμμετοχής των εργαζομένων της σε εκπαιδευτικά προγράμματα.					
30	Η εταιρεία (ή ο οργανισμός) την οποία διευθύνω μετρά τα αποτελέσματα από τη συμμετοχή μας σε μαθησιακές δραστηριότητες, τα οποία ελέγχονται από τον προϊστάμενο ή τον υπεύθυνο της ομάδας μας.					
31	Η εταιρεία (ή ο οργανισμός) που διευθύνω αξιολογεί εάν τα αποτελέσματα των εκπαιδευτικών προγραμμάτων (ή άλλων μαθησιακών δραστηριοτήτων) συμφωνούν με τους εκπαιδευτικούς στόχους που θέτει αυτός που τα παρέχει.					
32	Προτιμώ να μαθαίνω μέσω της επίλυσης προβλημάτων.					
33	Προτιμώ την αυτοδιαχειριζόμενη μάθηση (δηλαδή να διοικώ εγώ ότι σχετίζεται με τη μάθησή μου).					
34	Προτιμώ να θέτω τους προσωπικούς μου μαθησιακούς στόχους κατά τη διαδικασία μάθησης, ακόμη και αν αυτοί είναι διαφορετικοί από τους στόχους που έχουν οι άλλοι συμμετέχοντες (στην ομάδα που μαθαίνουμε μαζί).					
35	Θεωρώ τις δραστηριότητες της τυπικής εκπαίδευσης π.χ. σπουδές σε σχολεία, πανεπιστήμια κ.λ.π., ως εποικοδομητικές, αναγκαίες και όχι ως απολαυστικές μαθησιακές δραστηριότητες.					
36	Προτιμώ τη μάθηση μέσω των κοινωνικών σχέσεων ή δικτύων χωρίς κανενός είδους διάκριση (σε σχέση με τους συμμετέχοντες).					
37	Προτιμώ τη μάθηση διαμέσου των δραστηριοτήτων που αναπτύσσουν την κριτική σκέψη.					
38	Όταν επιλέγεται ως μέθοδος μάθησης η συζήτηση, η δράση ή το παίξιμο ρόλων προσπαθώ να συμμετέχω ενεργά εκφράζοντας τα συναισθήματά μου.					
39	Σε κάθε μαθησιακή μου δραστηριότητα έχω την επιθυμία να εκφράζω τα συναισθήματά μου, γιατί θέλω να συμμετέχω ενεργά.					
40	Προσποιούμαι ελαφρά ότι λειτουργώ διαδραστικά (ότι δηλαδή ενεργώ, επηρεάζω και επηρεάζομαι από τους άλλους) όταν μαθαίνω μαζί με άλλους, ενώ κρύβω τα πραγματικά μου συναισθήματα.					
41	Ικανοποιούμαι συναισθηματικά όταν μεταδίδω τις γνώσεις μου για αρκετό διάστημα σε κάποιον με λιγότερη πείρα και γνώσεις, γιατί έτσι έχω την ευκαιρία να τον βοηθήσω να αναπτύξει τα ταλέντα του.					
42	Αρνούμαι να εκφράσω τα συναισθήματά μου, όταν συμμετέχω σε μαθησιακή δραστηριότητα, όπως σε ενεργητική μάθηση (δηλαδή μαθαίνω κάνοντας) ή σε αναπαράσταση πραγματικών γεγονότων.					

**Παρακαλώ, συνεχίστε στο επόμενο μέρος της έρευνας, το οποίο αναφέρεται σε ατομικές πληροφορίες.**

**Συμπληρώστε με ιδιαίτερη προσοχή την ερώτηση No 17.**

## Ατομικές πληροφορίες

### 1. Τόπος Εργασίας

Σε ποια πόλη / περιοχή εργάζεστε;	
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### 2. Ηλικία

Σε ποια ηλικιακή ομάδα ανήκετε;

<input type="checkbox"/> 18-29ετών	<input type="checkbox"/> 30-39ετών	<input type="checkbox"/> 40-49ετών	<input type="checkbox"/> 50-59ετών	<input type="checkbox"/> 60-69ετών	<input type="checkbox"/> Πάνω από 70
------------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------	--------------------------------------

### 3. Φύλο

<input type="checkbox"/> Άνδρας	<input type="checkbox"/> Γυναίκα
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### 4. Μορφωτικό επίπεδο

<input type="checkbox"/> Χωρίς ειδικευση	<input type="checkbox"/> Χαμηλού επιπέδου ειδικευση (Δημοτικό/Γυμνάσιο)	<input type="checkbox"/> Απόφοιτος Λυκείου/Εξ.Γυμνασίου	<input type="checkbox"/> Μεσαίου επιπέδου ειδικευση (IEK κ.ά.)
<input type="checkbox"/> Υψηλού επιπέδου ειδικευση TEI	<input type="checkbox"/> Απόφοιτος Παν/μίου (ΑΕΙ)	<input type="checkbox"/> Κάτοχος Μεταπτυχιακού Τίτλου	<input type="checkbox"/> Άλλο, <b>Προσδιορίστε</b> .....

