

PROFESSIONAL EXAMINATION IN THE FIELD OF OCCUPATIONAL SAFETY IN THE REPUBLIC OF SRPSKA

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M.Sc. Biljana Vranješ¹,

University of Banjaluka, Faculty of Mechanical Engineering

Vladislava Tadić, Bachelor of Laws

The Ministry of Labor and Veterans Affairs Republic of Srpska

Abstract:

The new Law on Occupational Safety ("Official Gazette of the Republic of Srpska" No. 1/08 and 13/10) in the field of occupational safety brings professional examination in the field of occupational safety and health. A safety Officer is a person employed by the employer to carry out the supervision tasks related to the implementation of measures for the protection of safety and health and to provide technical assistance to employers, employees and their representatives. Research of the role of professional examination in the field of occupational safety was carried out in order to demonstrate the level of the implementation of knowledge in the safety and health at work system in the Republic of Srpska. The research results will open opportunities and point out the guidelines for further advancement and professional training of safety officers.

Key words: *occupational safety and health, professional examination, risk assessment, Risk Assessment Document, Safety Officer*

INTRODUCTION

Occupational safety in the Republic of Srpska has been regulated by a new law dated January 12, 2008, when the law entered into force and was published in the "Official Gazette of Republika Srpska" No. 1/08 and 13/10. The new law implements the Council of Europe Directive 89/391, which prescribes general principles in the field of occupational safety and health, first of all principles relating to measures to ensure safety and health at work, elimination of risks, hazards and harms, participation of workers and

¹ Correspondence to: M.Sc. Biljana Vranješ, University of Banjaluka, Faculty of Mechanical Engineering, E-mail: biljana.vranjes@mf.unibl.org.

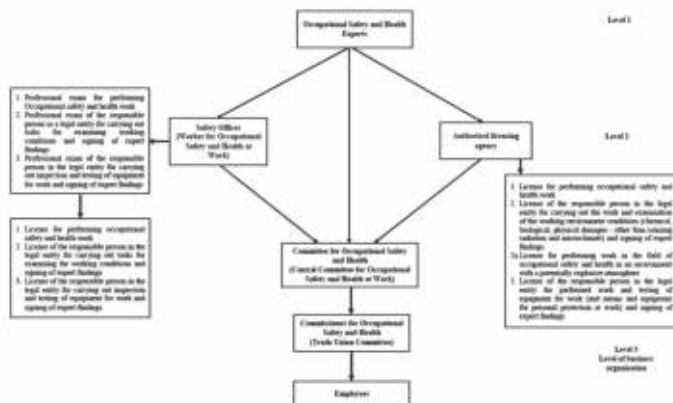
their representatives, and training for safe work. The area of occupational safety and health is an area that includes the rights and obligations of both employers and workers. In addition to the laws regulating this matter, there are a number of provisions and ordinances that regulate a particular area of protection. It is important to emphasize that the directives implemented in the ordinances are those related to the area that the Rules regulate. The new Law on Occupational Safety is fully adapted to the new socio-economic relations characterized by predominantly private property, so that the new relationship is an employer-worker. It is exactly due to those novelties in the society that there have also been novelties in the field of safety and health at work, such as taking professional examination and performing risk assessment at the workplace and in the work environment.

PROFESSIONAL EXAMINATION IN THE FIELD OF OCCUPATIONAL SAFETY

According to the Law on Occupational Safety (Article 37), the employer is obliged to organize occupational safety and health at the work. Occupational safety and health at work can be performed by a worker who has obtained the appropriate professional qualifications and passed professional examination in accordance with the law or an authorized licensed organization, Figure 1.

The Rulebook on the professional examination in the field of occupational safety and health (Article 1) regulates the conditions, method, examination commission and the costs of taking the professional exam. A professional examination may be carried out by a person with a higher and higher professional level of technical profession. In order for a person to enter the professional exam, one must fulfil certain conditions prescribed by the rules. The professional exam consists of a written and oral part (Article 2 of Rulebook on the professional examination in the field of occupational safety and health). A person who does not satisfy the written part does not take the oral part of the exam. The exam can be taken again after a 60-day period. The professional exam is taken before the examination commission, which is appointed by the minister.

