



The influence of demographic characteristics on the effectiveness of public administration training programs

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ABSTRACT

This paper examines the influence of demographic characteristics on the effectiveness of the training programs in public administration in the Republic of Serbia. Specifically, the aim is to evaluate the effectiveness of the training programs in public administration and to analyse how factors such as age, gender, educational level, years of work experience and job title influence the outcomes of training initiatives. The sample of the study includes 1,040 public administration employees in Serbia who participated in at least one training program organized by the National Academy of Public Administration in 2022. The primary data was collected through a survey questionnaire administered in October 2023. The effectiveness of the training programs is assessed according to the extent to which they contribute to achieving the desired objectives. The statistical analyses involve descriptive statistics, reliability assessments and statistical tests to identify differences between demographic groups. The research results indicate that age, gender and education level have no influence on the effectiveness of the training programs in public administration. However, training effectiveness is significantly influenced by professional experience and job titles in public administration. Respondents with up to 15 years of work experience rated the effectiveness of the training programs higher than those with more than 15 years of work experience. In addition, government officials rated the effectiveness of the training programs they participated in significantly higher than other employees and managers in public administration. The key policy recommendations that emerge from the research relate to matching training programs to job experience, differentiating training for different job titles, leveraging experienced employees and an inclusive training environment.

KEYWORDS

public administration, demographic characteristics, training program, training effectiveness

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1 INTRODUCTION

Training programs in public administration are essential for efficient and effective governance, smooth adaptation to change and fostering continuous professional development. They improve decision-making, ensure effective policy implementation and reinforce ethical standards and accountability. In addition, training encourages innovation, improves community engagement, prepares administrators for crisis management and supports the Sustainable Development Goals.

Public sector training is critical to the development of competent and effective public servants equipped with the necessary knowledge, skills and attitudes to provide quality public services (Cohen 2021). These programs aim to offer government employees a deep understanding of the context in which public administration operates, ensuring that the courses provided are relevant to their daily experiences (Haruna 2004). By investing in education and training, civil servants can enhance their competencies, ultimately improving the operational and administrative capacity of organizations (Lavdas, Papadakis and Rigopoulou 2012; Spreen, Afonso and Gerrish 2020).

Theory and practice have shown that training programs play a crucial role in fostering sustainable practices within public organizations. The connection between sustainable development and public administration training is evident in various studies that highlight the importance of developing human resources through education and training to drive sustainable practices and innovation within public administration (Bisogno et al. 2023; Rahman et al. 2020). Investing in human resources through education

and training programs is essential for sustaining public service motivation and improving the competencies of employees to drive ethical-oriented processes of innovation and change within public administration (Rahman et al. 2020).

The continuous education and training of human resources in the public sector not only ensures better service delivery to citizens, but also increases employee satisfaction and performance (Stavrakaki et al. 2023), as well as the positive attitude towards working in the public sector (Chen, Hsieh and Chen 2021). Effective training programs help employees to develop new skills and improve their performance, which can lead to increased confidence and a sense of accomplishment. Additionally, training programs can provide opportunities for career advancement, which can motivate employees and increase their satisfaction with their work. They also demonstrate an organization's investment in its employees' professional development, which can improve morale and foster a positive work environment.

The main objectives of this paper are twofold: firstly, to assess the overall effectiveness of training programs in public administration and secondly, to examine the impact of demographic characteristics on the effectiveness of these programs. Through this dual focus, the research seeks to provide a comprehensive understanding of how training programs can be optimized to meet the diverse needs of public administration professionals in the Republic of Serbia.

In the context of this study, the effectiveness of training programs refers to the extent to which the implementation of the training program has led to the achievement of the planned objectives (improvement of the relevant competencies). It implies learning out-

comes, i.e. changes that have occurred in the learning process, such as learning effects, acquired skills, expanded knowledge, adopted positive attitudes, behavioural changes.

Following the main objectives of the research and the definition of effectiveness, two research questions (RQ) are posed:

RQ1: How effective are the training programs in public administration?

RQ2: Which demographic characteristics have the greatest influence on the effectiveness of the training programs in public administration?

The structure of the paper is as follows. The theoretical part of the paper focuses on the effectiveness of training, different approaches to evaluating it and previous studies that have examined the role of demographic variables in training outcomes. The data and methods section describes the methodology and data sources used in the study, including a description of the survey conducted. The research findings section presents the main results, while the discussion section details the empirical findings. Finally, the paper summarizes the key findings and implications of the study and makes recommendations for the future development of training programs.

