Integrated Approach to Organisation of In-Service Training of Professionals Intended to Work for Public Governmental Bodies

IVO SVOBODA[1], TETIANA ALEKSANDRIUK[2], TETIANA DULIK[2], ANASTASIIA KLYMENKO[3*], IVAN RUDIANYN[4]

[1]Department of Security and Law, University of Regional Development and Banking Institute, AMBIS, Prague, 180 00, Czech Republic

[2]Department of Social Security and Tax Policy, Faculty of Economics, Business and International Relations, University of Customs and Finance, Dnipro, 49000, Ukraine

[3]Department of Labor and Economic Law, Kharkiv National University of Internal Affairs, Kharkiv, 61080, Ukraine

[4]Department of History of Ukraine and Archeology, Faculty of History, Political Science and National Security, Lesya Ukrainka Volyn National University, Lutsk, 43025, Ukraine

*Corresponding Author
Email ID: anastasiiak1987@gmail.com

Abstract: The purpose of the study was to identify how the integrated approach to the organisation of in-service training relied on an English language-based simulation team project simulation team project entitled "Build a Fair and Just State of 1000 people" influences the professional and personal qualities of the civil servants, and how the sampled individuals perceive the intervention. The study utilized quantitative and qualitative methods to establish the cause-effect relationships that had occurred in the variables due to the integrated approach used to organise the in-service training of the civil servants. The course participants' professional efficacy, motivation, decision-making were the variables for the study. Five commonly used online psychometric tests for the civil servants were the instruments to measure the variables before and after the treatment. The project seen as the integrated approach to organising the course of in-service training of the civil servants brought positive changes to the participants' professional efficacy, motivation, and decision-making. The sampled students acknowledged the effectiveness of this educational intervention and expressed satisfaction with its content, delivery mode, and the experience they gained from it. This study addressed the loopholes in the in-service training system of the civil servants such as succeeding in English language fluency and specific managerial skills and demonstrating certain beliefs, values, and behaviour patterns which were mentioned in the above document as the issues of reforming the training system of civil servants in Ukraine. The study implies that simulation games are an effective approach in training civil servants because they help them absorb professional knowledge through solving job-specific tasks. It also seems suggestive that the training system could be more decentralised, function-through-context-based with an assessment system that is flexible and situational based more on the practical than the theoretical component.

Keywords: Civil Servants, In-Service Training, Integrated Approach, Simulations, Public Service Reform.

INTRODUCTION

The in-service training system of professionals intended to work for public governmental bodies has been transformed and modernised since the adoption of the updated Law of Ukraine "On Civil Service", which was followed by the issuing of the ministerial Order #106-2019 (Verkhovna Rada of Ukraine, on civil service, 2016). The Order 'launched' the "Regulation on the system of the in-service training of civil servants, heads of

local state administrations, their first deputies and vice-deputies, local government officials and deputies of local councils" (Verkhovna Rada of Ukraine, 2019). According to the document, the system of the in-service training is supposed to of a forward-thinking nature, be innovative, best practice-based, and student-tailored (Balashov, 2020). Additionally, the above suggests that the in-service training system of the civil servants has been a part of the state policymaking aimed to adjust the quality of the public service to the European standards (Kachan, 2019; Kupriy, 2019). Despite its significance, the in-service training system has still been a second priority that does not provide the integrity of civil servants, while the primary attention has been paid to only the recruitment of appropriate people and assessing their performance using key performance indicators (KPI) (Kachan, 2019; Ministry of Foreign Affairs of the Netherlands, 2020).

LITERATURE REVIEW

It was found that the in-service training system of the civil servants in Ukraine is based on three approaches that are aimed to foster the civil servants' decision-making skills. These approaches are as follows: the rationalistic, incremental, and the "third kind" approaches (Orliv, 2016; Vashchenko et al., 2019). The purpose of the rationalistic approach to training the civil servants' decision-making skills is to improve and accelerate their decision-making skills so that they could meet new challenges (Packard & Bylund, 2019). According to researcher (Leoveanu, 2013), this approach rests on the assumption that there should not be any spontaneity in solving the problem or making a decision. The decision should be made using the criteria to evaluate the pros and cons of the alternative under consideration.

