

Employees' Attitudes toward Continuing Professional Education: Their Relationship between Reasons and Barriers to Participation

Niki Liodaki^{id}* and Thanassis Karalis^{id}

ABSTRACT

The attitudes of employees toward education are considered a determining factor for their participation or non-participation in Continuing Professional Education (CPE). The examination of the attitudes in combination with reasons, barriers and general characteristics of employees can be a strong predictor of participation. The present article examines employees' attitudes toward continuing professional education as well as their relationship between reasons that motivate them, barriers that prevent them from participating in Continuing Professional Education programs, and their general characteristics. The results showed that the majority of employees are positively inclined toward CPE programs. In addition, there is a relationship between attitudes, factors of reasons for participation, categories of barriers and four variables of general characteristics: gender, educational level, previous participation and the number of programs attended.

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Laboratory of Pedagogical Research and Lifelong Learning, 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

Several studies (Becker & Gibson, 1998; Darkenwald & Hayes, 1988; Hayes & Darkenwald, 1990; Kalenda *et al.*, 2023; Yang, 1992, 1995) have attempted to study adults' attitudes toward Continuing Professional Education (CPE), linking them with their participation in educational programs. In most of these, adults' attitudes toward CPE are examined in the context of the intention to participate (Grotelueschen & Caulley, 1977; Pryor, 1990; Yang *et al.*, 1994). Many researchers believe that intention to participate, which is largely determined by attitude, can explain and predict actual participation. Thus, attitudes are considered an important factor in understanding participation in CE, and in particular CPE (Yang, 1995). It is widely accepted that a positive attitude toward education can lead to the intention to participate, and the intention to participate can lead to actual participation. It is noteworthy that we recognize that the intention to participate is directly related to both attitudes and other participation factors, such as barriers (Boeren, 2011) and can be an indicator of actual participation. However, there is no research data showing that it is an accurate indicator for predicting participation (Grotelueschen & Caulley, 1977). In other words, an adult intending to participate does not

necessarily mean that he will participate. Karalis (2016) showed that the percentage of adults who had the intention to participate in education was greater than the percentage who finally participated. According to the study, this difference is due to the existence of barriers.

Our basic perception is that there are two intermediate stages between a) attitudes and intention of participation and b) between intention to participate and actual participation that are mediated by other factors. Such factors (reasons, barriers, participation and their intensity) are inextricably linked to attitudes. Furthermore, it is important in this case to assess how strong these attitudes are in order to prevent or encourage the intention to participate and, consequently, the actual participation. Attitudes toward CPE do not by themselves reflect the degree of behavior that leads to participation. Instead, they should be considered separately as factors of participation (and not only in the context of intention to participate) and correlated as independent variables directly with the other determinants of participation. The relationship of attitudes toward CPE, combined with reasons and barriers to participation, previous participation in educational programs, and the demographic characteristics of adults,



we consider to be a strong indicator of predicting participation.

2. THEORETICAL FRAMEWORK

“Attitude is a positive or negative affect toward an object or behavior, as I like the idea of continuing education” (Fishbein & Ajzen, 1975, as cited in Pryor, 1990, p. 148). Most definitions converge on the definition given by Gagné and Briggs (1974, p. 62, as cited in Darkenwald & Hayes, 1988, p. 197): “An internal state that influences a person’s choice of action toward some object, person or fact.” A positive attitude toward education can motivate the adult, and a negative attitude can prevent him from participating (Adolph & Whaley, 1967). For this reason, attitude is the most important variable associated with participation in adult education (Cookson, 1986, as cited in Yang *et al.*, 1994, p. 84).

The concept of attitudes plays an important role in the theory of participation in continuing education (Cross, 1981; Darkenwald & Merriam, 1982; Houle, 1984; Rubenson, 1977). However, it has not been widely and adequately studied in relation to it. Attitudes are linked to the individual’s beliefs and values and are often products of the unconscious social situations experienced by adults. Thus, it is very difficult for both learners and researchers to recognize and interpret them (Yong, 1989). Therefore, a greater understanding of the effects of attitudes on non-participation in education would contribute to a further and greater understanding of participation (Darkenwald & Hayes, 1988; Rokeach, 1968, as cited in Bennett, 2016, p. 52).

