STUDENTS' MOTIVATION IN DISTANCE HIGHER EDUCATION: THE ROLE OF INTRINSIC MOTIVATION

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Abstract

Motivation affects learning and plays an important role in the field of education. In addition, adult's motivation for participating in lifelong learning is of immediate interest since it is regarded as a possible solution for the constantly rising unemployment. According to the bibliography students have extrinsic (praises, grades, social and financial rewards) and intrinsic (mastering, knowledge) motivation. It seems that learning most of the time is associated with intrinsic motivation. The Hellenic Open University recently begun to offer six new postgraduate programs introducing several innovations in order to change the landscape of distance education in Greece since it's the unique university that offers postgraduate studies with this method. Aiming to improve the educational procedure of the new programs an evaluation questionnaire with open-ended questions was given to the students. Among other things, students were asked to describe the motives that led them chose each program. In this paper we discuss students' intrinsic motivation and examine if it is differentiated according to various factors, such as students' age and gender. Our sample is 1026 students of the six postgraduate programs that answered the questionnaire. By the analysis made we attempt to identify the factors that affect adult students' intrinsic motivation in distance learning environments in order to improve teaching methodology and structure of existing and forthcoming programs.

Keywords: Distance education, higher education, intrinsic motivation, adult education.

1 INTRODUCTION

The Hellenic Open University (HOU) is the unique university in Greece that offers postgraduate education with the method of distance learning and its students are mostly adults. Aiming to renew its academic profile, since the autumn of 2016, HOU is offering six new postgraduate programs that introduce several innovations ([13] [14]). Considering the importance of adults' motives in the context of improving the educational procedure, the teaching methodology and the structure of these programs, we examined the intrinsic motivation that led students chose one of them. In this study we present the students' intrinsic motivation and how is differentiated according to age, gender and experience in open and distance learning (ODL).

2 BACKROUND

It is suggested that motivation plays an important role on education [1]. Throughout the literature we find several definitions for motivation. For example, motivation is a "hypothetical construct used to describe external and internal forces that explain the start, strength, direction and persistence of action" [2]. Brennen [3] defines motivation "as the level of effort an individual is willing to expend toward the achievement of a certain goal" and McDevitt [4] suggests that "motivation energizes, directs and sustains behavior and can be either intrinsic or extrinsic".

As far as education is concerned, motivation is connected to student's promptness, need and desire not only to participate in, but also to be successful in the learning process [5]. In addition, motivation tries to find out the factors that lead students to become more involved in the classroom [5]. According to [6] we cannot disconnect learning from motivation. Hulleman and Barron [7] indicate the positive connection between motivation and engagement, learning and educational achievement. Theories of motivation include behavioral, cognitive, humanistic, and biological aspects [8].

Concerning the adults, scientists believe that adults' motivation to participate in the learning process is multiple, complex and change [9]. According to educational psychology studies, high positive motivation can compensate for low ability or insufficient stock of knowledge [10]. Also, it seems that internal and external factors influence the motivation to learn, although their interpretation may significantly differ [10]. Self-Determination Theory describes three categories of motivation: intrinsic motivation, which refers to doing something because it is inherently interesting, or enjoyable, extrinsic

motivation, which refers to doing something because it leads to a separable outcome and amotivation which refers to not intending to act [8].

In the context of learning, intrinsic motivation is internal influences, which cause a person to learn, for example, self-esteem, self-confidence, self-satisfaction, personal values and needs [5]. It is the pleasure of learning process of what comes after acquiring the knowledge [11]. Examples of external motives can be obtaining a degree, entering into the labor market, money, improving a career and thanking friends and family [8].

It seems that most of the time learning is associated with intrinsic motivation [11] which can foster learning when there is little or no extrinsic motivation or there are obstacles to learning [5]. Students who have intrinsic motives develop strategies that lead them process information deeply; they aim at a deep understanding rather than memorization and remain engaged in the educational procedure even when there are no external motives [8]. On the contrary, students with extrinsic motivation have the tendency to make the minimum effort in order to achieve an award [8]. To summarize, intrinsic motivation is regarded as "*more robust than extrinsic motivation and more related to deep quality learning*" [12].

3   METHODOLOGY

For analyzing the data we followed the grounded theory in order to construct a theory through the analysis of data and in particular the intrinsic motivation of students [15]. Also thematic analysis, for the qualitative analysis we used. We followed the six steps of thematic analysis which according to Braun and Clarke [16] are: 1) familiarizing with the data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes and 6) writing the report. To define intrinsic and extrinsic motivation we consulted the Carré model [17] on adult motives toward learning. According to this model intrinsic motivation are: 1) the epistemic motive, that is learning and knowledge are a source of satisfaction and pleasure, 2) the socio-emotional motive, that is adults want to create social contacts and 3) the hedonic motive, that is the pleasure is connected to the learning environment itself. The extrinsic motivation are: 1) the economic motive, 2) the prescriptive motive, 3) the derivative motive, 4) the professional operative motive, 5) the personal operative motive, 6) the identity motive and 7) the vocational motive [9].

