Factors affecting participation in Vocational Education and Training: The case of Vocational Training Institutes in Greece

Christina Sarri, Efthymios Valkanos, Dimitra Panda, Eugenia A. Panitsides

Abstract

The present study was designed with the aim to investigate the factors affecting adult participation in Vocational Education and Training (VET) programmes, through a survey conducted in public Vocational Training Institutes (VTI) in Greece. In detail, the study sought to identify whether: a) there are specific factors influencing participation in VET, b) these factors are differentiated according to variables, such as sex, age, birthplace, occupation, educational background, training sector or parents’ occupation. In this context, R. Boshier’s Education Participation Scale (a questionnaire based on a seven-factor typology) was administered to a random sample of 257 trainees in Northern Greece. The findings of the study highlighted that the most important factor affecting the decision to enroll in VET programmes, is trainees’ need for «professional advancement», followed by «cognitive interest» and «educational preparation», whilst «social relations» was identified as another salient parameter. As far as demographic/social and course-related variables identified to influence participation in VET were concerned, the findings indicated that all variables, except father’s occupation, have a statistically significant correlation.

Key words: Vocational Education and Training, participation factors, motivation, Education Participation Scale

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1. Rationale of the study

Considering that globalisation intensifies the challenges faced by the European Union (EU), in a context of technological and scientific evolution, as well as demographic change, contemporary educational systems are being redefined, undergoing structural transformations to adapt to challenges emerging from continuous change. Within this context, raising participation in VET has been proclaimed a priority policy area for EU education policy (Bruges Communiqué, 2010; European Council, 2002; Official Journal of the European Union, 2009), as well as for national policies of member states in alignment with the Copenhagen process for 2011-2020 mandates, so as to allow Europe to retain a strong global role.

Despite rising resurgence of the interest in VET, Greece has failed to develop an attractive VET system (‘deleted for anonymity’). In 1992, in an attempt to systematise VET and put the issue of vocational education and training on a new basis in line with European mandates, the Vocational Training Institutes (VTI) were established under Law 2009/1992 (Official Government Gazette, 1992). Their implementation aimed to provide every sort of vocational training, initial or continuing and assurance of qualifications, so that graduates could easily enter the job market and adjust to rapidly changing production schemes and procedures. Theoretically, they address an exceptionally wide adult audience, who either for reasons of (re)entrance in the labour market or for changing profession, wish to acquire some vocational specialisation, update knowledge and skills, or familiarise with new methods or technologies.

To ensure development of VET on a sustainable basis, what arises as a major challenge is raising participation rates, which is largely related to identifying and understanding motivational factors influencing the decision to participate or not participate in educational activities during adulthood. In this vein, multifarious and interrelated motivation variables have been identified by contemporary research.

2. Analytical framework

2.1 Motivation: variables and interrelations to adult participation in education and training programmes

Cofer and Appley (1967) define motivation as the process that initiates, guides and maintains goal-oriented behaviours, involving the biological, emotional, social and cognitive forces that activate behaviour. Yet, there is a plethora of definitions related to motivation, as it is a scientific construct, lacking thus a common concept of either human motivation or of mutually agreed explanations (Siebert, 1985).

Despite substantial differences, motivation theories (Cognitive theories (Lewin, 1938; McClelland, 1953; Weiner, 1985; Csikszentmihaly, 1990), Humanistic theories (Maslow, 1970; Rogers, 1959; McGregor, 1960; Herzberg, 1966), Psychoanalytic theory (Freud, 1900), Behavioural theories (Thordike, 1911; Hull, 1943; Skinner, 1953) share major commonalities, contributing, as a whole, to greater understanding of human action, failing however, to fully explain the mechanisms that govern individual behaviour. In detail, the psychoanalytic theory explains human motivation as an attempt to satisfy biological needs, behavioural theories explain motivation in terms of physiological and extrinsic incentives, humanist theories focus on the tendency of individuals to be self-actualised, whilst cognitive theories emphasise on personal interpretations of environmental conditions, such as beliefs, expectations and needs, guiding individual behaviour. As pointed out, though, there is absence of a universal theory to fully explain factors influencing human behaviour (Merriam & Caffarella, 1999). On the contrary, different motives operate at different times among different, or the even the same, individuals, depending on personal traits and given situation (Smith & Spurling, 2003).
Drawing on the interrelation between motivation and learning, motivation is assumed to form the mechanism that determines the specific goals toward which learners strive (Maehr & Meyer, 1997). In this process, according to Bandura (1977) self beliefs of efficacy play an important role, whilst three different forms of cognitive motivators can be identified: causal attributions, cognised goals and outcome expectancies. In effect, motivation to learn is considered to be the tendency of individuals to pursue learning activities that are important for them and/or expect to draw some kind of benefit out of them, determining the level of their cognitive, emotional, and behavioural engagement (Knowles, Holton & Swanson, 1998; Wlodkowski, 1999).

