Adult trainers' motivation for the participation in non formal education

Aikaterini Sotiropoulou [124]

Abstract

The purpose of the study is to detect the parameters of Greek reality related to the determination of the motives that stimulate adult educators to participate in continuing education, the estimation of their significance, their explanation and their connection with job satisfaction. The survey was conducted in a representative sample and applied in the prefecture of Ilia. For data collection a questionnaire of closed questions was compiled. The findings revealed that adult educators seek learning changes motivated by internal forces. Competition, rapid changes in the field of adult education and need for employability determine the motivators. The orientation towards learning correlates with the life cycle and the level of qualifications. Educators with low level of job satisfaction are motivated to a great extent by external factors. Contrary to this, those with high level of job satisfaction are motivated by internal forces. Recognition of performance and the feeling of job security form the intensity of motives. The survey results constitute a valuable input for the configuration of professional development strategies in favour of the educators themselves but more for the development and implementation of effective managerial policies on behalf of the educational organisations who occupy this group of professionals.

Key words: Adult educators, informal training, education motives, job satisfaction

1. Introduction

Adults' educators' training comprises a recent field of research in Greece. The educators of adults need training to ensure the quality and effectiveness of the offered training services. The adult's educator has to take action in a field that is constantly changing and meet the challenges of current reality that demands flexibility and adaptability in several fields. As an adult he brings in education formulated attitudes, life and training experiences (Athanasiou, 2006) and combines them with the

[124] Associate lecturer, Technological Educational Institute of Patras, Department of Informatic Applications in Management and Economy (Amaliada)

distinctiveness of the specific sector (secondary occupation, lack of professionalism, uncertainty, insecurity etc.). These constitute a complex blend of interaction that affect the participation motives and consequently the attitude at all stages of the learning process.

The survey tries to investigate and itemize the training motives of the adults' educators and measure the effects of job satisfaction on their formation. The survey results indicate how significant it is to know the motivation and its relation with job satisfaction as a valuable input for the configuration of professional development strategies in favour of the educators themselves but more for the development and implementation of effective managerial policies on behalf of the educational organisations who occupy this group of professionals. The ability of response by learning organisations such as educational organisations and their promptitude to incorporate the findings of similar surveys through training and professional development of their employees is not only needed but it also determines their further evolution and development in the diffusible uncertainty of the economic and social environment and the uncontrollable competition.

2. Literature review

2.1. Motives for involvement in adult education activities

Motive can be regarded as a deeper emotional impulse that motivates a person to behave and act in a certain way, to achieve a purpose (Bovee & Thrill, 1992; Wang & Wang, 2004). Systematic attempts have been conducted to interpret the motivation of adults to be involved in educational activities (Taylor, 2001) which have resulted in the formulation of multiple theories and research approaches. For Carre (2000) the logic of research about the motivation of adult learners is based on the phenomenon of excess demand for skills development. Ahl (2006) indicates three levels of factors that create motives: character - personality, status - location, structural – organic. Ryan & Deci (2000) distinguish the types of motivation between intrinsic and extrinsic. Houle (1961) concludes that there exist three groups of learners, goal, activity and learning oriented. Burgess (1971) concluded that there are seven factors-incentives: the desire for knowledge, personal achievement goals, social objectives, religious objectives achievement, escape, participation in social activities and compliance with formal requirements. Boshier (1971 in Cross, 1992) identified several correlations with Houle's

findings and added a new category; social welfare. For Morstain and Smart (1974 in Cross, 1992), adults seek training in order to develop social relationships, to meet the expectations that others have from them, to be useful to society, to achieve professional development, to escape and have new stimuli, to learn because they want to learn. The coincidence between Houle's three subgroups and Burgess's groups with the factors discovered by Morstain and Smart is apparent. Carp, Peterson, and Roelfs (1974 in Cross, 1992) based their study on the classification of Burgess and added two more, the desire for self accomplishment and the desire to acquire knowledge about culture and civilisation. Aslanian and Brickell (1980 in Cross, 1992) assumed that transitions to adult life requires from them to participate in learning activities in order to acquire knowledge missing which is needed in their new phase of life. Oaklief (1982 in Dolisso & Martin, 1999) found that adults participate in educational programmes not for financial gain but to acquire skills and more knowledge. Adults who consider learning as end in itself were intrinsically motivated; while those who were goal oriented were extrinsically motivated. Cervero (1988 in Hughes, 2005) presents five reasons why professionals choose to receive extra training: a) to maintain their skills, b) strengthen the likelihood that their clients will be better served, c) be prepared against challenges from colleagues, d) retain their identity in their profession, e) feel more secure in their profession. The reasons for participation can vary depending on the type of profession, the career and time presence in the profession.