The incremental (or incrementalist) approach is used to train the civil servants to amend or reshape through a descriptive analysis of the policies which are currently enforced rather than develop the new ones (Deegan; Wilson, 2019). Though considered the one that lacks objectivity, the incremental (or incrementalist) approach is supposed to be aligned with both the political realities and interests of individuals.

The "third kind" approaches such as the nominative-optimum (technocratic) and mixed-scanning ones, are claimed to be the extensions of the previous two and are criticised for being overloaded with the extra components which slow down substantially the decision-making process (Power et al., 2019).

The study also found that neither currently used approach to the in-service training of the civil servants motivates them to improve their job-related skills or potentiality. The system is not a student-tailored one and it does not develop the civil servants as individuals, either (Orliv, 2019).

Given the above, the integrated approach to the organisation of in-service training of the civil servants is seen as the way to upgrade the training system. This approach ensures cohesiveness of training comprising the identification of the areas that need training along with performance monitoring and appraisal (https://www.neeyamo.com).

Therefore, the purpose of the study is 1) to identify how the integrated approach to the organisation of in-service training relied on an English language-based simulation team project simulation team project entitled "Build a Fair and Just State of 1000 people" influences the professional and personal qualities of the civil servants, and 2) how the sampled individuals perceive the intervention.

The below hypotheses were formulated.

H_0–the integrated approach to organising the course of in-service training of the civil servants based on an English language-based simulation team project simulation team project entitled "Build a Fair and Just State of 1000 people" will not influence the participants' professional efficacy, motivation, and decision-making.

H_1 – the integrated approach to organising the course of in-service training of the civil servants based on an English language-based simulation team project simulation team project entitled "Build a Fair and Just State of 1000 people" will influence the participants' professional efficacy, motivation, and decision-making.

MATERIALS AND METHODS

The study utilized quantitative and qualitative methods to establish the cause-effect relationships that had occurred in the variables due to the integrated approach used to organise the in-service training of the civil servants. The course participants' professional efficacy, motivation, decision-making were the variables for the study. The English Language Placement Test which is available at http://t.me/QuizBot?start=ZYvtRvmX was used to roughly identify the students' level of English Language before the measurements of the variables were administered. This was important because the study used the English Language-based Government Recruitment

Service (UK) online practice tests which are accessible through the link: https://www.gov.uk/guidance/civil-service-online-tests. These were five free access and commonly used for practice purposes tests such as Civil Service Verbal Test (Verbal Test– VT), Civil Service Numerical Test (Numerical Test– NT), Civil Service Judgement Test (Judgement Test– JT), Civil Service Management Judgement Test (Management Judgement Test– MJT), Civil Service Work Strengths Test (Work Strengths Test– WST). The participants' professional efficacy was measured using the VT and NT, their motivation was measured by the WST, and their decision-making skills were measured through the MJT and JT. To answer the second research question, a student satisfaction survey questionnaire was designed (see Appendix A). It consisted of two dimensions such as the effectiveness of some course-integrated elements and the students' satisfaction with the course.