Figure 1. *Transfer of knowledge in the field of occupational safety and health in the Republic of Srpska*



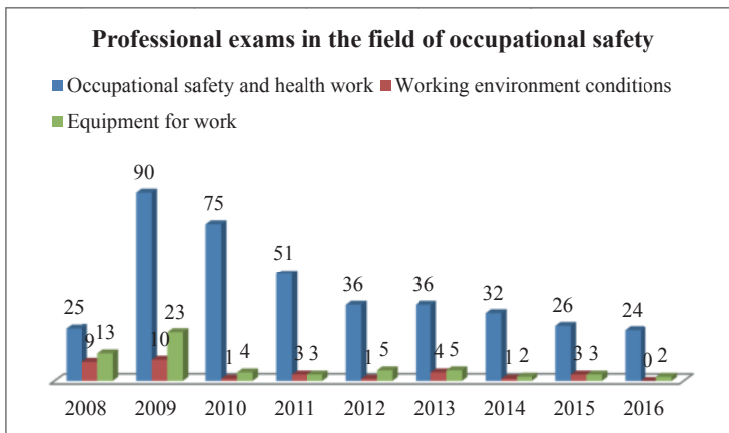
Source: Own modified model (Ruzic-Dimitrijevic & Dakic 2015)

There are three types of professional exams (Figure 2):

1. Professional exam for performing occupational safety and health work,
2. Professional exam of the responsible person in a legal entity for carrying out tasks for examining working conditions and signing of expert findings,
3. Professional exam of the responsible person in the legal entity for carrying out inspection and testing of equipment for work and signing of expert findings (Rulebook on the professional examination in the field of occupational safety and health).

After passing the professional exam, the candidate receives the certificate of the completed exam.

Figure 2. Number of completed professional exams in the field of occupational safety in the Republic of Srpska for the period 2008-2016.



Source: Own

The Rulebook on the level of costs for issuing licenses (Article 1) stipulates the licenses based on completed professional exams. The license is issued at the request of a natural person and a responsible person, where they must prove that they fulfil the statutory requirements for obtaining a license. The fulfilment of conditions for obtaining a license shall be determined by the competent minister's decision, upon a proposal of the commission that he/she appoints. The fulfilment of the conditions is determined by a decision within 60 days from the date of submission of the request with the prescribed documentation by a person who applied for the license. In order to exercise the right to a license, in addition to the prescribed rules, a person must have three years of experience in the jobs for which he/she is seeking a license. Since there are three types of exams through the legal regulations, there are three types of licenses:

1. License for performing occupational safety and health work,
2. License of the responsible person in the legal entity for carrying out the work and examination of the working environment conditions (chemical, biological, physical hazards - other than ionizing radiation and microclimate) and signing of expert findings,

- 2a. License for performing work in the field of occupational safety and health in an environment with a potentially explosive atmosphere,
3. License of the responsible person in the legal entity for performed work and testing of equipment for work (and means and equipment for personal protection at work) and signing of expert findings (Rulebook on the amount of costs for issuing licenses).

Only the person with a university degree is qualified to acquire the license of the responsible person in the legal entity and a completed professional examination as well as three years of work experience in the jobs for which he is seeking the license.

RESEARCH METHODS

Research problem and goal of research

The lack of knowledge about the management of occupational safety and health in the Republic of Srpska imposed the need to define a research problem on the role of taking the professional exam in the field of occupational safety and health as well as its importance in the system of safety and health at work in the Republic.

The aim of the research was to get to know about the role and significance of the professional exam in the field of occupational safety and health in occupational safety management.

Hypotheses

On the basis of the research problem, the following hypotheses have been posed:

H1: Professional examination in the field of occupational safety may be in the function of knowledge management in safety and health at work.

H2: There is a connection between knowledge management in safety and health at work by passing a professional exam and the type of professional exam for occupational safety and health.

Tasks

Research tasks have been set as follows:

1. A survey instrument was created: a survey questionnaire with established independent and dependent variables.
2. A survey has been conducted on a determined sample.
3. Data from the questionnaire were collected and statistically processed.
4. The results obtained were interpreted through discussion and conclusion.