2.2. Theories and models of interpretation of adult participation in educational activities

The typologies of motives have become the basis for formulating models and theories of interpretation and prediction of adult participation in education. The cost – benefit theory (Dhanidina & Griffith, 1975) proposes a rational model considering that the decision to obtain further education is a deliberate choice that resembles the decision-making process of an investor. Cohn and Hughes (1994) used a framework for the interpretation of the decision to participate in education based on an internal rate of return. According to the theory of reasoned action (Ajzen & Fishbein, 1980) the decision to participate is a function of individual and regulatory factors while the relative weight given to each factor varies depending on the situations and people. Miller (1967) understands the educational activity as an interaction between personal

needs and social structures; the participation is associated with the socio-economic status and the life cycle of the learner.

According to the expectancy - valence model, the anticipated benefit has two components, the expectation of personal success and the expectation that successful participation in the educational process will have positive effect (Rubenson, 1977, 1978 in Dollisso & Martin, 1999). The life transitions theory (Merriam, 2005) mentions that changes that occur during the life of the individual either voluntary or dependent on uncontrolled factors are affecting the education that each person seeks in order to meet new emerging situations and conditions. According to the psychological interaction model greater emphasis is given on the determinants deriving from the social environment of individuals (Darkenwald & Merriam, 1982). Merriam and Darkenwald introduced the concept of learning pressure, defining it as the point at which the environment of a person requires or encourages further learning.

According to Cross's (1981) chain of response model the decision of an adult to participate in an educational programme is not an individual act but comes as a result of a "chain reaction" towards the current psychological and environmental factors. The chain reaction starts from the trainee and gradually moves on to factors that have increased social and environmental character. The Interdisciplinary/sequential – specificity/time allocation/ life - span model (Smith Macaulay & Associates, 1980) is perhaps the most complete and comprehensive model focusing on several factors and social variables, personality traits, differences in time allocation. Smith and Theberge (1987) suggested the general activity model, making the assumption that people adapt to social and cultural environment. Models and theories provide important knowledge for understanding adult participation in educational activities. At the same time they confirm and elevate the complexity of participation as behaviour. What might motivate and stimulate the interest of each individual is different. The understanding of adult participation in education and training therefore requires a holistic approach.

2.3. Education and Job satisfaction

Job satisfaction is a pleasant emotional situation (Locke & Latham, 1990) led by the fluffiness of values at workplace. Vroom (1964) believes that is a function between perception and job instrumentality to ensure some desirable effects; a function of job valence. Herzberg (1959) distinguishes two different groups of factors related to job

satisfaction; the motivators and the hygiene factors. Spector (2000) believes that there are two groups of approaches, the global and facet approach. Job satisfaction can be extrinsic or intrinsic (Warr, 1987). Evans (1998) distinguishes the satisfactory situations from the factors that cause satisfaction calling them "job comfort" and "job fulfilment". Hoy and Miskel (1991) define job satisfaction in the field of education as an emotional condition of pleasure or displeasure.

The relation between education and job satisfaction isn't always steady (Ganzach, 2003; Verhofstadt & Omey, 2003) but most surveys indicate a positive relation. Better educated people are more likely to find more rewarding work and receive more satisfaction from their work (Ganzach, 2003). The acquisition of skills through training leads to increased professionalism whereas lack of it can lead to the decrease of job satisfaction (Wright & Davis, 2003). Well-trained people have certain expectations; work with professionalism while building their careers. Vocational training programmes for employees have a significant positive effect on job satisfaction (Hatcher, 1999). However, many researchers have detected a negative relation between education and job satisfaction (Clark & Oswald, 1996) while others have shown that education has no significant effect on job satisfaction (Lambert et al, 2001; Ting, 1997).

3. Methodology

The issue in this research study was developed around the drift: motives in education and job satisfaction of adult educators. The aim of the study is to detect the motives that stimulate adult educators to participate in continuing education, the estimation of their significance, their explanation and their association with job satisfaction. The study was based on quantitative analysis and specifically on survey. The answers to the research questions were given through the results of data processing. Data was collected using a structured questionnaire distributed to adult educators.