The description of the upgraded refresher courses for the civil servants based on a simulation team project: The course was designed and delivered as an English language-based simulation team projects imulation team project entitled "Build a Fair and Just State of 1000 people". It lasted seven months, from September 2019 to the end of February 2020 servantsat Kyiv City Center for Retraining and In-service training of Employees of Public Authorities, Local Self-Government Bodies, State Enterprises, Institutions, and Organisations. Every team was supervised and tutored by a higher-ranked official. The sampled group students were involved in the series of sessions aimed to develop the governance system of the mock state along with the taxation system (fair taxation), monetary system, social care system, legislation development and enforcement system, education, and the healthcare system. They were supposed to suggest a) the name of the country, its symbols (coat of arms, flag, and anthem), possible location and area; b) assigning the population with the demographic features (age, citizenship, marital status, job); c) deciding on the governance system (number and type of the governmental bodies, their responsibilities and the way they cooperate among themselves; the number of civil servants working in every governmental body to ensure the efficiency); d) budget and taxation system (raising money by the government, expenditures); e) sectors of the economy (primary, secondary and tertiary, number of citizens involved in every sector, international cooperation in business); f) education and healthcare (raising the youth, employment, wellbeing); g) law and enforcement (constitution, justice, social security).The students worked in separate teams and as cross-functional teams. The free trial of the SYDLE platform (which could be accessed via the link: https://www.sydle.com/) was used to model some processes of running the state. Each process was designed as handling the event. The course outcomes were assessed by the board of the higher-ranked government officials. The English language was used as a medium of content delivery.

Research design: The research was designed as a one-group only pretest-posttest quasi-experiment involving three basic phases such aspre-intervention, while-intervention, and post-intervention ones. In the pre-intervention phase, the research methodology was designed and approved by the management of Kyiv City Center for Retraining and In-service training of Employees of Public Authorities, Local Self-Government Bodies, State Enterprises, Institutions, and Organisations. The content and structure refresher course were examined and upgraded. The upgraded course was piloted. The pretest measurements of the variables were administered. In the while-intervention phase, the sampling was performed, the course was run, the focus group interviews were conducted and the data were yielded. In the post-intervention phase, the posttest measurements were performed, the data were processed and recommendations and implications were produced. The research design is presented in Figure 1.
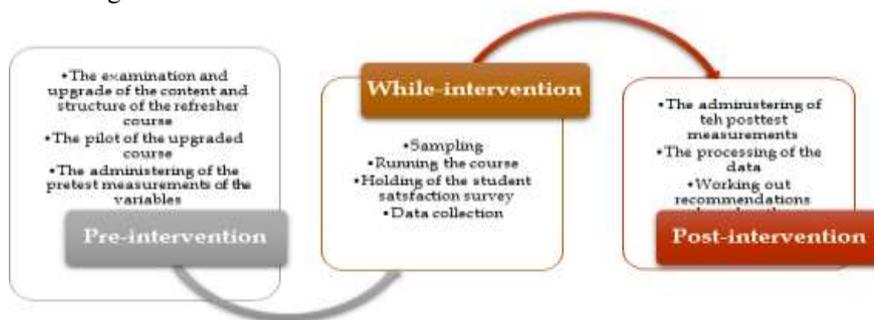

Figure 1: Research procedure

Sampling: A convenience sampling technique was used to hire 25 participants attending the professional refresher and upgrade course for the civil servants at Kyiv City Center for Retraining and In-service training of Employees of Public Authorities, Local Self-Government Bodies, State Enterprises, Institutions, and Organisations. The participants of the refresher and upgrade course were regarded as mutually homogeneous. The demographic characteristics of the sampled individuals are provided in Table 1. The random sampling technique was utilised to select the respondents to take part in a focus group interview.

Table 1: Demographic characteristics of the interviewees and surveyed individuals

Characteristic			$n = 25$	%	*p value*
Gender	Males		15	60.00	$p < 0.001$
	Females		10	40.00	
Age	Males	25-34	3	20.01	0.137
		35-45	5	33.32	
		46-55	4	26.66	
		55-65	3	20.01	
	Females	25-34	2	20.00	0.142
		35-45	3	30.00	
		46-55	3	30.00	
		55-65	2	20.00	
Employed	Local Self-Government Bodies		7	28.00	0.593
	Public Authorities		6	24.00	
	State Enterprises		5	20.00	
	State Institutions		5	20.00	
	State organisations		2	8.00	
Public service sphere	Economic policy		4	16.00	0.489
	Legislation shaping		3	12.00	
	Legislation enforcement (anti-corruption)		2	8.00	
	Education & Youth policy		8	32.00	
	Healthcare		3	12.00	
	Procurement & tenders		3	12.00	
	International relations		2	8.00	

Ethical considerations: Ethical considerations were addressed through obtaining the informed consent from the sampled students of the refresher course to participate voluntarily in the experiment. They also provided consent to the research team for the use of their personal information and information resulted from the measurements.