### 5. Επίπεδο σχέσεων. Στην παρούσα στιγμή, είστε...

<input type="checkbox"/> Ελεύθερος-η	<input type="checkbox"/> Σε σοβαρή σχέση/ <input type="checkbox"/> Παντρεμένος-η	<input type="checkbox"/> Σε σοβαρή σχέση/ <input type="checkbox"/> Παντρεμένος-η με παιδί/παιδιά	<input type="checkbox"/> Σε διάσταση/ <input type="checkbox"/> Σε χηρεία/ <input type="checkbox"/> Χωρισμένος-η	<input type="checkbox"/> Σε διάσταση/ <input type="checkbox"/> Σε χηρεία/ <input type="checkbox"/> Χωρισμένος-η με παιδί/παιδιά
--------------------------------------	---	---	---	---

### 6. Η απασχόλησή σας αναφέρεται σε:

A. <input type="checkbox"/> Εταιρεία	B. <input type="checkbox"/> Άλλο, προσδιορίστε.....
--------------------------------------	---

### 7. Συγκεκριμένα, είστε:

<input type="checkbox"/> Απασχολούμενος σε ελληνική εταιρεία	<input type="checkbox"/> Απασχολούμενος σε πολυεθνική εταιρεία	<input type="checkbox"/> Απασχολούμενος σε οικογενειακή επιχείρηση
<input type="checkbox"/> Απασχολούμενος σε δική σας επιχείρηση	<input type="checkbox"/> Αυτοαπασχολούμενος/Ελεύθερος επαγγελματίας	<input type="checkbox"/> Συνταξιούχος με άτυπη ή ειδική σχέση εργασίας

### 8. Ο τομέας της επιχείρησης που ανήκετε είναι:

<input type="checkbox"/> Δημόσιος	<input type="checkbox"/> Ιδιωτικός	<input type="checkbox"/> Άλλο, προσδιορίστε .....
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### 9. Αντικείμενο δραστηριότητας της επιχείρησης στην οποία ανήκετε:

<input type="checkbox"/> παροχή υπηρεσιών	<input type="checkbox"/> παραγωγή προϊόντων	<input type="checkbox"/> μικτή δραστηριότητα - παραγωγή & εμπορία προϊόντων	<input type="checkbox"/> σύνθετη δραστηριότητα -παροχή υπηρεσιών & εμπορία προϊόντων
---	---	---	--

### Ποιο το είδος των προϊόντων που παράγει ή εμπορεύεται η εταιρεία:

<input type="checkbox"/> προσδιορίστε.....
--

### Ποιο το είδος των υπηρεσιών που παρέχει η εταιρεία ή εσείς ο ίδιος-α:

<input type="checkbox"/> προσδιορίστε.....
--

### 10. Ποιο το θέμα της θέσης εργασίας σας στη συγκεκριμένη εταιρεία:

<input type="checkbox"/> Διοικητικά θέματα	<input type="checkbox"/> Οικονομικά θέματα	<input type="checkbox"/> Παραγωγή	<input type="checkbox"/> Πληροφορική-Τεχνολογία	<input type="checkbox"/> Υποστηρικτικές Υπηρεσίες	<input type="checkbox"/> Εκπαίδευση/Κατάρτιση
<input type="checkbox"/> Προσωπικό	<input type="checkbox"/> Ποιότητα	<input type="checkbox"/> Πωλήσεις	<input type="checkbox"/> Μάρκετινγκ	<input type="checkbox"/> Συμβουλευτική	<input type="checkbox"/> Άλλο, <b>προσδιορίστε</b> .....

**11. Η μορφή της επιχείρησης που ανήκετε είναι:**

<input type="checkbox"/> Ατομική Επιχείρηση	<input type="checkbox"/> Επιχείρηση Περιορισμένης Ευθύνης (ΕΠΕ)	<input type="checkbox"/> Ανώνυμη Εταιρεία (ΑΕ)	<input type="checkbox"/> Ομόρρυθμη (ΟΕ) ή Ετερόρρυθμη Επιχείρηση (ΕΕ)	<input type="checkbox"/> Φορέας Δημοσίου
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**12. Στη επιχείρηση στην οποία ανήκετε υπάρχει τμήμα ή υπεύθυνος για την εκπαίδευση ή την ανάπτυξη των ανθρώπινων πόρων (προσωπικού);**  ΟΧΙ  ΝΑΙ. Αν ΝΑΙ, γράψτε το πώς ονομάζεται το τμήμα ή ο υπεύθυνος .....

**13. Μέγεθος επιχείρησης**

<input type="checkbox"/> λιγότερο από 10 άτομα Συγκεκριμένα:	<input type="checkbox"/> λιγότερο από 50 άτομα Συγκεκριμένα:	<input type="checkbox"/> λιγότερο από 250 άτομα Συγκεκριμένα:	<input type="checkbox"/> περισσότερο από 250 Συγκεκριμένα:
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**14. Θέση ευθύνης που κατέχετε στην εταιρεία:**

<input type="checkbox"/> Γεν. Διευθυντής	<input type="checkbox"/> Αναπλ. Διευθυντής	<input type="checkbox"/> Υποδιευθυντής	<input type="checkbox"/> Διευθυντής Τμήμ.
<input type="checkbox"/> Διευθυντής Γραμ.	<input type="checkbox"/> Προϊστάμενος	<input type="checkbox"/> Υπάλληλος	<input type="checkbox"/> Σύμβουλος
<input type="checkbox"/> Εξωτ. Συνεργάτης	<input type="checkbox"/> Μέτοχος	<input type="checkbox"/> Εργοδότης	<input type="checkbox"/> Άλλο, προσδιορίστε.....