1. Survey method

The data were collected using a survey that is descriptive-analytical, written and online (online), voluntary and anonymous for respondents. The questionnaire contains 20 closed-type questions, categorized into 4 groups of questions.

Research variables

Table 1. *Variations of survey research (independent and dependent variables) (Vranjes, 2017)*

Independent	Dependent
<p>1. Worker occupational safety and health (Safety Officer) profile</p> <ul style="list-style-type: none"> • gender • age • level of education • total work experience 	<p>4. Managing knowledge in occupational safety by passing a professional examination in the field of occupational safety and health</p> <ul style="list-style-type: none"> • Professional exam helps in the performance of work safety and health at work in the organization • The professional exam includes all the topics (areas of knowledge) that are important for the performance of occupational safety and health at work • Professional exam expands and enhances personal expertise in the field of occupational safety and health • Professional exam helps in finding a better job • A person with a completed professional exam should further expand his/her knowledge (seminars, conferences, standards, professional literature) • A person with a completed professional exam should have a renewable license for performing occupational safety and health work • Employment organization supports and stimulates the passing of a professional exam in the field of occupational safety and health • Employment organization supports and stimulates the education of workers (Safety Officer) occupational safety and health (seminars, conferences, etc.) for acquiring new knowledge in the field of occupational safety and health • The organization of employment supports and evaluates the knowledge of workers (Safety Officer) occupational safety and health at work • Employment organization has developed a system and manages knowledge in the field of safety and health at work • The professional exam influences the quality of the system and knowledge management in the field of occupational safety and health in the Republic of Srpska • Assessment of occupational safety and health at work in the Republic of Srpska
<p>2. The profile of the organization of employment of workers (Safety Officer) occupational safety and health</p> <ul style="list-style-type: none"> • number of employees in the organization • type of organization • the activity of the organization 	
<p>3. Professional exam in the field of occupational safety and health</p> <ul style="list-style-type: none"> • type of professional exam 	

Source: Survey Research

Research sample

Workers dealing with occupational safety and health professionals (Safety Officers) have been defined as potential respondents in the research, who have passed a professional exam in the field of occupational safety at work from 2008 to 2016, including 487 potential respondents. The expected and planned minimum number of respondents for participation in the research is:

- more than 30
- more than 10% of the total number (more than 49 respondents)
- more than the minimum representative sample determined on the basis of the variability of the dependent variables of the research (minimum scientific sample).

2. Statistical methods

- N – Frequency
- % – percentage
- Σ – Amount - sum
- M – arithmetic mean
- σ – standard deviation
- V% – coefficient of variability
- r – Pearson's coefficient of correlation-for testing the connection between independent and dependent variables (Petz, 2007).

Data on survey research

The survey was organized from 1 March to 31 March 2017. The research was carried out partly online by sending questionnaires to the e-mail addresses of potential respondents through the Association of Occupational Safety and Health Engineers, and in part by directly completing questionnaires by respondents. From 9 March 2017 the questionnaire has been available on the website of the Association of Occupational Safety and Health Engineers (www.uizznr.org). A total of 56 respondents participated, and all completed questionnaires were accepted as valid for statistical processing.

Testing the representativeness of the survey sample

The size of a simple random sample was obtained by the formula (Arandelovic, Mitrovic & Stojanovic, 2011):

$$n' = \left[\frac{z_{\alpha/2} \cdot V}{G_r} \right]^2$$

where is:

- n' – the previous size of a simple random sample
- $z_{\alpha/2}$ – confidence or reliability coefficient for the default probability of estimation ($z_{\alpha/2} = 1,96$ for the probability of estimation 95% ili $z_{\alpha/2} = 2,58$ for the probability of estimation 99%)

- V – coefficient of population variability in percentages (%)
 G_t – estimation error, expressed relative in percentages

For the probability of estimating 95% i.e. $z_{\alpha/2} = 1.96$, the selected estimation error of 10% and the value of the variability coefficient of the population of the dependent variables 32.56, the sample size is $n = 41$, with an additional reduction ($f = n_0/487 = 0.08 > 0.05$) we get a minimal scientific sample $n_z = 38$. The set conditions of representativeness of the sample have been met:

- $N(56) > 30$
- $N(56) > 10\% n (49)$, $N = 11,5\% n$
- $N(56) > n_z (38)$

Results and discussion

Table 2. Frequency (N) and percentage (%) of independent variables

I. Worker occupational safety and health (Safety Officer) profile	
1. Gender <ul style="list-style-type: none"> • men - 39 (69.64%) • women 17 - (30.36%) 	2. Age <ul style="list-style-type: none"> • up to 30 years - 5 (8.93%) • from 31 to 40 - 13 (23.21%) • from 41 to 50 - 18 (32.14%) • from 51 to 60 - 17 (30.36%) • over 60 years - 3 (5.36%)
3. Level of education <ul style="list-style-type: none"> • college - 2 (3.57%) • higher education (graduate engineers) - 48 (85.71%) • masters - 5 (8.93%) • doctors of science - 1 (1.79%) 	4. Total work experience <ul style="list-style-type: none"> • up to 5 years - 5 (8.93%) • from 6 to 10 god. - 11 (19.64%) • from 11 to 20 god. - 14 (25%) • from 21 to 30 - 15 (26.79%) • over 30 years - 11 (19.64%)
II. The profile of the organization of employment of workers (Safety Officer) occupational safety and health	
5. Number of employees in the organization <ul style="list-style-type: none"> • up to 50 workers - 23 (41.07%) • from 50 to 250 workers - 14 (25%) • from 250 to 500 workers - 3 (5.36%) • over 500 workers - 16 (28.57%) 	6. Type of organization <ul style="list-style-type: none"> • state or public - 18 (32.14%) • private - 23 (41.07%) • mixed - 15 (26.79%)
7. The activity of the organization <ul style="list-style-type: none"> • industrial - 15 (26.79%) • service - 22 (39.29%) • financial - 1 (1.79%) • public - 11 (19.64%) • administrative - 1 (1.79%) • others - 6 (10.71%) 	

III. Professional exam in the field of occupational safety and health

8. Type of professional exam
1. for occupational safety and health (OSH) - 27 (48.21%)
 2. for occupational safety and health and examination of working environment conditions; for occupational safety and health and testing equipment for work; for testing of working environment and equipment for work i.e. two types of professional exam completed - 6 (10.71%)
 3. for occupational safety and health and license; for examination of working environment conditions and license; for testing equipment for work and license i.e. one type of professional exam and license completed- 10 (17.86%)
 4. for occupational safety and health and examination of working environment conditions and equipment for work i.e. three types of professional exam completed - 3 (5.36%)
 5. for occupational safety and health, examination of working environment conditions and license; for occupational safety and health, testing equipment for work and license; for testing of working environment and equipment for work and license i.e. two types of professional exam and license completed - 7 (12.5%)
 6. for occupational safety and health, examination of working environment conditions and testing equipment for work and license i.e. three types of professional exam and license completed - 3 (5.36%)

Source: Survey results

IV. Managing knowledge in occupational safety by passing a professional examination in the field of occupational safety and health

Workers dealing with occupational safety and health (Safety Officer) as respondents gave subjective assessments of raised assertions by choosing a response from 1 to 5 according to the Likert scale of intensity (Taradi, Nikolic & Grosanic, 2016):

- 1 I totally disagree
- 2 I mostly disagree
- 3 I do not know (I neither agree nor disagree)
- 4 I mostly agree
- 5 I totally agree

Table 3. Arithmetic mean (M), standard deviation (σ) and coefficient of variability of dependent variables of research ($V\%$) (Vranjes, 2017)

Serial number	MANAGING KNOWLEDGE IN OCCUPATIONAL SAFETY BY PASSING A PROFESSIONAL EXAMINATION IN THE FIELD OF OCCUPATIONAL SAFETY AND HEALTH	Lowest rating	Highest rating	Arithmetic mean - M	Standard deviation - s	Coefficient of variability - $V\%$
1.	Professional exam helps in the performance of work safety and health at work in the organization	1	5	4.09	0.94	23.04