On the other hand, barriers and reasons for participation have been widely studied as they are directly related to participation. In particular, barriers refer to all those reasons that hinder or prevent the participation of adults in educational programs. Such reasons may be the cost of participation, the difficulty of traveling to the place where the seminar is held, the lack of time due to work or family obligations, and so on. Based on Cross’s typology (1981), barriers are divided into three major categories: situational, institutional, and dispositional. Additionally, Darkenwald and Merriam (1982) proposed the category of informational barriers while renaming dispositional as psychological barriers. Moreover, Desjardins and Rubenson (2013) divide 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.

Respectively to the barriers, an adult may participate in educational programs for many different reasons. These reasons could be “to obtain a certificate of attendance,” “to escape from personal problems,” “to maintain a job,” etc. Reasons for participation have been researched both in the context of continuing education and, in particular, in CPE. The first research effort to group the reasons into factors was by Boshier (1971). He constructed the Educational Participation Scale (EPS), which has been widely used by many researchers in various educational contexts (Bova, 1979; Care, 1993; Das & Kumar, 2022;

Fujita-Stark & Thompson, 1994; Gordon *et al.*, 1990; Jones & Hong, 2006). Additionally, EPS has been evaluated as a valid research instrument for examining reasons for participation. The analysis of the research data revealed seven factors: (1) cognitive interest, (2) social contact, (3) educational preparation, (4) family togetherness, (5) communication improvement, (6) social stimulation, and (7) professional advancement (Boshier *et al.*, 2006). In addition, Grotelueschen *et al.* (1979, as cited in Kenny & Harnisch, 1982, p. 39) constructed the Professional Reason Scale (PRS) to examine reasons for participation specifically in CPE. Five factors emerged: (a) professional improvement and development, (b) professional service, (c) personal benefits and job security, and (d) professional commitment and reflection. Several studies used PRS in the context of CPE, such as Balachandran and Branch (1997) and Vasileiadi *et al.* (2023). In addition, Morstain and Smart (1974, 1977) highlighted the relationship of participation factors with the demographic characteristics of adults.

3. METHOD

The purpose of the study was to examine the attitudes of employees toward CPE as well as their relationship with the factors of reasons for participation, categories of barriers and general characteristics of employees.

3.1. Research Hypothesis and Research Questions

Based on the aims and objectives of the research, the following research hypothesis was formulated: The attitudes of employees toward CPE are linked to the factors of the reasons for participation, the categories of barriers and their general characteristics. Additionally, the following research questions were formulated:

1. *What are the employees’ attitudes toward CPE?*
2. *What is the relationship between the attitudes and the factors of the reasons for participation, and what is the relationship between the attitudes and the categories of barriers?*
3. *Is there a relationship between attitudes toward CPE and the general characteristics of employees?*

3.2. Participants

The research involved 1162 employees attending training programs organized by the institutes of two Greek confederations, INE GSEE (Labor Institute of the General Confederation of Greece) and IME GSEVEE (Small Business Institute of the General Confederation of Professional Craft Merchants of Greece). Both institutes, among other responsibilities, supervise and implement educational programs for their members. Therefore, due to the great heterogeneity of their population, it was deemed necessary to investigate the characteristics of the employees in detail in order to have an accurate picture of the research participants.

3.3. Research Instrument

The questionnaire “Attitudes, Reasons, and Barriers of Employees Participation” (Liodaki, 2020) was constructed to examine determinants of participation. The questionnaire consists of four axes. Each axis explores a different aspect of participation: Attitudes, reasons, barriers and general characteristics of employees. In the context of the above axes, we also examined previous participation, the factors that influence the final decision of participation, and the facilitating factors for the removal of barriers. In particular, to investigate the reasons for participation, we created a list of 28 reasons, which were categorized into factors using the factor analysis technique. Regarding barriers, the participants chose from a list of 29 barriers. They were initially categorized based on Cross's (1981) typology that divides barriers into three broad categories: (a) situational, (b) institutional, and (c) dispositional. Additionally, in order to examine the attitudes, we used part of the revised RAACES scale (Blunt & Yang, 2002), which includes 9 statements that capture employees' attitudes toward CPE. However, we processed them in a different way than the study suggested. In this case, the participants were asked to select on a 7-point Likert scale the degree of agreement or disagreement for each of the nine statements. Additionally, we examine 21 variables (general characteristics), which we grouped into four groups: (a) personal data, (b) work data, (c) indicators of participation, and (d) program data.

