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E-MOVING FORWARD – EMERGING ISSUES REGARDING E-LEARNING IN NON-FORMAL EDUCATION IN GREECE

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Abstract
One of the basic measures to increase the overall participation of adults in Lifelong Learning (LLL) is removing barriers to participation. In this paper, we will focus on the case of Greece, through an examination of a series of LLL courses offered by a Greek university through e-learning methods. We will examine the theoretical underpinnings that supported this introduction, and then we will present data regarding: i) the *participants' characteristics;* ii) the *main factors* that led them to participate; iii) their *evaluation* of the courses. Our findings show that e-learning is a new reality for Greece, which needs to be investigated on many levels, with diverse factors being taken into consideration: from wider socio-economic structures, to organizational settings at middle and local level; from national-level legal frameworks to individual characteristics.

Keywords: lifelong learning; e-learning; online distance learning; adult education; Greece

1. Introduction

In March 2000, the Lisbon European Council set out the goal for the European Union (henceforth EU) of becoming 'the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion', a goal which was reaffirmed, the following year, at the Stockholm European Council. The strategy for this purpose entailed such elements as

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the adaptation of education and training to offer tailored-made learning opportunities to individual citizens (European Commission, 2000).

In this paper, we will focus on the case of Greece, with an examination of the aims behind the introduction of *short-term courses through e-learning methods* at a Greek university. This introduction was based on a political discourse regarding the need for the public Higher Education (HE) system to offer flexible educational provisions and opportunities to people who would otherwise be excluded from formal education, or from further opportunities for training and career advancement (GMNELLRA, 2010, 2013; GMNERA, 2005).

We will examine the theoretical underpinnings that supported this introduction amidst an environment of protracted economic crisis, which has had serious effects on the social, economic and educational foundations of the country. We will then present data from the examined e-learning courses and draw preliminary conclusions regarding the implications of running such courses both for the participating individuals (micro-level) and for the development of human capital at national level (macro-level).

2. E-learning as a way of promoting LLL chances

E-learning is a new mode of learning, which is characterized by features such as the *distance* between the trainer and the trainee, the use of digital learning materials and the prevalence of interactive communication between the two parties (Harasim, 2000). Additionally, users can participate from anywhere and at any time, depending on their personal planning and needs (Lu & Chiou, 2010).

In recent years, various digital platforms, or Learning Management Systems (LMS) have been developed to –mainly— support asynchronous distance-learning environments (Lin, 2010). On the other hand, we have witnessed the ever-growing synchronous distance-learning environments, which, in principle, offer whatever one may find in any 'ordinary' (i.e. bricks-and-mortar) classroom (see Garrison & Kanuka, 2004; Lieblein, 2000; Rourke & Kanuka, 2009). As some researchers argue, the essential advantages of synchronous communication (SC) 'relate to the fact that activities requiring spontaneity can be handled effectively, such as brainstorming, or decision making, as these require a quick turn-around time rather than extended discussion' (Hlapanis, Kordaki & Dimitracopoulou, 2006, p. 176). Moreover, systems like the 'BigBlueButton' support elucidation of theory, active engagement and F2F-oriented learning experience (Kostas, Tapsis & Vitsilaki, 2016).

3. Factors related to and affecting adult participation in e-learning

Currently, there is a multiplicity of perspectives and theoretical attempts to highlight – not to mention categorize— the most important factors (psychological or social) that may be linked to, or affect the adult-population participation in e-learning. These are often characterized by incompatibility because they give different considerations on

how the internal processes (fundamentally learning needs) and social factors are involved in cognitive development, motivation framing and/or decision-making (i.e. behavioural) processes of adult learning.