Instruments

Five commonly used online psychometric tests for the civil servants were the instruments to measure the variables before and after the treatment. Those were as follows: the Civil Service Verbal Test (VT), the Civil Service Numerical Test (NT), the Civil Service Judgement Test (JT), the Civil Service Management Judgement Test (MJT), and the Civil Service Work Strengths Test (WST).The sampled students were allowed to have a maximum of two attempts and 10 minutes to take the tests. The answers were assigned the score that was further computed. The perception of the course by the sampled individuals was studied using the student satisfaction survey questionnaire (see Appendix A). The collected data were computed using the IBM SPSS Statistics (25.0.0.1) software. The tests were preceded by watching the informational videos explaining the specifics of the test-taking.

The VTis intended to test the individuals' ability to synthetising appropriate information from the situations and make logical conclusions based on them. It comprises 6 questions of "Yes", "No", and "Cannot Say" type. The feedback (answer key) is provided automatically after every question.

The NTis supposed to assess the individuals' ability to process and interpret the numbers and figures. The test consists of 9 questions of a multiple-choice type with the automated immediate feedbacks provided on a successive (question-by-question) basis.

The JTattempts to assess the individuals' abilities of judgement and decision-making in realistic job settings, and identify the individuals' job behavior patterns. It comprises three sections such as 'Preferences and behaviour' consisting three Likert scale-based questions, 'Judgement and decision-making' relying on two video

scenarios that present typical situations followed by four questions, and 'Judgement and decision-making' section that is based on the real job-related situations followed by the statements to rate each action as 'counterproductive', 'ineffective', 'fairly effective' and 'effective'.

The MJTassess the individuals' ability to manage others in terms of demonstrating decision making and expressing judgements. It is based on the three job-related scenarios. The test-taker is supposed to decide which action they would take most or least likely in 6 situations.

The WST identifies what motivates you to do certain things well. It comprises three sections such as A, B, and C each presenting different scenarios. In A section, the individuals are expected to express their agreement or disagreement using the 7-point Likert scale. In the B section, they are supposed to rate the effectiveness of some actions using the rating scale with the 'counterproductive', 'ineffective', 'partially effective', and 'effective' options. In the C section, the one should decide which action they would take most or least likely in two situations.

The student satisfaction survey questionnaire (see Appendix A)

The survey questionnaire reliability and validity were assessed. It consisted of 7 questions aimed to identify how the sampled students perceive the effectiveness of the course based on the simulation team project and how they were satisfied with the course design, delivery mode, the way the course was managed, assessment system, and the intellectual challenge that the participants experienced due to the course.It used a 5-point Likert scale for effectiveness and satisfaction (1= 'very ineffective' or 'very dissatisfied' up to 5 = 'very effective' 5 = 'very satisfied'). The satisfaction survey was administered online. The results were consolidated manually as an Excel file and processed by the research team. The inter-rater reliability of the questionnaire was assessed by three members of the research team. It was performed as recommended by researches (Rodrigues et al., 2017).

RESULTS

The English language-based simulation team project entitled "*Build a Fair and Just State of 1000 people*" that is seen as the integrated approach to organising the course of in-service training of the civil servants brought positive changes to the participants' professional efficacy, motivation, and decision-making which supported the hypothesis one (H_1). Furthermore, the sampled students acknowledged the effectiveness of this educational intervention and expressed satisfaction with its content, delivery mode, and the experience they gained from it. The pre-intervention and post-intervention measurement results based on the VT, NT, JT, MJT, and WST are presented in Table 2.

Table 2: The pre-intervention and post-intervention measurement results based on VT, NT, JT, MJT, and WST ($n = 25$).

