

Motivation and proposal of important categories of the work of mine rescuer

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Abstract. The paper presents the results of the conducted research using the questionnaire. Based on published categories of motives present in the work situation, 12 questionnaires were sent directly to the salvage miners' professional group. On the basis of the results obtained, 12 categories of importance of motives present in the life of the rescuer were proposed. After identifying the categories, a scheme of motives for the meaning of work in the life of the rescuer was proposed, which distinguishes six basic motives of the significance of the work of a lifeguard.

1. Introduction

Professional work is a very important element for the functioning of every adult. Man needs to use his ability to meet job requirements and experience interpersonal support, which is considered to be the main characteristics of work conditioning the physical and mental well-being of the individual [1]. The dynamics of changes in labor relations has been high and it is defined as follows [2]:

- The concept of "work" has been separated from the concept of 'employment' by explaining less and less work is realized through constant employment
- Employment requires the activity of an individual, for example, the nature
- Competitiveness through the flexibility of employment and thus the exchange of employees
- Employee exchange raises dissatisfaction received very negatively since it increases the sense of uncertainty,
- The permanent employment model from graduation to retirement disappears. There is a 'break' model in working life

According to T. Tomaszewski, the work is distinguished in six categories of motive groups present in the work situation [3]:

- Successes and failures - every person commits himself to perform certain tasks and is motivated by attaining the intended goal.
- Direct benefits and losses - any professional decision is dictated by the possibility of earning economic profits.
- Safety and Hazards - every person in the workplace strives to ensure a sense of security.
- Relationships between people - each person strives for the right and the same correct social relationship through kindness, support, acceptance.



- Attractiveness and aversiveness of particular activities - Any activity performed at work can be considered as or not liked by the unit performing the task.
- Comfort and discomfort at work - every man strives for comfortable working conditions to feel good in his workplace, while uncomfortable working conditions lead to an additional effort of the worker, where overcoming inner resistance leads him to perform work at the limits of his strength and capabilities.

Mine rescue is a voluntary service. Every miner can apply for permission to become a lifeguard. After proper testing and fulfillment of the conditions, the mine rescue. Rescue is a job and a challenge. The basic motivation is to save another human "human life" that is invaluable. Rescuers are proud to be able to serve. As a result, research into the importance of work in the life of the rescuer has been made. Based on the aforementioned motive groups, a questionnaire was created and 2 questions were assigned to each group. In total, 12 questions were included in the questionnaire and the research was carried out on a group of rescuers

2. Appropriate research

At the turn of 2016 and 2017, a survey was conducted on a group of mine rescue workers from one of the hard coal mines. The research sample consisted of 94 rescuers, which accounted for 50% of the salvage status of the rescuers during the survey. The research was done during the training along with the theoretical part. Everyone was informed about the research and its purpose. In addition, they received information about the anonymity of the survey and a thorough explanation of how to complete the questionnaire.

Respondents rescued were three age brackets between 21-30 years, 31-40 years and over 40 years. The most common compartment (31-40 years) counted 58 rescuers, which constituted 61.7%. It can therefore be stated that the surveyors who took part in the study were the so-called senior employees not belonging to the smallest or oldest compartment (table 1).

Table 1. Age brackets of rescuers participating in the study.

Age of Mine Rescuers	21-30 years	31-40 years	>40 years	Sum
number	24	58	12	94
%	25.5	61.7	12.8	100

When analyzing rescuers in terms of seniority in salvage, the noticeable prevalence of rescuers is in the range of 6-10 years. Then in two intervals, 1-5 years and 11-15 years, there were 17% of the whole population tested (table 2).

Table 2. Lengths of service of rescuers participating in the study.

Mine Rescuers work life	1-5 years	6-10 years	11-15 years	16-20 years	>20 years
number	16	44	16	10	8
%	17.0	46.8	17.0	10.6	8.6

Table 3. Declared responses in the survey.

Lp.	Question asked in survey sheet	Answer Yes		Answer No	
		number	%	number	%
1.	Does the rescue action motivate you to achieve the goal of: ending the action as soon as possible?	90	95.7	4	4.3
2.	During the rescue operation motivates you to reach the goal: how to get the victims out as soon as possible?	94	100.0	0	0
3.	Are you happy with your monthly salary?	71	75.5	23	24.5
4.	Do you have the need to improve your qualifications for promotion?	62	66.0	32	34.0
5.	Do you feel a great sense of security by doing health and safety activities?	89	95.0	5	5.0
6.	Do you think your workplace is safe without any additional risk reduction that may occur?	21	22.3	73	77.7
7.	Do you feel accepted by your team mates?	93	99.0	1	1.0
8.	Can you count on support from your colleagues and supervisors?	90	96.0	4	4.0
9.	Do you do something you do not like?	30	32.0	64	68.0
10.	Is your position is dominated by the activities you liked?	86	91.5	8	8.5
11.	Are you happy with your job?	87	92.6	7	7.4
12.	Do you feel that you do your work on the edge of endurance?	3	3.2	91	96.8

Figure 1 shows the results of the question ‘Does the rescue operation motivate you to achieve the goal of: ending the action as soon as possible?’ Rescue survivors found that 65.7% of rescue operations were their goal. Rescue is a voluntary service and every rescuer wants to achieve a career goal, which is to complete the rescue operation.