The results for reasons and barriers to participation have been published in previous articles. The factor analysis of the 28 reasons for participation yielded six factors:

1. Efficiency at work (Cronbach's $\alpha = 0.87$)
2. Professional advancement (Cronbach's $\alpha = 0.85$)
3. Network/environment factor (Cronbach's $\alpha = 0.77$)
4. Instrument use of education (Cronbach's $\alpha = 0.76$)
5. Enhancement acquisition of qualifications (Cronbach's $\alpha = 0.72$)
6. Escape (Cronbach's $\alpha = 0.65$)

Employees participated more for reasons related to *Efficiency at work* ($M = 76.40$, $SD = 13.34$) and *Professional advancement* ($M = 73.90$, $SD = 13.09$) and less for reasons related to *Escape* ($M = 50.82$, $SD = 18.79$). This finding is explained by the fact that the employees participated in CPE programs (Liodaki & Karalis, 2023). In addition, after the initial analysis of data, two new subcategories of institutional barriers emerged. The *institutional: state/institutions barriers* concern the barriers that arise from the institutions or the state that implements the educational programs, while the *institutional: working environment* concerns the barriers that arise from the working environment, such as “participating in the educational program will not improve my position at work” (Liodaki & Karalis, 2024, p. 39).

In the present article, only the findings concerning the attitudes will be presented, as well as their relationship with the factors of the reasons for participation, the categories of barriers and the four variables of the general characteristics of employees that seem to be related to attitudes: gender, educational level, previous participation

and number of educational programs. Specifically, gender (52.3% were women), educational level (18.9% were high school graduates), previous participation (70.7% had participated in an educational program in the past) and number of educational programs (75.8% had attended 1–5 educational programs).

4. RESULTS

4.1. Attitudes toward CPE

The majority of participants (92.2%) disagree with the statement: “Successful people do not need CPE” and that “CPE is mostly for people with little else to do” (89.8%). Furthermore, 78.5% and 79.9% disagree with the statements “I am fed up with teachers and classes” and “I dislike studying,” respectively. In contrast, 90.1% and 90% agree with the statements “I enjoy educational activities that allow me to learn with others” and “CPE is an important way to help people cope with changes in their lives.” Additionally, 88.7% believe that “CPE helps people make better use of their lives,” 87.7% that “Continuing my education would make me feel better about myself,” and 80.5% that “Money spent on CPE for employees is money well spent” (see Table I). Nine statements were formulated to explore participants' attitudes, as presented in the RAACES. However, participants were asked to state their degree of agreement or disagreement with each of these statements using a 7-point Likert scale. For a better understanding of the data, the results are presented on a 3-point scale.

As can be seen from Table I, the statements with positive content gathered high percentages of agreement, and the statements with negative content gathered great percentages of disagreement. Therefore, in a second level of analysis, we constructed two new variables as a sum of the above variables. In particular, positive attitude emerged as the sum of the following five variables:

1. Money spent on CPE for employees is money well spent.
2. Continuing my education would make me feel better about myself.
3. I enjoy educational activities that allow me to learn with others.
4. CPE is an important way to help people cope with changes in their lives.
5. CPE helps people make better use of their lives.

For the positive attitude, the internal reliability index (Cronbach's Alpha) was 0.87. Similarly, the negative attitude emerged as a sum of the following four variables:

1. CPE is mostly for people with little else to do.
2. I dislike studying.
3. Successful people do not need continuing education.
4. I am fed up with teachers and classes.

For the negative attitude, the internal reliability index (Cronbach's Alpha) was 0.82 (4 items).