2 TRAINING PROGRAMS IN PUBLIC SECTOR: EFFECTIVENESS AND DEMOGRAPHY

Public administration training programs encompass a wide range of topics designed to enhance the skills and knowledge of public sector employees. These programs include general topics such as personal development, technical skills, policy analysis, ethics and integrity or inclusion. There are also specialized pro-

grams that focus on customer service, crisis management, financial management, human resource management, project management, international relations and sustainability. Nguyen, Nguyen and Vo (2022) emphasize the importance of including courses such as leadership development, public service motivation and learning goal orientation, as they foster innovative behaviour among public sector employees.

Although learning is an important goal, the central purpose of training initiatives is to put the acquired knowledge into practice (Card, Kluge and Weber 2015; Lebedinski and Pavlovic 2023). Zumrah (2015) highlighted that the transfer of training mediates the relationship between training and service quality in the public sector, suggesting that training not only improves employees' skills and knowledge, but also directly impacts service quality through the application of learned skills in the workplace.

The training effectiveness is usually defined as the extent to which the training achieves its intended results. Training is generally considered effective when employees are satisfied with the training experience, show increased motivation and enhance their knowledge in a particular area. As a result, the training transfer leads to significant improvements in job performance (Sitzmann and Weinhardt 2018). Therefore, training effectiveness encompasses multiple dimensions, including participant satisfaction, motivation, knowledge and skills enhancement. A comprehensive approach that addresses all these factors is essential for effective training programs.

Evaluations of training programs are essential for improving their efficiency, providing valuable insights for decision-making processes and enhancing decision-makers' commitment

to training initiatives (Lee et al. 2017). Measuring the effectiveness of training programs in public administration is crucial for assessing their impact and identifying areas for improvement.

Various studies provide insights into different approaches and methodologies for evaluating the impact of training programs in public administration (Mei, Burgess and Xiao 2018; Berg-Cloete et al. 2020; Mohamad et al. 2023). One effective method involves conducting competency-based assessments to determine the extent to which employees have acquired the necessary knowledge and skills from the training (Dunning 2014). Employing the Kirkpatrick training evaluation model can offer a structured framework for evaluating training effectiveness by assessing reactions, learning, behaviour and results (Upadhyay, Goel and John 2023). This model enables a comprehensive analysis of the training program's impact on participants' knowledge, skills and behaviour. Additionally, developing capacity-building training models with innovative learning methodologies and utilizing the success case method can help in evaluating the effectiveness of training initiatives (Muhan 2023; Qureshi et al. 2004).

The success of training programs for both managerial and non-managerial staff in public sector depends on factors such as course design, trainer qualifications and the overall structure of the training program (Fernando 2023; Hajjar and Alkhanaizi 2018). The effectiveness of training initiatives in the public sector is also influenced by the contextual factors, especially the training environment and motivation of the trainees (Yaqoot, Noor and Isa 2017; Mohamad et al. 2023).

Research has shown that demographic factors can significantly influence learning and training outcomes. Factors

such as age, educational background and prior work experience can shape how individuals engage with and benefit from public administration training. Demographic characteristics of the employees have a very important impact on how individuals engage with and absorb concrete training content. This includes elements such as learning preferences and style, motivation, cultural sensitivity and gender dynamics (Ismail et al. 2015).

The influence of demographic factors on learning outcomes has been studied primarily in the context of student achievement (El Refae, Kaba and Eletter 2021; Schreiber, Agomate and Oddi 2017) and online learning (Jawthari and Stoffa 2022; Rizvi, Rienties and Khoja 2019; Islam et al. 2011). However, there is a lack of studies examining the influence of demographic characteristics on employee training programs, especially in the public administration sector. Cowman and McCarthy (2016) conducted an analysis in the public health care sector and concluded that position in organization has a significant impact on training transfer in terms of direction, while age and years of work experience influence the training transfer complexity. McMillan and Fenwick (2008) concluded that although there is no direct evidence that gender affects learning processes in public organizations, in combination with cultural factors or organizational hierarchy, gender can influence learning patterns. Arulampalam, Bryan and Booth (2004) investigated work-related training programs in the EU over a period of five years. The results showed that people with higher education and those working in the public sector were more likely to start a training course. On the other hand, there is no significant difference between men and women in their decision to enrol in a training program.

