

ICEEPSY 2023
14th International Conference on Education & Educational Psychology**IMPACT OF ATTITUDES ON PARTICIPATION IN ADULT
EDUCATION AND TRAINING**

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karger@utb.cz**Abstract**

This study examines the relationship between attitudes and participation in Adult Education and Training (AET) among a representative sample of adults in the Czech Republic. While previous research has explored sociopsychological factors related to AET participation, the direct impact of attitudes on overall participation remains understudied. Using a representative sample of adults ($n = 1,200$), this study employs a three-factorial model of attitudes towards AET (AtoALE) to investigate the influence of attitudes on the likelihood of AET participation. Structural equation modeling reveals that adults' attitudes significantly predict participation in AET. Our findings indicate that attitudes towards AET have a substantial impact on participation, and are consistent with earlier studies conducted on smaller non-representative samples. Notably, positive attitudes towards organised learning emerge as a crucial factor for participation. Furthermore, our results demonstrate that attitudes towards AET, as proposed by the three-factorial model, are not equal in significance, with emotional associations connected with AET playing a pivotal role. These findings support the notion that attitudes towards AET are deeply embodied and gradually developed over time. In conclusion, we recommend that future research consider both socioeconomic and sociopsychological factors to enhance our understanding of AET participation, expanding the explanatory power of existing models.

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1. Introduction

According to the last UNESCO's Global Report on Adult Learning and Education (GRALE V.), participation in *Adult Education and Training* (AET) and inequality to access to educational opportunities for adults have remained one of the central challenges of lifelong learning (UNESCO, 2022, p. 25).

In recent years, many scholars have done much to understand the structural layers of participation in AET. In this regard, they have explored the role of various institutional features that affect not only the level of participation in a particular country (Desjardins, 2017, 2020, 2023; Desjardins & Ioannidou, 2020; Ioannidou & Parma, 2022; Rubenson, 2018; Rubenson & Desjardins, 2009; Saar et al., 2013, 2023) but also related inequality among different social groups (Blossfeld et al., 2020; Dämmrich et al., 2014; Green et al., 2015; Hovdhaugen & Opheim, 2018; Lee, 2018; Lee & Desjardins, 2021; Van Nieuwenhove & De Wever, 2021), especially those who face various obstacles regarding their access to AET (Cabus et al., 2020; Iñiguez-Berrozpe et al., 2020).

Despite advances, these works often lack an explicit empirical measure of different socio-psychological factors (beliefs, attitudes, or various forms of motivation) linked to participation in AET. According to established theory, socio-psychological constructs are important for explaining participation as they represent cognitive constructs that are close to the decision-making of actors (Boeren, 2016, 2017, 2023; Kyndt et al., 2013a, 2013b; Lavrijsen & Nicaise, 2017). For this reason, the presented study is directly focused on the relationship between one of the sociopsychological factors of participation and AET – *the attitudes of adults*.

1.1. Participation in AET

We understand AET in line with current international discourse (CEDEFOP, 2008; Eurostat, 2016a, 2016b; UNESCO, 2020) as both Formal Adult Education (FAE) and Non-formal Adult Education (NFE) learning activities. While FAE is institutionalised, intentional and planned through public organisations and recognised private bodies that constitute the formal education system of a country, NFE involves structured activities that usually do not result in official certification, according to ISCED (2011). This type of learning includes all organised and planned development activities, such as courses, workshops, and private lessons or training in the workplace. NFE also includes both job-oriented (vocational) as well as non-job-oriented learning.

Numerous authors, including Albert et al. (2010), Boeren (2016), Boeren et al. (2017), Markowitsch and Hefler (2019), and policy documents such as from OECD (2019, 2020), or UNESCO (2022), contend that adult participation in AET contributes to economic development and social inclusion. This participation also benefits individuals by enhancing their qualifications and skills, improving or securing their position in the labour market, and enhancing their well-being (Schuller & Desjardins, 2010). Studies have also shown that adults who participate in AET exhibit higher levels of civic engagement (Iñiguez-Berrozpe et al., 2020) and report better overall quality of life (Field, 2012; Sabates & Hammond, 2008; Schuller & Desjardins, 2010), even in areas unconnected to the workplace. Therefore, it is a significant policy objective for national governments (MYES, 2020), the EU (EC, 2021; CEDEFOP, 2018), UNESCO (2020, 2022), and OECD (2019) to encourage high and equal participation of adults from all socio-demographic groups, especially for those who participate the least.