Starting with social factors, we could say that e-learning is a response to wider socio-economic needs of the adult population in (post)modern societies, where labour markets are highly volatile, job insecurity increases, dual-earner families are becoming the norm (Edgell, 2006, chapters 1 & 9), and workforce is expected to be highly educated and to continually improve skills and acquire new ones by engaging in Lifelong Learning (LLL) (Hrastinski, 2008). International reports, government-sponsored reports and academic studies list the unemployed and others on low incomes, the unskilled and unqualified, ex-offenders, part-time or temporary workers, those with learning difficulties or low levels of basic skills, and some ethnic groups, as being the least likely to participate in LLL (DfEE, 1998; NCES, 2004; OECD, 2000, 2016a,b).

As far as the LLL offered through e-learning is concerned, most studies focus on single aspects of the learning context, such as student/learner's satisfaction, institutional settings, organizational culture, technological infrastructure, quality-assurance mechanisms and various pedagogical issues concerning instructional methods and modes of delivery (Barbera, Clara & Linder-Vanberschot, 2013; Cuban, 2001; Frydenberg, 2002; Govindasamy, 2001; Hamid, 2001; Jara & Mellar, 2007; Jung, 2011; Kirkpatrick, 2005; Lin, 2010; Morrison, 2004; Tearle, 2004). Very few recent studies examine the relationship between demographic characteristics, on one hand, and participation or performance in e-learning, satisfaction and enjoyment of the whole learning experience, on the other. The results are still inconclusive, given the dynamic nature of contemporary working and learning environments and the different national and local contexts, but most studies seem to converge that there are differences –albeit not so wide— between educational level, gender, race, nationality and age (Atan, Sulaiman, Rahman & Idrus, 2002; Botha & Coetzee, 2016; Coldwell, Craig, Paterson, & Mustard, 2008; Lee, 2010). A few years ago, 'Education Today' (a known education & career-guidance blog) posted an Online Student Demographics infographic that summarized the studies of several leading organizations in e-learning. Out of the 56 million online students taking distance courses: 1) the average age of online learners was 34; 2) the gender make-up was 53% female and 47% male; 3) the racial identification of students was: 46.6% white, 24.8% black, 29.8% Hispanic, 3.2% Asian, and 4.6% others; 4) 74.3% made less than $40,000, 32% received financial aid, 38% received employer aid and 79% toot out student loans; 5) the majority were employed (81%) and undergraduates (82%), while 14% were graduate students; 6) only 16% were traditional students (predominately white, female, ages 15-23, full-time, with reported incomes of $40,000+), with 84% being non-traditional students; and 7) the growth rate for online learning (21%) versus that of traditional education (1.8%) indicated that online education was rapidly more accepted and embraced by students

(https://blog.classesandcareers.com/education/infographics/student-demographics-infographic/).

The growth of the MOOCs, although still a relatively under-researched phenomenon with no clear-cut conclusion in the academic debates about their use (Tapson, 2013), raises interesting issues regarding (the merits of) the standardization of the educational process, the validity of the assessment and the possibility –or the lack of it— for 'creative mutual engagement between teacher and student' (Ritzer, 2013, pp. 666-667).

4. The case study framework

E-learning programs in Greece are a relatively new phenomenon, in social, educational and technical terms. However, Greek HE institutions have increasingly embraced the new technologies, if not else for reasons of cost-effectiveness and for overcoming geographic and bureaucratic barriers (Kyrma & Mavroidis, 2015). On the other hand, citizens are beginning to perceive such programs as the only way to acquire a competitive edge in a highly volatile labour market (Karalis, 2013). We should not forget that the unprecedented wave of austerity measures imposed since May 2010, as a precondition for a 'bail-out' of Greece by the euro-area Member States and the International Monetary Fund (IMF), not only shrinked the country's GDP (2017 has been the first year marking a GDP growth, after seven consecutive years of recession), but also augmented the unemployment rate (officially at 20.5% in September 2017), especially the long-term one (72% of the total) (HSA 2017).

