RESEARCH ARTICLE



Barriers to Employees' Participation in Continuing Professional Education Programs in Greece

Niki Liodaki na and Thanassis Karalis

ABSTRACT

Surveys that examine the perceptions of employees regarding lifelong learning in Greece reveal that employees have a positive attitude towards education and also indicate that about 70% of the working population showed intention to participate in some form of continuing education. However, the participation rates of Greek employees in educational programs are below the European average. At this point, it is worth noting that little is known regarding the barriers that prevent them from participating. In this light, the present study is the first attempt to investigate both individual barriers and barrier categories of employees' participation in Greece. Survey data were collected using a questionnaire. The results of the present study revealed four categories of barriers. Of these, situational barriers gathered the highest average, followed by institutional: statelinstitute barriers and, institutional: working environment and, to a lesser extent, dispositional barriers. In particular, the three main barriers faced by employees were the "lack of time due to work obligations", the "participation cost", and the "lack of time due to taking care of children." In addition, the categories of barriers were found to be related to three of the four demographic variables examined: gender, employment status, and occupation, which were independent of age.

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Department of Educational Science and Early Childhood Education, University of Patras, Greece.

*Corresponding Author: e-mail: liodaki@upatras.gr

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1. Introduction

Previous surveys on participation show a significant difference between the rates of intention of adult participation in educational programs and the rates of actual participation. In many cases, although adults state their intention to participate in an educational program, they are ultimately unable to do so. The explanation for this gap between the intention to participate and the actual participation lies in the existence of inhibitors, or as they are cited in the literature, barriers to participation. Barriers are defined as anything that prevents an adult from participating in adult education and involves either internal or external factors (Hovdhaugen & Opheim, 2018, p. 563).

According to Ordos (1980, as cited in Scanlan & Darkenwald, 1984, p. 155), although examining the reasons for participation has made a significant contribution to understanding various aspects of participation behavior, it has not proved useful in predicting participation behavior and in particular, the distinction between participants and non-participants. This gap can be filled by examining the barriers. Therefore, a thorough examination of the barriers will further contribute to safer conclusions about the factors that influence and contribute to the decision of adult participation in educational programs. Knowing the respective barriers is the first step in changing the organization and providing training opportunities in order to encourage participation (Massing & Gauly, 2017, p. 16). However, despite the recognition by the academic community of the importance of examining barriers, surveys are numerically fewer than surveys for reasons of participation because, most of the time, it is easier for researchers to find out why individuals do something rather than why they do not (Cross, 1981).

2. Theoretical Framework

The first categorization of barriers was made by Johnstone and Rivera (1965), who divided barriers into two broad categories: situational or environmental and dispositional or internal barriers. Situational barriers refer to the external factors that affect adults (Merriam & Caffarella, 1999; Scanlan, 1986). Situational barriers are the barriers that arise depending on the living conditions of the individual at a given time. Such barriers can be the "lack of money", the "lack of time" (either due to work or family obligations), the "no transportation", etc. Barriers in the above category and in particular "participation cost" and "lack of time" are more often mentioned by adults in surveys for non-participation than those of the other two categories, dispositional and institutional (Cross, 1981; Darkenwald, 1984; Scanlan & Darkenwald, 1984).

Dispositional barriers refer to attitudes, perceptions, and beliefs, as well as the expectations of adults towards education and bad previous experiences with schooling (Rubenson & Desjardins, 2009; Scanlan, 1986). They are also mentioned in the literature as psycho-social or internal barriers (Porras-Hernández & Salinas-Amescua, 2012, p. 314). The category of dispositional barriers includes barriers such as "I am too old to learn", "tired of school", or "I have learnt enough so far." Usually, "lack of interest" is a barrier for adults with a low educational background (Cross, 1974). In most studies, dispositional barriers are present to a lesser extent than in the other two categories. This is due to methodological problems that researchers face in the process of gathering research data, which make it difficult for them to understand the real role of dispositional barriers.

Cross (1974, 1977, 1981), based on the research of Carp et al. (1974), suggested an additional category: the institutional barriers. Institutional barriers mainly concern the procedures and practices that arise from the institutions that offer educational programs. This category includes barriers such as: "lack of information regarding the educational programs," "registration procedures to an educational program," "lack of appropriate courses and the scheduling of them," and "lack of employers support." (Cross, 1981; Hovdhaugen & Opheim, 2018; Rubenson & Desjardins, 2009).