These studies provide valuable insights but are limited in scope and do not fully address the complex interplay of multiple demographic factors. Therefore, comprehensive research is needed to understand how a broader range of demographic characteristics collectively impact the effectiveness of public administration training programs. This study aims to fill this gap by examining the effects of various demographic factors on training outcomes in a holistic manner.

3 DATA AND METHODS

The research was conducted in October 2023 using an online questionnaire targeted at public administration employees and managers in the Republic of Serbia. With the support of the National Academy for Public Administration, all 9,073 individuals who participated in at least one training course organized by the Academy in 2022 were invited to complete the survey. This approach ensured a representative sample across various institutions and local self-government units.

The questionnaire was distributed via an online survey platform, accompanied by a cover letter explaining the study's purpose and ensuring confidentiality and anonymity of responses. Participants provided informed consent before completing the survey, and two reminders were sent to enhance the response rate. In total, 1,040 complete responses were received, representing 11.46% of the population.

In 2022, civil servants from Serbia took part in 737 training courses organized by the National Academy of Public Administration. The training programs were focused on improving behavioural, general functional, specific functional or coaching skills. Therefore, public admin-

istration employees had the opportunity to participate in training courses from different areas: personal development, digital competences, data management, strategic management, public relations, public procurement, business communication and many others.

Respondents rated seven statements about the effectiveness of the training programs on a five-point Likert scale (1-Strongly disagree; 2-Disagree; 3-Neither agree nor disagree; 4-Agree; 5-Strongly agree). The statements in the questionnaire were formulated on the basis of widely recognized Kirkpatrick's four-level evaluation model, which has been extensively validated in the literature and in previous studies. These statements were then adapted specifically for the public administration sector. According to the Kirkpatrick model, training effectiveness is measured using four categories: 1) participants' reactions to the program, 2) changes in attitudes, knowledge, or skills, 3) changes in work behaviours, and 4) changes in organizational outcomes (Kirkpatrick and Kirkpatrick, 2009). The adaptation involved adjusting the evaluation criteria to the unique context and objectives of public administration training programs. The arithmetic mean of the answers to these seven questions represents the evaluation of the effectiveness of the training programs given by the respondent.

In order to determine what demographic characteristics most influence the effectiveness of training programs in public administration, the respondents were sorted by their gender (two groups), age (three groups), education achieved (three groups), work experience attained in public administration (three groups) and position (three groups). The collected data was processed and analysed using the Statistical

Software for Social Sciences (SPSS). The statistical analysis included descriptive statistics, reliability analysis and non-parametric tests (Kruskal Wallis and Mann-Whitney tests) to compare the differences between the groups.

4 RESULTS

The results of the study indicate that around 38% of the respondents work in central government, while 50% work in local government. The remaining 12% are employed in other government institutions (i.e. public agencies, the judiciary or state auditing institutions). Regionally, the majority (51%) are employed in Belgrade, followed by Vojvodina (19%), Šumadija and Western Serbia (15%), Southern and Eastern Serbia (14%) and Kosovo and Metohija (1%).

About 75% of the respondents are female. Most of the respondents (53%) are between 36 and 50 years old. The average age is 47. In terms of education level, most respondents have a universi-

ty degree. It is interesting to note that 21 respondents (2% of the sample) have a doctorate. The average work experience in public administration is 15 years.

As far as job titles in public administration are concerned, the respondents are categorised as administrative officers (junior administrative officers, administrative officers and senior administrative officers), advisors (junior advisors, advisors, independent advisors, and senior advisors) and government officials. Administrative officers generally do not require a university degree, while advisors are required to have at least a bachelor's degree. Government officials are employees of the public administration who are appointed by the government to take on management tasks. Our sample consists of 12% administrative officials, 83% advisors and 6% government officials.

