

## Morana Koludrović and Ina Reić Ercegovac

# Attitudes, Motivation, and Self-Efficacy in Adult Education in Croatia

**Abstract:** The main objective of this research was to investigate certain motivational characteristics, attitudes towards adult education, and participants' self-efficacy in formal adult education programs in the Republic of Croatia. A total of 299 respondents participated in the study, which employed a demographic survey along with the Adult Attitudes Toward Adult Education Scale (Darkenwald and Hayes 1988), the Academic Motivation Scale (Vallerand et al. 1992), and the General Self-Efficacy Scale (Ivanov 2002). Motivation was analysed from the perspective of self-determination theory (Deci and Ryan 2008; Ryan and Deci 2000), which offers a broad (social, emotional, and environmental) framework for understanding human motivation. The results show a connection between attitudes towards adult education (enjoyment of learning activities; importance of adult education; and intrinsic value of adult education) and intrinsic motivation (to know, to accomplish, and stimulation) and introjected and identified regulation. A negative correlation was found with amotivation; there was no correlation with external regulation.

**Keywords:** self-determination approach, motivation, teachers in adult education, self-efficacy, attitudes

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## Introduction

### *Adult Motivation from the Perspective of Self-Determination Theory*

Investigating motivation in a population of adult learners is challenging because of the personal experiences, environmental influences, attitudes, values, and other personal concepts that they have acquired throughout their lives. However, having a good understanding in this area is extremely important for institutions, i.e., teachers in adult education, because if teachers know what motivates adults to enrol, attend, and complete a program, as well as how this occurs, it is reasonable to expect that adult learners' interest in enrolling in the program will increase, while dropout rate will decrease. From the very beginnings of andragogy, researchers have noted that learner motivation plays an important role in lifelong learning and have emphasized the role of intrinsic over extrinsic motivation, assuming that motivation is a relatively stable concept. However, research suggests that motivation in general, and motivation in adult education in particular, cannot be viewed solely through the relationship between intrinsic and extrinsic motivation, as it has been emphasized that motivation, i.e., motives, change with age (Barbuto et al. 2004; Seifert and Sutton 2009; Sheldon and Elliot 1999; Vallerand et al. 2008; Wlodkowski 2008). Analyses of adult motivation have shown that individuals' personal values and interests have an impact on motives in adulthood (Sheldon 2009; Sheldon and Elliot 1999; Wlodkowski 2008). It has been observed that, unless reflecting the personal values and interests of an individual, achieving a goal does not necessarily result in satisfying a need or a subjective sense of fulfilment (Sheldon 2009). Furthermore, many authors have stated that choosing goals is not always autonomous; it depends on environmental influences, and choosing the right goals requires an individual to be able to resist social pressures and expectations (Rothes et al. 2014; Sheldon 2009; Sheldon and Elliot 1999). In this context, self-determination theory is interesting for researching motivation in adult education because it moves away from the dual understanding of motivation as exclusively extrinsic and intrinsic, instead emphasizing the importance of social and emotional contexts and their impacts on motivation (Gagne and Deci 2005; Rothes et al. 2014; Ryan

and Deci 2000; Sheldon 2009; Vansteenkiste et al. 2006). Self-determination theory basically distinguishes between amotivation, which is the complete absence of control regulation, and controlled regulation and autonomous motivation, both of which (though in different ways) encourage and direct the behaviour of individuals (Ahmed and Bruinsma 2006; Deci and Ryan 2008; Gagne and Deci 2005; Noels et al. 2003; Vallerand et al. 1992). What follows is external regulation, which is the least autonomous and includes behaviours that are the result of a reward, punishment, or command. In relation to external regulation, in introjected regulation an individual performs an action to avoid guilt or anxiety and strengthen the ego, while in identified regulation, as the least regulated extrinsic motivation, an individual accepts initially imposed activities as being their own and personally important (Ahmed and Bruinsma 2006; Deci and Ryan 2008; Gagne and Deci 2005; Noels et al. 2003; Rothes et al. 2014; Vallerand et al. 1992).