In addition to Cross's three categories (1981), Darkenwald and Merriam (1982) proposed informational barriers and renamed dispositional barriers to psycho-social. By renaming dispositional barriers, researchers wanted to highlight the importance of the social environment in adult participation in educational activities (Larson & Milana, 2006). The most recent categorization of barriers is cited by Desigratins and Rubenson (2013), dividing barriers into individual and structural. Individuals include dispositional barriers, while institutional and situational barriers are included in the category of *structural* barriers. "Information" and "liquidity" can be included in both of the above categories.

3. Метнор

The aim of this study was to highlight the barriers that employees face and prevent them from participating in continuing professional education programs. In particular, we investigated which barriers prevent participants and whether there was a difference in participants' preferences when choosing between many as well as the most important barrier. In a secondary analysis (based on cross-categorization), we investigated which of the barriers categories appeared to a greater extent. To achieve the

above goal, we used the questionnaire "Attitudes, Reasons and Barriers of Employees Participation" (developed by Liodaki, 2020) and, in particular, the part where the barriers of employees are examined. To compile a list of barriers, we used the barriers (11 of them) listed in the "Participation Reasons Barriers Questionaire- PRB" (Karalis, 2013) as well as research data collected by two focus groups of 20 employees. The total number of barriers was 29.

There were 1.143 participants, aged from 18 to 65+, with the largest percentage being aged 32–39 years, and the majority were women (52.3%). The largest percentage worked as skilled craftsmen (22.5%) and were employed in the private sector as full-time employees (47.9%). All participants, during the survey, were employees and attended continuing professional education programs offered by provided by two Greek Confederations: the Hellenic Small Enterprises Institute of the Confederation of Professionals. Craftsmen and Merchants (IME GSEVEE) and the Labour Institute of General Confederation of Greek Workers (INE GSEE) throughout Greece. The total number of educational programs implemented by both confederations during the research period was 663.

4. Results

4.1. Barriers

Participants were asked to rate (on a seven-point Likert scale) their degree of agreement or disagreement on each of the 29 reasons for non-participation and then to choose one of the most important ones that prevented them from participating in educational programs (Tables I and II). In order to capture the data clearly, Table I presents the data on a three-point scale. Of the 29 barriers listed, the "lack of time due to work obligations" (68%), the "participation cost" (50%) and the "lack of time due to taking care of children" (44.8%) showed the highest agreement rates from participants.

Similarly, in the case of one choice, (Table II) the three most important barrier which gathered the highest percent of agreement were "lack of time due to work obligations" (16.4%) "Participation cost" (12.7%), "lack of time due to taking care of children" (8.6%). However, there was little variation in the last positions where, in the case of multiple choice, the lowest agreement rates were accumulated by the following barriers: "I can learn in other ways what I would at an educational program" (6.5%), "I have learnt enough so far" (5.2%), "I am too old to learn" (4.3%) compared to "negative attitude of my family or friends" (0.3%), "I don't have the typical requirements for participation" (0.2%) and "not recognized by my colleagues" (0.2%) It is worth noting that the fourth highest percentage of agreement (multiple choice) was the "lack of information about the available educational programs" while when asked to choose only one barrier that was the "lack of educational programs related to my needs" (8.4%).

In most surveys that examined barriers, the "lack of time due to work obligations" and "participation cost" alternate in the first and second place of adults' choice. For instance, in the work by Karalis (2017, 2021), the most important barrier chosen was the "participation cost,"

TABLE I: EMPLOYEES' BARRIERS OF PARTICIPATION IN EDUCATIONAL PROGRAM (MULTIPLE CHOICES)