**15. Μορφή σύμβασης εργασίας**

<input type="checkbox"/> Μόνιμου ή αορίστου χαρακτήρα	<input type="checkbox"/> Ορισμένου χρόνου και διάρκειας	<input type="checkbox"/> Εποχιακής εργασίας
<input type="checkbox"/> Μειωμένου ωραρίου	<input type="checkbox"/> Ειδικού τύπου σύμβαση/συμφωνητικό	<input type="checkbox"/> Άλλο, προσδιορίστε .....

**16. Διάρκεια απασχόλησης**

**Πόσο καιρό εργάζεστε στη συγκεκριμένη εταιρεία/ή είστε αυτοαπασχολούμενος-η;**

<input type="checkbox"/> Λιγότερο από 1 έτος	<input type="checkbox"/> από 1 έως 4 έτη	<input type="checkbox"/> από 5 έως 9 έτη
<input type="checkbox"/> από 10 έως 14 έτη	<input type="checkbox"/> από 15 έως 19 έτη	<input type="checkbox"/> περισσότερο από 20 έτη

**17. Τα τελευταία 3 χρόνια συμμετείχατε σε:**

<b>Σεμινάρια</b> <input type="checkbox"/> ΝΑΙ <input type="checkbox"/> ΟΧΙ	Αν ΝΑΙ, προσδιορίστε το θέμα του τελευταίου σεμιναρίου .....	Σε αυτό, η χρησιμοποιούμενη μέθοδος διδασκαλίας ήταν: <input type="checkbox"/> διάλεξη <input type="checkbox"/> συζήτηση <input type="checkbox"/> παίξιμο ρόλων <input type="checkbox"/> άλλο, προσδιορίστε.....	1= διαφωνώ έντονα, 2= διαφωνώ, 3= δεν είμαι σίγουρος-η, 4= συμφωνώ, 5= συμφωνώ απολύτως. ----- Το τελευταίο σεμινάριο: <b>α) Επηρέασε θετικά την αυτοεκτίμησή μου</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> ----- <b>β) Βοήθησε στην επαγγελματική μου ανάπτυξη</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> ----- <b>γ) Βοήθησε στο να κάνω καλύτερα τη δουλειά μου</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> ----- <b>δ) Βοήθησε στην προσωπική μου ανάπτυξη</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> ----- <b>ε) Ενίσχυσε την επιθυμία μου για επιπλέον μάθηση</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>
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<p><b>Εκπαιδευτικά προγράμματα / Προγράμματα κατάρτισης</b>  <input type="checkbox"/> ΝΑΙ <input type="checkbox"/> ΟΧΙ</p>	<p>Αν <b>ΝΑΙ</b>, προσδιορίστε το θέμα του τελευταίου προγράμματος  .....</p>	<p>Σε αυτό, η χρησιμοποιούμενη μέθοδος διδασκαλίας ήταν:  <input type="checkbox"/> διάλεξη  <input type="checkbox"/> συζήτηση  <input type="checkbox"/> παίξιμο ρόλων  <input type="checkbox"/> άλλο,  <b>προσδιορίστε</b>.....</p>	<p>1= διαφωνώ έντονα,  2= διαφωνώ,  3= δεν είμαι σίγουρος-η,  4= συμφωνώ,  5= συμφωνώ απολύτως.</p> <p>-----</p> <p>Το τελευταίο πρόγραμμα:  <b>α) Επηρέασε θετικά την αυτοεκτίμησή μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>β) Βοήθησε στην επαγγελματική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>γ) Βοήθησε στο να κάνω καλύτερα τη δουλειά μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>δ) Βοήθησε στην προσωπική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>ε) Ενίσχυσε την επιθυμία μου για επιπλέον μάθηση</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p>
<p><b>Ημερίδες</b>  <input type="checkbox"/> ΝΑΙ <input type="checkbox"/> ΟΧΙ</p>	<p>Αν <b>ΝΑΙ</b>, προσδιορίστε το θέμα της τελευταίας ημερίδας  .....</p>	<p>Σε αυτήν, η χρησιμοποιούμενη μέθοδος παρουσίασης ήταν:  <input type="checkbox"/> διάλεξη  <input type="checkbox"/> συζήτηση  <input type="checkbox"/> ενισχυμένη παρουσίαση  <input type="checkbox"/> άλλο,  <b>προσδιορίστε</b>.....</p>	<p>1= διαφωνώ έντονα,  2= διαφωνώ,  3= δεν είμαι σίγουρος-η,  4= συμφωνώ,  5= συμφωνώ απολύτως.</p> <p>-----</p> <p>Η τελευταία ημερίδα:  <b>α) Επηρέασε θετικά την αυτοεκτίμησή μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>β) Βοήθησε στην επαγγελματική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>γ) Βοήθησε στο να κάνω καλύτερα τη δουλειά μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>δ) Βοήθησε στην προσωπική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>ε) Ενίσχυσε την επιθυμία μου για επιπλέον μάθηση</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p>