2.	The professional exam includes all the topics (areas of knowledge) that are important for the performance of occupational safety and health at work	1	5	3.73	1.05	28.15
3.	Professional exam expands and enhances personal expertise in the field of occupational safety and health	1	5	3.70	1.13	30.54
4.	Professional exam helps in finding a better job	1	5	3.39	0.98	28.91
5.	A person with a completed professional exam should further expand his/her knowledge (seminars, conferences, standards, professional literature)	1	5	4.63	0.84	18.14
6.	A person with a completed professional exam should have a renewable license for performing occupational safety and health work	1	5	2.82	1.59	56.38
7.	Employment organization supports and stimulates the passing of a professional exam in the field of occupational safety and health	1	5	3.38	1.29	38.17
8.	Employment organization supports and stimulates the education of workers (Safety Officer) occupational safety and health (seminars, conferences, etc.) for acquiring new knowledge in the field of occupational safety and health	1	5	2.88	1.28	44.44
9.	The organization of employment supports and evaluates the knowledge of workers (Safety Officer) occupational safety and health at work	1	5	3.07	1.09	35.50
10.	Employment organization has developed a system and manages knowledge in the field of safety and health at work	1	5	3.38	1.27	37.57
11.	The professional exam influences the quality of the system and knowledge management in the field of occupational safety and health in the Republic of Srpska	1	5	3.63	1.12	30.85
12.	Assessment of occupational safety and health at work in the Republic of Srpska	1	5	2.63	0.89	33.84
	Total	1	5	3.44	1.12	32.56

Source: Survey Results

Correlation testing

Pearson's correlation coefficient tested correlations between independent and dependent variables of the study. Correlation coefficient (r) has limit values: Degrees of freedom (N-2) = 56-2 = 54. Correlation significance levels (Petz, 2007):

- **An extremely significant correlation**** - the risk of accepting the correlation between the two indicators is less than 1%, $r \geq 0,325$
- **Significant correlation*** - the risk of accepting the correlation between the two indicators is less than 5%, $r \geq 0,250$

Table 4. Relationship of dependent variables Knowledge management in occupational safety by passing a professional exam in the field of occupational safety and independent variables Type of professional exam

Serial number	Dependent variables	Independent variables					
		Type of professional exam					
		1.	2.	3.	4.	5.	6.
	MANAGING KNOWLEDGE IN OCCUPATIONAL SAFETY BY PASSING A PROFESSIONAL EXAMINATION IN THE FIELD OF OCCUPATIONAL SAFETY AND HEALTH	For occupational safety and health	Two types of professional exam	One type of professional exam and license	Three types of professional exam	Two types of professional exam and license	Three types of professional exam and license
1.	Professional exam helps in the performance of work safety and health at work in the organization	-0.054	0.215	0.005	-0.023	-0.152	0.062
2.	The professional exam includes all the topics (areas of knowledge) that are important for the performance of occupational safety and health at work	-0.026	-0.022	0.209	0.061	-0.213	-0.015
3.	Professional exam expands and enhances personal expertise in the field of occupational safety and health	-0.058	0.301*	-0.124	0.065	-0.187	0.136
4.	Professional exam helps in finding a better job	0.271*	-0.021	-0.235	0.067	-0.152	-0.015
5.	A person with a completed professional exam should further expand his/her knowledge (seminars, conferences, standards, professional literature)	0.048	-0.052	-0.014	0.107	0.105	-0.273*
6.	A person with a completed professional exam should have a renewable license for performing occupational safety and health work	0.246	-0.071	0.053	-0.276*	-0.198	0.027