Barriers	Disagree (%)	Neither agree, nor disagree (%)	Agree (%)
Lack of time due to work obligations	12.7	19.3	68.0
Participation cost	29.9	20.0	50.0
Lack of time due to taking care of children	28.5	26.7	44.8
Lack of information regarding available educational programs	39.0	19.7	41.3
Lack of time due to other activities	36.7	22.7	40.7
The educational program take place at days and times I can't attend	37.8	26.4	35.8
Lack of educational programs related to my needs	47.2	22.1	30.7
Lack of time due to taking care of relatives	42.4	29.0	28.5
The quality and the organization of the educational programs are not up to my standards	51.1	20.5	28.0
I am prevented by health-related issues	5.8	18.9	25.3
Transportation difficulties	52.8	22.0	25.2
A certificate of attendance is not provided	53.9	21.6	24.5
The educational program lasts too long	52.8	23.3	24.0
The educational program is not subsidized	56.8	21.5	21.7
The educational program will not help me cope with my daily work	58.1	22.7	19.2
It is not considered an asset at my working environment	57.7	24.0	18.3
Not recognized by my employer	60.2	23.6	16.2
Not recognized by my colleagues	62.4	23.9	13.7
Participating in educational programs will not improve my position at work	66.0	21.9	12.2
I don't like the trainers of the educational program	71.5	16.3	12.2
The selection procedure, I don't think I will be chosen	60.5	27.7	11.7
I don't have the essential skills required for participation	71.8	17.1	11.1
I don't have the typical requirement for participation	70.5	19.1	10.4
I don't like the institution that organizes the educational program	76.6	14.8	8.6
Negative attitude of family or friends	71.6	20.4	8.0
I don't like to attend educational programs, they remind me of school	81.4	12.0	6.6
I can learn in other ways what I would at an educational program	76.8	16.7	6.5
I have learnt enough so far	81.5	13.2	5.2
I'm too old to learn	86.0	9.7	4.3

while the second most important was the "lack of time due to work obligations". The difference between the two surveys is that, in the population under investigation of the present survey, only employed participants were included. In addition, in the year of the present survey, an increase in the participation rate was recorded due to the offer of programs through subsidized actions of the European Community support frameworks (Karalis, 2017), ranking the "participation cost" in the present survey as the second most important barrier. "Lack of time due to taking care of children" emerged as the third most important barrier to participation in this study, in contrast to Karalis (2021) study, which ranked fourth. A result expected since the largest percentage of participants was women aged 32–39 years. According to Eurostat (2010), the deterrents to adults' participation in Greece in educational programs are both the "lack of time due to family" (43%) and the "lack of time due to their work obligations" (48.3%).

4.2. Categorization of Barriers

The initial categorization of barriers was based on the Cross (1981) categorization, which divides barriers into three broad categories: (a) situational, (b) institutional, and (c) dispositional. After the initial analysis of our data, two subcategories of institutional barriers emerged. The category of situational barriers was derived from the sum of eight variables (Table III) with an internal reliability index (Cronbach's Alpha), a = 0.76.

The category of institutional barriers was derived from the sum of 16 variables. For the institutional barriers category, the internal reliability index (Cronbach's Alpha) was 0.90. The analysis of the data of the present study (as mentioned above) revealed two new categories of barriers as subcategories of institutional barriers. The institutional: statelinstitutions barriers and the institutional: working environment. The first subcategory concerns the barriers that arise from the institutions or the state that implements the educational programs, while the second subcategory

TABLE II: EMPLOYEES' BARRIERS TO PARTICIPATION IN EDUCATIONAL PROGRAMS (ONE CHOICE)

Barriers	Percentage
Lack of time due to work obligations	16.4
Participation cost	12.7
Lack of time due to taking care of children	8.6
Lack of educational programs related to my needs	8.4
The educational program is taking place on days and times I can't attend	7.3
I don't have the essential skills required for participation	7.2
Lack of time due to other activities	6.0
I am prevented by health-related issues	5.9
The education program is not subsidized	4.1
Transportation difficulties	2.9
Not recognized by my employer	2.8
Lack of information regarding available educational programs	2.7
A certificate of attendance is not provided	2.7
The quality and the organization of the educational programs are not up to my	2.4
standards	
The educational program will not help me cope with my daily work	1.8
Participating in educational programs will not improve my position at work	1.5
Lack of time due to taking care of relatives	1.5
The educational program lasts too long	1.3
It is not considered an asset in my working environment	1.0
I don't like the trainers of the educational program	1.0
The selection procedure, I don't think I will be selected	1.0
I have learnt enough so far	0.6
I'm too old to learn	0.5
I can learn in other ways what I would in an educational program	0.5
I don't like the institution that organizes the educational program	0.4
I don't like to attend educational programs; they remind me of school	0.4
Negative attitude of family or friends	0.3
I don't have the typical requirement for participation	0.2
Not recognized by my colleagues	0.2
Total: 1143	100.0