Test	Pre-intervention		Post-intervention		$t-$ value*	SS	$p-value$*
	μ	σ	μ	σ			
VT	2.91	1.11	4.13	0.94	-18.352	0.0291	<.00001
NT	2.87	1.52	3.47	0.81	-17.291	0.0287	.2711
JT	3.12	2.28	4.56	0.45	-14.419	0.1999	.2518
MJT	3.41	2.67	4.17	0.67	-21.771	0.2103	.3218
WST	3.06	2.35	4.27	0.73	-19.319	0.2711	.3919

Note: μ – Mean; σ - Standard Deviation.*significant at p < .05

As can be seen in Table 2, the students experienced the most significant improvement in decision-making (JT, the difference in mean values = 1.22), and professional efficacy (VT & WST, the difference in mean values for VT = 1.22 and WST = 1.21). There was observed the moderated improvement in other tests. In the NT, the change was 0.6, and in the MJT, there was an improvement of 0.76 points.

The correlations analysis of the relationship between the variables and the intervention was conducted. The results of the descriptive analysis are presented in Table 3.

Table 3: The correlations between the variables and the intervention

Variables	1	2	3
1. PE	1.00		
2. M	.73**	1.00	

3. DM	.81**	.74**	1.00
Mean (Likert type mean score)	76.31 (4.43)	78.43 (4.27)	81.11 (4.54)
SD	21.33	28.21	17.31

Note: PE - professional efficacy; M – Motivation; DM – Decision-making; *p > .05. **p < .01

The values that are drawn from the correlation analysis (see Table 3) suggest that all the variables showed a high correlation, considering that the high coefficient is expected to be greater than +0.70 (Ratner, 2009). The positive correlation is observed between PE and M with values of $r = .73, p > .05$. The PE and DM also showed a significant and positive relationship with the values of $r = .81, p > .05$. The relationship between M and DM was also positive ($r = .74, p > .05$). According to the Mean values based on the Likert scale, the most noticeable effect occurred in decision-making (81.11 (4.54)). Additionally, the other values proved that students experienced approximately the same change in PE and M variables.

The $t-test$ based on the values for Cohen's d, Glass's $delta$, and Hedges' g also confirmed that the intervention was effective.

Cohen's d = (3.21 - 4.44)/1.11982 = 0.529187.

Glass's $delta$ = (3.31 – 4.37)/0.89 = 0.633618.

Hedges' g = (3.41 - 4.33)/1.06541 = 0.634317.

The results of the student satisfaction survey

The overall result of the survey showed that the sampled students' perceptions of the effectiveness and satisfaction of the in-service training course based on a simulation team project were positive (see Table 4).

Table 4: Descriptive statistics of the student satisfaction survey based on a questionnaire ($n = 25$)

Effectiveness				Questi on #	Satisfaction			
Median	μ, margin of error	SD	σ^2		Median	μ, margin of error	SD	σ^2
2	4.8±6.306 (±131.38%)	7.19	51.76	Q1	4	5±5.02 (±100.40%)	5.72	32.80
4	7.2±2.794 (±38.80%)	3.18	10.16	Q2	5	5±3.185 (±63.69%)	3.63	13.20
5	5±3.593 (±71.85%)	4.09	16.80	Q3	7	5±3.635 (±72.71%)	4.14	17.20
6	5±2.6 (±52.00%)	2.96	8.80	Q4	7	5±2.416 (±48.33%)	2.75	7.60
4	5±3.136 (±62.72%)	3.57	12.80	Q5	5	5±3.959 (±79.18%)	4.51	20.40
5	5±4.258 (±85.16%)	4.85	23.6	Q6	5	5±4.801 (±96.02%)	5.47	30.00
3	5±4.435 (±88.70%)	5.05	25.60	Q7	7	5±3.635 (±72.71%)	4.14	17.20

Note: σ^2 – variance; confidence level– 95%.