<p><b>Λοιπές μαθησιακές δραστηριότητες</b>  <input type="checkbox"/> ΝΑΙ <input type="checkbox"/> ΟΧΙ</p>	<p>Αν <b>ΝΑΙ</b>, προσδιορίστε το <b>θέμα</b> της <b>τελευταίας δραστηριότητας</b>  .....</p>	<p>Η μαθησιακή δραστηριότητα αφορούσε  <input type="checkbox"/> κοινωνική δικτύωση (facebook, twitter)  <input type="checkbox"/> κοινωνική εκδήλωση  <input type="checkbox"/> συμμετοχή σε κλαδική ή άλλη έκθεση  <input type="checkbox"/> πλοήγηση στο διαδίκτυο  <input type="checkbox"/> άλλο,  <b>προσδιορίστε</b>.....</p>	<p><b>1=</b> διαφωνώ έντονα,  <b>2=</b> διαφωνώ,  <b>3=</b> δεν είμαι σίγουρος-η,  <b>4=</b> συμφωνώ,  <b>5=</b> συμφωνώ απολύτως.</p> <hr/> <p>Η τελευταία μαθησιακή δραστηριότητα:  <b>α) Επηρέασε θετικά την αυτοεκτίμησή μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <hr/> <p><b>β) Βοήθησε στην επαγγελματική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <hr/> <p><b>γ) Βοήθησε στο να κάνω καλύτερα τη δουλειά μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <hr/> <p><b>δ) Βοήθησε στην προσωπική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <hr/> <p><b>ε) Ενίσχυσε την επιθυμία μου για επιπλέον μάθηση</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p>
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18. Η επιχείρησή σας κάνει εξαγωγές  ΟΧΙ  ΝΑΙ

**Σας ευχαριστώ πολύ για τη συμμετοχή σας, για το χρόνο σας και ιδιαίτερα για την υπομονή που δείξατε για την ολοκλήρωση του ερωτηματολογίου.**

## Εκδοχή (B): Εργαζόμενοι



**Έρευνα για τη δια βίου μάθηση και τους ανθρώπινους πόρους (B)**  
**Εκφράστε το βαθμό διαφωνίας ή συμφωνίας σας, βάζοντας X στην αντίστοιχη επιλογή:**

[1]= ΔΕ = Διαφωνώ Έντονα

[2]= Δ = Διαφωνώ

[3]= ΔΕΣ = Δεν Είμαι Σίγουρος

[4]= Σ = Συμφωνώ

[5]= ΣΑ = Συμφωνώ Απολύτως

	Παρακαλώ, επιλέξτε μόνο μία από τις πέντε επιλογές	ΔΕ 1	Δ 2	ΔΕΣ 3	Σ 4	ΣΑ 5
1	Η δια βίου μάθηση είναι να μαθαίνεις μέχρι την περίοδο της συνταξιοδότησης.					
2	Η δια βίου μάθηση σχετίζεται με τη μάθηση που βασίζεται στην εργασία (δουλειά).					
3	Βασικός σκοπός της δια βίου μάθησης είναι: α) να βελτιώνει <b>τη γνώση</b> στα πλαίσια μιας προσωπικής, πολιτικής, κοινωνικής, και σχετικής με την απασχόληση αντίληψης.					
4	Βασικός σκοπός της δια βίου μάθησης είναι: α) να βελτιώνει <b>τις δεξιότητες</b> στα πλαίσια μιας προσωπικής, πολιτικής, κοινωνικής, και σχετικής με την απασχόληση αντίληψης.					
5	Βασικός σκοπός της δια βίου μάθησης είναι: α) να οδηγεί σε <b>αλλαγή συμπεριφοράς</b> μετά τη βαθύτερη κατανόηση που συντελείται με την ολοκλήρωση της δραστηριότητας μάθησης.					
6	Η δια βίου μάθηση περιλαμβάνει την άτυπη και μη τυπική μάθηση ή με άλλα λόγια την ελεύθερη, επαγγελματική και με κοινωνικές διαστάσεις μάθηση.					
7	Είμαι υπεύθυνος για την επαγγελματική μου κατάρτιση.					
8	Δουλεύω σκληρά (από μόνος/-η μου) με στόχο να αναπτύσσομαι συνεχώς επαγγελματικά, ώστε να διατηρήσω τη θέση εργασίας μου.					
9	Χρησιμοποιώ τις ικανότητές μου για να βοηθήσω στην επίτευξη των στόχων της επιχείρησης ή του οργανισμού στον οποίο ανήκω.					
10	Η πεποίθησή μου είναι ότι η δια βίου μάθηση οδηγεί στην ευημερία (ευζωία) των συμμετεχόντων στη διαδικασία μάθησης.					
11	Η πεποίθησή μου είναι ότι η δια βίου μάθηση οδηγεί στην ικανοποίηση από την εργασία.					
12	Η πεποίθησή μου είναι ότι η δια βίου μάθηση οδηγεί σε καινοτόμες ιδέες.					