For collecting the data students answered a questionnaire with open-ended questions about their motives that led them chose one of the postgraduate programs. The sample was students (N=1026) who attended the new six postgraduate programs during the autumn semester of 2016. The majority was female (83,04%). As far as the age is concerned the majority was between 23 and 29 years old and 71,15% had no experience in Open and Distance Learning (ODL).

4   RESULTS

From the coding process and taking into consideration Carré's model, two categories were arisen intrinsic and extrinsic motivation. In this paper we focus on intrinsic motivation. We categorized intrinsic motives to seven different themes (see Table 1). The majority of the comments (44,43%) describes students' interesting in the subject, for example "*I love literature*", "*I am very interested in geriatrics*", "*My interest in special education*". Follows with 27,94% the specialization, enrichment, widening and improvement of their existing knowledge and skills, for example students write *"I am interested in specializing in New Media Communication and Journalism*" and "*To improve my skills in my teaching about minorities*". The 13,80% of the comments mention as motive the acquisition of new knowledge and skills, for example "*Knowledge of the theory of creative writing*" and "*Acquiring knowledge in Special Education*". Other intrinsic motives that students stated with fewer references was updating their knowledge (2,38%), for example "*The need to update on the subject*", motives that are connected with the personal development (6,11%), for example satisfaction, internal improvement and fulfillment ("*My constant interest in personal development and progress*"), their desire for lifelong learning (3,85%) and last but not least the 1,47% of the references reported as motive the awareness on refugee and migrant issues since one of the six programs was entitled "Language education for refugees and migrants".

Table 1. *Themes and frequencies of intrinsic motivation*

Themes of intrinsic motivation	Number of references	Percentage
Specialization, enrichment, widening, improvement knowledge and skills	247	27,94%
Acquiring knowledge and skills	122	13,80%
Updating knowledge	21	2,38%
Awareness on refugee and migrant issues	13	1,47%
Personal development (satisfaction, internal improvement, fulfillment)	54	6,11%
Lifelong learning	34	3,85%
Subject ("I find it interesting", "I love it", "I like it" etc.)	393	44,43%

4.1   Intrinsic motivation and gender

As far as the gender is concerned we notice in the Fig. 2 that the 45,04% of women referred as motive the subject of the postgraduate program and the 28,69% the fact that they want to specialize, enrich and improve their knowledge and skills. Last but not least the 13,00% of women cited the motive of acquiring new knowledge and skills. The other themes were less than 10%.
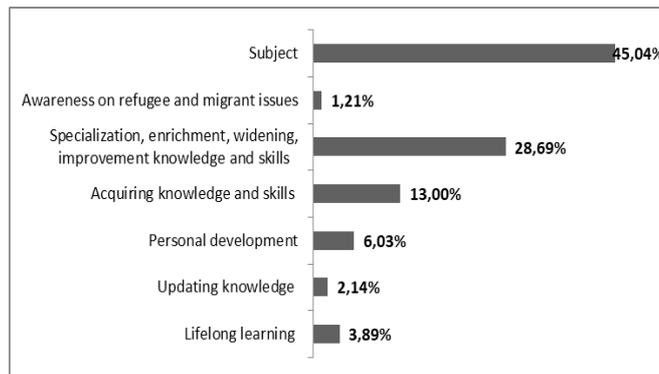

Figure 2. Women's intrinsic motivation

On the other hand, the 41,30% of males mentioned the motive of *Subject* and 23,91% the motive of *Specialization, enrichment, widening, improvement knowledge and skills*. Also 18,12% reported the motive *Acquiring knowledge and skills*. The other themes were less than 10%.
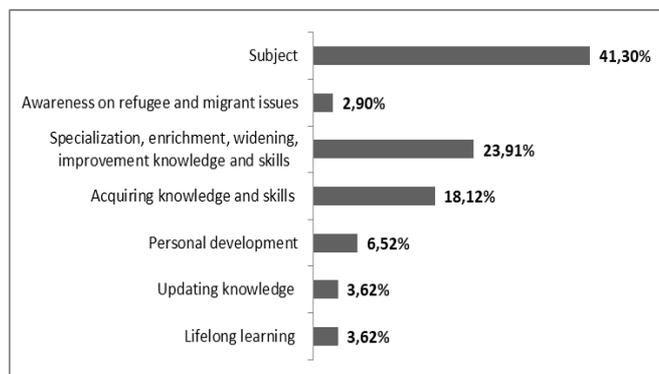