The level of participation in AET is typically determined by measuring an individual's involvement in any type of formal or non-formal learning activity within the past year. This is applicable to adults between the ages of 25 and 64 years old (Eurostat 2016a, 2016b) who are usually undergoing any kind of post-compulsory training – FAE or NFE. Similarly, the same approach has been used in this study to measure participation levels (see below).

1.2. Attitudes and participation in AET

In this article, we define attitudes as everyday opinions and emotions that take the form of normative perspectives on a particular topic (e.g., AET). These views are evaluative, rather than descriptive, and can implicitly or explicitly involve cultural meanings as positive or negative, good or bad, appropriate or inappropriate (Eagly & Chaiken, 2005; Procter, 2008). The significance of attitudes lies in their ability to influence both individuals (Ajzen & Fishbein, 2014) and social groups (Fazio & Olson, 2003). In other words, they serve as a compass for individuals as to whether a particular behaviour or object is appropriate or valuable.

The way adults view AET plays a crucial role in their decision-making process when it comes to participating in educational and training activities. According to various scholars (Boeren, 2016, 2017, 2023; Kalenda et al., 2023; Kyndt et al., 2013a, 2013b; Lavrijsen & Nicaise, 2017), having a positive perception of lifelong learning, viewing participation as beneficial or valuable, and associating learning with positive emotions, tends to make adults more receptive to participating. Conversely, if their attitudes are predominantly negative, they are more likely to be hesitant about participation.

Our understanding of attitudes has been influenced by Lizardo's (2017) triadic model of culture, which has helped us develop a three-factor model of attitudes towards AET (Kalenda et al., 2023). Based on this framework, we have proposed three distinct types of attitudes that reflect particular everyday normative opinions or emotional associations that shape perspectives on AET. These include:

(1) *Individuals' personal attitudes towards the value of AET* (i.e. personal declarative dimension) involve their daily assessments of its usefulness and expectations for lifelong learning. This may include whether adults believe they need to pursue FAE at some point in their lives or if they view further organised learning as a beneficial activity for personal growth.

(2) *The attitudes towards the public value of AET* (i.e., declarative public dimension) include normative perspectives on the shared meanings of continuous learning. These attitudes assess institutions and key narratives related to adult education, and cover not only the evaluation of educational opportunities but also equal access to AET and its social roles. Its primary focus is on whether AET is perceived as an established social way to enhance individuals' earnings, job prospects, and social inclusion.

(3) The final type of attitude in the proposed model pertains to normative *emotional associations related to AET* (personal aspects of non-declarative dimension). It focuses on both positive and negative emotions associated with adult education. These emotions are significant because they reflect implicit ideas of organised learning for adults that, unlike the preceding two types, are learned much slowly, and they are deeply embodied.

In summary, we argue that attitudes towards AET are complex and encompass various dimensions. They represent individuals' perceptions and emotional associations towards lifelong learning and can influence their participation. These attitudes can be measured through statements that express evaluative

opinions, reflecting cultural beliefs that consider AET as either individually favourable or unfavourable, socially beneficial or unhelpful, and associated with positive or negative emotions.

2. Problem Statement

Although some of the sociopsychological aspects of participation in AET, like motivation, or perceived barriers, have been investigated before (Blunt & Yang, 2002; Boeren, Holford, et al., 2012; Boeren, Nicaise, et al., 2012; Boshier 1971; Cross 1981), a deeper examination of attitudes is still needed. Surveys that specifically target attitudes have not been conducted with representative samples of adults (Bennett, 2016; Blunt & Yang, 2002; Darkenwald & Hayes, 1988; Hayes & Darkenwald, 1990; Lavrijsen & Nicaise, 2017), making it difficult to establish a clear link between attitudes to lifelong learning and AET involvement. Furthermore, there has not been a systematic exploration of how attitudes impact the participation of adults in organised adult learning in the Czech Republic. Previous research in this country has primarily focused on comparing attitudes between those who do and do not participate in AET (Kalenda et al., 2023), motives for non-involvement in AET (Kalenda & Kočvarová, 2022a), barriers to AET (Kalenda et al., 2022) or socioeconomic factors contributing to participation in organised learning for adults (Kalenda & Kočvarová 2022b; Vaculíková et al., 2021).