The question ‘Does the rescue operation motivate you to achieve the goal of: getting the victims out as soon as possible?’ Indicates that for the 100% of the rescuers rescuing the victims is the achievement of the goal. Let us not forget that miners rescuers always claim ‘we go to live’ (figure 2).

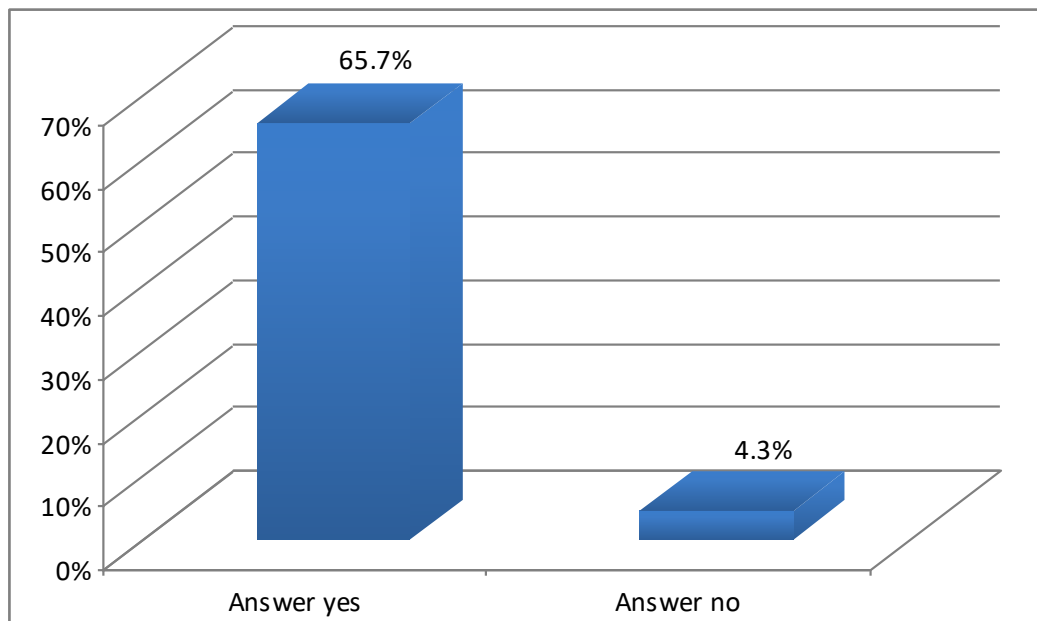


Figure 1. Declared answers to question No. 1.

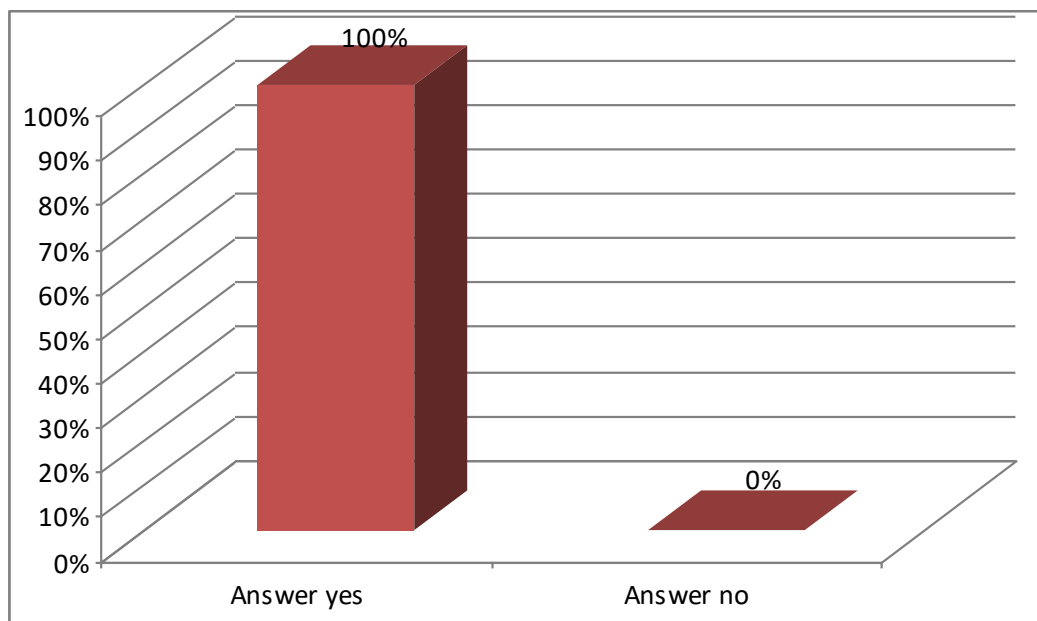


Figure 2. Declared answers to question No. 2.