Figure 3. Men's intrinsic motivation

4.2   Intrinsic motivation and age

Examining the age of the students and their intrinsic motivation, 40,57% of students between 23 and 29 years old (Fig. 4) mentioned as motive the subject and the 35,40% the specialization, enrichment,

widening, improvement of their knowledge and skills. Finally, the 14,99% of these students described as motive the acquisition of new knowledge and skills related to the subject of the postgraduate program.
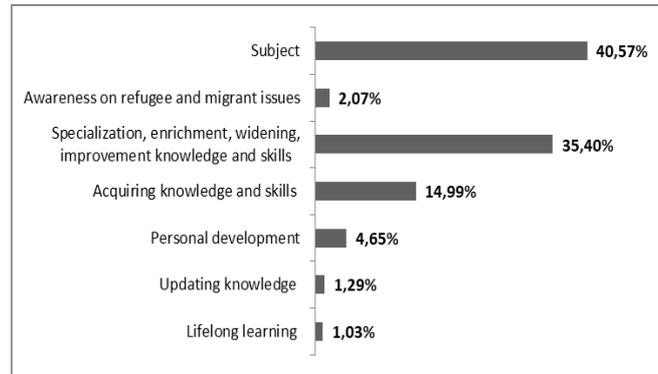

Figure 4. Intrinsic motivation of students between 23 and 29 years old

As far as the students between 30 and 39 years old are concerned (Fig. 5) the 46,35% of them cited as an intrinsic motive the subject, the 23,18% the specialized knowledge and skills and the 16,31% the new knowledge and skills they wanted to develop.
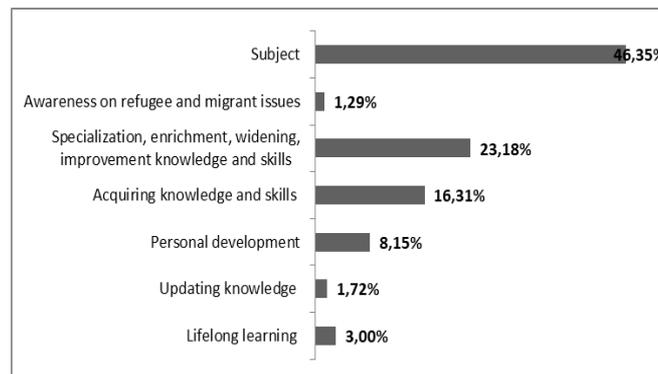

Figure 5. Intrinsic motivation of students between 30 and 39 years old

Next, as we can see in the Fig. 6, students that belong in the age range 40-49 reported the motive *Subject* with 47,00% and the motive *Specialization, enrichment, widening, improvement knowledge and skills* with 23,50%. It's worth mentioning that the motive *Acquiring knowledge and skills* in these ages had less than 10%.
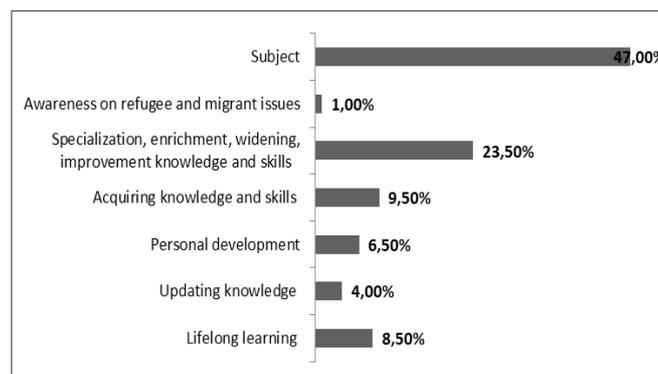

Figure 6. Intrinsic motivation of students between 40 and 49 years old

Subsequently, more than half of the students over 50 years old (53,13%) reported as their motive the subject of the postgraduate program and the 14,06% their desire to specialize, enrich and improve their existing knowledge and skills. Acquisition of new knowledge and skills was a motive for the