13	Η πεποίθησή μου είναι ότι η δια βίου μάθηση οδηγεί σε μεγαλύτερη εργασιακή απόδοση.					
14	Η πεποίθησή μου είναι ότι η εμπλοκή σε δραστηριότητες δια βίου μάθησης ενδυναμώνουν το κίνητρο (παρακίνηση) για μάθηση.					
15	Η παροχή ποιοτικής δια βίου μάθησης απαιτεί πιστοποίηση.					
16	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω πιστεύει πως η νέα γνώση δεν είναι απαραίτητη σε αυτούς που έχουν πλατιά εμπειρία.					
17	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω προσφέρει ευκαιρίες μάθησης, τις οποίες χρηματοδοτεί στο μεγαλύτερο βαθμό (π.χ. μέσω προγραμμάτων της Ευρωπαϊκής Ένωσης, ΟΑΕΔ/ΛΑΕΚ κ.ά.)					
18	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω έχει τη δέσμευση να φροντίζει για τη βελτίωση της απόδοσης των εργαζομένων της, ενισχύοντας τη συμμετοχή τους σε προγράμματα κατάρτισης για την απόκτηση γνώσεων, δεξιοτήτων, ικανοτήτων και αλλαγής συμπεριφοράς.					
19	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω έχει θετική στάση απέναντι στη δια βίου μάθηση.					
20	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω προσπαθεί να κάνει τη μάθηση προσβάσιμη σε όλους.					
21	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω θεωρεί τους εργαζόμενους ως σπουδαίο κεφάλαιο (οι εργαζόμενοι αποτελούν τη δύναμή της).					
22	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω θεωρεί ότι η στρατηγική δια βίου μάθησης είναι στρατηγική που δημιουργεί αξία.					
23	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω επενδύει σε κατάρτιση, γιατί πιστεύει ότι αυτή είναι απαραίτητη στην απόκτηση ανταγωνιστικού πλεονεκτήματος.					
24	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω έχει κοινωνική ευθύνη, πράγμα που φαίνεται από την εκπαιδευτική πολιτική της.					
25	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω πιστεύει ότι η γνώση είναι πρωταρχικής σημασίας, οπότε η διάχυσή της είναι πολύτιμη.					
26	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω αμείβει τη συμμετοχή μας σε εκπαιδευτικά προγράμματα χρήσιμα για την αύξηση της απόδοσής μας.					
27	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω αξιολογεί τις εκπαιδευτικές ανάγκες μας, πριν επιτρέψει τη συμμετοχή μας σε οποιοδήποτε εκπαιδευτικό πρόγραμμα.					
28	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω εξετάζει τα οφέλη από τη συμμετοχή μας σε εκπαιδευτικά προγράμματα.					

29	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω εξετάζει μετά το τέλος του προγράμματος, τα οφέλη σε σχέση με το κόστος της συμμετοχής των εργαζομένων της σε εκπαιδευτικά προγράμματα.					
30	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω μετρά τα αποτελέσματα από τη συμμετοχή μας σε μαθησιακές δραστηριότητες, τα οποία ελέγχονται από τον προϊστάμενο ή τον υπεύθυνο της ομάδας μας.					
31	Η εταιρεία (ή ο οργανισμός) στην οποία ανήκω αξιολογεί εάν τα αποτελέσματα των εκπαιδευτικών προγραμμάτων (ή άλλων μαθησιακών δραστηριοτήτων) συμφωνούν με τους εκπαιδευτικούς στόχους που θέτει αυτός που τα παρέχει.					
32	Προτιμώ να μαθαίνω μέσω της επίλυσης προβλημάτων.					
33	Προτιμώ την αυτοδιαχειριζόμενη μάθηση (δηλαδή να διοικώ εγώ ότι σχετίζεται με τη μάθησή μου).					
34	Προτιμώ να θέτω τους προσωπικούς μου μαθησιακούς στόχους κατά τη διαδικασία μάθησης, ακόμη και αν αυτοί είναι διαφορετικοί από τους στόχους που έχουν οι άλλοι συμμετέχοντες (στην ομάδα που μαθαίνουμε μαζί).					
35	Θεωρώ τις δραστηριότητες της τυπικής εκπαίδευσης π.χ. σπουδές σε σχολεία, πανεπιστήμια κ.λ.π., ως εποικοδομητικές, αναγκαίες και όχι ως απολαυστικές μαθησιακές δραστηριότητες.					
36	Προτιμώ τη μάθηση μέσω των κοινωνικών σχέσεων ή δικτύων χωρίς κανενός είδους διάκριση (σε σχέση με τους συμμετέχοντες).					
37	Προτιμώ τη μάθηση διαμέσου των δραστηριοτήτων που αναπτύσσουν την κριτική σκέψη.					
38	Όταν επιλέγεται ως μέθοδος μάθησης η συζήτηση, η δράση ή το παίξιμο ρόλων προσπαθώ να συμμετέχω ενεργά εκφράζοντας τα συναισθήματά μου.					
39	Σε κάθε μαθησιακή μου δραστηριότητα έχω την επιθυμία να εκφράζω τα συναισθήματά μου, γιατί θέλω να συμμετέχω ενεργά.					
40	Προσποιούμαι ελαφρά ότι λειτουργώ διαδραστικά (ότι δηλαδή ενεργώ, επηρεάζω και επηρεάζομαι από τους άλλους) όταν μαθαίνω μαζί με άλλους, ενώ κρύβω τα πραγματικά μου συναισθήματα.					
41	41. Ικανοποιούμαι συναισθηματικά όταν μαθαίνω για αρκετό διάστημα από κάποιον έμπειρο γιατί έτσι έχω την ευκαιρία να αναπτύξω τα ταλέντα μου.					
42	Αρνούμαι να εκφράσω τα συναισθήματά μου, όταν συμμετέχω σε μαθησιακή δραστηριότητα, όπως σε ενεργητική μάθηση (δηλαδή μαθαίνω κάνοντας) ή σε αναπαράσταση πραγματικών γεγονότων.					