There are three types of intrinsic motivation on the self-determination continuum. The first is the intrinsic motivation to know, which describes an individual's desire to perform an activity they enjoy while learning. The second is the intrinsic motivation for accomplishment; this implies the satisfaction that an individual feels when creating new works. Finally, the intrinsic motivation to obtain stimulating experiences refers to a desire to perform activities that create satisfaction (Deci and Ryan 2008; Fairchild et al. 2005; Gagne and Children 2005; Vallerand et al. 1992). According to Sheldon (2009), self-determination theory starts from the assumption that motives become internalized and integrated over time, i.e., individuals have a tendency to move on the self-determination continuum, following the path of intrinsic motivation as they age. Moreover, self-determination theory is important because it emphasizes the importance of knowing and implementing strategies to achieve learning goals (Kump et al. 2013).

### *Attitudes of Adult Learners*

Investigating attitudes as internal conditions that affect an individual's personal choices to perform an activity is important in adult education; it helps create understanding of the reasons for and needs of adults in continuing education and helps adult education institutions to support and encourage attendance and completion of education programs (Bennet 2016; Darkenwald and Hayes 1988). While investigating attitudes in adult education, Darkenwald and Hayes (1988) defined three dimensions of participants' attitudes toward adult education: the enjoyment of learning activities, the importance of adult education, and the intrinsic value of adult education. Similarly, Wlodkowski (2008) pointed out that adults' motivation to learn is the greatest if learners simultaneously experience success in learning, that is, if they expect positive outcomes, and have the will to learn, meaning they recognize the importance and value of education and experience enjoyment of learning activities.

Indeed, the first step in attending adult education programs is reflected in participants' expectations of positive outcomes (Bennett 2016; Wlodkowski 2008).

Wlodkowski (2008) indicated that a necessary criterion for participation in adult education programs is the assessment of experiencing success combined with a will to learn. However, if there is no recognition of the value of education or enjoyment of learning activities, experiencing success and having a will to learn will be insufficient in the long term. In other words, along with an expectation of positive outcomes, individuals must recognize the importance of education for their personal well-being.

Thus, along with success and will, this higher level of learner motivation in adult education also includes the value of education (Wlodkowski 2008). Niemeiec (2014) defined intrinsic and extrinsic values as relatively stable factors that encourage the development and achievement of life goals or aspirations, organize and direct behaviour over time, and can affect psychological, social, and physical well-being. Attitudes towards the importance and value of adult education are strongly influenced by environmental factors, as an individual's environment shapes their experiences with and beliefs about lifelong learning (Benders 2011; Bennett 2016; Knowles et al. 2005; Merriam and Caffarella 1999). Therefore, the importance of continuous to research the value and importance of education from the perspective of adult learners is obvious, as suggested by many authors who have pointed out that, along with intrinsic motivation, participation in lifelong learning programs requires that learners recognize the relevance of education for their personal well-being and that teachers respect learners' individual differences, which include experiences, attitudes, and values (Brockett 2015; Knowles et al. 2005; Wlodkowski 2008) and are influenced by personal as well as environmental factors.

Meanwhile, enjoyment of learning activities is related to personal attitudes and can be situational or contextual, depending on whether enjoyment of learning activities arises from interesting educational content or from an individual's personal interest in adult education and training (Bennett 2016). Wlodkowski (2008) found the experience of enjoying learning activities to be a key element of success in adult education.

### *Self-efficacy of Adult Learners*

Self-efficacy, which is an individual's assessment of their own ability to organize and perform the activities needed to achieve desired outcomes, plays an important role in motivation, positive learning outcomes, and the experience of success, as it influences activity, effort, persistence, and perseverance (Bandura 1993, 1997; Schunk and Pajares 2001). Investigating self-efficacy in adult learners is important; it has been found that dropout rates in adult education decrease with increased self-efficacy (Hammond and Feinstein 2005), and there is a direct correlation between self-efficacy and experiences of success and academic achievement (Goulao 2014; Hammond and Feinstein 2005). Moreover, a connection between self-efficacy and intrinsic motivation has been established (Carre 2000; Maraghi et al. 2018; Rothes et al. 2014). Investigating self-efficacy is also important because once an individual develops a sense of self-efficacy, further failure no longer significantly affects them

