

# THE IMPACT OF PRACTICING SPORTS ON IMPROVING FITNESS, INTEGRATION AND MOTIVATION IN THE CONTEXT OF THE SAFETY OF FIREFIGHTERS OF THE STATE FIRE SERVICE DURING OPERATIONAL ACTIVITIES

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## Abstract

Sport is an important element of self-improvement and professional development of every person and above all of firefighters, since their service involves helping people and saving property in particularly dangerous and often quite extreme conditions. The article is an assessment of the impact of sports on the improvement of fitness, integration and motivation of firefighters in the context of safety during operational activities of State Fire Service units, based on two different environments - the District Headquarters of the State Fire Service in Włoszczowa and the Polish firefighters' team in firefighting sports. Empirical research was conducted using a survey questionnaire. The results of the research and the formulated conclusions summarize the article.

**Keywords:** sports, fire sports, motivation, State Fire Service, operational risk, safety

## 1. The essence of motivation in management and its importance

Work is an indispensable part of human existence. With it, we earn the money we need to meet life's needs and to be able to find fulfilment and make our own dreams come true. Work gives meaning to life, defines a person's status, increases activity and stimulates action. Our perception of work and performance in it depends primarily on our motivation and willingness, as well as on the work conditions of the workplace. There are many definitions that deal with motivation and motivating, and so the terms can be interpreted in multiple ways. The word motivation comes from the Latin *motus* - to set in motion, to move - and is associated with explaining

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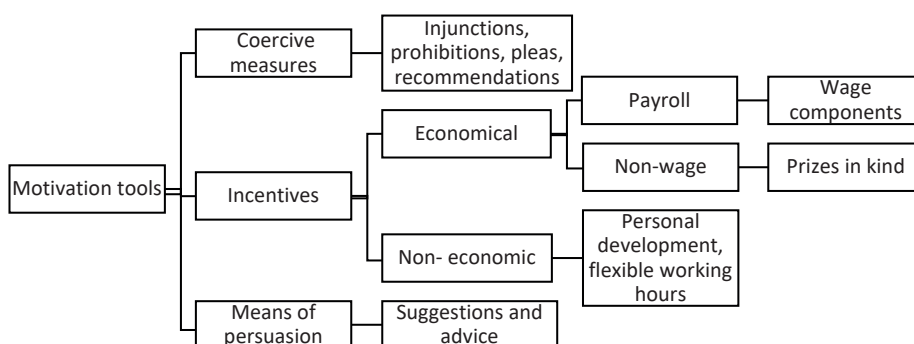
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and justifying the reasons for action. It is widely recognized that motivation is a state by which a person is capable of undertaking a certain action (Regulation of the Minister of Internal Affairs and Administration on the emoluments of firefighters of the State Fire Service of September 13, 2021). In the case of the discipline of management, motivation is a parameter that determines the direction, level and persistence of effort and hard work (Griffin, 2015). When an employee is well motivated they exude energy, ingenuity, commitment and creativity. However, the process of motivation is not the easiest to carry out smoothly. The goal of motivation is to achieve a state in which the employed person knows the company's overarching goals, submits to and identifies with them. However, the goals of employees and the organization are not always identical, which adversely affects the development of the company. These include, but are not limited to: remuneration that is too low in relation to the scope of duties performed, lack of support and proper motivation on the part of the boss, inadequate conditions or a disagreeable atmosphere. Therefore, it can be concluded that being familiar with the process of motivating and stimulating employees to act is important and is the key to success. There are three stages of motivation. The first one is the absolute subordination of the employee, the second is the clearly presented benefit of the employee's success, and the third is full commitment - the subordinate must understand that their diligence and conscientious performance of duties is in their interest and will bring diverse benefits (Stoner, Freeman, Gilbert, 2001).

There is also a concept of the degree of motivation. When motivation is too strong it can lead to stressful situations, even inhibit the desire to act. Such a state becomes manifested in distraction and helplessness which leads to the occurrence of numerous errors (Król, Ludwiczynski, 2010). Motivation that is too weak does not bring the expected results and effects either because commitment does not translate into the expected rewards. Thus, average motivation is most favourable to unravel difficult and complex issues such as those that require commitment and effective action (Regulation of the Minister of Internal Affairs and Administration on the emoluments of firefighters of the National Fire Service of September 13, 2021). Motivation is characterized by the fact that it can be of a diverse nature. On the one hand, a person finds motivation in work that provides opportunities for development, prospects, allows satisfying personal needs and meets expectations. On the other hand, employees can be motivated by praise, promotion or pay. In order to distinguish between motivation and motivating, it should be considered that motivation is a state that has an attributive dimension, while motivating is functional in nature and requires action (Regulation of the Minister of Internal Affairs and Administration on the emoluments of firefighters of the National Fire Service of September 13, 2021). An important role in motivation is played by the managers and their individual approach to the employee (Stoner, Freeman, Gilbert, 2001). The motivation process itself is characterized by bilateralism. It occurs between the employee and the manager and depends mainly on their mutual relationship. However, it is the supervisor who is responsible for the proper