Figure 3 shows the results of satisfaction with the monthly salary, 75.5% of the respondents confirmed satisfaction. We are now living in a time where young people are striving to rapidly raise their living conditions and consequently raise finances. And it was this group that most likely presented a negative opinion about satisfaction from a monthly salary.

‘Do you have the need to improve your qualifications for promotion?’ Question No. 4 in the questionnaire. Probably the young rescuers have declared 66% of the need to improve their qualifications. This is a positive trait that signifies a great commitment to the performance and seriousness of the work performed (figure 4).

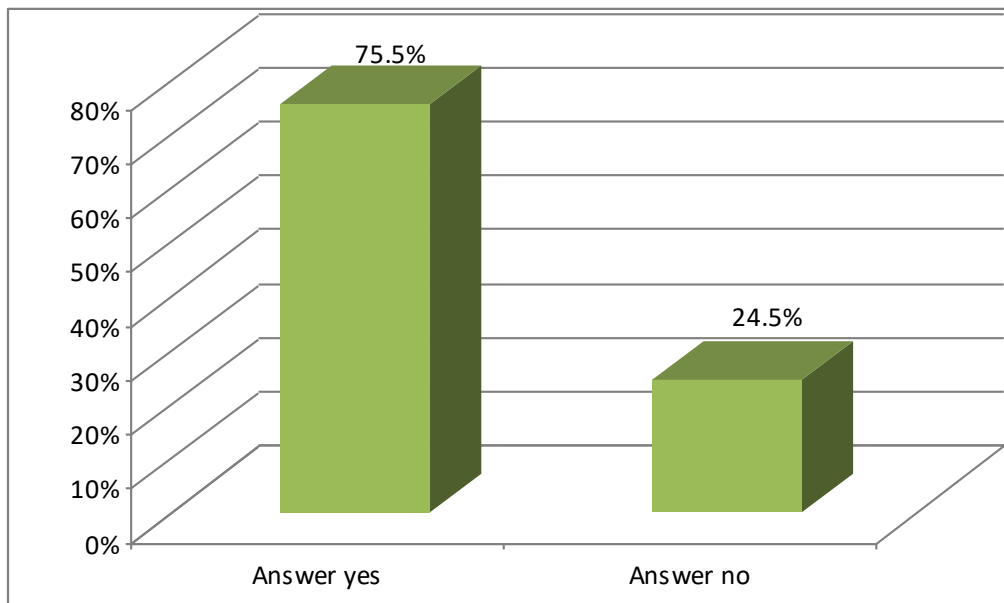


Figure 3. Declared answers to question No. 3.

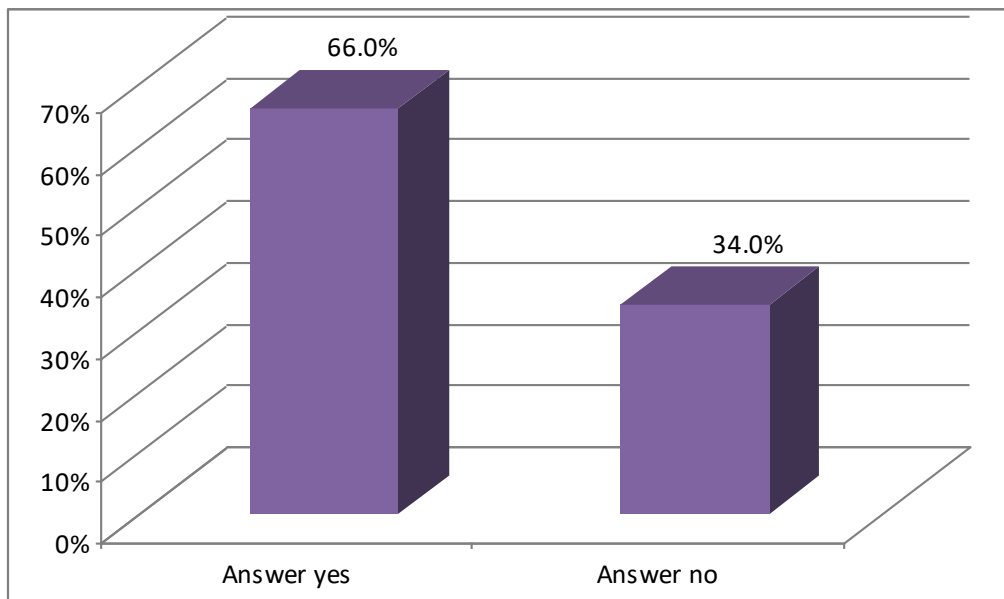


Figure 4. Declared answers to question No. 4.