(Bandura 1986; Schunk 1991). This is crucial in adult education, where it is extremely important to encourage learners to not give up when they encounter obstacles. However, a number of studies have had inconsistent results related to self-efficacy when considering age, sex, individual experiences, attitudes, motivation, type of education, and employment status. This makes further investigation of self-efficacy relevant and important for both motivating learners in adult education and the overall well-being of the adult population.

## Research Objective and Research Questions

The objective of this research was to examine certain motivational characteristics of participants in formal adult education programs in the Republic of Croatia. Due to a lack of research in this area and the rarity of empirical data on the determinants of motivation in adult education, the research sought to learn more about different aspects of adult learners' motivation and attitudes towards adult education. In order to achieve this objective, the research tried to provide answers to the following research questions:

- What is the relationship between sociodemographic characteristics, motivation, and self-efficacy of participants in adult education programs?
- Do participants' motivational characteristics and self-efficacy differ with regard to the reasons they enrolled in the program?
- Do participants' sociodemographic characteristics (sex, age, length of work experience, employment status and completed level of education) and general self-efficacy contribute to their attitudes towards adult education and motivation in the context of self-determination theory?

## Method

### *Research Sample*

The research involved 299 participants, all of whom were in formal adult education programs in the Republic of Croatia. The participants with primary education or high school diplomas were enrolled in vocational education programs, and the participants with university degrees were enrolled in teacher education programs. There were 118 (39,46%) men and 181 (60,54%) women in the sample. With regard to employment status, 92 (30,77%) participants had permanent employment contracts, 61 (20,40%) participants worked on a fixed-term contract basis, 67 (22,41%) participants worked part-time, and 79 (26,42%) participants were unemployed. For level of education, 31 participants (10,40%) had a primary education, 134 (44,97%) participants had a high school diploma, 61 (20,47%) had some higher education or a bachelor's degree, and 72 (24,16%) participants had either a university or an academic degree. The majority of the participants ( $n = 171$ ; 57,19%) had enrolled

in adult education programs because they were interested in the program, while 85 (28,43%) participants mentioned the possibility of job promotion or getting a better job, 23 (7,7%) participants were referred to the adult education program by their employer or the Croatian Employment Service, and 20 (6,69%) stated other reasons. With regard to the type of education, 89,63% (n = 268) of the participants were enrolled in retraining programs, and 10,37% (n = 31) participated in training programs, of which only four were sent by their employer; answers from other participants suggested they had enrolled in the program based on interest or possibility of advancement.

## Instruments

A demographic survey and the *Adult Attitudes Toward Adult Education Scale* (AACES; Bennett 2016; Darkenwald and Hayes 1988), Academic Motivation Scale (AMS-C28, Vallerand et al. 1992) and General Self-Efficacy Scale (GSE; Ivanov 2002) were used in this research. The demographic survey collected data on the socio-demographic characteristics of the participants and comprised six closed-ended questions that collected data on sex, age, length of work experience, completed level of education, employment status, and reasons for enrolling in the adult education program.

The AACES (Darkenwald and Hayes 1988) consists of 22 items that can be used to examine three factors: the enjoyment of learning activities (seven items, e.g., *I find learning stimulating*), the importance of adult education (nine items, e.g., *Adult education is less important than children's education*), and the subjective value of adult education (six items, e.g., *Adult education helps people make better use of their lives*). The task of the participants was to assess their level of agreement with each statement on a scale from 1 to 5, where 1 meant *I do not agree at all* and 5 meant *I completely agree*. After reverse scoring negative statements, three overall results of satisfactory reliability were formed, the characteristics of which are shown in Table 1.