The population of the survey consists of adult educators registered members of certified adult educators in the prefecture of Ilia- Greece. Since the total number of the population was eighty, the research was carried out in the general population, so it has census characteristics. Only 64 out of 80 adult educators were surveyed, of whom 47 were male and 17 female. The 36.67% were between 30-40 years, 33.33% between 40-50, 21% between 50-60 years. The 24.19% had been involved in adult education for less than 5 years, 25.81% up to 10 years, 30.65% up to 15 years, 17.74% up to 20 years

and only one had experience for more than 20 years. The largest percentage of 54.7% belongs to positive and technological sciences, 16.6% has ICT background, 12.5% economy and administration background, 10.9% in teaching and psychology. The 50% are higher educated, 23.4% are graduates of technological education, 25% hold master degrees and only one holds a doctorate. All are professionals in the subject area they teach, and for all adult education is second occupation. The 59.4% of them have attended up to three training courses, 18,8% up to 5 courses, and 21.9% participated in up to 10 training programmes.

For data collection a questionnaire with closed questions was used. The questionnaire consisted of three sections: the first one concerned the measurement of job satisfaction, the second measured the motives and the third section recorded the demographic characteristics. For the measurement of job satisfaction the Warr, Cook & Wall's tool "Job satisfaction – JB" (1979) was used. It consists of 15 suggestions - questions and counts three dimensions of job satisfaction: *"the framework and working conditions"*, *"the recognition by superiors and colleagues"*, *"the system meritocracy"*. Employee Lifelong Learning Scale - ELLS of Gardiner and Kline (2007) was used to measure the motives. It consists of 17 suggestions - questions that correspond to three categories of people *"passionate visionary"*, *"ambitious"*, and *"frightened"*.

4. Results

The main items that force adult educators to be educated, according to the ELLS scale are: *"I would like to learn to be the best I can be in my chosen field"*(M=4.41), *"I would like to get ahead in my work"* (M= 4, 22), *"I would like to be active in my work for many years"* (M= 4.19), *"I learn things that I can apply to work just because I like to learn"* (M= 4.02).

Factor analysis based on Maximum Likelihood Factor Analysis confirmed Gardiner and Kline's three factors (passionate visionary, ambitious, frightened) with the exception of two items (Table 1). The item *"I learn when I have specific goals and objectives"* was dropped because it had value less than 0.32. The item *"I like to work where employment is regular and secure"* was categorised in a different factor. The difference may be explained by the fact that the ELLS tool has been developed in a country with different conditions of employment, different social structures and culture and has been applied to a different professional group.

Rotation Method: Varimax with Kaiser Normalization.

The size of the sample, even small, was examined for size adequacy and found sufficient. MacCallum et al (1999) suggest that definite recommendations regarding sample size in factor analysis are based upon the misconception that the minimum sample or N:p ratio for meaningful factor analysis is invariant across studies. They suggest that the minimum sample size depends upon the nature of the data itself, its "strength". Strong data is data in which item communalities are consistently high, factors exhibit high loadings on a substantial number of items (at least three or four) and the number of factors is small. Empirical evidence supports the argument that sample size is less important where data are sufficiently strong. Obsorne and Costello (2004) found that sample size had less of an impact in factor analysis when there were fewer variables (items) and that both N and N:p had a larger effect on the "goodness" of a factor analysis when item loadings were small. Similarly MacCallum et al (1999) reported that when data are strong the impact of sample size is greatly reduced and concluded that factor analysis can produce correct solutions. Costello and Osborne (2005) also noted that uniformly high communalities are unlikely to occur in real data and that more common magnitudes in social science research are in the order of 0.40 to 0.70. As communalities become lower the size of the sample has a grater impact upon factor analysis outcomes. In this study the data are fairly strong. All three factors are fairly determined (over three), the communalities exceed 0.611 on average. These in combination with the fact that the Bartlett test of sphericity is significant (0.000), the Keiser-Meyer-Olkin measure of sampling adequacy is greater than 0.6 (0.726) indicated that the sample size was sufficient for factor analysis.

Factor analysis revealed that three factors explain the 48.37% of the variance of the variables of motives (23.90% for the first, 13.09% for the second and 11.38% for the third), value that can be considered as significant. The reliability index «Cronbach a» showed that for all three factors reliability was at satisfactory levels, 0.865 for the passionate visionary, 0.791 for the fearful Instrumental and 0.718 for ambitious instrumental.