7.	Employment organization supports and stimulates the passing of a professional exam in the field of occupational safety and health	-0.032	-0.011	0.192	-0.070	-0.069	-0.070
8.	Employment organization supports and stimulates the education of workers (Safety Officer) occupational safety and health (seminars, conferences, etc.) for acquiring new knowledge in the field of occupational safety and health	-0.046	0.080	0.009	-0.039	-0.005	0.023
9.	The organization of employment supports and evaluates the knowledge of workers (Safety Officer) occupational safety and health at work	-0.196	0.030	0.098	-0.089	0.174	0.058
10.	Employment organization has developed a system and manages knowledge in the field of safety and health at work	-0.060	-0.057	0.157	-0.134	0.102	-0.071
11.	The professional exam influences the quality of the system and knowledge management in the field of occupational safety and health in the Republic of Srpska	0.004	0.169	-0.010	-0.205	-0.067	0.080
12.	Assessment of occupational safety and health at work in the Republic of Srpska	-0.036	0.280*	-0.066	-0.169	-0.023	0.011
	5/72 (7%)	1	2	0	1	0	1

Source: Survey Results

Table 5. Statistical analysis of coefficients of correlation of dependent variables Knowledge management in occupational safety by passing a professional exam in the field of occupational safety and independent variables Type of professional exam

Type of professional exam
Respondents with a professional exam for occupational safety and health are known:
• higher score of variables: 4 ($r = 0.271^*$) - significant positive correlation
Respondents with two types of professional exams passed are known:
• higher score for variables: 3 ($r = 0.301^*$) and 12 ($r = 0.280^*$) - significant positives correlations
Respondents with three types of professional exams passed are known:
• lowest score of variables: 6 ($r = -0.276^*$) - significant negative correlation
Respondents with three types of professional exams completed and license are known:
• lowest score of variables: 5 ($r = -0.273^*$) - significant negative correlation

Source: Survey Results

Table 6. Testing of statistical significance of correlations among group variables Type of professional exam

Group and number of variables Type of professional exam	Type of professional exam					
	1.	2.	3.	4.	5.	6.
1.						
2.	-0.334**					
3.	-0.450**	-0.162				
4.	-0.230	-0.082	-0.111			
5.	-0.365**	-0.131	-0.176	-0.090		
6.	-0.230	-0.082	-0.111	-0.057	-0.090	

Source: Survey Results

There are 3 (out of possible 15, i.e. 20%) statistically significant correlations between all variables in the Type of Professional Exam. The strongest correlation between the variables is the “Professional exam for work occupational safety and health” and “One type of professional exam and license“ (extremely significant negative correlation -0.450**).

Table 7. Testing of the statistical significance of correlations among the variables of the group’s research Knowledge management in occupational safety by passing a professional examination in the field of occupational safety and health at work

Group and number of variables	Managing knowledge in occupational safety by passing a professional examination in the field of occupational safety and health											
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1.												
2.	0,649**											
3.	0,713**	0,620**										
4.	0,315*	0,349**	0,322*									
5.	0,318*	0,335**	0,222	0,290*								
6.	0,133	0,232	0,152	0,197	0,248							
7.	0,167	0,196	0,067	0,212	0,266*	-0,100						
8.	0,161	0,123	0,124	0,256*	0,158	-0,002	0,757**					
9.	0,064	-0,015	0,077	0,159	0,089	-0,066	0,601**	0,682**				
10.	0,139	0,171	0,030	0,011	0,269*	-0,038	0,712**	0,688**	0,686**			
11.	0,706**	0,545**	0,671**	0,284*	0,329**	0,166	0,099	0,119	0,126	0,113		
12.	0,391**	0,319*	0,449**	0,089	0,027	-0,139	0,062	0,118	0,066	0,030	0,478**	

Source: Results of Survey Research

Among all the variables of the Knowledge management in occupational safety group, with the passing of a professional exam, there are 27 (of possible 66, i.e. 41%) of statistically significant correlations. The strongest correlation between the variables between the variables “Organization of employment supports and stimulates the passing of a professional exam in the field of occupational safety and health“, and “Organization of employment supports and stimulates the education of occupational safety and health professionals (seminars, conferences, etc.) for acquiring new knowledge from occupational safety and health fields“ (a very significant positive correlation of 0.757**). This means that as many employment organizations support and stimulate the passing of a professional exam for occupational safety and health professionals, it is more supportive and stimulates further education of safety and health professionals through seminars, conferences, etc.