The respondents' attitudes towards the effectiveness of the training programs in which they participated are shown in Table 1. It presents the per-

Table 1 Descriptive analysis of programs' effectiveness

Effectiveness	M	SD	1	2	3	4	5
1. Thanks to the training courses I attended, I was able to improve my knowledge and skills.	4.26	0.75	0%	2%	10%	47%	41%
2. I have applied the knowledge and skills acquired in the training courses and improved my daily work.	4.05	0.86	1%	3%	17%	47%	32%
3. The training courses I have attended have helped me to have a positive attitude towards my work.	3.94	0.94	3%	4%	20%	43%	30%
4. The training courses I have attended have had a positive impact on my behaviour at work.	3.69	1.00	4%	5%	28%	42%	21%
5. The training courses I have attended have had a positive effect on improving my formal position at work.	3.13	1.26	15%	13%	30%	27%	15%
6. Participation in the training courses has had a positive effect on my personal development.	4.17	0.88	2%	2%	13%	42%	41%
7. After participating in the training, I work more successfully in a team with colleagues.	3.73	1.02	5%	4%	28%	39%	24%

Note: M – Mean; SD – Standard deviation. Cronbach's alpha = 0.899

Source: Authors' research

centage structure of the respondents' evaluations together with the mean and standard deviation of the answers.

From the data in Table 1, it can be concluded that the vast majority of the respondents agree or strongly agree that thanks to the training courses they have improved their knowledge and skills (88%), that they apply the knowledge and skills acquired in the training courses in their daily work (79%), that these training courses have influenced the adoption of a positive attitude towards their work (73%) and that participation in the training courses has had a positive impact on their personal development (83%).

However, the majority of the respondents (58%) state that they do not agree that the training they attended

had a positive impact on improving their formal position in the workplace. Furthermore, 38% of the respondents do not agree that the training they attended has had a positive impact on their behaviour in the workplace and 37% of them do not believe that they work more successfully in a team with colleagues after attending the training. Cronbach's alpha for effectiveness is 0.899, which means that the measurement instruments used (seven statements) have a satisfactory reliability (Field 2009).

Table 2 shows the descriptive statistics for the effectiveness of training programs as the mean value of the respondents' evaluation of the seven statements on effectiveness. The respondents were

Table 2 Descriptive statistics with the test of normality for the effectiveness of training programs

Effectiveness	N	%	M	SD	Mdn	Shapiro-Wilk	
						Statistic	Sig.
Gender							
Female	785	75%	3.87	0.75	4.00	0.96	0.00*
Male	255	25%	3.80	0.81	4.00	0.94	0.00*
Age							
21–35	108	10%	3.87	0.88	3.86	0.95	0.00*
36–50	552	53%	3.88	0.75	4.00	0.96	0.00*
51–67	379	36%	3.80	0.75	3.86	0.95	0.00*
Education							
High school diploma	100	10%	3.91	0.71	4.00	0.92	0.00*
Bachelor's degree	645	62%	3.85	0.78	4.00	0.95	0.00*
Master's or doctorate degree	295	28%	3.83	0.75	4.00	0.96	0.00*
Work experience							
1–15	551	53%	3.93	0.75	4.00	0.96	0.00*
16–30	453	44%	3.76	0.77	3.86	0.95	0.00*
31–44	36	3%	3.82	0.83	4.00	0.94	0.09
Job title							
Administrative officer	105	12%	3.94	0.76	4.00	0.91	0.00*
Advisor	745	83%	3.83	0.75	3.86	0.96	0.00*
Government official	52	6%	4.10	0.58	4.00	0.93	0.01*
Total	1040	100%	3.85	0.77	4.00	0.95	0.00

The results are significant* at the 0.05 level.

Note: M – Mean; SD – Standard deviation; Mdn – Median.

Source: Authors' research

categorised according to their demographic characteristics, i.e. they were divided into two groups according to their gender, three groups according to their age, three groups according to their level of education, three groups according to the number of years of work experience in public administration and three groups according to their job title in public administration.

The mean values (M) for the effectiveness of the training programmes are above 3 for all subsamples. As the effectiveness can take on values from 1 to 5, the mean values indicate that the effectiveness is rated highly by all demographic groups. However, different demographic groups rated the effectiveness of the training programmes differently. To determine whether these differences are significant, statistical tests are carried out to compare the differences between the groups.

In addition to the descriptive statistics on the effectiveness of the training programs, Table 2 shows the results of the Shapiro-Wilk test for normality. The test is significant ($p < 0.05$) for the entire sample as well as for each of the subsamples (except for the work experience 31–44 subsample), indicating that the data are not normally distributed. As the assumption of normality is required for parametric tests, non-parametric tests such as Mann-Whitney and Kruskal-Wallis tests were used to determine which demographic characteristics influence

the effectiveness of training programs in public administration.

The Kruskal-Wallis test was used to determine whether there are significant differences in the effectiveness of the training programs in public administration between participants of different ages, educational levels, professional experience in public administration and job titles in public administration (Table 3).