The AMS-C28 (Vallerand et al. 1992) is based on self-determination theory (Ryan and Deci 2000) and is intended to examine different types of motivation, according to the self-determination continuum, in an educational context. The scale consists of 28 statements related to different reasons participants joined the lifelong learning program (adult education). The statements are divided into seven subscales. Of these, three relate to intrinsic motivation: to know (e.g., ... *because I feel happy and satisfied when I learn new things*), accomplishment (e.g., ... *because of the pleasure I feel when I surpass myself*), and stimulation (e.g., ... *because of the strong feelings I have as I share my ideas with others*); three relate to extrinsic motivation: identified (e.g., ... *because I will eventually be able to work in the field I love*), introjected (e.g., ... *because I want to prove to myself that I can succeed at this*), and external regulation (e.g., ... *because with present level of education I cannot find a well-paid job*); and one relates to amotivation (e.g., ... *I don't know, I can't understand what I'm doing here*). Each subscale consists of four statements, and

the task of the participants was to assess to what extent each reason applied to them on a seven-point scale, where 1 meant *not the reason at all* and 7 meant *completely the reason*. Seven overall results were formed, with a higher result indicating a higher expression of this type of learner motivation. Descriptive characteristics for all seven subscales are shown in Table 1.

The GES (Ivanov 2002) consists of 10 items that examine general self-efficacy (e.g., *When I have a problem, I can usually figure out what to do*). The task of the participants was to assess their level of agreement with each item on a scale from 1 to 4, where 1 meant *I do not agree at all* and 4 meant *I completely agree*. Descriptive characteristics of the total results, formed by summing the responses to all 10 items, are shown in Table 1.

	N	M	SD	range	Cronbach's $\alpha$	skewness	kurtosis
Enjoyment of learning activities	7	29.97	3.85	12–35	0.72	-1.22	2.41
Importance of adult education	9	39.65	4.84	13–45	0.80	-1.89	5.54
Subjective value of adult education	6	25.19	3.42	10–30	0.66	-1.05	1.93
Intrinsic motivation: to know	4	22.32	5.03	4–28	0.84	-0.97	0.54
Intrinsic motivation: accomplishment	4	19.31	5.43	4–28	0.76	-0.45	-0.23
Intrinsic motivation: stimulation	4	17.52	6.07	4–28	0.84	-0.26	-0.59
Extrinsic motivation: identified	4	22.93	4.77	5–28	0.80	-1.10	1.11
Extrinsic motivation: introjected	4	16.54	6.73	4–28	0.85	-0.10	-0.93
Extrinsic motivation: extrinsic regulation	4	17.15	5.61	4–28	0.70	-0.29	-0.41
Amotivation	4	5.99	3.61	4–24	0.71	2.26	5.18
General self-efficacy	10	33.34	4.34	10–40	0.87	-0.57	1.86

Table 1: Descriptive characteristics of research variables

### Procedure and Data Analyses

The research was conducted during the 2018/2019 academic year in institutions that organize and implement adult education programs in the Republic of Croatia. Data were collected in groups during regular classes. Participants were given brief oral instructions, and written instructions on how to complete the questionnaire were presented in the materials handed out before surveys were completed. Participants were guaranteed anonymity, asked to be honest in their answers, and

informed and informed that they could withdraw from participating in the survey at any time. A total of 299 fully completed questionnaires were collected, and the data were analysed using the STATISTICA13 application.

## Results

The first research question explored relationships between attitudes towards adult education, motivation for adult education, self-efficacy, and certain socio-demographic characteristics of the participants (Table 2). According to the results (Table 2), the three types of attitudes towards adult education correlated with the three types of intrinsic motivation (to know, accomplishment, stimulation) and with identified and introjected extrinsic motivation. A connection between attitudes towards adult education was not established in external regulation, while there was a negative connection with amotivation.

When comparing the relationship between attitudes towards adult education with sex, age, length of work experience, and employment status (Table 2), it can be seen that women assessed adult education as more important and personally valuable, as did older participants with longer work experience. There was no correlation between attitudes towards adult education and employment status or level of education.