HE institutions in Greece do not offer integrated e-learning programs that lead to the award of tertiary degrees (of the levels 6 and above of the ISCED classification). The only HE institution that was granted, from 1997, the power to award 'distance-learning' degrees, through either paper-based or e-learning methods, is the Hellenic Open University (based in Patras, in Southern Greece). Nevertheless, other HE institutions (universities and Technological Education Institutes / TEIs) implement LLL programs (of a non-formal, but mostly informal character) through e-learning (at post-secondary level, ISCED levels 4-5), some of them from the mid-2000s. A PhD study in 2012 (Pagge, 2012) estimated that across the country's HE institutions were offering 19,699 e-learning courses of any kind (formal, non-formal and informal) (p. 128). A recent estimate put the total of HE institutions offering e-learning programs to 26, and the offered under- or post-graduate courses to 4,246, (http://opencourses.gr/index.xhtml;jsessionid=AB89A01ABBB58AC8C7C74700B4B83A9B?_ln=en, latest data on October 26, 2018). The vast majority of these courses are 'Open Courses' (MOOCs), an increasingly familiar practice for many HE departments, since they are funded by the European Union – under the supervision of the competent national authorities— to promote a 'free learning environment, consistent with the mission of the university' (ibid.).

In this new, dynamic and increasingly competitive framework, the University of the Aegean (UoA) has established itself (since 2012) as a key provider of new and

innovative non-formal education, e-learning courses. The particular university (with campuses in 6 different Greek islands in the north and south Aegean Sea) has a total enrolment of more than 15,000 students, with approximately 2,300 classified as 'graduate students' (doing MSc, MEd or PhD studies), 316 faculty members, 65 adjunct professors and teaching assistants and 282 administrative personnel (latest figures for academic year 2017-18). The institution offers –autonomously or in collaboration— 39 graduate degree programs, with an increasing number of them incorporating distance-learning features (through the use of ICTs), although the dominant mode of delivery, at under- and post-graduate levels, is still the F2F model.

To achieve the aforementioned scope (i.e. the implementation of LLL programs through e-learning), a coherent organizational and operational framework has been established, with well-defined procedures for assuring the quality and sustainability of those e-courses, which would be certified under the European Credit System for Vocational Education and Training (ECVET) and would be based on the Greek National Qualification Certification System.

The framework, as a typical e-learning organizational structure (Morrison, 2003), was based on collaborative sub-teams, such as subject-experts, content developers, e-learning experts, helpdesk support, ICT-experts, etc., with a Scientific Coordinator, a Program Coordinator and a Steering Committee of academics, mainly to ensure a certain level of academic and educational quality. This was accomplished by implementing a standard instructional-design methodology, based on a 7-steps procedure. This procedure was guided by a set of key questions where the corresponding answers shaped the educational process, as shown below (Figure 1).