The correlation and analysis by factor was attempted to find possible association between adult educators' demographic characteristics and motives. Gender seems to

affect a number of motivators. Females (M= 4.06) seem to be more passionate about learning than males (M= 3.26). They also want to learn things because they are applicable to their work or because they just like to learn (M= 4.4 versus M=3.87 for males). Females (M=4) are motivated to be educated more than men (M=3.40) because they feel very personally involved in their work.

Age affects positively the motives *"I learn because I am committed to my career"*, *"I have a passion for learning"*, *"I would like to be remembered for what I have done in my work"*. Older people pay more attention to these factors (Spearman correlations: 0.339, 0.354, 0.418, statistically significant for a = 0.01). All educators, regardless of their age, are educated because *"they would like to be active in their work for many years"*, *"they learn things that they can apply to work just because they like to learn"*, *"they would like to learn to be the best they can in their chosen field"*. The youngest educators are educated because they have specific goals and objectives, and the older get educated to remain employable in their current organisation or learn new skills in order to keep their jobs. Factors such as *"I learn because I am afraid of losing my job"* or *"I would like to be promoted"* don't seem to concern any particular age. Both young and older educators have aspirations about working where their work is more regular and secure.

A lot of motivators vary depending on the level of education. Graduates from technological institutes (M=4.47) are motivated more than the higher educated (M=3.94) and master graduated (M=3.69) to learn things that they can apply to work just because they like to learn. They are also motivated to learn to remain employable in their current organisation (M=3.07) compared to higher educated (M=2.87) and master holders (M=2.75). They seek to learn new skills in order to keep their job (M= 3.60) compared to higher educated (M=3.22) and master holders (M=2.50).

Regarding the correlation between motives and specialisation, there are significant differences. Adult educators who come from the areas of legal and political sciences, and information technology show less significance to factors such as *"I learn because I am committed to my career"*, *"I would like to be active in my work for many years"*, *"I would like to work for as long as possible"*, *"I would like to learn to be the best I can in my chosen field"*, *"I would like to be remembered for what I have done in my work"*. Factors such as *"I learn to remain employable in my current organisation"*, *"I learn*

new skills in order to keep my job" affect more adult educators who come from the science of economy and administration. For all adult educators, regardless of specialisation, the motive *"I would like to get ahead in my work"* remains significant, since in all categories the average exceed 4.00.

Some of the motives vary according to the years involved in the field of adult education. The motive *"I would like to be active in my work for many years"* correlates positively with the years involved (spearman correlation 0.341, statistically significant for a = 0.01). The factor *''I learn because I would like to work for as long as possible"* correlates positively with the years involved in adult education field (spearman correlation 0.297, statistically significant for a = 0.05). The significance of motives correlating with the factor *"I learn because I need to in order to achieve my career goals"* is rising as the years involved are increasing (spearman correlation 0.311, statistically significant for a = 0.05).

The significance of motives varies depending on the involvement of educators in previous training. The more training sessions they had attended the more significant motives such as *"I learn because I am committed to my career"*, *"I have a passion for learning"*, *"I would like to be active in my work for many years"*, *"I would like to work for as long as possible"*, *"I would like to learn to be the best I can in my chosen field"* are considered. The number of previous training courses did not have the same impact on motivators related to fear. The more courses they have attended the less significant the motive *"I learn because I am afraid of losing my job"* is considered.

A general assessment of the research findings indicate that there is a significant correlation between different aspects of job satisfaction and the factors that motivate adult educators towards learning. To measure the correlation between the variables of job satisfaction and training motives, spearman coefficient of correlation was used because some parametric assumptions (normality and linearity) were not confirmed from the statistical analysis. On the other hand, all the correlated variables were distinct.

The adult educators involved in the survey are motivated to learn because they are committed to their career. They are satisfied from recognition of their performance, from their recognition by their superiors, their reward and the way they are managed (r=0.362, r=0.416, r=0.359, r=0.375, statistical significant for a=0.01).