The analysis of the relationship between motivation and other research variables showed that women were intrinsically motivated more than men; no relationship was found between age, length of work experience, level of education, or employment status and intrinsic motivation. The analysis of the types of extrinsic motivation showed that women achieved higher results on the subscales of identified and introjected regulation; this was also true in younger participants and low-qualified workers. With regard to external regulation, sex did not prove predictive, but younger respondents with lower qualification levels and longer work experience were more externally motivated. In terms of amotivation, a relationship was found for the variables of sex, age, attitudes towards adult education, and some types of motivation in such a way that amotivation was higher in younger men and negatively correlated with attitudes towards adult education and some types of motivation (intrinsic motivation to know and identified motivation).

Sex, age, level of education, employment status, and length of work experience were not connected to general self-efficacy, but all attitudes toward learning and all types of motivation were found to be related to self-efficacy, and a negative relationship was found only with amotivation.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Sex															
2. Age	0.18**														
3. Length of work experience	0.02	0.75**													
4. Employment status	0.00	-0.15**	-0.31**												
5. Level of education	0.11	0.02	-0.07	-0.09											
6. Enjoyment of learning activities	0.39**	0.33**	0.27**	-0.08	0.12										
7. Importance of adult education	0.33**	0.24**	0.22**	-0.07	0.08	0.60**									
8. Subjective value of adult education	0.32**	0.14**	0.15**	-0.09	0.11	0.54**	0.65**								
9. General self-efficacy	0.09	-0.02	0.03	-0.06	-0.08	0.28**	0.27**	0.23**							
10. Intrinsic motivation: to know	0.26**	0.01	0.08	-0.06	0.04	0.54**	0.50**	0.56**	0.34**						
11. Intrinsic motivation: accomplishment	0.21**	-0.04	0.05	-0.02	0.02	0.41**	0.39**	0.46**	0.33**	0.75**					
12. Intrinsic motivation: stimulation	0.22**	0.07	0.10	-0.04	0.06	0.41**	0.34**	0.42**	0.22**	0.71**	0.71**				
13. Extrinsic motivation: identified	0.23**	-0.12*	-0.08	0.02	-0.02	0.31**	0.37**	0.43**	0.30**	0.63**	0.52**	0.45**			
14. Extrinsic motivation: introjected	0.18**	-0.12*	-0.03	0.04	-0.20**	0.19**	0.22**	0.29**	0.27**	0.47**	0.72**	0.50**	0.44**		
15. Extrinsic motivation: external	-0.04	-0.17**	-0.08	0.17**	-0.27**	-0.04	0.05	0.09	0.15**	0.23**	0.31**	0.19**	0.53**	0.49**	
16. Amotivation	-0.18**	-0.13**	-0.08	0.03	-0.02	-0.42**	-0.32**	-0.29**	-0.19**	-0.20**	-0.06	0.01	-0.15**	0.04	0.11

Table 2: Correlation matrix of all research variables\* $p < 0.05$ ; \*\* $p < 0.01$

In order to answer the second research question and examine whether the participants differed in motivational characteristics and self-efficacy with regard to the reason they enrolled in the program, a series of Kruskal-Wallis analyses of variance were conducted, the results of which are shown in Table 3.

	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	H (3, N = 299)	p
Enjoyment of learning activities	4.00	4.29	4.43	4.43	6.82	0.078
Importance of adult education	4.44	4.56	4.55	4.61	.50	0.918
Subjective value of adult education	4.17	4.33	4.33	4.25	1.86	0.602
Intrinsic motivation: to know	3.20	3.30	3.33	3.30	.03	0.998
Intrinsic motivation: accomplishment	5.50	5.50	6.00	5.75	10.90	0.012
Intrinsic motivation: stimulation	4.25	4.75	5.00	4.38	10.62	0.014
Extrinsic motivation: identified	4.00	4.00	5.00	3.50	15.15	0.002
Extrinsic motivation: introjected	5.75	6.00	6.25	5.85	1.18	0.757
Extrinsic motivation: extrinsic regulation	4.50	4.00	4.25	3.00	3.33	0.344
Amotivation	5.00	4.50	4.25	4.27	7.59	0.055
General self-efficacy	1.50	1.00	1.00	1.00	5.90	0.117