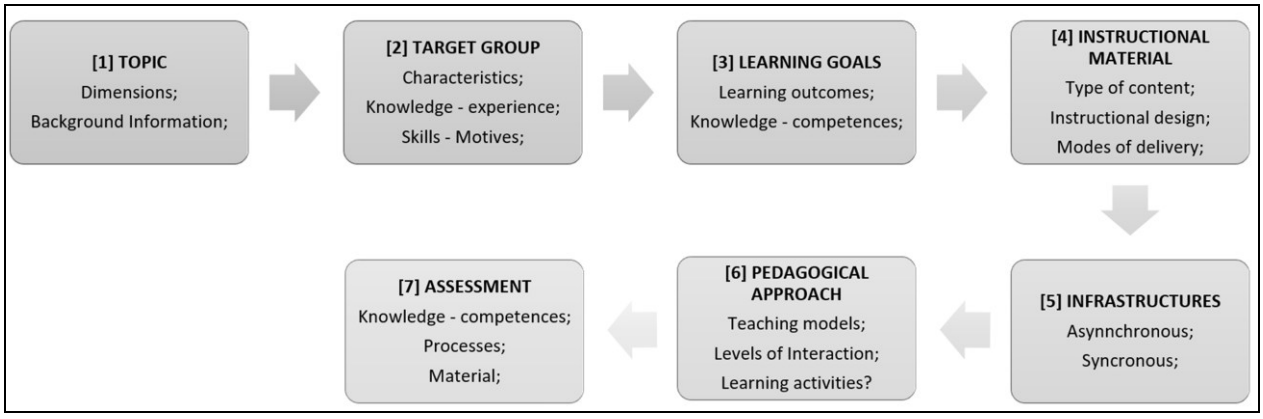

Figure 1: A 7-steps instructional design approach

Based on the above methodology, several innovative technology-enhanced courses were developed. Those courses spanned over five main disciplines (Environmental Sciences, Social Sciences, Economics & Management, Humanities and Natural Sciences), leading to various specialised e-courses, such as short MBA, Communication, History-archeology, Social Research Methodology, Sustainable Development, ICT applications, etc. Each course consisted of various cohesive learning modules, and each module combined a series of asynchronous and synchronous online

sessions, thus providing the opportunity to students to organize their own learning portfolio. Each session was assigned a total of 6 hours workload (self-paced study, self-assessment, communication, etc.), corresponding to 0.05 ECVET credits. Thus, during the last five years (from 2012-13), the UoA has offered more than 160 training programs to more than 3,700 trainees, utilizing more than 550 educators/instructors (http://e-epimorfosi.aegean.gr/).

For the delivery of the sessions, the *fully online, distance-education model* was adopted to provide self-paced and self-regulated e-learning experiences, independently of time and space constraints. This approach comprised both 'Content & Support' and 'Wrap Around' models of web-based training (Holmberg, 1983; Mason, 1998).

5. Research Questions, Method and Data Collection

At times when societies go through crises (economic, social and cultural), education is often seen as an agency that may offer a sustainable development for the future (UNESCO, 2015). This claim may be examined: a) at the level of the individual (*micro-level*), where the focus is on training and retraining individuals; and b) at the *macro-level*, by investing in innovative programs, which could advance society's human capital as the most endurable source of investment for long-term development and growth (Becker, 1993; Schultz, 1971).

Our paper is policy oriented, as it has indeed been the whole e-learning project. Therefore, although we have been influenced by various theories explaining participation in adult learning, distance learning and e-learning (see discussion above), we did not wish to test any kind of explanatory model of e-learning. The focus of our analysis is the *exploration* of the most important dimensions of adult participation in e-learning in Greece, such as the participants' characteristics, the main reasons for participation, the attitudes towards e-learning and the evaluation of the courses offered. This is an unresearched issue in Greece, despite the fact that e-learning is becoming increasingly acceptable as normal practice in everyday LLL activities (Sofos, Kostas & Paraschou, 2015, chapter 4). The data emerged from three years of implementation of e-learning courses at the University of the Aegean (2012 to 2014).

5.1. Research questions

Taking also into account, on the one hand, the lack of evidence concerning the participation of adult learners in non-formal educational programs offered by HE institutions, and the protracted economic crisis, on the other, the following research questions have been formulated:

Research Question 1: Which are the participants' characteristics?

- Who are those who participate in e-learning in contemporary Greece?
- Are the younger generations more positive about the e-learning?

- Do women participate in higher percentages than men in LLL programs, as some evidence from the Greek (see Giavrimis *et al.*, 2009; Karalis, 2013) or the international context suggests (EIU 2003; also in E-Learning Advisory Group, 2002, and NIPA, 2008, as cited in Jung, 2011, pp. 446 & 449)?
- Do these courses offer flexible educational provisions and opportunities to groups of students/trainees who would otherwise be excluded from formal education (see Holmberg 1986, 1995), or are they simply a convenient way of promoting professional development for the more educated citizens?

Research Question 2: Which are the factors leading to participation?
These span from motives for participation, to preferences for specific methods of implementation and/or modes of delivery.