Satisfaction from the recognition of performance, the recognition by the superiors, the awards, the chances of promotion, the management style and from the chances of evolution is positively correlated with the motive *" I would like to be active in my work for many years"* (r= 0.501, r=0.430, r=0.373, r=0.401, r=0.416, r=0.422, statistically significant for a = 0.01). Satisfaction deriving from the recognition by the superiors and from management style positively influences the motive of training *"I would like to work for as long as possible"* (r= 0.432, r=0.444, statistically significant for a = 0.01). Educators are positively motivated to learn because they feel very personally involved in their work or they want to be the best they can in their chosen field as they feel that they are recognised for their efforts by their superiors (r= 0.360, r=0.347, statistically significant for a = 0.01).

Satisfaction related to the working hours is negatively correlated with the motive *"I learn to remain employable in my current organisation"* (r= -0.408, statistically significant for a = 0.01). All variables of job satisfaction scale are correlated negatively with the motives *"I have a passion for learning"* and *"I would like to be promoted"*.

The motives *"I learn new skills in order to keep my job"* or *"I learn because I need to in order to achieve my career goals"* are positively correlated with satisfaction deriving from the managing style (r=0.354, r=0.322 statistically significant for a = 0.01 and a = 0.05). The adult educators who are satisfied with their working conditions are more motivated to be educated because they need to feel safe (r= 0.311, statistically significant for a = 0.05).

From the conducted analysis concerning the correlation between the factors of job satisfaction and the factors of motives significant positive correlations were revealed (Pearson coefficient of correlation) both between the factor *"passionate visionary"* and *"satisfaction from the framework and working conditions"* (r=0.319,) and between the *"passionate visionary"* and *"satisfaction with the meritocracy of system"* (r=0.365).

By applying the method of multiple regression, fulfilling all the necessary assumptions (linearity, normality, homoscedasticity, independence of the residuals, regularity of the residuals) it was shown that the factors of job satisfaction are able to explain the 0.446 (coefficient of determination R^2) of the variation of the value of the factor *"passionate visionary"*. It practically means that the 44.6% of the motivation of the *"passionate visionary"* adult educator can be explained by the factors of job satisfaction. From the

regression analysis it is also shown, after the relevant tests of statistical significance, that the only factor that explains the motives of the *"passionate visionary"* is the satisfaction by the meritocracy of system (beta coefficient 0.480, probability less than 0.05). Adult educators' satisfaction from the meritocracy of the system, meaning the recognition of their performance and the security of their work, contribute to the amount of 0.476 of the formation of the incentives that define the profile of the *"passionate visionary"*.

5. Discussion

Almost all the participants in the survey have shown strong incentives to participate in training actions. They are being consciously involved in learning and have their own inner intentions to be educated. All the incentives mainly derive from the characteristics of their personality (Ahl, 2006). Factors associated with internal motives have higher average levels, indicating that adult educators are motivated to pursue learning changes motivated by intrinsic rather than extrinsic motives (Ryan & Deci, 2000). Women seem to be influenced by intrinsic factors with greater intensity than men. On the contrary, motives related to extrinsic motivation were not so important. Training is for adult educators an additional source of income rather than their main profession. They have been involved in various sciences, and they are usually occupied in other fields feeling themselves members of other professions.

Age considerably differentiates the motives for education. Older educators are motivated to a greater extent endogenously compared to the younger. The competition and rapid changes in the field of adult education force the educators to be educated in order to remain employable; this trend confirms the life transition theory (Merriam, 2005). Changes that occur in their lives influence their decisions to seek more training in order to face new situations and conditions that emerge, owing to their maturity and developments that have occurred in adult education. Younger educators consider the achievement of career goals as the most significant motive. It is expected that they do not feel aged or professionally mature and consequently they pursue more education just to succeed in their profession. This differentiation may be positively correlated with the developments that have occurred in the field of adult education and suggest the trend towards professionalisation. The findings regarding diversification of educational

motives related with age could be interpreted in the light of the force - field theory (Miller, 1967). The adult educator's involvement towards learning is correlated with the point of their life cycle. The relative strength of individual needs, personal and psychological characteristics that are formed by age, facilitate or impede their participation in educational activities, by elevating or relegating specific incentives.

Motives for education vary depending on the level of education. Adult educators with lower education level are more motivated by extrinsic factors. Feeling insecure they seek to maintain their employability and pursue the acquisition of more skills. This behaviour fits the psychological interaction model, according to which the determinant factors including the type and performance in the formal education system affect the motives for education (Darkenwald & Merriam, 1982). Adult educators with significant experience choose to be educated, implementing a sort of investment (Cost benefit analysis) so that the value of their offered services in the future is increased (Dhanidina & Griffith, 1975).