Table 3: Differences in attitudes, motivation and self-efficacy regarding reasons for enrolling in the program

$C_1$  = median value of results from the group of participants referred to the program by the employer or the CES;  $C_2$  = median value of results from the group of learners who enrolled in the program for the possibility of advancement or better salary;  $C_3$  = median value of results from the group of participants who enrolled in the program due to interest in the program itself;  $C_4$  = median value of results from a group of participants who enrolled in the program for other personal or professional reasons

Table 3 shows that differences of intrinsic motivation among participants who enrolled in adult education programs for various reasons exist only in three aspects, and participants who cited an interest in the program achieved significantly higher results compared to other participants.

In order to answer the final research question, a series of hierarchical regressions were conducted; motivation was a criterion, while sociodemographic characteristics, self-efficacy, and attitudes towards adult education were predictors. The results of these analyses are shown in Table 4. All analyses were performed in three steps: sociodemographic variables were introduced, then general self-efficacy, followed by attitudes towards adult education.

n criteria	intrinsic motivation			extrinsic motivation			amotivation
	to know	accomplishment	stimulation	identified	introjected	external	
1 <sup>st</sup> step							
Sex	0.29**	0.25**	0.22**	0.28**	0.25**	0.02	-0.16**
Age	-0.22*	-0.29**	-0.09	-0.24**	-0.28**	-0.25**	-0.11
Length of work experience	0.23*	0.27**	0.16	0.10	0.17	0.14	0.01
Employment status	-0.02	0.03	-0.02	0.01	.03	0.15*	0.02
Level of education	0.02	0.02	0.02	-0.04	-.20**	-0.24**	0.00
R (R <sup>2</sup> )	0.31 (0.10)	0.28 (0.08)	0.24 (0.06)	0.30 (0.09)	0.34 (0.11)	0.35 (0.12)	0.21 (0.04)
F (5,292)	6.15**	4.98**	3.64**	5.68**	7.41**	8.08**	2.68*
Sex	0.26**	0.22**	0.20**	0.25**	0.22**	0.01	-0.14*
Age	-0.18*	-0.25**	-0.07	-0.21**	-0.25**	-0.23**	-0.13
Length of work experience	0.20*	0.24**	0.14	0.07	0.15	0.12	0.03
Employment status	-0.01	0.04	-0.01	0.03	0.04	0.16**	0.01
Level of education	0.05	0.04	0.04	-0.01	-0.18**	-0.23**	-0.01
General self-efficacy	0.31**	0.31**	0.22**	0.27**	0.23**	0.14*	-0.18**
R (R <sup>2</sup> )	0.43 (0.19)	0.41 (0.17)	0.33 (0.11)	0.40 (0.16)	0.40 (0.16)	0.37 (0.14)	0.27 (0.07)
ΔR <sup>2</sup>	0.09**	0.09**	0.05**	0.07**	0.05**	0.02*	0.03*
F (6,291)	11.29**	10.04**	5.83**	9.21**	9.37**	7.87**	3.90**
Sex	0.04	0.05	0.04	0.10	0.13*	-0.02	0.00
Age	-0.24**	-0.29**	-0.10	-0.23**	-0.26**	-0.21**	-0.06
Length of work experience	0.10	0.16*	0.07	0.00	0.10	0.10	0.08
Employment status	0.00	0.05	0.00	0.03	0.05	0.16*	0.01
Level of education	-0.02	-0.01	-0.01	-0.06	-0.21**	-0.24**	0.04
General self-efficacy	0.14**	0.18**	0.10	0.16**	0.16**	0.12*	-0.06
Enjoyment of learning activities	0.31**	0.22**	0.22**	0.10	0.05	-0.08	-0.33**
Importance of adult education	0.11	0.07	0.02	0.12	0.02	0.04	-0.07
Subjective value of adult education	0.30**	0.26**	0.27**	0.27**	0.21**	0.14	-0.05
R (R <sup>2</sup> )	0.67 (0.45)	0.57 (0.33)	0.50 (0.25)	0.54 (0.29)	0.46 (0.21)	0.40 (0.16)	0.43 (0.19)
ΔR <sup>2</sup>	0.26**	0.16**	0.14**	0.13**	0.05*	0.02	0.12**
F (9,288)	26.15**	15.43**	10.52**	13.11**	8.66**	5.99**	7.41**