Figure 5 shows the results of the questionnaire, 'Do you feel a great sense of security by doing your health and safety activities?' The 95% group confirmed that they are safe by doing their job in accordance with safety standards. Each rescuer has knowledge of the consequences of not following the principles of safe work, which may result in an accident at work.

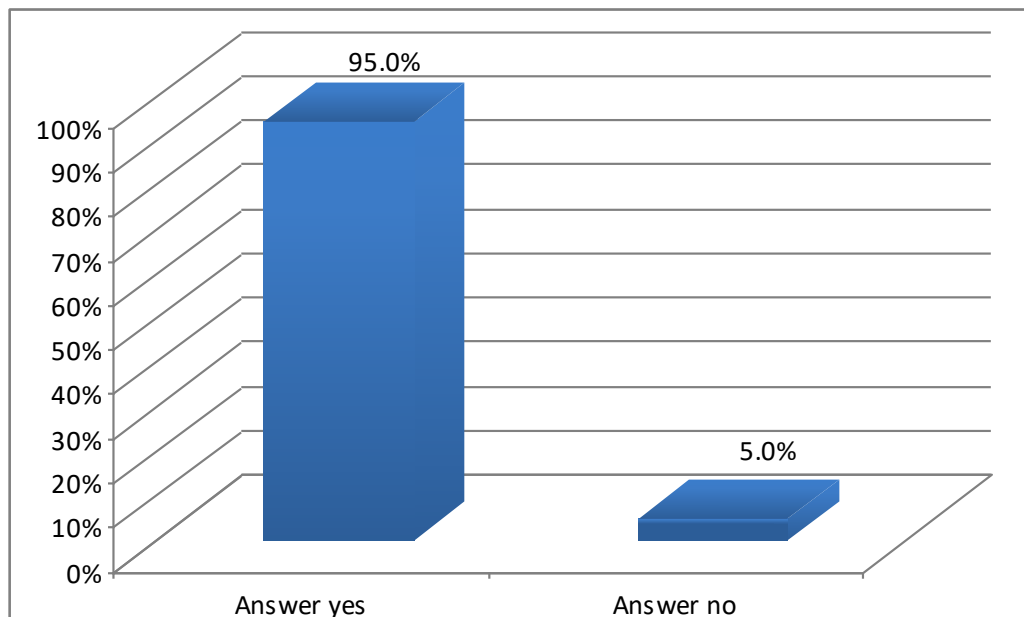


Figure 5. Declared answers to question No. 5.

Rescuers' response to 'Do you think your workplace is safe without any additional reduction of the risks that may occur?' Show rescuers are demanding a reduction in the risks that could occur in their workplace at 77.7%. Respondents are aware that any hazard can lead to even fatal consequences (figure 6).

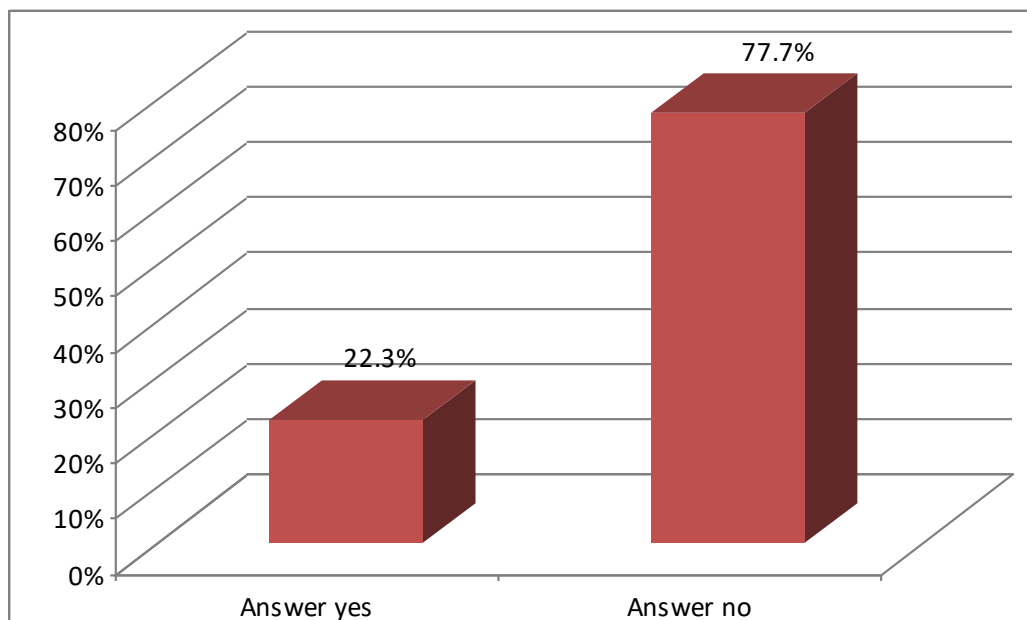


Figure 6. Declared answers to question No. 6.