It is therefore assumed that for learning to take place presupposes the existence of a set of determinants influencing motivation to participate in educational activities, following a linear pattern which begins with the intention of an individual to be involved in educational activities, the desire to participate in a particular educational programme and finally the actual attendance of a course.

### 2.2 Understandings factors of adult participation in education and training

As mentioned above, the attempt to get insight into factors influencing adults’ decision to participate in educational activities has resulted in a number of theories and research approaches, without however having reached a generally accepted theory of motivation of adult learners. Additionally, both participation factors and statistical data largely depend on how the concepts of “adulthood” and “adult education” are being perceived (Merriam & Caffarella, 1999).

According to Ahl (2006), several similarities can be identified in the theories having been developed. In detail, the inherent need for learning is considered as a cornerstone, whilst motivation is perceived as latent, the appearance of which may be inhibited or enhanced by several factors. Such factors may vary according to the theoretical approach, but in general terms they function at three levels: a) factors related to personality traits and personal skills acquired through parenting and early school experiences, such as self-confidence b) factors related to the specific context associated with situational parameters, such as lack of time, lack of interest etc. and c) organisational-structural factors associated with organisational factors, such as accessibility, attractiveness, information etc.

Merriam and Caffarella (1999) outlined that those mainly interested in research findings on participation or non-participation factors are education providers and policy makers, whilst they identified two main research approaches. In light of the first approach, research draws on the reasons for adult involvement in educational activities, with most studies indicating professional reasons, although there is most often reference to more than one reason. According to the second approach, researchers are oriented toward the identification of root causes of motivation for adult participation or non-participation in education, identifying various reasons usually allocated in specific categories. A pioneer in this direction was Houle (1965), who developed a typology consisting of three groups of learners: goal-oriented, activity-oriented, and learning-oriented, with the latter group, learning-oriented individuals, being those who chose to pursue learning for its own sake, as well as for their personal growth and fulfillment. The specific typology set the basis for many subsequent analyses and investigations (Boshier, 1977, 1991; Boshier & Collins, 1983, 1985; Morstain & Smart, 1974), highlighting that the motives of adult participation in educational activities are numerous, complex, and closely interlated (Merriam & Caffarella, 1999; Houle, 1979).

In detail Boshier (1991), after large scale research, proposed a seven factor motivation scale, comprising communication improvement, social contact, educational preparation, professional advancement, family togetherness, social stimulation and cognitive interest. In the same vein, Burgess’ (1971) survey results indicated seven motivational factors, as well: desire for knowledge, personal goals, social goals, religious goals, escaping, participation in social activity and compliance with a formal requirement. Finally, in their study, Morstain and Smart (1974), conducting a factor analysis of Boshier’s (1971) Educational Participation Scale, derived six major reasons for participation in adult education, among which, social relationships, external expectations, social welfare, professional advancement, escape and stimulation and cognitive interest.

In another attempt to explain human motivation (Deci & Ryan, 1985, 2000), it was assumed that motivation depends on either intrinsic or extrinsic factors. Intrinsic motivation factors comprise the need for autonomy, competence and relatedness, which Deci and Ryan (2008a) identified in their later studies as the ones to allow an optimal degree of motivation. On the other hand, extrinsic motivation is associated with behaviours triggered by external incentives, closely linked to some benefit or personal gain. Deci and Ryan (2008a, 2008b) described a third form of motivation as well, which they named “amotivation” implying the state in which the individual completely lacks interest for undertaking any action.

Finally, looking at the issue of participation from another angle, Cross (1981) concentrated her studies on non-participation, identifying three major categories of barriers to participation: situational, institutional, and dispositional. Additionally, she categorised studies on participation factors in three wider categories according to the methodologies employed: a) in depth interviews, such as Houle’s (1965) and Tough’s (1968) studies, b) statistical analysis of motivational scales drawing onto data from Participation scales such as “Education Participation Scale” (Boshier, 1971) or “Reasons for Educational Participation Scale” (Burgess, 1971), c) survey questionnaires (Johnstone & Rivera, 1965 and d) hypothesis testing (Aslian & Brickell, 1980). However, she concluded, all research conducted on the interests and needs of adult learners has not actually revealed something unexpected, but the inherent interest for learning (Cross, 1981).
2.3 Conclusions: impetus for further research