TABLE III: CATEGORIZATION OF SITUATIONAL BARRIERS

1.	Participation cost	
2.	Lack of time due to taking care of children	
3.	Lack of time due to other activities	
4.	I am prevented by health-related issues	
5.	Lack of time due to work obligations	
6.	Negative attitude of family or friends	
7.	Transportation difficulties	
8.	Lack of time due to taking care of relatives	

concerns the barriers that arise from the working environment, such as "participating in the educational program will not improve my position at work." The category of institutional: statelinstitutions (Table IV) was derived from the sum of 12 variables with a = 0.87.

The category of institutional: working environment barriers (Table V) was derived from the sum of four variables with a = 0.80.

The category of dispositional barriers (Table VI) was derived from the sum of five variables with a = 0.88.

As observed from the table of averages of the barriers' categories (Table VII) the situational barriers were detected to a greater extent followed by institutional statelinstitutions and institutional: working environment and to a lesser extent the dispositional barriers.

The correlations between the four demographics we examined, and the categories of barriers, showed that the latter were related to gender, employment status and occupation, while they were independent of age. More specifically in terms of gender (t-test, p < 0.001) women face more *situational* barriers (M = 55.06, SD = 13.20). The differences between the categories of employment status were statistically significant in the category of situational barriers, (p < 0.001) institutional: state/institutions (p < 0.001) and institutional: working environment (p < 0.001). On average, in all categories of barriers the highest average is found in government and wider public sector employees (Situational barriers: M = 56.14, SD = 11.87; Institutional state/institutions: M = 47.27, SD = 13.76; Institutional working environment: M = 44.92, SD =16.08). However, it is noteworthy that the lowest average

TABLE IV: CATEGORIZATION OF INSTITUTIONAL: STATE/INSTITUTIONS BARRIERS

1.	The educational program takes place on days and times I cannot attend
2.	Lack of information regarding available programs
3.	A certificate of attendance is not provided
4.	The educational program lasts too long
5.	The quality and organization of the educational programs are not to my standards
6.	The educational program is not subsidized
7.	Lack of educational programs related to my needs
8.	The selection procedure, I don't think I will be chosen
9.	I don't meet the typical requirements for participation
10.	I don't have the essential skills required for participation
11.	I don't like the institution that organizes the educational program
12.	I don't like the trainers of the educational program

TABLE V: CATEGORIZATION OF INSTITUTIONAL: WORKING ENVIRONMENT BARRIERS

1.	It isn't considered an asset at my work environment
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- 2. Participation in educational programs will not improve my position at work
- 3. Not recognized by the employer
- 4. Not recognized by my colleagues

TABLE VI: CATEGORIZATION OF DISPOSITIONAL BARRIERS

- 1. I have learnt enough so far
- 2. I don't like attending educational programs, they remind me of school
- 3. I'm too old to learn
- 4. I can learn in other ways what I would at an educational program
- 5. The educational program will not help me cope with my daily work

TABLE VII: MEAN AND STANDARD DEVIATION OF BARRIERS' CATEGORIES

Categories of barriers	Mean	S.D.
Situational barriers	54.07	13.89
Institutional: state/institutions	46.10	14.38
Institutional: working environment	43.55	17.20
Dispositional barriers	36.00	16.59

Note. Min: 14.29, Max: 100.00.

was found in business owners/employers, also in all categories of barriers.

The differences between the occupational categories were statistically significant in the three out of the four categories of barriers: the *situational barriers* (p < 0.001), the institutional: statelinstitutions (p < 0.001) and the institutional working environment (p = 0.006). In particular, technologists-technicians gathered the highest averages in the situational barriers (M = 57.52, SD = 12.42), the heavy machinery operators in the institutional: working environment (M = 47.86, SD = 20.26) while in the institutional statelinstitutions (M = 51.65, SD = 13.93), the employees who are employed in scientific, artistic and related professions. On the contrary, the lowest averages are collected by the skilled craftsmen in the situational (M = 50.29, SD =14.92) and the institutional statelinstitutions (M = 44.03, SD = 15.14), while the lowest averages in the *institutional* working environment (M = 40.00, SD = 13.17) were found in senior managers and executives.