At the first level, the separation of attitudes into positive and negative was conducted based on the content of the statements using the calculation technique. However, to

TABLE I: ATTITUDES TOWARD CPE

Statements	Percentage of responses		
	Disagree	Neither agree nor disagree	Agree
CPE is mostly for people with little else to do	89.8	5.7	4.5
I dislike studying	79.9	14.3	5.8
Successful people do not need CPE	92.9	4.0	3.2
I am fed up with teachers and classes	78.5	14.4	7.1
Money spent on CPE for employees is money well spent	8.7	10.8	80.5
Continuing my education would make me feel better about myself	4.1	8.2	87.7
I enjoy educational activities that allow me to learn with others	3.7	6.2	90.1
CPE is an important way to help people cope with changes in their lives	3.3	6.7	90.0
CPE helps people make better use of their lives	3.6	7.7	88.7

TABLE II: STATEMENTS' LOADINGS OF THE FACTOR "POSITIVE ATTITUDES"

Positives attitudes toward CPE	Loadings
Money spent on CPE for employees is money well spent	0.641
Continuing my education would make me feel better about myself	0.813
I enjoy educational activities that allow me to learn with others	0.840
CPE is an important way to help people cope with changes in their lives	0.881
CPE helps people make better use of their lives	0.850

TABLE III: STATEMENTS' LOADINGS OF THE FACTOR "NEGATIVE ATTITUDES"

Negative attitudes toward CPE	Loadings
CPE is mostly for people with little else to do	0.797
I dislike studying	0.786
Successful people do not need CPE	0.833
I am fed up with teachers and classes	0.776

ensure reliability, a factor analysis was additionally carried out, and two factors emerged (Eigenvalues ≥ 1), with the total explaining 70% of the variance, confirming the initial separation (Tables II and III). At the same time, a confirmatory factor analysis was carried out based on the three factors, as described by the RAACES analysis. However, in this case, two factors emerged instead of three.

The majority of participants have a positive attitude toward CPE (M.O.: 80.04/T.A.: 14.75). Based on the above separation of the statements into positive and negative attitudes, all the correlations with the participation factors and with the categories of barriers, as well as with the variables of the general characteristics, were carried out.

4.2. Relationships between Attitudes (Positive and Negative) toward CPE and Factors of Participation and Categories of Barriers

As it emerged from the correlations between positive attitude and participation factors, positive attitude has a positive, moderate and statistically significant relationship with the factors of *efficiency at work* ($r = 0.562$, $p < 0.000$), *professional advancement* ($r = 0.486$, $p < 0.000$), *network/environment* ($r = 0.373$, $p < 0.000$) and *enhancement/acquisition of qualifications* ($r = 0.390$, $p < 0.000$). On the contrary, the relationship between positive attitude and the *instrumental use of education* factor is positive, weak and statistically significant ($r = 0.226$, $p < 0.000$), while

there is no relationship between positive attitude and the *escape* factor ($r = 0.019$, $p = 0.511$). Conversely, negative attitudes have a negative, weak and statistically significant relationship with the factors of *efficiency at work* ($r = -0.288$, $p < 0.000$), *professional advancement* ($r = -0.243$, $p < 0.000$) *enhancement/acquisition of qualifications* ($r = -0.169$, $p < 0.000$) and *network/environment* ($r = -0.078$, $p = 0.008$). In addition, there is a positive relationship, but weak and statistically significant, only with the *escape* factor ($r = 0.167$, $p < 0.000$), and while there is no relationship with the *instrumental use of education* factor ($r = 0.000$, $p < 0.987$) (Table IV).

As shown in Table V, negative attitudes have a positive, moderate and statistically significant relationship with dispositional barriers ($r = 0.539$, $p < 0.000$), *institutional: state/institutes* barriers ($r = 0.428$, $p < 0.000$) and *institutional: working environment* barriers ($r = 0.429$, $p < 0.000$) while it has a positive, statistically significant but weak relationship with *situational* barriers ($r = 0.269$, $p < 0.000$). Positive attitudes have a negative, weak and statistically significant relationship with all categories of barriers: *dispositional* ($r = -0.308$, $p < 0.000$), *institutional barriers: state/institutes* ($r = -0.243$, $p < 0.000$) and *institutional: working environment* ($r = -0.244$, $p < 0.000$) and *situational* barriers ($r = -0.099$, $p < 0.001$).