Research Question 3: What was the evaluation of the course(s)?
There is a growing number of studies on quality and quality assurance (QA) in e-learning (e.g. Anderson & Elloumi, 2004; Jara & Mellar 2007), but only a few have reached a definite conclusion on the quality of e-learning (formal or non-formal) in HE, from the learner's perspective. That happens because 'quality' is a relative and value-laden concept and may be viewed differently by various stakeholders (Dondi, Moretti & Nascimbeni, 2006; Jung & Latchem, 2007). Especially in Greece, this kind of research is scarce and focused on very narrow target-groups, on specific academic and occupational settings, and for limited subject areas (Pagge, 2012; Rossiou, 2010; Valassidou, 2005; Xanthopoulou, 2016; Zgouva, 2013).

5.2. Target Population and sample

The e-learning courses offered by the UoA initially targeted the general population (minimum prerequisite for acceptance was a ISCED level-3 certificate, that is the completion of at least upper-secondary education). The thematic areas offered could match the needs for initial vocational education or short-term training, as well as for further training and/or professional development.

Our sample consisted of 218 individuals who completed questionnaires both at the beginning and at the end of the courses, out of a total of 542 participants who responded to the initial questionnaires (357 in academic year 2012-13, 130 in academic year 2013-14 and 55 in academic year 2014-15).

5.3. Instruments and variables

A. Research questions 1-2

Initially the participants in the e-learning courses completed a questionnaire with basic demographic data on themselves (the same information was provided again at the end of the program). More specifically, the participants provided information about their age, gender, family status, number of children, job status, current occupation, level of education completed.

The respondents also provided information about their previous experience with LLL structures, as well as about the *main reasons* that made them choose the particular university and the specific e-learning course(s).

B. Research question 3

After the conclusion of the courses(s), the students/trainees were also asked to complete another questionnaire to evaluate the whole program (accomplishment of learning aims, quality of learning material and teaching practices, effects on personal and family life, etc.). For that questionnaire, a six-point Likert scale was used (from 1= 'totally unsatisfactory', to 6= 'highly satisfactory').

6. Results

6.1. Demographics

As far as the demographic data are concerned (N = 218**)**, we got information on the following dimensions:

- We can see that much more women (66% of the respondents) than men (34%) decided to participate in e-learning programs. Women seem to perceive e-learning methods of LLL as more attractive than men, since this is something that relates to the unequal distribution of duties within the household and the family life in general (see also Jung, 2011; Merriam & Caffarella 1999).
- There is a balance between 'married' and 'single' persons. More specifically, a 55.5% of the respondents were married or 'cohabitating' with someone else, and 44.5% were single.
- The majority of the participants (58.5%) had no children.
- The mean age was 37 years (SD 9.5) and 75% of the participants were below 45.
- The vast majority of the participants were well educated persons. A 96% of our sample held at least a fist-level tertiary degree, with 28.1% of them holding a second-level (post-graduate) tertiary degree, and 3.1% holding a Ph.D. This finding is consistent with results from various (national and international) studies, which show that adults with high levels of literacy participate more actively in adult education (Creighton & Hudson 2002; Karalis 2013; Kim, Hagedorn & Williamson 2004; OECD 2000, 2016a,b).
- Most of the students had a full-time job (68.2%). This is understandable since people with stable and full-time jobs are expected to participate in various LLL programs, because they can cover the cost of their tuition (see Bozick 2007; Watts & Pickering 2000).
- As far as the occupations of the respondents are concerned, we had a variety of professional backgrounds and expertise, but the most frequent occupations were those of 'teacher' (in primary or secondary education) or 'public-sector employee'. The combined percentage of these two groups was 74.2% of the total. People working in these jobs, despite the considerable wage cuts in recent years

and the increasing insecurity surrounding the Public Sector in times of fiscal discipline, still enjoy higher salary levels, better working environments and constitutionally guaranteed job protection. Thus, it is easier for them to use LLL opportunities, compared to salaried employees or self-employed in the private sector (cf. Creighton & Hudson, 2002).