5. Discussion

"Lack of time due to work obligations", "cost of participation", and "lack of time due to taking care of children" were highlighted by employees as the three most important barriers that prevent them from participating in educational programs. All three of the above barriers belong to the category of situational barriers, which gathered the highest average compared to the others. This result is consistent with Kitiashvili and Branton Tasker (2016). Barriers belonging to the above category are mentioned more often than the other two categories, in particular, the barrier of "lack of time" and "participation cost". A finding that is in complete agreement with the literature (Cross, 1981; Darkenwald, 1984; Johnstone & Rivera, 1965; Karalis, 2021; Katjimune, 2011; Massing & Gauly, 2017; Scanlan & Darkenwald, 1984).

In particular, participants recognize the "lack of time due to work obligations" as the most important barrier for them. It is mentioned as the most important barrier in eight other European countries (Hovdhaugen & Opheim, 2018). It has also emerged as one of the major barriers for pharmacists and for Hispanic ESL students (Hayes, 1989;

Marriott et al., 2007). The ranking of this barrier in the first two places may be due to the fact that employees find it difficult to combine their personal and work lives with academic schedules (Katjimune, 2011).

As mentioned in the literature, "participation cost" and "lack of time" are two socially acceptable reasons for non-participation, which may conceal more complex and possibly unrecognized reasons. However, many participants choose "participation cost" as a barrier without knowing the actual cost of training programs (Charner & Fraser, 1986; Cross, 1977, 1981; McGivney, 1993; Merriam & Caffarella, 1999). We should take into consideration that as adult education develops rapidly, some programs are funded either by the state or employers.

In our previous study (Liodaki & Karalis, 2016), we found that the "cost of participation" was the main barrier for participants. However, in that study, the participants were students, and the majority were unemployed. Therefore, such a result was expected. In the present study, employees participated in educational programs without any financial burden, which raises questions about whether "participation cost" is such a significant barrier to participation, as reflected in employees' responses. However, since the question about the barriers referred to all the educational programs that the participants have attended so far, we can't assess whether the "participation cost" was chosen by participants simply because it is a socially acceptable reason. In addition, it is noteworthy that in Karalis (2021) study, the "cost of participation" remains the most important barrier for participants from 2011 to

Similarly, the barrier of "lack of time" ranked high, even though the education programs offered to employees are often designed to facilitate them (afternoon classes, short seminars, distance learning programs, etc.,) Possibly, "participation cost" and "lack of time due to work obligations" may not be real barriers. In this case, of course, these two barriers are associated with a "lack of information about the options available" or a "lack of interest in finding information" (Charner & Fraser, 1986). The examination of these two barriers via qualitative research methods would provide us with more information about their real meaning. On the other hand, "lack of time due to work obligations" seems to be a strong barrier that may hide more than one barrier arising from the working environment.

The results of the present study revealed two subcategories of institutional barriers: the institutional: statelinstitutions and the institutional: working environment. The category of institutional barriers statelinstitutions received the second highest score, compared to the others, and includes the barriers that mainly concern the procedures, as well as the practices arising from the institutions implementing the educational programs or from the state. It includes reasons such as "the quality and the organization of the educational program are not up to my standards" "lack of training programs that meet my needs", "the educational program is not subsidized", etc. In the present survey, the "lack of information regarding available educational programs" was ranked in the fourth place, in the case of multiple

choice and in the 12th place in the case of one choice while it was ranked in the second and fourth place respectively in all three phases of Karalis's survey (years of 2011, 2013, and 2016). The main difference between the two surveys is that the majority of employees in the present survey were members of the two confederations and, likely, had easier access to information regarding the available educational programs.

Institutional: working environment barriers are related to barriers that arise or relate to the working environment of employees and include barriers such as "not recognized by my employer" or "participation in an educational program won't improve my position at "work" etc. The low readability of non-formal education certificates (GGDVM, 2013) works as a deterrent to participation and is reflected in the barrier "it isn't considered an asset at my working environment," which was chosen more by the participants.