**Παρακαλώ συνεχίστε στο επόμενο μέρος της έρευνας, που αναφέρεται σε ατομικές πληροφορίες.**

**Συμπληρώστε με ιδιαίτερη προσοχή την ερώτηση Νο 17**

## Ατομικές πληροφορίες

### 1. Τόπος Εργασίας

Σε ποια πόλη / περιοχή εργάζεστε;	
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### 2. Ηλικία

Σε ποια ηλικιακή ομάδα ανήκετε;

<input type="checkbox"/> 18-29ετών	<input type="checkbox"/> 30-39ετών	<input type="checkbox"/> 40-49ετών	<input type="checkbox"/> 50-59ετών	<input type="checkbox"/> 60-69ετών	<input type="checkbox"/> Πάνω από 70
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### 3. Φύλο

<input type="checkbox"/> Άνδρας	<input type="checkbox"/> Γυναίκα
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### 4. Μορφωτικό επίπεδο

<input type="checkbox"/> Χωρίς ειδικευση	<input type="checkbox"/> Χαμηλού επιπέδου ειδικευση (Δημοτικό/Γυμνάσιο)	<input type="checkbox"/> Απόφοιτος Λυκείου/Εξ.Γυμνασίου	<input type="checkbox"/> Μεσαίου επιπέδου ειδικευση (IEK κ.ά.)
<input type="checkbox"/> Υψηλού επιπέδου ειδικευση TEI	<input type="checkbox"/> Απόφοιτος Παν/μίου (ΑΕΙ)	<input type="checkbox"/> Κάτοχος Μεταπτυχιακού Τίτλου	<input type="checkbox"/> Άλλο, <b>Προσδιορίστε</b> .....

### 5. Επίπεδο σχέσεων. Στην παρούσα στιγμή, είστε...

<input type="checkbox"/> Ελεύθερος-η	<input type="checkbox"/> Σε σοβαρή σχέση/ <input type="checkbox"/> Παντρεμένος-η	<input type="checkbox"/> Σε σοβαρή σχέση/ <input type="checkbox"/> Παντρεμένος-η με παιδί/παιδιά	<input type="checkbox"/> Σε διάσταση/ <input type="checkbox"/> Σε χηρεία/ <input type="checkbox"/> Χωρισμένος-η	<input type="checkbox"/> Σε διάσταση/ <input type="checkbox"/> Σε χηρεία/ <input type="checkbox"/> Χωρισμένος-η με παιδί/παιδιά
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### 6. Η απασχόλησή σας αναφέρεται σε:

A. <input type="checkbox"/> Εταιρεία	B. <input type="checkbox"/> Άλλο, προσδιορίστε.....
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### 7. Συγκεκριμένα, είστε:

<input type="checkbox"/> Απασχολούμενος σε ελληνική εταιρεία	<input type="checkbox"/> Απασχολούμενος σε πολυεθνική εταιρεία	<input type="checkbox"/> Απασχολούμενος σε οικογενειακή επιχείρηση
<input type="checkbox"/> Απασχολούμενος σε δική σας επιχείρηση	<input type="checkbox"/> Αυτοαπασχολούμενος/Ελεύθερος επαγγελματίας	<input type="checkbox"/> Συνταξιούχος με άτυπη ή ειδική σχέση εργασίας

### 8. Ο τομέας της επιχείρησης που ανήκετε είναι:

<input type="checkbox"/> Δημόσιος	<input type="checkbox"/> Ιδιωτικός	<input type="checkbox"/> Άλλο, προσδιορίστε .....
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### 9. Αντικείμενο δραστηριότητας της επιχείρησης στην οποία ανήκετε:

<input type="checkbox"/> παροχή υπηρεσιών	<input type="checkbox"/> παραγωγή προϊόντων	<input type="checkbox"/> μικτή δραστηριότητα - παραγωγή & εμπορία προϊόντων	<input type="checkbox"/> σύνθετη δραστηριότητα -παροχή υπηρεσιών & εμπορία προϊόντων
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### Ποιο το είδος των προϊόντων που παράγει ή εμπορεύεται η εταιρεία:

<input type="checkbox"/> προσδιορίστε.....
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### Ποιο το είδος των υπηρεσιών που παρέχει η εταιρεία ή εσείς ο ίδιος-α:

<input type="checkbox"/> προσδιορίστε.....
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### 10. Ποιο το θέμα της θέσης εργασίας σας στη συγκεκριμένη εταιρεία:

<input type="checkbox"/> Διοικητικά θέματα	<input type="checkbox"/> Οικονομικά θέματα	<input type="checkbox"/> Παραγωγή	<input type="checkbox"/> Πληροφορική-Τεχνολογία	<input type="checkbox"/> Υποστηρικτικές Υπηρεσίες	<input type="checkbox"/> Εκπαίδευση/Κατάρτιση
<input type="checkbox"/> Προσωπικό	<input type="checkbox"/> Ποιότητα	<input type="checkbox"/> Πωλήσεις	<input type="checkbox"/> Μάρκετινγκ	<input type="checkbox"/> Συμβουλευτική	<input type="checkbox"/> Άλλο, <b>προσδιορίστε</b> .....

**11. Η μορφή της επιχείρησης που ανήκετε είναι:**

<input type="checkbox"/> Ατομική Επιχείρηση	<input type="checkbox"/> Επιχείρηση Περιορισμένης Ευθύνης (ΕΠΕ)	<input type="checkbox"/> Ανώνυμη Εταιρεία (ΑΕ)	<input type="checkbox"/> Ομόρρυθμη (ΟΕ) ή Ετερόρρυθμη Επιχείρηση (ΕΕ)	<input type="checkbox"/> Φορέας Δημοσίου
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**12. Στη επιχείρηση στην οποία ανήκετε υπάρχει τμήμα ή υπεύθυνος για την εκπαίδευση ή την ανάπτυξη των ανθρώπινων πόρων (προσωπικού);**  ΟΧΙ  ΝΑΙ. Αν ΝΑΙ, γράψτε το πώς ονομάζεται το τμήμα ή ο υπεύθυνος .....

**13. Μέγεθος επιχείρησης**

<input type="checkbox"/> λιγότερο από 10 άτομα Συγκεκριμένα:	<input type="checkbox"/> λιγότερο από 50 άτομα Συγκεκριμένα:	<input type="checkbox"/> λιγότερο από 250 άτομα Συγκεκριμένα:	<input type="checkbox"/> περισσότερο από 250 Συγκεκριμένα:
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**14. Θέση ευθύνης που κατέχετε στην εταιρεία:**

<input type="checkbox"/> Γεν. Διευθυντής	<input type="checkbox"/> Αναπλ. Διευθυντής	<input type="checkbox"/> Υποδιευθυντής	<input type="checkbox"/> Διευθυντής Τμήμ.
<input type="checkbox"/> Διευθυντής Γραμ.	<input type="checkbox"/> Προϊστάμενος	<input type="checkbox"/> Υπάλληλος	<input type="checkbox"/> Σύμβουλος
<input type="checkbox"/> Εξωτ. Συνεργάτης	<input type="checkbox"/> Μέτοχος	<input type="checkbox"/> Εργοδότης	<input type="checkbox"/> Άλλο, προσδιορίστε.....

**15. Μορφή σύμβασης εργασίας**

<input type="checkbox"/> Μόνιμου ή αορίστου χαρακτήρα	<input type="checkbox"/> Ορισμένου χρόνου και διάρκειας	<input type="checkbox"/> Εποχιακής εργασίας
<input type="checkbox"/> Μειωμένου ωραρίου	<input type="checkbox"/> Ειδικού τύπου σύμβαση/συμφωνητικό	<input type="checkbox"/> Άλλο, προσδιορίστε .....

**16. Διάρκεια απασχόλησης**

**Πόσο καιρό εργάζεστε στη συγκεκριμένη εταιρεία/ή είστε αυτοαπασχολούμενος-η;**

<input type="checkbox"/> Λιγότερο από 1 έτος	<input type="checkbox"/> από 1 έως 4 έτη	<input type="checkbox"/> από 5 έως 9 έτη
<input type="checkbox"/> από 10 έως 14 έτη	<input type="checkbox"/> από 15 έως 19 έτη	<input type="checkbox"/> περισσότερο από 20 έτη