Apparently, the main motivational factor identified to account for participation in adult education is learning itself, which is considered to contribute to improvement of individuals’ working and social lives, whilst participation largely depends on variables such as age (NIACE, 1999, 2005; Sargent, 1996), sex (Boshier & Collins, 1983; Mostain & Smart, 1974; Rubenson, 2003; Vallerand & Bissonnette, 1992), educational background (Bash, 2003; Cross, 1983; Knox, 1997), occupation (Boshier & Collins, 1983; Clair, 2006; Knox, 1997; NIACE, 2005), socioeconomic background (Boshier & Collins, 1983; Fullarton, 2001; NIACE, 2005; Sargent, 1997) and life stage (Bash, 2003; Clair, 2006; Tett, 1996).

However, most research on adult participation in education and training has been carried out in Western societies, with emphasis on the United States and Northern Europe (‘deleted for anonymity’). Thus, existing findings can be considered fragmented and insufficient for a comprehensive synthesis of observations and interpretation of empirical facts, so as to draw on a universal theory valid for different countries and environments (Merriam & Caffarella, 1999), such as the Greek context.

In this respect, a survey was conducted to investigate participation factors in VET in Greece, so as to provide feedback in improving planning and delivery of VET educational interventions, as well as promote VET policies.

3. The Study

3.1 Aim of the study

The present study aimed to record the factors affecting adult participation in VET programmes in Greece. On a second level, it sought to identify certain variables influencing participation, so as to serve as a reference framework for policy making and VET interventions. In particular, the research questions underpinning the study sought to identify:

- whether there are specific factors influencing participation in VET
- whether there are any socio-demographic or course-related variables affecting the decision of individuals to enroll in VET programmes.

3.2. Research methods and tools

3.2.1 Questionnaire

To conduct the study the questionnaire was selected as the most appropriate tool to address a wide statistical sample, overcoming time and space constraints, ensuring anonymity of respondents, enhancing objectivity and validity of data, and providing an overview of the research topic, which would be difficult to achieve with other research techniques (Borg & Gall, 1989; Cohen & Manion, 1994). The screening tool used for data collection was Boshier’s Education Participation Scale-A form, having been granted the license to use by R. Boshier upon relevant request. The questionnaire was translated into Greek and cultural adaptation was performed through a pilot testing with a random sample of twelve individuals. Questions were expressed in the form of 42 statements, asking participants to indicate the extent of influence on a four-point Likert scale.

3.2.2 Sampling

The sample consisted of trainees attending VET programmes in public VTIs, in the prefecture of Thessaloniki, during the period February to June 2010. The sample size was determined in relation to the size of population and sampling error (Javeau, 1996), which after the pilot testing, was estimated to approximately 250 individuals.

Sampling was conducted on the grounds of multilevel modeling (Javeau, 1996; Bell, 2007), following a three level model so as to ensure representativeness of the sample in relation to the population being studied. Questionnaires were administered to a sample of 257 individuals, out of which 248 valid questionnaires were retrieved.

3.2.3 Data analysis

The data underwent analysis by descriptive statistical methods (frequencies and percentages, indicators of central tendency). Additionally, the t-test was applied to determine whether there was a significant correlation between participation factors and sex, whilst for all other independent variables the one way analysis of variance (ANOVA) test followed by Fisher’s Least Significant Difference (LSD) test were used to compare means.

Moreover, to assess internal consistency, Cronbach’s alpha coefficient was estimated for all items (Hair et al, 1995). For the statistical analysis SPSS v. 15.0 statistical package was used. The significance level of all statistical tests was predetermined at 0.05.

3.3 Results

3.3.1 Participants’ profile

In the light of the research findings, the majority of participants in the sample were women, aged 19-25, born in Thessaloniki, being secondary education graduates, not employed, with a lower middle class background [mother in a job requiring manual labour (blue collar), whilst father performing professional, managerial, or administrative work (white collar)] (table 1).

<table>
<thead>
<tr>
<th>Table 1.</th>
<th>Profile of participants in the sample</th>
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</thead>
<tbody>
<tr>
<td>Demographic Characteristics</td>
<td>Profile</td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>Age group</td>
<td>16-19 years</td>
</tr>
<tr>
<td></td>
<td>20-25 years</td>
</tr>
<tr>
<td>Birthplace</td>
<td>Thessaloniki</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>Educational background</td>
<td>Upper secondary education</td>
</tr>
<tr>
<td></td>
<td>Lower secondary education</td>
</tr>
<tr>
<td>Occupation</td>
<td>Not employed</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
</tr>
<tr>
<td>Mother’s occupation</td>
<td>Blue collar</td>
</tr>
<tr>
<td></td>
<td>White collar</td>
</tr>
<tr>
<td>Father’s occupation</td>
<td>White collar</td>
</tr>
</tbody>
</table>

Furthermore, the majority of participants attended courses in the Health, Beauty and Social Services sector...
It should be noted that the above findings are representative of the VTI population, being in compliance with statistical data on trainees provided by the General Secretariat of Lifelong Learning, the National body supervising VTI operation.