6.2. Reasons for and forms of participation

Regarding their previous experience with LLL courses, the majority stated that it was the first time they ever participated in such a course (47%), while a further 21.2% revealed that this was the second time they did it.

As it regards the main source of information about the course(s), the majority of the participants stated that they had found relevant information on the internet (64.4%), with a smaller proportion stating that they had received e-mail message(s) or a e-newsletter (15.4%). Few of them (14.9%) answered that they had been 'informed by a friend / acquaintance', and a further 2.9% of them 'from a University's Career Office'.

Regarding the main reason that made them choose the specific e-learning course(s), most of them stated that they did it to acquire new specialized knowledge and skills (46.1%), or to get accreditation and enrich their CV (20.3%). Another notable proportion (29%) stated that they did it for reasons of scientific interest. The remaining referred to various personal reasons (4.1%) or general social obligations (0.5%).

As for the reason they picked the specific university, the majority (73%) stated that they 'did not wish to search' or 'it was the only program available at that time', with the remaining respondents stating that they 'judged the particular university more positively than other educational establishments'. This finding, although initially contradictory with international evidence, which argues that an institution's reputation and credibility influence a person's decision to participate in distance-learning programs (Kirkpatrick, 2005; Jung, 2011), it seems understandable and rather expected in a country where the notion of 'e-learning' is under-searched and opaque to the wider public.

When respondents were asked which method of implementation they would choose if they had the option, the majority (76.1%) stated the obvious (i.e. 'through e-learning'), but a notable 23.9% picked the option 'through a face-to-face environment', something that seems odd given the voluntary basis of the participation. That might imply that many participants had made a 'forced' decision in the beginning, and they would rather prefer a more conventional program, something that is not unique in studies of adult e-learners (Jung, 2011).

When respondents were asked which mode of e-learning they would prefer (i.e. between synchronous or asynchronous), the majority expressed the opinion that the most favorable modes of e-learning were either the 'blended', or the asynchronous one.

When respondents were asked which model of participation and learning they would pick between a 'totally collaborative model' and a 'totally personalized and self-paced model', the vast majority (94%) favoured either the latter, or a combination of both. It

seems that, even today, when there are plenty of sophisticated models for collaborative e-learning across the world (Garrison, Anderson & Archer, 2001; Rourke & Kanuka 2009), an individualized approach to knowledge seems to attract most people.

Of all the above dimensions of participation in e-learning, there is not any (statistically significant) differentiation according to experience with LLL programs, age, gender, family status, job status, occupation and level of education completed.

6.3. Evaluation of the course(s)

In Table 1 we can see the evaluation of various aspects and dimensions of the LLL courses in which the study's respondents took part (N = 218). In general, it could be said that respondents were quite positive about the e-learning courses they had attended. The most positive ratings went to the administrative assistance during their studies.

However, there were mixed feelings and ambivalence about the cost –economic and other— that the courses have had on the participants and their families. As the Table 2 shows, the respondents were less positive –but not negative— about the impact of their involvement in e-learning on their financial situation, professional, personal and family life.

The gender of the respondents seems not to correlate with their evaluation of the various aspects of the e-learning experience. However, the age does correlate, but not very strongly, and only with those variables that deal with the (negative) impact that the course(s) had on a person's working, personal-social and family life (see Table 3). More specifically, the older the respondents, the more negative was their views about the course(s)' impact on 'family life' (r[216] = 0.284, sig = .001), on 'personal-social life' (r[216] = 0.181, sig = .008) and on 'working life' (r[215] = 0.174, sig = .01).

The rest of the demographic variables (i.e. family status, job status, occupation and educational level) or other personal variables (e.g. previous experience of LLL programs) do not seem to have exerted any significant effect on the respondents' evaluation of the course(s).