Table 4: Results of hierarchical regression analyses with motivation as a criterion

\*p < 0.05; \*\*p < 0.01

All analyses have shown that, separately, sociodemographic characteristics, self-efficacy, and attitudes towards adult education significantly contributed to the motivation of participants in adult education programs; age and, to a somewhat lesser extent, level of education proved to be the most important. As expected, a younger age predicted a higher level of both intrinsic and extrinsic motivation, and a lower level of education predicted a higher level of extrinsic motivation (Table 4).

Also as expected, general self-efficacy proved to be a significant positive predictor of all types of motivation except amotivation and stimulation (as a form of intrinsic motivation). Enjoyment of learning activities was a significant positive predictor of all types of intrinsic motivation and a negative predictor of amotivation, while, unexpectedly, the importance of adult education was not predictive of any type of motivation. In other words, a positive attitude toward the importance of adult education does not determine personal motivation at all. However, the subjective value of adult education is predictive for all types of motivation except amotivation and external motivation.

## Discussion

The results of this study found a connection between intrinsic motivation and attitudes towards adult education, which was expected, as previous authors have suggested adults would be more motivated to achieve a goal they found personally valuable or interesting (Sheldon 2009; Sheldon and Elliot 1999). Something both interesting and important were the results related to the connection between the identified and introjected motivation and attitudes towards adult education. Namely, within the self-determination approach to motivation, identified and introjected regulation represent the external motives that an individual internalizes over time; although initially extrinsically motivated, they understand and experience the importance and value of adult education and, ultimately, the enjoyment of learning activities. Such results suggest that motives of adults are not stable and can be influenced. In practical terms, the same results are important in the organization and implementation of adult education programs, as they indicate the importance of the role of teachers in adult education, who should recognize the motives of learners and consequently be able to motivate them to further learn.

When comparing the relationship between attitudes towards adult education with age, length of work experience, and employment status, older learners with longer work experience assessed adult education as more important and personally valuable, while no relationship was found between attitudes towards adult education and employment status. In addition, level of education was not predictive of attitudes towards adult education and intrinsic motivation, which is not in line with some previous studies showing that a connection, though inconsistent, between all types of motivation and qualification level and employment status exists (Carre 2000; Ilke 2011; Rothes et al. 2014).

When examining the relationship between external regulation and other variables, younger participants and those with a lower qualification levels were

found to be more extrinsically motivated, which is consistent with a number of previous studies (Ilke 2011; Rothes et al. 2014). As can be seen in Table 2, external regulation is related to all other types of motivation, which speaks in favour of the fact that motivation is a complex concept and that the intensity of motivation for adult education is important. This is understandable since, according to the results of this research, adults primarily enrol in programs because they are personally motivated (Table 3), and at the same time they are attracted by the possibility of better employment (i.e., better job, higher salary, potentially better social status, etc.); these are all external motives, which in adult education are obviously intertwined with internal motives. However, when observing the correlation between external regulation and attitudes towards adult education, no connection was found, which suggests that attitudes towards adult education, regardless of whether they are primarily internal (enjoyment of learning activities) or influenced by environmental factors (importance and value of adult education), are above all driven by personal motives rather than rewards and punishments, such as are associated with external regulation.