3. Research Questions

Following the previous discussion, we have addressed three interrelated research questions that were previously identified as a research gap. These questions include: (1) Whether attitudes towards AET have an impact on participation in AET? (RQ1); (2) To what extent attitudes towards AET can predict the variability of participation in AET? (RQ2), and (3) How do different types of attitudes, based on the triadic model of culture, affect participation in AET? (RQ3).

4. Purpose of the Study

The aim of the study is to explore the link between attitudes towards AET and participation in AET among a representative sample of adults in the Czech Republic. This study aims to demonstrate: (1) how attitudes affect participation in AET in the Czech Republic (as outlined in RQ1), (2) how attitudes can explain some of the participation in AET (see RQ2), and (3) which attitudes have the greatest impact on participation in AET among Czech adults (see RQ3).

5. Research Methods

5.1. Research sample

Our quantitative research used a representative stratified random sample of 1,200 individuals aged 25 to 69 years, reflecting the gender, education, and region ratio of the overall Czech population. The data was collected in the Czech Republic during September and October 2019, before the COVID-19 pandemic, using the Computer Assisted Personal Interviewing (CAPI) method by a professional agency. Throughout the survey process, ethical principles of research were emphasised, particularly anonymity, as per the

ICC/ESOMAR International Code (2022). Our data have no missing values, and Table 1 shows the basic socio-demographic characteristics of the sample.

Table 1. Sociodemographic characteristics of the sample (n = 1.200)

Categories and sub-categories		n	%
Gender	Male	598	49,8
	Female	602	50,2
Age	25-34	286	23,8
	35-44	289	24,1
	45-54	247	20,6
	55-64	271	22,6
	65-69	107	8,9
Education	ISCED 2 or lower	134	11,2
	ISCED 3c	460	38,3
	ISCED 3ab	415	34,6
	ISCED 5-8	191	15,9
Participation in AET	yes	392	32,7
	no	808	67,3

Note. ISCED = International Standard Classification of Education.

5.2. Measures

In our research, we utilised the “Attitudes toward adult learning and education questionnaire” (AtoALE). This questionnaire consists of three batteries of items that were created following the theoretical model introduced earlier (Kalenda et al., 2023). Each battery of items focuses on one of the three forms of attitudes discussed above: Factor 1 (F1): *Individuals' personal attitudes towards the value of AET* (Personal declarative dimension); Factor 2 (F2): *The attitudes towards the public value of AET* (Public declarative dimension); and Factor 3 (F3): *Emotional associations related to AET* (Personal non-declarative dimension), which is further divided into F3p (positive emotions) and F3n (negative emotions).

The AtoALE research tool comprises 26 items and uses a 6-point Likert scale, where 1 indicates strong disagreement, and 6 indicates strong agreement (see Table 2). The tool satisfies the standard statistical parameters for measurement quality ($\chi^2 = 1555.221$; $df = 282$; CFI = 0.937; TLI = 0.928; RMSEA = 0.061). All factors and the complete tool are dependable. Results of Cronbach's α show a value of 0.895 for F1, 0.835 for F2, 0.929 for F3p, 0.907 for F3n, and 0.830 for the Complete model. Detailed information regarding the construct validity and reliability of AtoALE is available in Kalenda et al. (2023). Similar to major international surveys on lifelong learning, such as the *Adult Education Survey* (AES) and *Programme for the International Assessment of Adult Competencies* (PIAAC), participation in AET is measured as the involvement of adults in any FAE and NFE in the twelve months before the survey.