The Median values for the course content ($Med = 5$), delivery mode ($Med = 6$), and assessment system ($Med = 5$) suggest that these were found by the respondents to be the most effective for the civil servants' occupation. The Median values for participants' satisfaction indicate that the participants were mainly satisfied with the course content ($Med = 7$), delivery mode ($Med = 7$), and the intellectual challenge they experienced when doing the course ($Med = 7$). The above results imply that the in-service training course based on the English language-based simulation team project can be considered effective and beneficial for the students.

Limitations: The involvement of the only institution and the sample size may cause misinterpretation of the results and thus be considered to bet he limitations to the study.

DISCUSSIONS

The study sought to address two research questions such as how the integrated approach to the organisation of in-service training relied on an English language-based simulation team project entitled "*Build a Fair and Just State of 1000 people*" influences the professional and personal qualities of the civil servants, and how the sampled individuals perceive this educational intervention. These questions were detalised in two hypotheses. The study is novel because it used the English language was used as a medium to deliver the content which not common in Ukraine. It is also novel because the project comprehensively influences both students' professional and personal qualities which they need for their job. Moreover, the project develops the students' 'helicopter view' which seems crucial for governmental officials.

It was found that the English language-based simulation team project entitled "*Build a Fair and Just State of 1000 people*" seen as the integrated approach to organising the course of in-service training of the civil servants brought positive changes to the participants' professional efficacy, motivation, and decision-making which supported the hypothesis one (H_1). Furthermore, the sampled students acknowledged the effectiveness of this educational intervention and expressed satisfaction with its content, delivery mode, and the experience they gained from it. The test results showed that the students experienced the most significant improvement in decision-making (JT, the difference in mean values = 1.22), and professional efficacy (VT & WST, the difference in mean values for VT = 1.22 and WST = 1.21). There was observed the moderated improvement in other tests. In the NT, the change was 0.6, and in the MJT, there was an improvement of 0.76 points. The correlation analysis suggested that all the variables showed a high correlation, considering that the high coefficient was expected to be greater than +0.70 (Ratner, 2009). The positive correlation is observed between PE and M with values of $r = .73, p > .05$. The PE and DM also showed a significant and positive relationship with the values of $r = .81, p > .05$. The relationship between M and DM was also positive ($r = .74, p > .05$). According to the Mean values based on the Likert scale, the most noticeable effect occurred in decision-making (81.11 (4.54)). Additionally, the other values proved that students experienced approximately the same change in PE and M variables. The $t-test$ based on the values for Cohen's d, Glass's $delta$, and Hedges' $g$also confirmed that the intervention was effective. These were as follows: Cohen's d = (3.21 - 4.44)/1.11982 = 0.529187; Glass's $delta$ = (3.31 – 4.37)/0.89 = 0.633618, and Hedges' g = (3.41 - 4.33)/1.06541 = 0.634317.The results of the survey showed that the sampled students' perceptions of the effectiveness and satisfaction of the in-service training course based on a simulation team project were positive. The Median values for the course content ($Med = 5$), delivery mode ($Med = 6$), and assessment system ($Med = 5$) suggest that these were found by the respondents to be the most effective for the civil servants' occupation. The Median values for participants' satisfaction indicate that the participants were mainly satisfied with the course content ($Med = 7$), delivery mode ($Med = 7$), and the intellectual challenge they experienced when doing the course ($Med = 7$). The results implied that the in-service training course based on the English language-based simulation team project can be considered effective and beneficial for the students.