Figure 7 shows the results of team acceptance by colleagues. Because rescuers work in teams, the results confirm the bond and acceptance of the individual units in the team. Only 1% of respondents expressed a disagreement, they could be people with small work placements, where team bond was not established or not yet participated in rescue operations.

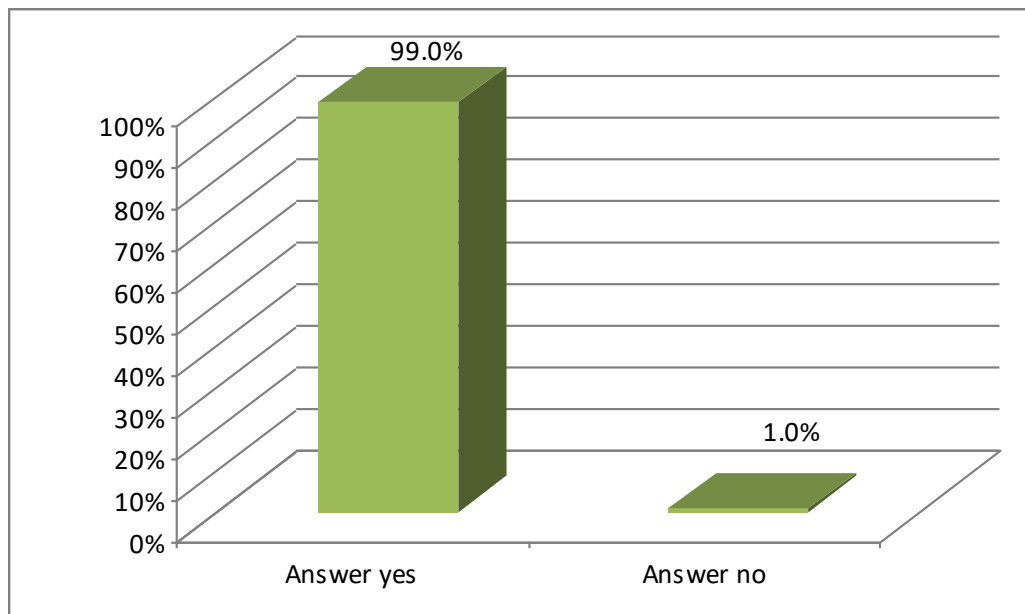


Figure 7. Declared answers to question No. 7.

Figure 8 shows the results of the question ‘Can you count on support from your colleagues and supervisors?’ The respondents in 96% rated the relationship with superiors and colleagues as very good, knowing they can count on them in every situation. This confirms the very good coordination and teamwork, which is undoubtedly one of the important characteristics of work in the rescue.

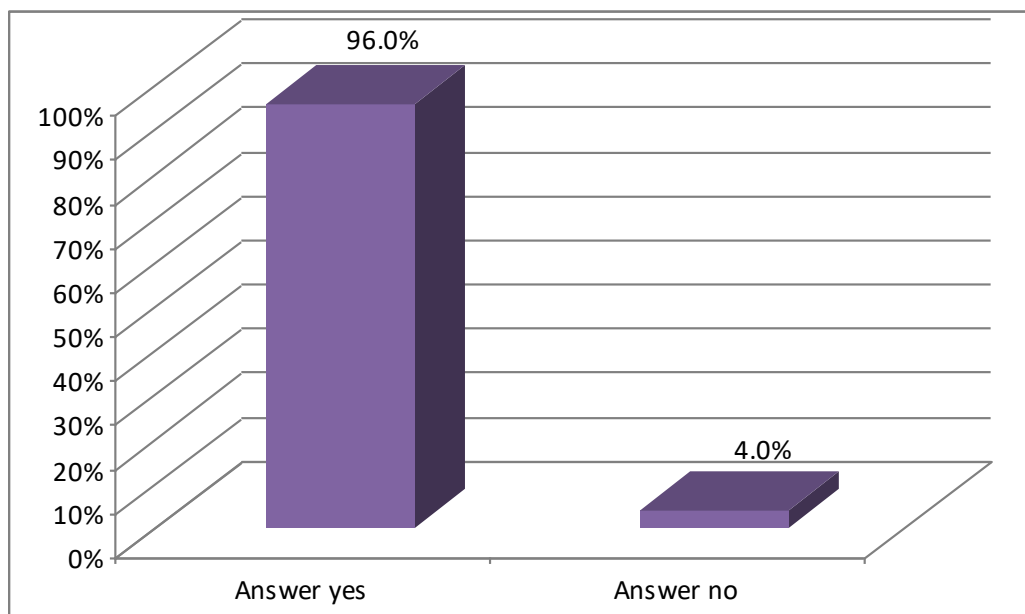


Figure 8. Declared answers to question No. 8.