Table 1: General Evaluation of the e-learning course(s)

	N	Minimum	Maximum	Mean	Std. Deviation
Program_evalution - satisfying aims	217	1	6	5.02	.948
Program_evalution - duration according to targets set	217	2	6	5.04	.907
Program_evalution - technological infrastructure	216	1	6	5.17	.999
Program_evalution - guidance for e-learning	216	1	6	5.03	1.091
Program_evalution - technical assistance	215	1	6	5.20	1.024
Program_evalution - registration system	215	2	6	5.36	.847
Program_evalution - administrat. support	214	1	6	5.34	.934
Program_evalution - fees	217	1	6	4.31	1.192

Table 2: Evaluation of the negative impact that e-learning course(s) has had on ….

	N	Minimum	Maximum	Mean	Std. Deviation
Family life	217	1	6	2.95	1.394
Personal life	217	1	6	3.00	1.381
Professional life / Occupation	216	1	6	2.62	1.474

Table 3: Correlation coefficients (Pearson's r) for *age* and impact that the course(s) has had on a person's working, personal-social and family life

		Age of respondent
Impact of program on - family life	Pearson Correlation	.284**
	Sig. (2-tailed)	.000
	N	216
Impact of program on - personal & social life	Pearson Correlation	.181**
	Sig. (2-tailed)	.008
	N	216
Impact of program on - working life	Pearson Correlation	.174*
	Sig. (2-tailed)	.010
	N	215

Note: * p < 0,05. ** p < 0,01.

7. Discussion

E-learning is progressively becoming a common place among adult learners in Greece. Adults seem to seek to improve their employment situation and enhance their relevant knowledge and skills, through educational means beyond the traditional 'brick-and-mortar' settings.

In our data, the older the respondents, the more negative views they expressed about the course(s) impact on family, personal and professional life.

Women seem to participate more actively in LLL programs offered through e-learning than men, something that replicates findings from the international bibliography (NCES, 2004; OECD, 2000, 2016a,b).

Married (or 'cohabitating') persons are more likely to participate in e-learning, although the differences between them and those who are 'single' are not very wide. However, this finding highlights a promising potential of e-learning to enhance the opportunities for couples who, due to family obligations, are discouraged from participating in LLL programs (Kim, Hagedorn & Williamson 2004).

The more educated people, and those working in the Public Sector (especially teachers), more actively participate. This is something that corroborates the existing international and national research evidence about the considerably higher probabilities of the more educated strata of population, or those with the highest degree of job 'security', to participate in LLL (Giavrimis, Papanis, Mitrellou, & Nikolarea, 2009; Gorard & Selwyn, 2005; Karalis, 2013; Kim, Hagedorn & Williamson, 2004; Selwyn & Gorard, 1999, 2002).

As far as the reasons for participation are concerned, a rather opportunistic approach to LLL is evidenced, in the sense that people seek to either acquire new

specialized knowledge and skills, or wish to get accreditation and/or enrichment of their CV, in a highly competitive and volatile labour market (European Commission, 2016; Larjanko, 2016).

Asynchronous modes of e-learning are more popular than synchronous ones, revealing this way a wider social phenomenon: working adults choose to get engaged in distance learning at different time and space settings, and in flexible ways that are compatible with their job requirements, personality traits and family or other social obligations (Anderson, Poellhuber & Mckerich, 2010; Botha & Coetzee, 2016; Knowles, 1990; Zucca, 2010). The above goes in hand with the model that respondents showed more preference for. Although the research evidence in Greece for these matters is scarce and sketchy (Zgouva, 2013), it seems that employers, especially in the service sector are increasingly getting acquainted with e-learning methods of training and professional development.

7.1 Limitations

First of all, we need to stress that, original as it may be for the HE sector in Greece, the particular study is a case study, and it must be viewed and assessed with the necessary caution. The findings need to be cross-checked with and corroborated by studies on other e-learning programs currently under way, or already completed, at various HE institutions around the country (see discussion above).