### 3.3.2 Analysis of data

The internal consistency of the 42 items of the Education Participation Scale—estimated by the internal consistency coefficient (Cronbach’s alpha) was 0.94, exceeding by far minimum requirements for reliability (Hair et al., 1998; Nunnally, 1978).

As indicated in Table 3, respondents’ statements on factors having influenced their participation in VET tended to be rather neutral, in the sense that they indicated for most factors little to moderate influence on their decision to attend VET programmes (means ranging from 1.60 “little influence” to 3.39 “moderate influence”). More precisely, the predominate factor/incentive indicated to influence their participation in VET, was “professional advancement” (mean 3.39), followed by “cognitive interest” (mean 2.44) and “educational preparation” (mean 2.42). On the other contrary, the least significant factor was indicated to be “social stimulation” (mean 1.60) followed by “family togetherness” (mean 1.61).

### Table 2. Training sectors of participants in the sample

<table>
<thead>
<tr>
<th>Training sector</th>
<th>Frequency</th>
<th>Percent %</th>
</tr>
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<tbody>
<tr>
<td>Health - Beauty - Social services</td>
<td>98</td>
<td>39.52%</td>
</tr>
<tr>
<td>Mechanical and Electronic Technology</td>
<td>71</td>
<td>28.63%</td>
</tr>
<tr>
<td>Financial and Administrative services</td>
<td>37</td>
<td>14.92%</td>
</tr>
<tr>
<td>Information Technology - Telecommunications</td>
<td>23</td>
<td>9.27%</td>
</tr>
<tr>
<td>Culture and Sport</td>
<td>19</td>
<td>7.66%</td>
</tr>
<tr>
<td>Total</td>
<td>248</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3. Central tendency and dispersion per participation factor

<table>
<thead>
<tr>
<th>Participation factors</th>
<th>mean</th>
<th>median</th>
<th>standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication improvement</td>
<td>1.70</td>
<td>1.50</td>
<td>0.66</td>
</tr>
<tr>
<td>Social contact</td>
<td>1.88</td>
<td>1.67</td>
<td>0.85</td>
</tr>
<tr>
<td>Educational preparation</td>
<td>2.42</td>
<td>2.33</td>
<td>0.73</td>
</tr>
<tr>
<td>Professional advancement</td>
<td>3.39</td>
<td>3.50</td>
<td>0.83</td>
</tr>
<tr>
<td>Family togetherness</td>
<td>1.61</td>
<td>1.33</td>
<td>0.71</td>
</tr>
<tr>
<td>Social stimulation</td>
<td>1.60</td>
<td>1.42</td>
<td>0.62</td>
</tr>
<tr>
<td>Cognitive interest</td>
<td>2.44</td>
<td>2.50</td>
<td>0.70</td>
</tr>
</tbody>
</table>

On a second level of analysis, socio-demographic characteristics, such as sex, age, place of birth, educational background, training sector, employment, mother’s and father’s occupation (independent variables) were correlated with the seven participation factors (dependent variables). Statistically significant correlations detected between variables are depicted in Table 4.

### Table 4. Statistically significant correlation between independent variables and participation factors

4. Discussion

In conducting the present research, several methodological limitations had to be taken into consideration, such as geographical localisation of the sample (prefecture of Thessaloniki) impeding generalisation of results at national or international levels. Moreover, individual differences in personality, attitudes and behaviour, as well as differences arising from family, community or social context which trainees grew up and live in, not having been depicted during research, might have influenced their decision to participate in VET. Most importantly however, a major constraint is subjectivity of data, as research findings were grounded on respondents’ statements.

Nevertheless, despite the aforementioned limitations, there has been provided valuable insight into motivational factors influencing participation in VET in the Greek context. As outlined above, in the effort to develop an attractive VET system, as well as systematise VET in Greece, the issue of raising participating rates is directly related to understanding factors affecting the decision of individuals to attend VET programmes.