Each of the employees, as well as the rescuers of the mining work, considers it more or less acceptable. This is not only a way of doing work, but also a number of training activities in the area of rescue operations. The surveyed respondents in 32% stated that their workstations performed work that they did not like. Most likely, this evaluation results from lack of experience.

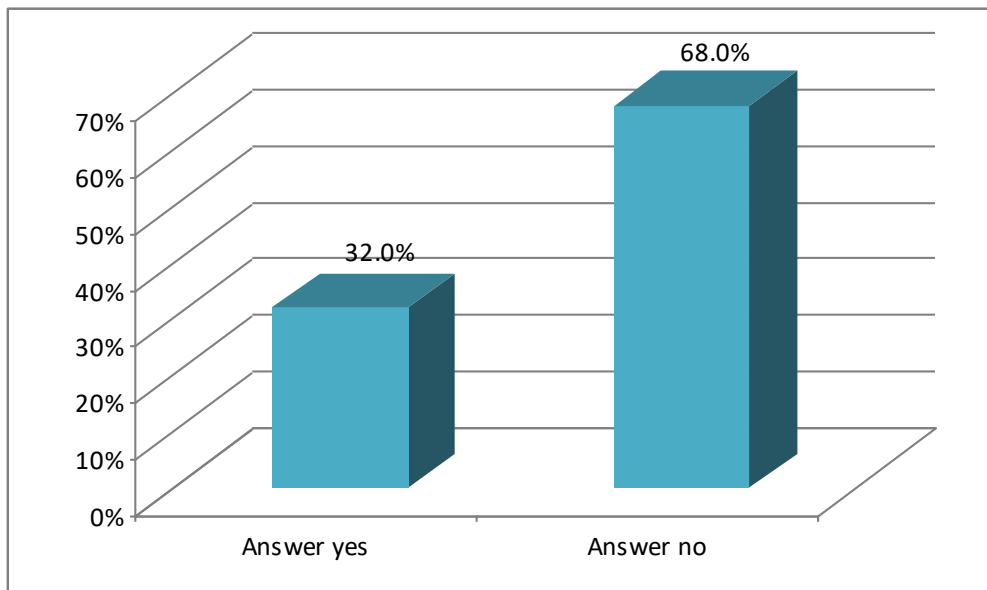


Figure 9. Declared answers to question No. 9.

Figure 10 shows the results of the rescue rescuers' declaration on the question, 'Do you like your favorite activities?'. According to 91.5% of respondents, they consider their work to be the most popular job they enjoy.

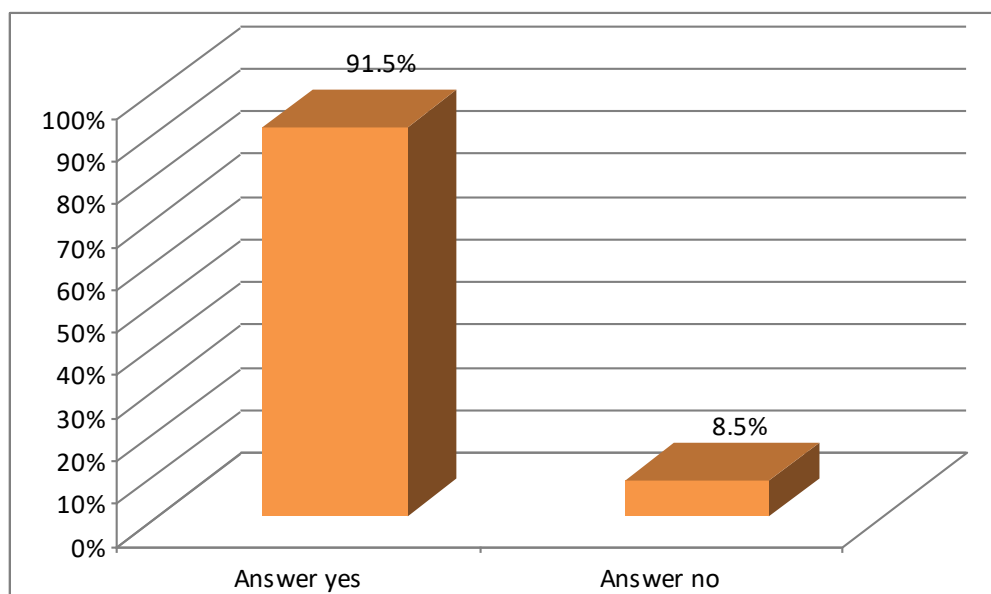


Figure 10. Declared answers to question No. 10.