Finally, from the results shown in Table 4, it is noticeable (and was expected) that, separately, sociodemographic characteristics, self-efficacy, and attitudes towards adult education significantly contribute to the motivation of participants in adult education programs. The obtained results are in line with the results of previous research (Carre 2000; Rothes et al. 2014) and are extremely important with regard to the organization of adult education programs. Similarly, Rothes and colleagues (2016) found that autonomous motivation and higher self-efficacy contributed to using deep-learning strategies. These results suggest that to enable learners to persevere in adult education, teachers should pay attention to learners' ages and what types of qualification they seek to acquire, and they should explore learners' motives for enrolling in and attending an adult education program. The realization that motivation is not a stable concept, but that it changes and implies a combination of internal and external motives, should not discourage teachers; rather it should encourage them to think about how to organize classes that will focus on learners and their needs and interests.

Of particular interest was the result showing that general attitudes towards adult education (i.e., how important people consider adult education in general) are not significant predictors of learner motivation. It could be expected that more positive attitudes would contribute to motivation, yet it is obvious that such attitudes were not indicative of the participants' personal motivation. The subjective value of adult education, on the other hand, was proven to be relevant for personal motivation, which suggests that in order to understand and strengthen personal motivation, focus should be placed more on learners' subjective experiences and respective personal value of education.

## Conclusion

The results of this study confirm a connection between intrinsic motivation, self-efficacy, and attitudes towards adult education. The results also show that intrinsic motives prevail among participants in adult education programs, and that they are often combined with external motives, which should be considered by teachers. The results obtained by this research point to the fact that it is necessary in adult education to organize classes that are learner-centred (Knowles et al. 2005; Wlodkowski 2008) and will respect learners' views, interests, experiences, and motives. Moreover, the results suggest that motivation is a complex concept that cannot be viewed in a unified intrinsic-extrinsic relationship, as is stressed in self-determination theory.

It is necessary to acknowledge certain limitations of the current study. One relates to the sample structure, which only included individuals who were already attending adult education programs, meaning that they were sufficiently motivated to enrol. It is possible that in the general adult population, the results would suggest different conclusions about the relationship between motivational characteristics and attitudes towards adult education. Furthermore, neither the performance of the participants nor their satisfaction with their specific program were controlled for, which may be relevant with regard to the assessment of both personal motivation and attitudes towards adult education. To be sure, adult education is an area that has rarely been researched in the Croatian context, thus there is little empirical data that could be used practically to improve the quality of adult education programs or motivate adults to join education programs.

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## ODNOS, MOTIVACIJA IN SAMOUČINKOVITOST NA PODROČJU IZOBRAŽEVANJA ODRASLIH NA HRVAŠKEM

**Povzetek:** Z raziskavo, ki jo predstavljamo v prispevku, smo želeli ugotoviti, kakšne so motivacijske značilnosti, odnos do izobraževanja odraslih in lastna učinkovitost udeležencev v formalnih programih izobraževanja odraslih na Hrvaškem. V raziskavi je sodelovalo 299 respondentov, ki so odgovarjali na vprašalnik o osnovnih demografskih podatkih ter na vprašalnik z lestvicami, ki so merile (i) odnos odraslih do izobraževanja odraslih (angl. *Adult Attitudes Toward Adult Education Scale*; Darkenwald in Hayes 1988), (ii) motiviranost za izobraževanje (angl. *Academic Motivation Scale*; Vallerand idr. 1992), ter (iii) splošno samoučinkovitost udeležencev (angl. *General Self-Efficacy Scale*; Ivanov 2002). Motiviranost smo analizirali s perspektive teorije samodeterminiranosti (Deci in Ryan 2008; Ryan in Deci 2000), ki vzpostavlja širok (družbeni, emocionalni in okoljski) okvir za razumevanje človekove motivacije. Rezultati kažejo, da obstaja povezava med odnosom do izobraževanja odraslih (občutek ugodja ob učnih dejavnostih, pripisovanje pomena izobraževanju odraslih, subjektivno vrednotenje le-tega) in notranjo motivacijo (za usvajanje znanja, doseganje ciljev, stimuliranost). Negativna povezanost je bila ugotovljena v razmerju do amotivacije, medtem ko ni bilo mogoče dokazati povezave z eksterno regulacijo.

**Ključne besede:** teorija samodeterminacije, motivacija, učitelji v izobraževanju odraslih, samoučinkovitost, odno

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