Table 2. Items and descriptive statistics of individual items

	M	SD
F1. Individuals' personal attitudes towards the value of AET		
F1.1: Attending courses and lectures on non-job-oriented education is essential for me.	3.17	1.60
F1.2: Having enough training and organised learning at work significantly benefits me.	3.31	1.62
F1.3: I often look for opportunities to learn something new in my free time.	3.42	1.50
F1.4: Learning new things at work is vital to me.	3.77	1.57
F1.5: I can't imagine being where I am now without my current education.	3.68	1.63
F1.6: I expect that I have to study for the rest of my life to succeed in my profession.	3.19	1.65
F1.7: I expect that I will return to school at least one more time in my life.	2.27	1.49
F2. The attitudes towards the public value of AET		
F2.1: The courses, workshops, training and lessons offered are of a high standard.	4.00	1.17
F2.2: Adults have many opportunities for their education.	3.61	1.46
F2.3: Everyone in the Czech Republic has the opportunity to participate in lifelong learning.	4.20	1.35
F2.4: Everyone can improve their social position thanks to lifelong learning.	4.17	1.29
F2.5: Women can participate in lifelong learning as easily as men.	4.43	1.37
F2.6 If one participates in lifelong learning, one is less likely to lose a job	3.84	1.40
F2.7: Thanks to continuing education, one earns much more money.	3.82	1.38
F3. Emotional associations related to AET		
F3p. Positive emotions		
F3p.1: I am always looking forward to any educational opportunity.	3.41	1.40
F3p.2: When I find that I have made progress in learning, I am satisfied.	4.37	1.25
F3p.3: I am proud that education develops my abilities.	4.02	1.33
F3p.4: When I am successful in learning, I am proud of myself.	4.24	1.28
F3p.5: Continuing in learning gives me more confidence.	3.98	1.39
F3p.6: When I imagine I have learned something new, it encourages me.	4.24	1.28
F3n. Negative emotions		
F3n.1: I get angry when I have to learn something new.	2.87	1.39
F3n.2: I am afraid I do not have the skills to continue my education.	2.86	1.46
F3n.3: I have not talent for learning	3.01	1.53
F3n.4: Education bores me to death.	2.82	1.50
F3n.5: I am often anxious when I have to learn something.	3.09	1.53
F3n.6: I am sick of learning.	2.42	1.44

Note. The larger the mean, the higher the rate of agreement with the item.

5.3. Analysis

To better understand why some individuals participate in AET while others do not, we used *structural equation modeling* (SEM) to examine the relationship between attitudes towards AET and participation in organised learning. In this model, participation was the dependent variable, while attitudes towards AET were the independent variables. We ensured that the model met standard measurement quality parameters ($\chi^2 = 1657.193$; $df = 305$; $CFI = 0.935$; $TLI = 0.925$; $RMSEA = 0.061$), and all regression weights, intercepts, covariances, and variances were found to be statistically significant at a level of 0.01.

We conducted our analysis using IBM SPSS 27, and used IBM SPSS Amos 27 for SEM. To calculate reliability, we used JASP 0.16.2.0, which allowed us to calculate not only Cronbach's α , but also McDonald's ω and Gutmann's λ_6 .

6. Findings

The results from our SEM analysis are presented in Figure 1. It is evident that the total explained variance of participation in AET is 28% by using a three-factorial model of attitudes. All of the proposed factors of the theoretical model have a positive correlation among each other. Their impact on the level of participation is mostly indicating that more people tend to participate in AET when they agree with individual items, except for factor F2 (*The attitudes towards the public value of AET*) and sub-factor F3n (*negative Emotional associations related to AET*) which has reversely formulated items. In this regard, negative emotional associations with AET are related to non-participation. The strength of the direct effect of F1 (*Individuals' personal attitudes towards the value of AET*) is .24, F2 (*The attitudes towards the public value of AET*) is .12 (the weakest), and F3 (*Emotional associations related to AET*) is .40 (the strongest).