The results show that the age and educational level of the participants have no influence on the effectiveness of the training programs in public administration. There are no significant ($p > 0.05$) differences in the effectiveness of training programs between participants of different ages and educational levels. However, the differences between participants with different work experience and job titles in public administration are significant ($p < 0.05$). To follow up on this result, Mann-Whitney tests were used.

Table 4 shows the results of the Mann-Whitney test for the effectiveness of the training programs. The grouping variables are work experience in public administration, job title in public administration, and gender. For work experience and job title, Bonferroni correction was applied so that the reported results are significant at the 0.025 level.

The results indicate that the training programs in public administration are more effective for the participants with less professional experience in public administration. For example,

Table 3 Kruskal Wallis Test

	Age	Education	Work experience	Job title
Chi-Square	2.66	0.67	14.08	7.83
df	2.00	2.00	2.00	2.00
Asymp. Sig.	0.26	0.72	0.00*	0.02*

The results are significant* at the 0.05 level.

Source: Authors' research

Table 4 Mann-Whitney Test

	Work experience: 1–15 vs. 16–30	Work experience: 16–30 vs. 31–44	Job title: administrative officer vs. advisor	Job title: advisor vs. government official	Gender
Mann-Whitney U	107711.00	7622.00	35126.00	15567.00	96230.50
Wilcoxon W	210542.00	110453.00	313011.00	293452.00	128870.50
Z	-3.75	-0.65	-1.70	-2.38	-0.93
Asymp. Sig. (2-tailed)	0.00*	0.51	0.09	0.02*	0.35

Note: For gender, the results are significant* at the 0.05 level. For work experience and job title, the results are significant* at the 0.025 level.

Source: Authors' research

the respondents with between 1 and 15 years of professional experience ($M=3.93$) rated the effectiveness of the training programs they attended significantly higher ($p<0.05$) than the respondents with between 16 and 30 years of professional experience ($M=3.76$). On the other hand, there are no significant differences ($p>0.05$) between the respondents with between 16 and 30 years of professional experience ($M=3.76$) and the respondents with between 31 and 41 years of professional experience ($M=3.82$) in their assessment of the effectiveness of the training programs they have attended. In summary, it can be concluded that the respondents with up to 15 years of professional experience rate the effectiveness of the training programs they have attended significantly higher than the respondents with more than 15 years of professional experience. To further substantiate this finding, the Spearman correlation coefficient between the effectiveness of training programs and years of work experience in public administration was calculated and a statistically significant ($p<0.01$) negative correlation ($\rho=-0.11$) was found.

The results also indicate there are no significant differences ($p>0.05$) between administrative officers ($M=3.94$) and advisors ($M=3.83$) in their assessment

of the effectiveness of the training programs they attended. However, government officials ($M=4.10$) rated the effectiveness of the training programs they attended significantly higher ($p<0.05$) than advisors ($M=3.83$). In summary, it can be stated that government officials rate the effectiveness of the training programs they attend significantly higher than other employees and managers in public administration.

Finally, the results show that the gender of the participants has no influence on the effectiveness of training programs in public administration. There are no significant ($p>0.05$) differences in the effectiveness of the training programs between female ($M=3.87$) and male ($M=3.80$) participants.

5 DISCUSSION

5.1 EFFECTIVENESS OF TRAINING PROGRAMS IN PUBLIC ADMINISTRATION

The empirical study carried out showed that the effectiveness of the training programs in public administration was relatively high in 2022 (between 3.13 and 4.26). However, there are slight differences between the different aspects of effectiveness.

Civil servants in Serbia who participated in the training programs in 2022 gave the highest average score for the elements of effectiveness that include improvement of knowledge and skills, application of acquired knowledge and personal development. The average score for these elements is above 4, which indicates that the training content is well aligned with the current tasks and responsibilities of the respondents.

A slightly lower average score (between 3.69 and 3.94) is given for improving positive attitude to work, positive impact on behaviour and teamwork. The lowest average score is given for improving formal position at work (3.13). This suggests that participation in training programs is only one factor in improving formal position in public administration. However, in some cases this result could also indicate a lack of organizational support or inadequate recognition and reward systems in the public administration. Therefore, policy makers in the public administration should focus on improving organizational support for the application of new skills, promoting merit-based promotion and creating clear career paths for civil servants.