In contrast to situational and institutional barriers, dispositional barriers include socially unacceptable reasons for non-participation. It is easier for adults to state that they can't afford it than because they do not have confidence in their abilities and believe that they will not be able to meet the demands of an educational program (Cross, 1981). Additionally, dispositional barriers related to negative perceptions of employees about education are largely shaped by their experience in formal education. This often acts as a deterrent to participation. As dispositional barriers are more difficult to overcome compared to the other two categories, employees who face these types of barriers do not participate, at least not as frequently. Consequently, questions about barriers are often addressed to participants or those who wish to participate (Rubenson & Desjardins, 2009). As a result, dispositional barriers are less common in almost all surveys. Respectively, in the present survey, during the research period, participants were attending one and/or more training programs. It was expected that they would appear to a lesser extent than the other categories.

According to Cross (1974, 1977), the categorization of barriers is not absolute. For instance, the "participation cost" as a barrier to participation can be either situational when adults can't afford the time period that conducted the educational program, or it can be an institutional barrier when the cost of the educational program is too high. In the present study, "participation cost" is included in the category of situational barriers. This is consistent with Charner and Fraser (1986), Cross (1981), Johnstone and Rivera (1965), and Hayes (1988, 1989), whereas in contrast to Hovdhaugen and Opheim (2018) and Karalis (2017, 2021), which categorized "cost" as an institutional barrier. Respectively, the barrier of "transportation difficulties" in the present survey was classified as a *situational* barrier, in Karalis's survey (2017) as institutional and in Charner and Fraser (1986) as structural. Additionally, in Karalis's survey, the three important barriers are the same as in the present one. However, the categories of barriers that appear most in his research are institutional and situational barriers. This fact relates to the different categories of barriers. Categorizing barriers into broader groups provides us with the framework for correctly interpreting individual barriers. Therefore, depending on the context in which a respondent is asked about the barriers (Cross, 1981, p. 102) and on the interpretation of each barrier by the participant, can be assigned to different categories.

Situational and institutional barriers are two more fluid categories in the sense that the barriers contained in them can belong to both categories. There is no clear distinction, and maybe, for this reason, Desjardins and Rubenson (2013) included them in a single category of structural barriers. Institutional barriers are directly linked to adult education policies, programs and strategies, while institutional barriers are directly related to welfare state benefits and services, as well as labor market services. Additionally, the barriers included in these two categories are easier to overcome depending on how advanced the welfare state is (Desjardins & Rubenson, 2013). On the other hand, dispositional barriers are a clear category referring exclusively to psychological-type barriers focusing on the individual.

6. Conclusion

In conclusion, the barriers faced by employees, and adults in general, in their participation in educational programs have been recognized early on by Johnstone and Rivera (1965) and remain the same to this day: "cost", "work obligations", "lack of information about available educational programs" or "transportation difficulties" etc. The differences in the barriers to participation between different surveys are mainly due to three factors: the characteristics of the population under investigation, the socio-economic conditions, and the development of welfare state in the participants' countries and methodological issues during the design of the survey (e.g., the method of data collection). In particular, in surveys where the majority of participants are women, situational barriers appear to a greater extent. Participation surveys conducted in strong welfare states show that participants face fewer barriers, such as "lack of time due to taking care of children.

Additionally, in surveys that use large lists of questionnaires as a research tool, it is often observed that some barriers overlap. For example, in the research of Carp et al. (1974), "lack of time due to taking care of children" and "family obligations" are presented as two separate barriers. However, "family obligations" as a broader category may also include the "lack of time due to taking care of children," making it an ambiguous barrier. Still, separating barriers into clear sub-barriers can give us a more accurate picture. In the present survey, the barrier "lack of time due to family obligation" was separated into "lack of time due to childcare" and "lack of time due to the care of relatives," with the former ranked as the third most important barrier while the other ranked in 17th place. In order to avoid confusion among the participants, researchers should pay more attention to the wording of the barriers listed in the questionnaires.

Finally, in the past decades, research about the barriers to participation has focused on data mainly obtained from Eurostat surveys. Therefore, in addition to quantitative studies, there is an urgent need to examine barriers with more qualitative research methods in order to gain a deeper

understanding of how employees perceive the different barriers. Acquiring a deeper understanding of the participation barriers will help us design more appropriate programs that meet the needs and expectations of employees and consequently increase participation. Especially in the context of Greece, where, in contrast to other European countries, the participation rate in 2021 was at 3.5% and showed a decrease compared to 2020 (Eurostat, 2022).

CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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