CONCLUSION

So far, in the Republic of Srpska there were no relevant statistical data in the field of occupational safety. The aim of the survey was fulfilled by conducted survey research, as data and knowledge about knowledge management were obtained by passing a professional exam in the field of occupational safety and health. Data on the role of the professional exam in the occupational safety and health system in the Republic have been partially provided by the research. Further data collection should be aimed at broadening the objectives and tasks of research in the field of occupational safety and health.

Workers occupational safety and health (Safety Officers) gave a mean average assessment of the dependent variables of the study 3.44, the assessment is in the positive area, and confirms the hypothesis. The professional exam in the field of occupational safety and health can be in the function of knowledge management in safety and health at work. The average grade is not significantly high, which leads to the conclusion that work on promoting the role professional exam in the field of occupational safety and health in occupational safety and health management should continue to be promoted. Averaging the average grade 4.63 received the dependent variable “The person with a completed professional exam should further expand his/her knowledge (seminars, conferences, standards, professional literature)”. Workers dealing with occupational safety and health (Safety Officers) recognized the importance of improving knowledge and constant education in the field of safety and health at work, but did not recognize the professional exam as the only way to acquire the necessary knowledge in this field. The lowest score was obtained by the dependent variable “An assessment of occupational safety and health at work in the Republic of Srpska” 2.63, from which it can be concluded that the state of safety and health at work in the Republic of Srpska is not at an enviable level. All participants in this system (state, employers, occupational safety and health professionals, occupational medicine, licensed organizations, employees) should work to improve the overall occupational safety and health system.

Hypothesis: There is a connection between knowledge management in safety and health at work by passing a professional exam and the type of professional exam for occupational safety and health, due to the inability to provide a larger sample of research (>56) has been only partially proven because of the possible 72 correlation variables established correlation of 5 of them i.e. 7%. A larger sample of research would provide

more representative results and a more complete picture of the correlation between independent and dependent research variables.

The results of the research are not satisfactory in relation to hypotheses, but this should not be a reason for the research to be stopped. Participants in the system of safety and health at work in the Republic should ensure harmonization and coordination of data collection in the field of occupational safety and health as well as their systematization and unique processing. The starting point provided by this research should enable the correction of the hypothesis and the definition of new research variables that will lead to new knowledge. New knowledge in the field of safety and health will in any case enable to raise the level of efficiency and effectiveness of the occupational safety and health system in achieving the protection goals. The results of the research provide guidelines for the improvement of each system, as well as the occupational safety and health system in the Republic of Srpska.

LITERATURE

- Arandelovic I., Mitrovic Z. & Stojanovic V. (2011), *Probability and Statistics*. Belgrade Institute for Textbooks.
- Petz B. (2007), *Basic statistical methods for non-mathematicians*. Zagreb: Print Waterfall,
- Ruzic-Dimitrijevic Lj. & Dakic J. (2015), *Permanent education of persons and associates for OSH*, Proceedings, works of the 2nd regional conference Applied protection and its trends-Zlatibor 2015., pp. 70-82
- Vranjes B. (2017), *Knowledge management in protection at work through newspapers new law on occupational safety in the Republic of Srpska (professional exam, risk assessment)*, Proceedings of the 12th International Conference on Management and Safety M&S 2017, Neum and Mostar, BiH, June 9 and 10, 2017, pp. 113-124
- Taradi J., Nikolic V. & Grosanic N. (2016), *Protection in the function of sustainable development*, XI. Scientific Conference "Management and Safety" 2016 Theme of the Conference "Sustainable Development and Safety", Proceedings, Vrnjačka Banja, Republic of Serbia, pp. 196-210.

Regulations

- Law on Occupational Safety ("Official Gazette of the Republic of Srpska", No. 1/08 and 13/10)
- Rulebook on the professional examination in the field of occupational safety and health ("Official Gazette of the Republic of Srpska", No. 70/08)
- Rulebook on amendments to the rules on professional examination in the field of occupational safety and health ("Official Gazette of the Republic of Srpska", No. 78/15)
- Rulebook on the amount of costs for issuing licenses ("Official Gazette of the Republic of Srpska", No. 68/08 and 28/12)

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JUBILEE 20 YEARS OF DEFENDOLOGY