The above results are in line with the relevant studies.It agrees with a governmental policy aimed at improving the training of the civil servants (https://www.kmu.gov.ua). This study addresses the loopholes in the in-service training system of the civil servants such as succeeding in English language fluency and specific managerial skills and demonstrating certain beliefs, values, and behaviour patterns which were mentioned in the above document as the issues of reforming the training system of civil servants in Ukraine. The study supports the findings of researcher (Parkhomenko-Kutsevil, 2017) who revealed that simulation games are an effective approach in training civil servants because they help them absorb professional knowledge through solving job-specific tasks. The study is consistent with researchers (Vyas, 2019; Sun, 2019) claiming that the training system should be more decentralised, function-through-context-based. The study supports the findings of researchers (Tien Vi, 2019; Landa, 2018) who imply that the effectiveness of the process of training and retraining the civil servants that relies heavily on the evaluation and performance assessment system. The latter should be flexible and situational using more practical than theoretical components. The study agrees with researcher (Stadler et al., 2017) who state that the civil servants benefit more from the e-learning methodology than from the conventional one as the e-learning provides more freedom and flexibility. It is more students-centered and motivating for the students. This study mode brings them more satisfaction. Additionally, the study aligns with researcher (Thuy Nga, 2018) who claims that English language fluency seems to be a prerequisite for the integrated training of civil servants.

CONCLUSION

The English language-based simulation team project entitled "*Build a Fair and Just State of 1000 people*" seen as the integrated approach to organising the course of in-service training of the civil servants brought positive changes to the participants' professional efficacy, motivation, and decision-making. The sampled students acknowledged the effectiveness of this educational intervention and expressed satisfaction with its content, delivery mode, and the experience they gained from it. This study addresses the loopholes in the in-service training system of the civil servants such as succeeding in English language fluency and specific managerial skills and demonstrating certain beliefs, values, and behaviour patterns which were mentioned in the above

document as the issues of reforming the training system of civil servants in Ukraine. The study implies that simulation games are an effective approach in training civil servants because they help them absorb professional knowledge through solving job-specific tasks. It also seems suggestive that the training system could be more decentralised, function-through-context-based with an assessment system that is flexible and situational based more on the practical than the theoretical component. The in-service training system would benefit if further research assessed the effectiveness of the automation of the training process based on the simulations of the kind used in this study that is seen as an integrated approach to the organisation of training. Further research is needed in the automation of the process of the in-service training of the civil service.

ACKNOWLEDGEMENT

Conflicts of Interest: The research team members declare that they have no conflict of interest.

REFERENCES

1. Balashov, I.V. (2020). On the prospect of implementing the latest rules of the Law of Ukraine "On Civil Service". Public management and administration in Ukraine, 16, 29-33.
2. Deegan, J. An evaluation of both the 'rational' and the 'incremental' approaches to policy-making, Project: Master of Public Policy, Online available from http://dx.doi.org/10.13140/RG.2.2.10710.96327
3. Governmental portal, Government improves the training of civil servants, Online available from https://www.kmu.gov.ua/en/news/uryad-vdoskonalyuye-sistemu-navchannya-derzhavnih-sluzhbovciv
4. Jones, I. Benefits of having an integrated approach to employee training, development, and performance review, Neeyamo, Online available from https://www.neeyamo.com/benefits-integrated-approach-employee-training-development-performance-review/
5. Kachan, Ya. V. (2019). The European experience of professional development of the public service and the possibility of its use in Ukraine during system reforms, Public management and administration in Ukraine, 13, 94-98.
6. Kupriy, N. (2019). Public administration reform in Ukraine: A review of accomplishments, Ukrainian PRISM, Online available from http://prismua.org/en/pdf/2019-02-8/
7. Landa, E. (2018). Influence of training on employees' performance in a public institution in Tanzania. International Journal of Human Resource Studies, 8(2), 324-336.
8. Leoveanu, A. C. (2013). Rationalist Model in Public Decision Making, Journal of Public Administration, Finance and Law, 4. Online available from http://www.jopafl.com/uploads/issue4/RATIONALIST_MODEL_IN_PUBLIC_DECISION_MAKING.pdf
9. Ministry of Foreign Affairs of the Netherlands. (2020). The integrity of Civil Servants: 10 day-training programme for 36 civil servants from the following countries: Albania, Armenia, Bosnia-Herzegovina, Georgia, Kosovo, Moldova, Montenegro, North Macedonia, Serbia, Turkey, Ukraine, Online available from https://www.nhc.nl/assets/uploads/2019/12/Matra-ROLT-brochure-Integrity-of-civil-servants-2020.pdf
10. Orliv, M. S. (2016). Development of an in-service training system for civil servants and local self-government officials in Ukraine using the incrementalist model. Bulletin of the NAPA under the President of Ukraine, 2, 139-145. Online available from http://visnyk.academy.gov.ua/pages/dop/54/files/7c5595e3-564e-42f5-982c-10f8f22cc4d3.pdf
11. Orliv, M. S. (2019). In-service training for civil servants in the context of ensuring the sustainable development of Ukraine (archetypal approach). Public Management, 1, 336-345.
12. Packard, M. D., & Bylund, P. L. (2019). Truth and Knowledge in Management: Toward a Modern Rationalist Approach. Academy of Management Proceedings, 1, 15606.
13. Parkhomenko-Kutsevil, O. I. (2017). Innovative approach to training civil servants and local government officials, Public management, 1, 146-152. Online available from http://nbuv.gov.ua/j-