Job satisfaction is an important element that affects work performance as well as relationships within a team. The respondents in 92.6% have declared satisfaction with their work, some rescue work treats it a passion in which they save lives that are irreplaceable (figure 11).

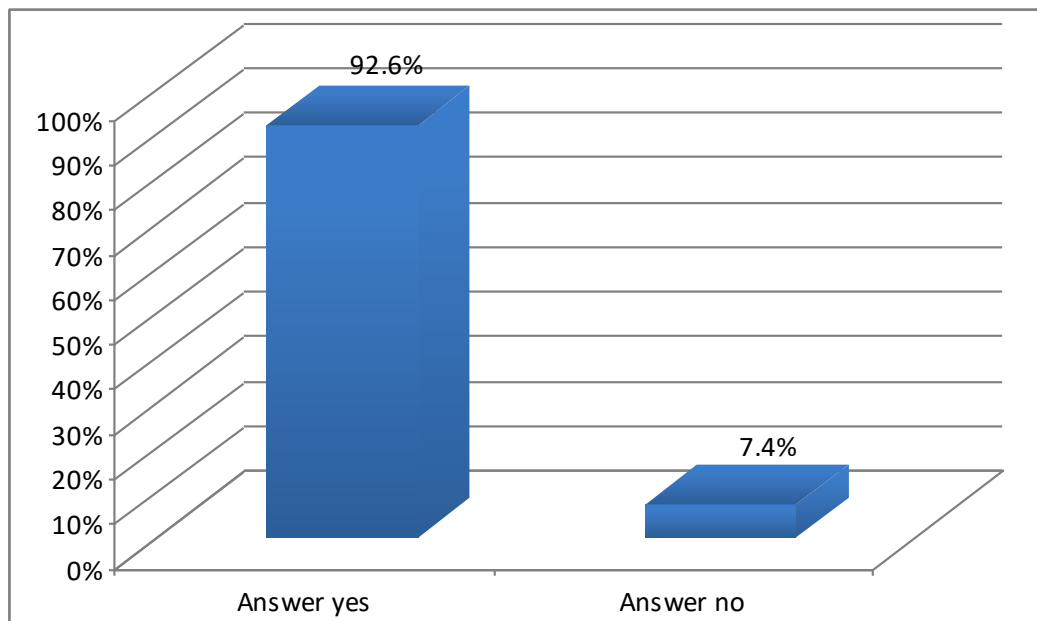


Figure 11. Declared answers to question No. 11.

Rescue workers are very well prepared not only mentally but also physically. The question ‘Do you feel that you are doing your work on the edge of endurance?’. Have confirmed perfect preparation because only 3.2% of respondents have the feeling that they are working at the limit of endurance (figure 12).

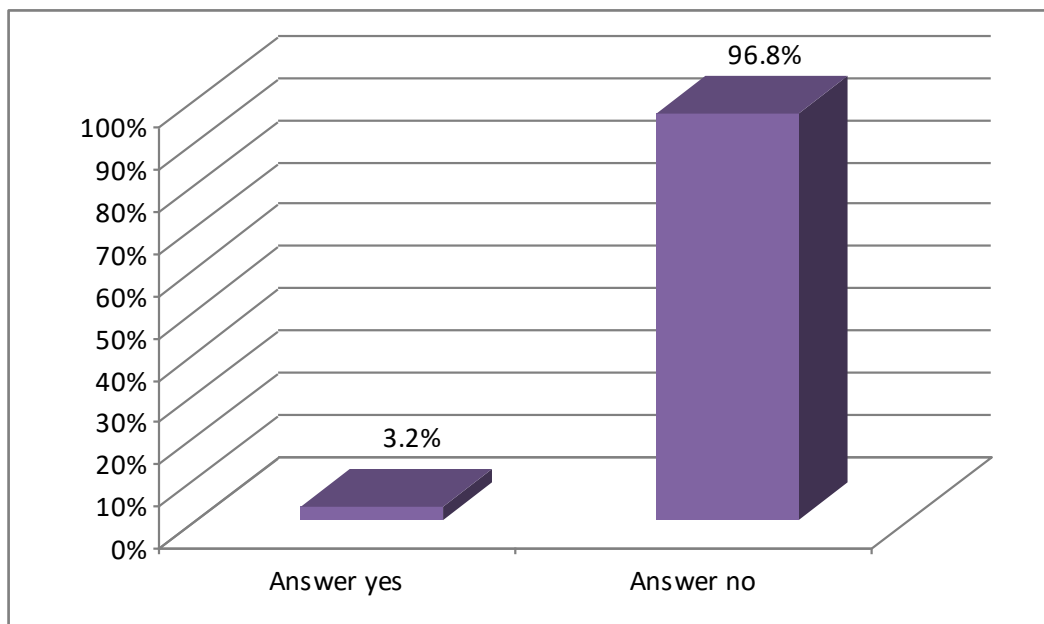


Figure 12. Declared answers to question No. 12.