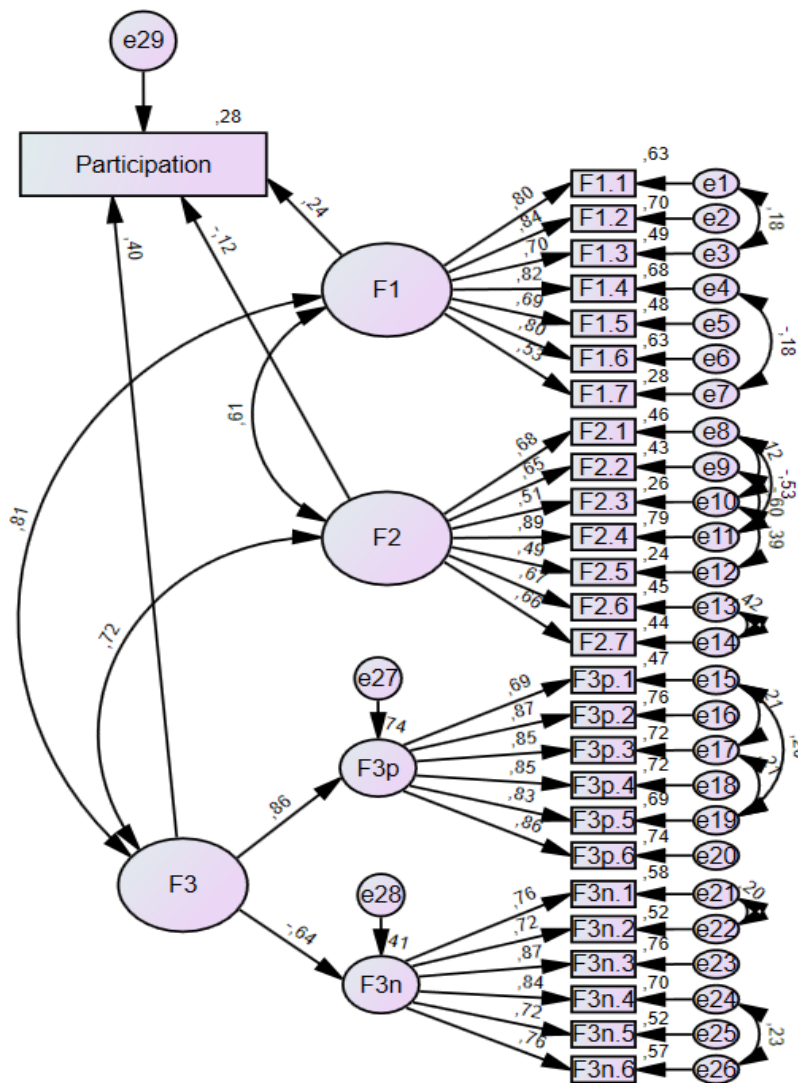


Figure 1. Visualisation of SEM (n = 1,200)

7. Conclusion

Our research has found that attitudes towards AET have a substantial impact on participation, even when measuring attitudes for both FAE and NFE on a representative sample of adults aged 25 to 69. These results align with previous research on smaller non-representative samples conducted by Bennett (2016), Blunt & Yang (2002), Darkenwald & Hayes (1988), Hayes & Darkenwald (1990), and Lavrijsen & Nicaise (2017). It is essential to have a positive attitude towards organised learning as a crucial factor for participation.

In addition, research has shown that attitudes towards AET can significantly predict participation in AET. Although models that explain participation based on socioeconomic factors can account for 19 to 35% of the variability (Blossfeld et al., 2020; Dämmrich et al., 2014; Kalenda & Kočvarová, 2022b, Kalenda et al., 2022), our model has a similar explanatory power, accounting for 28% of the explained variation. Therefore, we strongly recommend that future research should consider both socioeconomic and sociopsychological factors to expand our understanding and explanation of participation in AET.

Lastly, our research indicates that not all types of attitudes towards AET, as per our triadic model, carry the same weight. Some hold more significance than others. Specifically, emotional associations connected with AET (F3) appear to be crucial. This is not only because they have the greatest impact on overall participation, but also because they are closely linked to the other two forms of attitudes. Therefore, our findings support the previous theoretical assumption that attitudes towards AET are deeply ingrained in individuals (Kyndt et al., 2013b, 2013b; Lavrijsen & Nicaise, 2017; Van Nieuwenhove & De Wever, 2021), and have gradually developed over time rather than being a by-product of current public discourse.

Data Availability Statement

The datasets analysed in this study are available on request to the corresponding author.

Declaration of Conflicts Interests

The author(s) declare no potential conflicts of interest with respect to the research, authorship or publication of this article.

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Ethics Statement

Data collection and data analysis follow the ethical principles of research respecting the ICC / ESOMAR International Code (ESOMAR, 2022). A principle of anonymity was followed according to which participants remained anonymous to each other and to the research team. Emphasis was put on voluntary participation and comprehension of informed consent. Principle of anonymity remaining

participants anonymous and to the researchers themselves throughout the study emphasised voluntary participation and comprehension of informed consent. Participants were informed about the aims of the research and that the given information would be treated confidentially. Grant project reviewers evaluated the grant proposal with respect to ethical implications and assured the safety and rights of participants.

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