In conclusion, from the correlations between the attitudes and the participation factors, it follows that the positive attitude has a positive and statistically significant relationship with all the factors of participation except the *escape* factor, where no relationship emerged. On the other hand, negative attitudes have a negative relationship with the reasons for participation factors except for the *escape* factor, which has a positive relationship and except for the *Instrumental Use of Education* factor, which has no relationship. In contrast, the correlations between attitudes and categories of barriers show that positive attitude has a negative and statistically significant relationship with all categories of barriers.

Contrary to the above, the relationship between the negative attitude and the categories of barriers is positive and statistically significant.

4.3. Relationships of Positive and Negative Attitudes toward CPE with General Characteristics

Attitudes (positive and negative) showed no relationship with any of the variables included in the groups of work and program data, such as employment status. Instead,

TABLE IV: CORRELATION TABLE OF POSITIVE AND NEGATIVE ATTITUDES WITH FACTORS OF PARTICIPATION

Attitudes	Efficiency at work	Professional advancement	Network/Environment	Instrumental use of education	Enhancement/Acquisition of qualifications	Escape
Positive	0.562**	0.486**	0.373**	0.226**	0.390**	0.019
Negative	-0.288**	-0.243**	-0.078*	0.987	-0.169**	0.167**

Note: **p < 0.001; *p < 0.05.

TABLE V: CORRELATION TABLE OF POSITIVE AND NEGATIVE ATTITUDES WITH CATEGORIES OF BARRIERS

Attitudes	Dispositional Barriers (DB)	Situational Barriers (SB)	Institutional barriers: State/Institutes (IN1)	Institutional barriers: Working environment (IN2)
Negative	0.539**	0.269**	0.428**	0.429**
Positive	-0.308**	-0.099**	-0.243**	-0.244**

Note: **p < 0.001.

attitudes are related to personal data (gender, educational level) as well as the indicators of participation (previous participation and number of educational programs).

Specifically, women ($M = 81.15$, $SD = 13.96$) have more positive attitudes toward CPE than men ($M = 78.81$, $SD = 15.60$). Conversely, men ($M = 32.57$, $SD = 15.66$) show more negative attitudes toward CPE than women ($M = 29.85$, $SD = 14.38$). Furthermore, the average of the participants who have not completed their basic education seems to differ significantly in negative attitude from the rest of the participants, who have a primary school diploma or higher, and in particular, with the holders of a doctorate diploma. For the negative attitude, the differences between the categories of gender (t-test, $t = 3.045$, $df = 1099.92$, $p = 0.002$) and educational level (F-test, $f = 1.895$, $df = 9$, $p = 0.049$) are statistically significant.

Additionally, participants who have previously participated in an educational program have a higher average positive attitude than those who have had no previous participation experience (T-test, $p < 0.001$). In addition, positive attitude has a positive and statistically significant relationship with the number of educational programs ($r = 0.109$, $p = 0.002$) that employees attended. Participants who had participated in more than 16 training programs ($M = 87.25$, $SD = 10.72$) have a higher mean of positive attitude than those who had attended 1–5 training programs ($M = 80.32$, $SD = 14.36$).

As can be seen from the above correlations between the attitudes and the general characteristics of the participants, there is a relationship between the attitudes toward CPE and the above four variables of the general characteristics, but these relationships are weak.

5. DISCUSSION

More than 80% of the participants agreed with the attitude statements with positive content, such as “CPE is an important way to help people cope with changes in their lives.” In agreement with previous studies (Karalis, 2021; Kitiashvili & Tasker, 2016; Liodaki et al., 2016), the majority of employees have a positive attitude toward CPE. Participation depends to a large extent on the adult's attitude toward education. However, the fact that a small percentage of employees have a negative attitude and yet participated in an educational program means that

(a) a negative attitude does not necessarily imply non-participation of the individual and that (b) participation is also determined by other factors. However, the possibility of participation of those employees who have a negative attitude toward education and at the same time face barriers is small.