Based on the research conducted on the importance of work in the life of the rescuer, the authors proposed categories of validity of motives present in the life of the rescuer:

- Category I - motivation to achieve the goal of the fastest removal of victims.
- Category II - acceptance by your teammates.

- Category III - appropriate work comfort taking into account its load.
- Category IV - motivation to achieve the goal of the fastest completion of the action.
- Category V - support for colleagues and superiors.
- Category VI - sense of security by performing by the life-saver itself safety-related activities.
- Category VII - satisfaction with your work.
- Category VIII - dominance of favourite activities by the rescuer.
- Category IX - creating a safe workplace.
- Category X - satisfaction with monthly salary.
- Category XI - limitation of activities not liked by rescuer.
- Category XII - the need to improve their qualifications for promotion.

Based on the suggested categories of validity of the motives present in the rescuer's work situation, the scheme "highlighted motives of the importance of work in the life of the rescuer" was proposed, which will be discussed during the pilot studies during the rescue training.

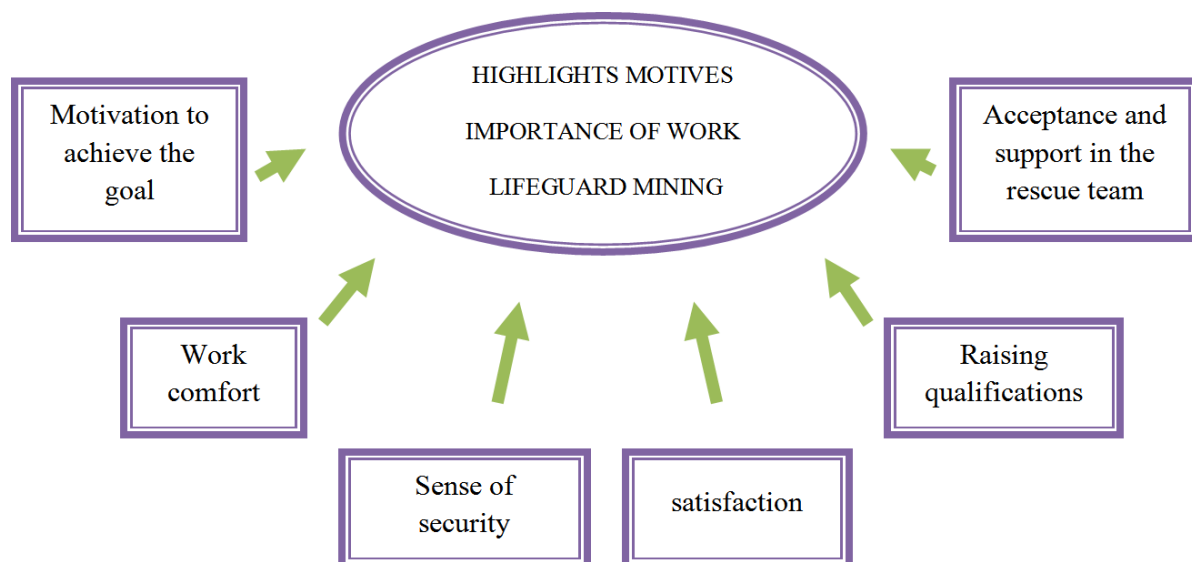


Figure 13. The motives of the importance of work in the life of the rescuer.

3. Summary

- Mining salvage is voluntary, and this is precisely the choice of the miner who has worked for a minimum of a year in a mining plant and additionally has to meet several criteria in accordance with the regulation. Therefore, it can be stated that the survey was carried out by employees with professional experience. They declared that 95.7% of the action motivates them to achieve the goal of the quickest completion of the action and 100% of the quickest way out.
- Each work, and its exact execution, involves paying for it. Rescue workers in 75.5% are happy with the salary, which indicates a positive attitude to work because it increases the comfort of life. In addition, 66% of lifeguards admitted to the need to improve their qualifications.
- The rescuers declared 99% of the acceptance of their colleagues, and 96% could count on support from their colleagues and superiors. Such results are very positive, which, through appropriate cooperation and support will certainly affect the safety at the workplace.
- Satisfaction with their work was expressed by 92.6% of rescuers surveyed, which has an impact on the importance of work in the mine rescue service with the specificity of teamwork.

- Analyzing the survey results, 12 categories of importance of motives present in the life of the rescuer were proposed. In addition, the scheme ‘highlighted themes of the importance of work in the life of the rescuer’ was proposed, which will be discussed during the pilot study during rescue training.

References

- [1] Warr P et al 2001 Encyklopedia Blackwella *Psychologia Społeczna* Jacek Santorski & CO pp 411-2
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