In this context, the aim of the present study was to identify factors affecting adult participation in VET programmes delivered by IVTs. Findings indicated that the predominant motivational factor for enrolling in the specific programmes is professional advancement, followed by cognitive interest and educational preparation, whilst the other four factors of the Education Participation Scale were identified to have little influence in this decision. Our findings come in line with relevant literature indicating that different motivational agents apply to different individuals (Smith & Spurling, 2002). According to Cross (1981), motives differ across different groups of learners, at different stages of life, whilst most times participation is affected by multiple motives. Moreover, motivation depends on either intrinsic or extrinsic factors (Deci & Ryan, 1985, 2000, 2008a, 2008b), which most often are closely
interrelated (Dollisso & Martin, 1999). In this vein, professional development can be considered an extrinsic motivational factor, whilst cognitive interest and educational preparation are associated with intrinsic motivation.

Through the correlation of socio-demographic characteristics with participation factors it was indicated, in line with previous research findings (Boshier & Collins, 1983), that men put more emphasis on the “social contact” factor. As far as age is concerned, there was recorded statistically significant correlation with social stimulation, with the age group of 31-35 years appearing to be in search of new social stimulation through their participation in training programmes, although according to relevant findings it is younger learners who tend to participate in educational interventions for social reasons (Boshier & Collins, 1983; Bova, 1979; Morstain & Smart, 1974; Wolfgang & Dowling, 1981). This could be attributed to the fact that, at this age (31-35), weighed under more responsibilities (family, professional), education provides participants with a chance to escape from everyday frustrations.

Coming to the influence of birth place on participation factors, very little evidence can be traced in relevant literature (NIACE, 1999). Our findings indicated that those born outside the major urban areas of Athens and Thessaloniki put greater emphasis on the “social contact” and “social stimulation” factors.

Concerning occupation, “professional advancement” has been identified as a major incentive for those in blue collar professions, being usually of lower socioeconomic background, a finding which is consistent with other studies (Boshier, 1977; Boshier & Collins, 1983). “Professional advancement”, along with “cognitive interest” and “educational preparation”, has also been found to play an important role for participants being senior high-school graduates. In this vein, Boshier (1979) has argued that people with low educational background are more motivated by “professional advancement” in their decision to enroll in an educational programme.

As far as parents’ occupation is concerned, in light of Boshier and Collins’ (1983) findings, learners from lower socioeconomic backgrounds tend to acknowledge higher influence of all participation factors, except “cognitive interest”. In our study, however, parents’ occupation was not identified to exert a significant impact in the participants’ decision to join IVTs, except the case of those respondents whose mother was in a job requiring manual labour (blue collar), who also appeared to indicate “social stimulation” as an important parameter for their enrollment in VET programmes.

Finally, the correlation with the training sector indicated that trainees attending courses in the field of Culture and Sport, compared to trainees attending courses in other sectors, appeared to be more motivated by the “professional development” factor and less motivated by “cognitive interest”, “educational preparation”, “social contact” and “family togetherness”. This could be possibly attributed to the fact that the Culture and Sport sector in the particular study includes mainly respondents enrolled in “Museums and Archaeological Sites Guards” programme, a specialty which provides graduates with the certification needed to exercise the particular profession. Therefore, the decision to enroll in this specialty was apparently mainly related to obtaining the relevant certification, in order to follow a career in the specific sector.

5. Conclusions

The present study attempted to identify factors impacting adult participation in VET, so that findings could provide for feedback, as well as for an indicative framework to redefine priorities, planning, design and delivery of VET programmes in Greece. According to relevant literature, most participants in training programmes are motivated by multiple parameters. Additionally, participation motivators can be distinguished into intrinsic and extrinsic, whilst their intensity differs among various trainees and groups.

Growing consensus on the necessity to raise VET participation rates in the EU, combined with the assumption that participation is often the manifestation of complex and interrelated psychosocial processes, calls for extending research in an attempt to get insight into specific determinants related to various contexts.

In this context, investigation of participation factors in VET programmes delivered by public IVTs and their correlation with socio-demographic characteristics and training sectors may be of particular interest to policy makers and stakeholders in the field of vocational education and training in Greece. More precisely, identifying and understanding participation factors may provide valuable feedback to education policy makers so as to support trainees at multiple levels, as motivation affects choices, duration and commitment of participants in the learning process (Locke & Latham, 2004). Furthermore, findings could be used in designing targeted action initiatives, so as to raise interest and increase attractiveness of VET in Greece, shifting established perceptions on inferiority of vocational education.

It should be outlined however that the present study is limited in scope since it dealt with limited sample in national settings. For this purpose further research is needed to support the current results.

References


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