10,94% of the students. As we can see in the Fig. 7, none of the students reported the *Awareness on refugee and migrant issues* motive.
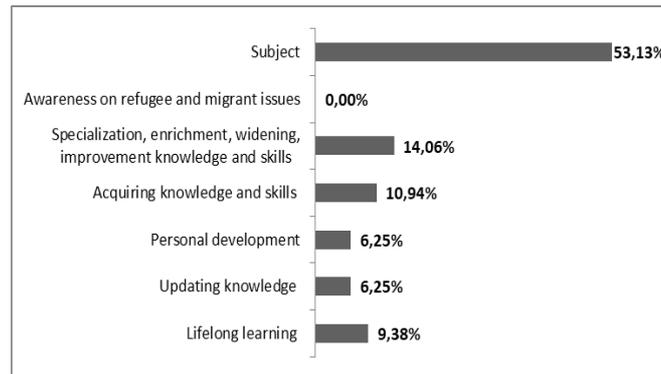

Figure 7. Intrinsic motivation of students over 50 years old

4.3   Intrinsic motivation and experience in ODL

At the end of this study, we examined the relationship between intrinsic motivation and students' experience in ODL (Fig. 8). The 49,24% of students who had experience in ODL mentioned as motive the interesting subject and the 20,08% mentioned the expectation for specialization, enrichment, widening, improvement their existing knowledge and skills. The motive Acquiring knowledge and skills was mentioned from the 13,26% of the students with experience in ODL.
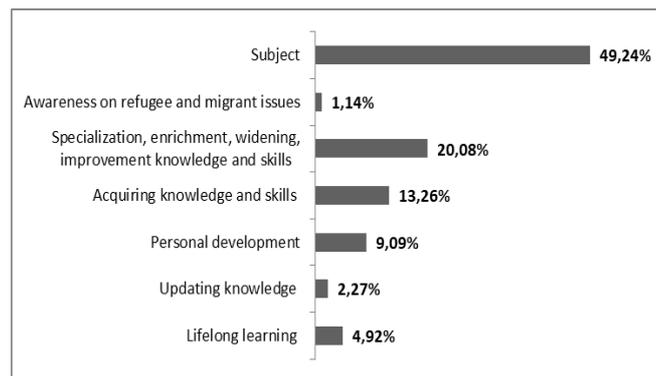

Figure 8. Intrinsic motivation and experience in ODL

Regarding the students with no experience in ODL (Fig. 9), the 42,42% of them was motivated by the subject of the program, the 31,29% by the desire to obtain specialization, enrichment, widening and improvement of their existing knowledge and skills and last but not least the 14,03% by the need to develop new knowledge and skills.
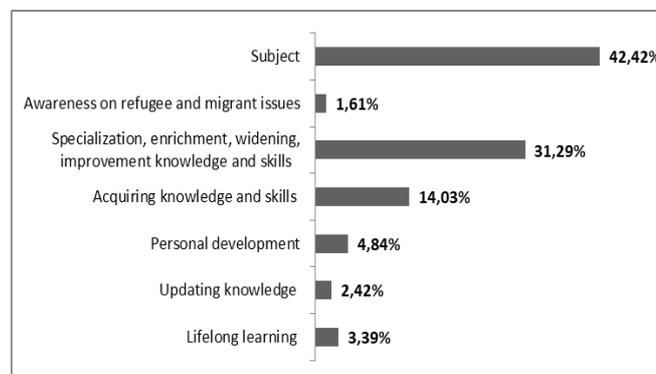

Figure 9. Intrinsic motivation and no experience in ODL

5   CONCLUSIONS

To summarize, the intrinsic motive that was mentioned from the majority of the students (44,43%) was the subject of the postgraduate program that is to say students selected the specific program because they like, love or find interest its field of study. In addition 27,94% the specialization, enrichment, widening and improvement of their existing knowledge and skills and last but not least the acquisition of new knowledge and skills with 13,80%. Other students' motives were the updating of their knowledge, lifelong learning and motives that are connected with the personal development.

Regarding the gender, women mentioned the motive of postgraduate program's subject in higher percentage than men, likewise the *Specialization, enrichment, widening, and improvement knowledge and skills* motive. On the contrary the motive *Acquiring knowledge and skills* was mentioned in higher percentage by men than women. We would say that for choosing a postgraduate program the subject and the specialization, enrichment, widening and improvement of existing knowledge and skills are more important motives for females than males. The opposite occurs for the motive of developing new knowledge and skills.

For all the age ranges the motive that was mentioned in most of references was the subject of the program. But we find the higher percentage in the students over 50 years old. Regarding the motive of specialize, enrich and improve existing knowledge and skills was mentioned in the highest percentage by the students between 23 and 29 years old. Students in the age of 30-39 years old mentioned with the highest percentage the motive of acquiring new knowledge and skills. To conclude, it seems that the motive of the subject is more important for the students over 50 years old, the motive of specialization, enrichment, widening and improvement of existing knowledge and skills for the students 23-29 years old and the motive of acquiring new knowledge and skills for the students 30-39 years old.