pdf/pubm_2017_1_15.pdf

14. Power, D. J., Cyphert, D., & Roth, R. M. (2019). Analytics, bias, and evidence: the quest for rational decision making. Journal of Decision Systems, 28(2), 120-137.

15. Ratner, B. (2009). The correlation coefficient: Its values range between +1/−1, or do they?. Journal of Targeting, Measurement, and Analysis for Marketing, 17, 139-142.

16. Rodrigues, I. B., Adachi, J. D., Beattie, K. A., & MacDermid, J. C. (2017). Development and validation of a new tool to measure the facilitators, barriers, and preferences to exercise in people with osteoporosis, BMC Musculoskelet Disord, 18(1), 1-9.

17. Stadler, A., Camargo, R. T. M., & Maioli, M. R. (2017). E-learning as a training tool for civil servants: A case in the state of Parana – Brazil, Turkish Online Journal of Distance Education, 18(2), 94-103.

18. Sun, Y. (2019). Ways and methods to improve the training of civil servants, Proceedings for the 4th International Conference on Education Science and Development, 1-7.

19. Thuy Nga, N. T. (2018). Solutions to improve English in training programs for civil servants, Journal of Science, Education & Art, 22, 46-49.

20. Tien Vi, C. (2019). Training and retraining civil servants of home affairs in Vietnam in response to the requirements of international integration, International Journal of Human Resource Studies, 9(1), 126-135.

21. Vashchenko, K. (ed.), Kupriy, V., Chmyha, V., Tokarchuk, T., Rykova, L., Vernigor, Y. ... Yarovyi, D. (2019). The state of the system of professional training of civil servants, heads of local state administrations, their first deputies and deputies, local government officials, deputies of local councils: public report, Centre for Adjusting the Civil Service to the Standards of the European Union, Online available from https://nads.gov.ua/storage/app/sites/5/%D0%BF%D1%80%D0%BE%D1%84%D0%B5%D1%81%D1%96%D0%B9%D0%BD%D0%B5%20%D0%BD%D0%B0%D0%B2%D1%87%D0%B0%D0%BD%D0%BD%D1%8F/preview_2019-07-16_block_dopovid_170x240.pdf

22. Verkhovna Rada of Ukraine, on civil service, (2016). Online available from https://zakon.rada.gov.ua/laws/show/889-19#Text

23. Verkhovna Rada of Ukraine. (2019). On approval of the Regulations on the system of professional training of civil servants, heads of local state administrations, their first deputies and deputies, local government officials and deputies of local councils, Online available from https://zakon.rada.gov.ua/laws/show/106-2019-%D0%BF#Text

24. Vyas, L. (2019). Customization in Civil Service Training: Implications for Outsourcing Human Resources Management. International Journal of Public Administration, 42, 41-54.

25. Wilson, D.E. (2019). The infirmities of age: The incremental and rational approaches, in The National Planning Idea in U.S. Public Policy: Five Alternative Approaches, D. E. Wilson ed., New York, USA: Routledge, 189-225.