5.2 DEMOGRAPHIC VARIABLES AND EFFECTIVENESS OF TRAINING PROGRAMS

The research results show that there are no significant differences in the effectiveness of training programs between participants of different age, gender and educational level. These findings offer several implications related to the training content and training methods. Namely, they imply that the content of the training courses is standardized and therefore equally accessible and relevant to all partici-

pants, regardless of their demographic characteristics. Moreover, it may suggest that the use of inclusive training methods and materials that cater to diverse learning styles and backgrounds can ensure that all participants benefit equally. In addition, certain training programs of National Academy of Public Administration focus on general professional competencies that are not significantly influenced by demographic factors, such as communication, leadership and technical skills.

A particularly interesting result is that education level does not affect the effectiveness of the training programs. This indicates that the training programs are designed with clear objectives tailored to address specific job-related competencies regardless of prior education levels. Moreover, it implies that the training courses are more focused on practical skills and application than on academic knowledge. Therefore, although education provides a foundation, the design and delivery of training programs are crucial for ensuring effectiveness, making them accessible and beneficial to all participants, regardless of their educational background.

These results suggest that there could be other factors influencing the effectiveness of the training programs in public administration. The effectiveness of training is probably more strongly influenced by the participants' motivation, engagement and willingness to learn and apply new skills. Another important factor is a supportive organizational environment that encourages the application of new skills and continuous learning.

On the other hand, there are significant differences between participants with different work experience and job titles in public administration when

measuring the effectiveness of the training programs. The respondents with up to 15 years of professional experience rated the effectiveness of the training programs they have attended significantly higher than those with more than 15 years of professional experience. These results imply that less experienced employees consider the training programs to be more relevant, as they are still in the process of developing their skills and knowledge. They are also more open and eager to learn new concepts and methods and see training as a valuable opportunity for growth. Training programs can have a greater impact on the career development of less experienced employees who are at an earlier stage of their professional development. On the other hand, experienced professionals often believe that they already have the expertise and autonomy required for their role, so they are less likely to recognise the value of additional training.

Government officials rate the effectiveness of the training programs they have attended significantly higher than other employees and managers in public administration. This result is expected because government officials often have the authority and resources to implement new knowledge and skills gained from training, leading to a more positive evaluation of its effectiveness. This group of employees in public administration is usually more engaged and motivated during training due to their position, leading to a greater perceived benefit. Moreover, some training programs are often tailored to their specific needs and responsibilities, providing relevant and impactful content.

6 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Although the study provides valuable insights, it is limited by its exclusive focus on public administration employees in Serbia, which may not allow generalization to other contexts. The reliance on self-reported data introduces potential bias and the cross-sectional design restricts the ability to infer causality. Furthermore, the study did not consider other influential factors such as organizational culture and personal motivation, training program content, duration and delivery methods. Future research should include longitudinal studies to assess long-term impacts and comparative studies across different countries to understand demographic influences in diverse contexts. Including variables such as organizational culture, personal motivation and previous training experiences would provide a more comprehensive understanding. Qualitative research methods could offer deeper insights into participants' perspectives, and program-specific analyzes could identify the most effective training types for various groups.

7 CONCLUSION

The results of the study, in which 1,040 public sector administrators and managers in Serbia participated, show that the effectiveness of the training programs is relatively high, especially in terms of personal development, improvement and application of knowledge and skills. Demographic factors such as age, gender, and education level do not significantly affect the training effectiveness. However, the training effectiveness is strongly influenced by the professional experience and job title of the public

administration employees. These findings have several implications for improving professional development outcomes, particularly in relation to: tailoring training programs to professional experience, differentiating training for different job titles, leveraging experienced staff and an inclusive training environment.

To further increase the effectiveness of public administration training programs, it is crucial to tailor training to different levels of professional experience and job roles. Customized modules for new, mid-level, and experienced employees, along with role-specific training, ensure relevance and practical application. Mentoring programs, where experienced employees guide less experienced colleagues, can promote knowledge sharing and improve the overall learning experience. Cross-functional training also helps

employees understand the tasks and challenges of other departments, fostering a collaborative work environment. Involving experienced staff in leading training sessions and sharing best practices enriches the learning process.

Although age, gender, and education level do not significantly impact training effectiveness, creating an inclusive training environment in public administration ensures that programs remain accessible to all employees. By incorporating diverse perspectives, training is enriched, leading to greater individual development and enhanced organizational performance. Inclusive measures, such as equal participation opportunities and addressing different learning needs, foster a culture of equality and respect, ultimately strengthening the organization through a diverse workforce.