Another limitation of the study might be the ominous economic conjuncture in which it was carried out (austerity measures, recession, very high levels of unemployment and job insecurity, etc.). In such harsh economic conditions, is it reliable to evaluate people's attitudes to new forms of learning, in general, or to e-learning in particular? Thus, there might be a need for a similar study on general population, to highlight factors leading to or discourage from LLL, that is a study that extends (in time and space) far beyond the requirements of a specific academic program.

Another issue is the nature of the barriers to participation. Apart from sampling issues (mentioned above), one thing that has also to be taken care of is the framing of the questionnaire(s) within the wider socio-economic context, and possibly the inclusion of more targeted questions concerning various kinds of 'barriers' (economic, cultural, esthetic, geographical, language, religious etc.).

Another methodological issue is the possible future triangulation of our findings with more qualitative studies (e.g. interviews, focus-groups, netnographic participant observation), which would enrich our views about the people's participation in e-learning, and its many quantitative and qualitative features.

8. Conclusions

It seems that education cannot, in itself, be a response to the economic crisis**,** even in the form of very innovative programs, such as the e-courses offered by the UoA. In fact, it might contribute –unintentionally of course— to reproducing existing inequalities, by

equipping already highly educated and trained persons with more credentials, knowledge and skills, in highly competitive and unstable working environments.

These findings have implications for the HE institution under study (mid-level), as well as for the Greek society in general, and more particularly the policy makers in the Greek Ministry of Education.

On the one hand, the UoA should make a *political* (in the wider sense of the term) decision. It should take great care to assess the degree of success of the examined e-learning courses regarding the offer of flexible educational provisions. As we have seen –at least for the three first cohorts of participants— those courses attracted people who already had a significant educational and economic advantage in the labour market, and had not faced any danger of social or even occupational exclusion. Thus, it seems that 'digital literacy' is interlinked with other types of 'literacy', and above all, with various kinds of economic, social and cultural capital (Bourdieu, 1986; Pitzalis & Porcu, 2017). A targeted promotion towards unemployed people, or towards other target-groups (e.g. the 'less educated'), combined with a differentiated fee policy for its 'clients', might be a partial solution for an increase in participation of the less privileged strata of the Greek adult population. Additionally, feedback from the participants on the various aspects of e-learning (for the content, mode of content delivery, etc.) should also be considered when evaluation of the courses and policy decisions about their future are made.

On the other hand, the Ministry of Education should take a very cautious approach in the promotion of e-learning. Based on the extended literature concerning the successful implementation of e-learning, and the wider European Qualifications Framework (EQF), it should set the minimum requirements, indicators and quality criteria for a National Qualifications Framework, especially in non-formal education (for the first attempt to classify qualifications within the formal educational system of the country, see EOPPEP, 2016). In this attempt it should engage and coordinate all those 'social partners', from national and community level, as they are acknowledged in the legal framework that applies to LLL. So far, there has not been any clear and concise framework regarding the promotion of distance learning or e-learning, leaving space for fragmentation and contestation among the various institutional initiatives. The latest legislation on Higher Education (GMERRA, 2017) does not improve things, since it requires that no more that 35% of teaching at graduate level may be carried out through distance-learning methods. Additionally, in educational legislation introduced in the last 10 years, even that dealing with the promotion of LLL, there has rarely been the case to have one or two references to terms such as 'e-learning', 'distance learning', 'open learning', or 'online distance learning' (ODL) (GMNERA, 2005, 2010, 2013).

It seems that e-learning is a new reality for Greece, at the level of both non-formal and formal learning, and it needs to be investigated on many levels: organizational, technological and pedagogical. No matter how well the design and implementation of e-learning courses is made, other factors should be taken into consideration when the outcomes of these courses are assessed: from wider socio-

economic structures, to organizational settings at middle and local level; from national-level legal frameworks to individual characteristics and personality traits. Political decisions that promote a 'one-size-fits-all' approach to LLL, regardless of good intentions, might be proved useless, counter-productive and, ultimately, socially damaging.

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