**17. Τα τελευταία 3 χρόνια συμμετείχατε σε:**

<p><b>Σεμινάρια</b> <input type="checkbox"/> ΝΑΙ <input type="checkbox"/> ΟΧΙ</p>	<p>Αν ΝΑΙ, προσδιορίστε το θέμα του τελευταίου σεμιναρίου .....</p>	<p>Σε αυτό, η χρησιμοποιούμενη μέθοδος διδασκαλίας ήταν:</p> <p><input type="checkbox"/> διάλεξη <input type="checkbox"/> συζήτηση <input type="checkbox"/> παίξιμο ρόλων <input type="checkbox"/> άλλο, προσδιορίστε.....</p>	<p>1= διαφωνώ έντονα, 2= διαφωνώ, 3= δεν είμαι σίγουρος-η, 4= συμφωνώ, 5= συμφωνώ απολύτως.</p> <p>----- Το τελευταίο σεμινάριο: <b>α) Επηρέασε θετικά την αυτοεκτίμησή μου</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>----- <b>β) Βοήθησε στην επαγγελματική μου ανάπτυξη</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>----- <b>γ) Βοήθησε στο να κάνω καλύτερα τη δουλειά μου</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>----- <b>δ) Βοήθησε στην προσωπική μου ανάπτυξη</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>----- <b>ε) Ενίσχυσε την επιθυμία μου για επιπλέον μάθηση</b> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p>
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<p><b>Εκπαιδευτικά προγράμματα / Προγράμματα κατάρτισης</b>  <input type="checkbox"/> ΝΑΙ <input type="checkbox"/> ΟΧΙ</p>	<p>Αν <b>ΝΑΙ</b>, προσδιορίστε το θέμα του τελευταίου προγράμματος  .....</p>	<p>Σε αυτό, η χρησιμοποιούμενη μέθοδος διδασκαλίας ήταν:  <input type="checkbox"/> διάλεξη  <input type="checkbox"/> συζήτηση  <input type="checkbox"/> παίξιμο ρόλων  <input type="checkbox"/> άλλο,  <b>προσδιορίστε</b>.....</p>	<p>1= διαφωνώ έντονα,  2= διαφωνώ,  3= δεν είμαι σίγουρος-η,  4= συμφωνώ,  5= συμφωνώ απολύτως.</p> <p>-----</p> <p>Το τελευταίο πρόγραμμα:  <b>α) Επηρέασε θετικά την αυτοεκτίμησή μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>β) Βοήθησε στην επαγγελματική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>γ) Βοήθησε στο να κάνω καλύτερα τη δουλειά μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>δ) Βοήθησε στην προσωπική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>ε) Ενίσχυσε την επιθυμία μου για επιπλέον μάθηση</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p>
<p><b>Ημερίδες</b>  <input type="checkbox"/> ΝΑΙ <input type="checkbox"/> ΟΧΙ</p>	<p>Αν <b>ΝΑΙ</b>, προσδιορίστε το θέμα της τελευταίας ημερίδας  .....</p>	<p>Σε αυτήν, η χρησιμοποιούμενη μέθοδος παρουσίασης ήταν:  <input type="checkbox"/> διάλεξη  <input type="checkbox"/> συζήτηση  <input type="checkbox"/> ενισχυμένη παρουσίαση  <input type="checkbox"/> άλλο,  <b>προσδιορίστε</b>.....</p>	<p>1= διαφωνώ έντονα,  2= διαφωνώ,  3= δεν είμαι σίγουρος-η,  4= συμφωνώ,  5= συμφωνώ απολύτως.</p> <p>-----</p> <p>Η τελευταία ημερίδα:  <b>α) Επηρέασε θετικά την αυτοεκτίμησή μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>β) Βοήθησε στην επαγγελματική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>γ) Βοήθησε στο να κάνω καλύτερα τη δουλειά μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>δ) Βοήθησε στην προσωπική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <p>-----</p> <p><b>ε) Ενίσχυσε την επιθυμία μου για επιπλέον μάθηση</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p>

<p><b>Λοιπές μαθησιακές δραστηριότητες</b>  <input type="checkbox"/> ΝΑΙ <input type="checkbox"/> ΟΧΙ</p>	<p>Αν <b>ΝΑΙ</b>, προσδιορίστε το <b>θέμα</b> της <b>τελευταίας δραστηριότητας</b>  .....</p>	<p>Η μαθησιακή δραστηριότητα αφορούσε  <input type="checkbox"/> κοινωνική δικτύωση (facebook, twitter)  <input type="checkbox"/> κοινωνική εκδήλωση  <input type="checkbox"/> συμμετοχή σε κλαδική ή άλλη έκθεση  <input type="checkbox"/> πλοήγηση στο διαδίκτυο  <input type="checkbox"/> άλλο,  <b>προσδιορίστε</b>.....</p>	<p><b>1=</b> διαφωνώ έντονα,  <b>2=</b> διαφωνώ,  <b>3=</b> δεν είμαι σίγουρος-η,  <b>4=</b> συμφωνώ,  <b>5=</b> συμφωνώ απολύτως.</p> <hr/> <p>Η τελευταία μαθησιακή δραστηριότητα:  <b>α) Επηρέασε θετικά την αυτοεκτίμησή μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <hr/> <p><b>β) Βοήθησε στην επαγγελματική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <hr/> <p><b>γ) Βοήθησε στο να κάνω καλύτερα τη δουλειά μου</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <hr/> <p><b>δ) Βοήθησε στην προσωπική μου ανάπτυξη</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p> <hr/> <p><b>ε) Ενίσχυσε την επιθυμία μου για επιπλέον μάθηση</b>  1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/></p>
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18. Η επιχείρησή σας κάνει εξαγωγές  ΟΧΙ  ΝΑΙ

**Σας ευχαριστώ πολύ για τη συμμετοχή σας, για το χρόνο σας και ιδιαίτερα για την υπομονή που δείξατε για την ολοκλήρωση του ερωτηματολογίου.**