ACKNOWLEDGEMENTS

The research presented in this paper was funded by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia under contract number 451-03-66/2024-03/200005. The database used in this research is the result of the project "Civil Service Training for the 21st Century in the Republic of Serbia" implemented by the United Nations Development Programme (UNDP) in partnership with the National Academy of Public Administration (NAPA), with support of the Swedish International Development Cooperation Agency (SIDA).

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Data Availability Statement

Data are available from the authors upon request.

Coauthor contributions

Dijana Štrbac: Conceptualization, Methodology, Formal Analysis, Validation, Writing – Original Draft, Supervision. **Mihailo Paunović:** Methodology, Data Curation, Formal Analysis, Writing – Review & Editing, Supervision. **Dejana Pavlović:** Writing – Original Draft, Writing – Review & Editing.

How to cite: Štrbac, D., Paunović, M., & Pavlović, D. (2024). The influence of demographic characteristics on the effectiveness of public administration training programs. *Stanovništvo*, 62(2), 251–266. <https://doi.org/10.59954/stnv.637>

Uticaj demografskih karakteristika na efektivnost programa obuka u javnoj upravi

PROŠIRENI SAŽETAK

Programi obuka u javnoj upravi su od suštinskog značaja za efikasno i efektivno upravljanje, nesmetano prilagođavanje promenama i podsticanje kontinuiranog profesionalnog razvoja. Oni poboljšavaju donošenje odluka, osiguravaju efikasnu implementaciju politika i jačaju etičke standarde i odgovornost. Pored toga, obuke podstiču inovativnost, povećavaju angažovanje lokalne zajednice, pripremaju državne službenike za krizne situacije i doprinose ostvarivanju ciljeva održivog razvoja.

U radu se ispituje uticaj demografskih karakteristika na efektivnost programa obuka u javnoj upravi u Republici Srbiji. Cilj rada je procena efektivnosti programa obuka u javnoj upravi i analiza uticaja faktora kao što su starost, pol, nivo obrazovanja, godine radnog iskustva i pozicija u organizaciji na rezultate obuka. Efektivnost je posmatrana kao mera u kojoj programi obuka doprinose postizanju planiranih ciljeva. U pitanju su različiti ishodi učenja, uključujući promene u znanju, sticanje veština, promene u stavovima i promene u ponašanju.

Istraživački uzorak čini 1.040 zaposlenih iz sektora javne uprave u Srbiji koji su učestvovali u najmanje jednom programu obuke u organizaciji Nacionalne akademije za javnu upravu u 2022. godini. Primarni podaci su prikupljeni anketnim istraživanjem sprovedenim u oktobru 2023. godine. Statistička analiza je obuhvatila deskriptivnu statistiku, procenu pouzdanosti i statističke testove za identifikaciju razlika između demografskih grupa. Prikupljeni podaci su obrađeni i analizirani korišćenjem Statističkog softvera za društvene nauke (SPSS).

Rezultati istraživanja su pokazali da starost, pol i stepen obrazovanja nemaju uticaja na efektivnost programa obuka u javnoj upravi. S druge strane, postoje statistički značajne razlike u oceni efektivnosti između učesnika sa različitim nivoima profesionalnog iskustva i zvanja u javnoj upravi. Sveobuhvatnim istraživanjem interakcije između demografskih karakteristika i efektivnosti programa obuke, ovaj rad doprinosi unapređenju naučnog razmatranja rezultata učenja zaposlenih u javnoj upravi. Osim toga, empirijsko istraživanje nudi i praktične uvide relevantne za optimizaciju dizajna i sprovođenja programa obuka u javnoj upravi u Srbiji i šire. Najvažnije preporuke za kreatore politika odnose se na prilagođavanje programa obuke profesionalnom iskustvu zaposlenih, diferenciranje obuka za različite poslove u organizaciji, uključivanje zaposlenih sa značajnim radnim iskustvom u sprovođenje programa obuka i stvaranje inkluzivnog okruženja za obuke. Ovi nalazi imaju implikacije na poboljšanje rezultata profesionalnog razvoja i jačanje organizacionih kapaciteta koji su ključni za promovisanje održivog upravljanja i razvoja.

KLJUČNE REČI

javna uprava, demografske karakteristike, program obuke, efektivnost obuke