The results of the present study highlight that the positive attitude is related to all participation factors except the escape factor, and there is no relationship between positive attitude and the categories of barriers. Moreover, the negative attitude is related to all the categories of barriers and the *escape* participation factor. In particular, the negative attitude is related to the barriers and mainly to the dispositional barriers, as expected. Dispositional barriers are more related to the adult's perceptions and attitudes toward education. The negative experiences that the individual experiences during formal education shape his attitudes (McDonald, 1984, as cited in McGivney, 1993). In case the individual has experienced positive experiences at school, he has also formed positive attitudes toward education. Otherwise, if he has formed negative attitudes, then he faces dispositional barriers. The above claim is confirmed by the results of the present study. Specifically, dispositional barriers seem to be related to negative attitudes. The combination of the low rate of dispositional barriers and the also low rate of negative attitudes is another indication that barriers are directly linked to negative attitudes. Furthermore, negative attitudes show a weak relationship with *situational barriers*. At the same time, the latter shows no relationship with positive attitudes. Situational barriers are those that arise from situations that the employees experience at that given moment and are constantly changing. Additionally, they are removed more easily compared to the other barriers. It is, therefore, expected that they have no relation to the employees' attitude toward CPE.

Positive attitudes have a weak relationship with the *instrumental use of education*, while there is no relationship with negative attitudes. Participants who choose to participate in a program for reasons related to the *instrumental use of education* see education as a means to achieve their goals. Therefore, on this basis, it matters little whether attitudes are positive or negative toward education. In contrast, negative attitudes, with the only participation factor that appears to have any relationship, albeit a weak

one, are the *escape* factor, while positive attitudes have no relationship.

Attitude toward education is related to educational level, gender and indicators of participation. Employees who had not completed their primary education have a more negative attitude toward CPE than the rest of the participants, while holders of a doctorate degree, as expected, have a less negative attitude. More specifically, as the educational level of the participants increases, so does their negative attitude decrease, and vice versa. In addition, men have a more negative attitude toward education than women. The above finding is in agreement with the research of Darkenwald and Hayes (1988) and Kitiashvili and Tasker (2016). In addition, the studies showed that there is a relationship between attitudes and family income, a finding that did not emerge from the present study.

The indicators of participation, which include the variables “previous participation” and “number of in-training programs attended,” are related to the attitude of employees toward training, agreeing with the theory of Triantis (1975, 1977, 1980, as cited in Yang *et al.*, 1994, p. 85), who argued that actual participation behavior is determined by the performance of that behavior in the past, as well as its frequency. Participants who have previously participated in an educational program have a positive attitude compared to those who have not. The findings are in complete agreement with the results of Yang's study (1995). Furthermore, as the number of participants in educational programs increases, so does the average positive attitude. The average for positive attitude also increases. It is generally accepted that a positive attitude toward behavior leads to intentions to participate and intentions in the actual behavior of participation (Boeren, 2011, p. 377).

Positive attitude has a positive relationship with participation factors and a negative relationship with barriers. Conversely, negative attitude has a positive relationship with barriers and a negative relationship with participation factors. Obviously, employees who have a positive attitude can simultaneously face barriers, and those who have negative attitudes may have many reasons for participating in CPE. In the first case, they may face barriers such as “family obligations”, but as they are positively inclined to participate in education, they possibly find a way to overcome them. On the other hand, according to the literature, if employees have a negative attitude, they also face dispositional barriers, so the probability of participating is small. However, maybe they participate because there is a need to increase their formal qualifications in order to “be informed about new technologies and developments in their field”. Therefore, in both of the above cases, we should examine how strong the reason or barrier is to finally lead them to participate in a CPE program. Therefore, all of the above should be considered in terms of the intensity of barriers and reasons for participation.

In conclusion, our research hypothesis, “*The attitudes of employees toward CPE are linked to the factors of the reasons for participation, the categories of barriers and their general characteristics*,” was confirmed. As reflected in the literature, the examination of attitudes is important, as it is an indicator of the intention to participate. Examining attitudes in conjunction with barriers, reasons (and their

intensity), and general characteristics of employees is a strong indicator for predicting actual participation.

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CONFLICT OF INTEREST

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

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