Both the majority of students with and no experience in ODL reported the motive of the subject more frequently than the other motives. But the motive of the subject was reported by the students with experience in ODL in higher percentage than by the students with no experience in ODL. The opposite occurred for the motives of specialization, enrichment, widening and improvement of their existing knowledge and skill and the acquisition of new knowledge and skills. It seems that the interesting on the subject is more important for the students with experience in ODL and the specialization, enrichment, widening and improvement of existing knowledge and skill and acquisition of new knowledge and skills are more important for the students with no experience in ODL.

Taking into consideration the importance of intrinsic motivation for the educational process, especially in adult education, analyzing adult learners' motives is very important not only for educational staff but also for higher educational institutions' administration. Understanding adults' intrinsic motivation can be useful during the design, development and operation of programs in order to fill students' needs. On the other hand, knowing those motives can help administration adopt appropriate strategies to support students' students but also to bring new students in order to ensure the longevity of the programs. In the case of HOU it would be of great interest the study of adults' intrinsic motivation in combination with extrinsic motivation in order to have a full picture about the reasons why adults choose to study a postgraduate program especially with the method of distance learning. It could be a procedure that would take place before the beginning of a semester and its results could afterwards be used for redesigning and improve the existing programs. Finally, exploring the motivation of existing students could help find the proper ground for creating new programs.

REFERENCES

[1]   D.H. Lim, "Cross cultural differences in online learning motivation," *Educational Media International*, vol. 41, no. 2, pp. 163-173, 2006.

[2]   R. Vallerand, and E. Thill, *Introduction à la psychologie de la motivation*. Paris: Vigot, 1993.

[3]   A.M. Brennen, Enhancing students' motivation, 8 October, 2017. Retrieved from http://www.soencouragement.org/enhancing-students-motivation.htm.

[4]   T.M, McDevitt, and J.E Ormrod, *Child development, educating and working with children and adolescents* (2nd ed.). Boston: Prentice Hall, 2006.

[5]   L. Bomia, L., Beluzo, D. Demeester, K., Elander, M. Johnson, and B. Sheldon, "The impact of teaching strategies on intrinsic motivation," ERIC *Clearinghouse on Elementary and Early Childhood Education*, 1997.

[6]   R. J. Wlodkowski, Enhancing adult motivation to learn: A comprehensive guide for teaching all adults. San Francisco, CA: Wiley Periodicals, 2008.

[7]   C. S. Hulleman and K. F. Barron, "Motivation Interventions in Education: Bringing Theory Research, and Practice," in *Handbook of Educational Psychology* (L. Corno and E. M. Anderman, eds.), New York: Routledge, 2016.

[8]   S. Pew, "Andragogy and pedagogy as foundational theory for student motivation in higher education," *Student Motivation*, vol. 2, pp. 14-25, 2007.

[9]   A. L. de Oliveira Pires, "Higher education and adult motivation towards lifelong learning. An empirical analysis of university post-graduates perspectives," *European journal of vocational training*, No 46, pp.129-150, 2009.

[10]   L. Lukianova, "Motivation factors of adult learning," *The New Educational Review*, vol. 44, pp. 223-229, 2016.

[11]   M. Csikszentmihalyi, "Intrinsic Motivation and Effective Teaching" in *Applications of Flow in Human Development and Education* (M. Csikszentmihalyi, eds), pp.173-187, United States: Springer, 2014.

[12]   P. Kawachi, "Initiating Intrinsic Motivation in Online Education: Review of the Current State of the Art," *Interactive Learning Environments*, vol. 11, no. 1, pp. 59-81*, 2003.

[13]   R. Kalantzi, D. Sideris, N. Spyropoulou and G. Androulakis, "Changing the Gear: Adopting Inter-institutional Collaborative Course Development as the Policy for Distance Higher Education in Greece," *The Online, Open and Flexible Higher Education Conference*, pp. 61-68, 2016.

[14]   N. Spyropoulou, R. Kalantzi, D. Sideris and G. Androulakis, "Newcomer Students' Perspectives on Online Tutor-Student Sessions in Distance Higher Education," *In Conference Proceedings. The Future of Education*, pp. 163-168, 2017.

[15]   P. Yancey Martin and B. A. Turner, "Grounded Theory and Organizational Research," *The Journal of Applied Behavioural Science*, vol. 22, no. 2, 1986.

[16]   V. Braun, and V. Clarke, "Using thematic analysis in psychology. Qualitative Research in Psychology," vol. 3, no. 2, pp. 77–101 (2006).

[17]   P. Carré, "Motifs et dynamiques d'engagement en formation," *Education Permanente,* no 136, 1998.