The numbers of courses in which adult educators have participated in the past differentiate motives. The more courses they have been involved in, the more important motives have been considered factors like: career commitment, passion for learning, years of activity, best performance. This finding confirms the model of equation and the existence of positive correlation between the quantity of previous education and the likelihood of participation in new educational programmes (Boshier, 1973 in Smith, 1998).

The relationship between job satisfaction and motives for training revealed significant positive or negative correlations between the satisfaction that an adult educator receives from the profession and the parameters of motivation for learning. Those who were not satisfied with their job or at least with some of its aspects have a tendency to seek educational opportunities influenced by external incentives. Adult educators who feel more satisfied with their work are motivated to a greater extent by intrinsic factors. All aspects of job satisfaction correlated negatively with education incentives associated with the passion for learning, the less satisfied the educators are from various aspects of their work the more they are motivated to be trained when they have passion for learning. The less they feel dissatisfied from their work, the more they want to be trained in order to be promoted. The degree of satisfaction from aspects of the

profession such as the recognition of their performance and the confidence that derives from their job, form almost the 50% of the intensity of incentives linked to the passion for their profession and learning in general.

6. Conclusions and implications

This research study resulted in the formulation of important conclusions. Considering the fact that no similar research effort has been conducted for the specific professional group, proposals can be put forward and new research directions that could enhance the acquisition of new knowledge in this field can emerge. Finding training motives and their correlation with job satisfaction is essential for various reasons. The knowledge of the education incentives is important in terms of design, development and implementation of training programmes for any educational institution. Understanding the reasons why adult educators perform and are motivated in a particular way is an important issue for their support in achieving their teaching effort. The study of motivators can provide useful information to organisations that employ adult educators, which could be taken into account in the phase of strategic planning. The exploitation of training incentives would virtually be important knowledge for the improvement of their job satisfaction and their further business development within the business field they belong to.

During the survey a lot of new items were revealed that could be explored in more detail through other research efforts. A research concerning training motives could focus on the correlation with several components of the job profile of the adult educator as well as on exploring the repelling factors in participating in non formal training and the identification of the deterrent factors. The conduction of other research towards deeper understanding and elevation of the correlation between trainers training incentives and the social and work context in which they operate, or the understanding of the association of incentives with various types of training would be interesting as well.

References

Ahl, H. (2006). Motivation in adult education. A problem solver or a euphemism for direction and control? *International Journal of lifelong education*, Taylor and Francis, 25, 385-405.

Ajzen, I. and Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*, Prentice Hall, New Jersey

Athanasiou, A. (2006). The motivation of adults towards their participation in internship programs. *Four-monthly edition of the Hellenic Adult Education Association*, 7, 12-17

Burgess, P. (1971). Reasons for adult participation in group educational activities. *Adult education*, 22 (1), 3-29

Bovee, C. L. and Thill, J. V. (1992). *Marketing*, McGraw-Hill, New York

Carre, P. (2000). *Motivation in adult education: From engagement to performance*. 41th Annual adult education research conference, University of British Columbia, Vancouver

Clark, A.E. and Oswald, A. (1996). Satisfaction and comparison income. *Journal of Public Economics*, 61, 359-381.

Cohn, E., and Hughes, W.W. (1994). A benefit-cost analysis of investment in college education in the United States: 1969-1985. *Economics of Education Review,*13(2), 109-123.

Costello, A. B. and Osborne, J. W. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis, P*ractical Assessment Research & evaluation*, 10(7).

Cross, K.P. (1992). *Adult learners*. CA:Jossey – Bass, San Francisco

Cross, K.P. (1981). *Adults as learners.* CA:Jossey-Bass, San Francisco

Darkenwald, G.G. and Merriam, S.B. (1982). *Adult education: foundations of practice*. Harper & Row, New York

Dhanidina, L., and Griffith, W.S. (1975). Costs and benefits of delayed high school completion. *Adult Education Quarterly*, 25(4), 217-230.

Dollisso, D. and Martin, A. (1999). Perceptions regarding adult learners motivation to participate in educational programs. *Journal of agricultural education*, 40(4), 38-46.

Evans, L**.** (1998). *Teacher morale, job satisfaction and motivation*, Paul Chapman, London

Ganzach, Y. (2003). Intelligence, Education and Facets of Job Satisfaction. *Work and Occupations*, 30(1), 97-122

Gardiner, H. and Kline, T. (2007). Development of the employee lifelong learning scale (ELLS). *PAACE Journal of lifelong learning*, 16, 63-72

Hatcher, T. (1999). How multiple interventions influenced employee turnover: A case study. *Human Resource Development Quarterly*, 10(4), 365–382.

Herzberg, F., Mausner, B. and Snyderman, B. (1959). T*he Motivation to Work (2nd edition)*. John Wiley, New York

Hoy, W. K and Miskel, C. (1991). *Educational administration: Theory research and practice*. McGraw Hill, New York

Houle, C.O. (1961). *The inquiring mind*. Madison: University of Wisconsin Press

Hughes, B. (2005). Identifying attitudes and deterring factors toward continuing education among certified athletic trainers. *The internet Journal of allied health sciences and practice*, 3

Lambert, E.G., Hogan, N.L., Barton, A., and Lubbock, S.M. (2001). The impact of job satisfaction on turnover intent: A test of a structural measurement model using a national sample of workers. *Social Science Journal*, 38(2), 233-251.

Locke, E. A., and Latham, G. P. (1990). *A theory of goal setting and task performance,* Prentice Hall, New Jersey

MacCallum, R.C, Widaman, K.F, Zhang, S. and Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4, 84-99

Merriam, S. B. (2005). How Adult Life Transitions Foster Learning and Development. *New Directions for Adult and Continuing Education*, 108 (1), 3-13

Miller, H.L. (1967). *Participation of adults in education: A force-field analysis*. Boston: The Center for the Study of Liberal Education for Adults, Boston University.

Osborne, J. W., and Costello, A. B. (2004). Sample size and subject to item ratio in principal components analysis. *Practical Assessment, Research & Evaluation*, 9(11)

Ryan, M. and Deci, L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new Directions. *Contemporary Educational Psychology*, 25, 54-67.

Spector, P. (2000). *Industrial and Organizational Psychology: Research and Practice*. John Wiley & Sons Inc, New York

Smith, D.H., Macaulay, J. and associates (1980). *Participation in social and political activities.* CA:Jossey-Bass, San Francisco

Smith, D.H. and Theberge, N. (1987). *Why people recreate: An overview of research*. Life Enhancement Publications, Illinois

Smith, K. (1998). *Participating in learning projects and programmes*. The encyclopaedia of informal education.

Taylor, E. (2001). Adult Education Quarterly from 1989 to 1999: A content analysis of all submissions. *Adult education Quarterly,* 51, 322-340.

Ting, Y. (1997). Determinants of job satisfaction of federal government employees. *Public Personnel Management*, 26(3), 313-335.

Verhofstadt, E. and Omey, E. (2003). The impact of education on job satisfaction in the first job. *Working Paper 169/2003*, University of Gent.

Vroom, V. H. (1964). *Work and motivation*. John Wiley, New York

Wang, G. G. and Wang, J. (2004). Toward a Theory of HRD Learning Participation. *Human Resource Development Review*, 10, 1-28.

Warr, P. (1987). *Work, Unemployment, and Mental Health, Clarendon Press*, Oxford.

Warr, P., Cook, and Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational of psychology*, 52, 129-148.

Wright, B.E. and Davis, B.S. (2003). Job satisfaction in the public sector – the role of the work environment. *American Review of Public Administration*, 33 (1), 70-90.

ΠΑΡΑΡΤΗΜΑ

Table 1: the factors of incentives according to the typology ELLS

Items	Factors		
	Passionate Visionary	Fearful Instrumental	Ambitious Instrumental
I feel very personally involved in my work.	.797		
I would like to be active in my work for many years.	.779		
I would like to be remembered for what I did in my work.	.660		
I would like to work for as long as possible.	.641		
I learn because I am committed to my career.	.616		
I have a passion for learning.	.598		
I would like to learn to be the best I can be in my chosen field.	.594		
I learn things that I can apply to work just because I like to learn.	.541		
I have a vision of where I want to be in my work in ten years, even if I am not sure of how to accomplish my vision.	.388		
I learn when I have specific goals and objectives.			
I learn new skills in order to keep my job.		.893	
I learn to remain employable in my current organisation.		.735	
I learn because I am afraid of losing my job.		.695	
I learn because I need to in order to achieve my career goals.		.436	
I would like to be promoted.			.816
I would like to get ahead in my work.			.668
I like to work where employment is regular and secure.			.490

Extraction Method: Maximum Likelihood.