application of measures expected to give sufficient results for the employees to be properly motivated, engaged and achieve high performance at work. It should be borne in mind that the most desirable aspect of motivation is a situation in which employees satisfy their needs, but at the same time properly carry out the tasks assigned to them (Regulation of the Minister of Internal Affairs and Administration on the emoluments of firefighters of the National Fire Service of September 13, 2021). There is a wide range of tools that affect motivation among employees. Motivation tools can be divided into three main groups: coercive, incentive and persuasive. Their detailed division is shown in figure number 1 (Regulation of the Minister of Internal Affairs and Administration on the emoluments of firefighters of the National Fire Service of September 13 2021).



**Figure 1.** Division of motivation tools

Source: own compilation based on (Pietroń-Pyszczek, 2007, pp. 9–10)

Coercive means were the earliest and most widely used tools of motivation, as a result of which this function is identified with physical coercion and command. They are distinguished by a high degree of imperativeness, which is due to the threat of sanction, i.e. punishment (Król, Ludwiczynski, 2010). Coercive measures include orders and prohibitions, as well as commands and recommendations indirectly threatened with sanction. The highest degrees of imperativeness are orders and prohibitions, which specify the behaviour itself, the deadline and the way the given task should be accomplished. They can also be referred to as commands. Coercive measures can also include a command. This term suggests an official obligation to perform a task ordered by a superior. Coercive measures also include recommendations. They do not specify the approach or deadline for the task, but are threatened indirectly with a sanction. Both orders and recommendations can be issued to employees individually and in groups. Motivation through coercive means is an effective form in situations where a decisive and quick decision is required, precluding agreement on the course or manner of action. These are usually situations that involve an immediate threat to health and life, an example being a rescue operation. In the case of incentives, the employee has a personal interest in doing the job well. Among the most well-known incentives are wage

incentives. These are used to determine base salaries, which are shaped on the basis of clear, obvious criteria by awarding a raise, for example. In the group of non-wage incentives, one can distinguish all kinds of material and monetary rewards (bonds and shares), social and living benefits, company car, laptop, phone, health insurance or medical care, etc.

The last group of tools are means of persuasion. They are distinguished by the fact that the motivator, together with the employee, agrees and decides on mutually beneficial and desirable goals and behaviours. Moreover, they differ in that they offer neither rewards nor punishments. They are an ideal complement to motivation tools. Means of persuasion include inspiration, suggestion and advice - counselling or coaching, but also less frequently used measures of an emotional nature, such as appeals. Various forms of employee participation in management are very important tools of persuasion. They involve participation in periodic or even daily staff meetings, where topics concerning the organization and the company's performance are discussed.

In summary, motivation tools affect employee behaviour to a great extent. They influence attitudes toward the supervisor and work, raise awareness and help build mutual relationships. In addition, they perform informative, disciplinary and educational functions. Thanks to them, people are definitely more willing to take on difficult challenges, deepen their knowledge, gain new experiences and perform their duties with commitment.

## **2. Incentive system of SFS officers and improvement of efficiency and integration**

Due to the nature of service in the SFS, firefighters are expected to be fit, not only physically but also mentally. As a high-risk profession – it requires extraordinary courage, responsibility for both their own lives and those of the others', so officers are often subjected to psychophysical tests. Service often takes place in difficult conditions, regardless of the weather, and firefighters must always be in full readiness, as each rescue and firefighting operation requires quick and flawless decisions. The incentive system for firefighters is legally regulated by the Law of August 24, 1991 on the State Fire Service (Polish Journal of Laws/Dz.U. 1991 no. 88, pose 400), the Decree of the Minister of Internal Affairs and Administration of September 13, 2021 on the emoluments of firefighters of the State Fire Service, the Law of December 22, 2021 on the establishment of the "Programme for Modernization of the Police, Border Guard, State Fire Service and State Protection Service in 2022–2025," the Regulation of the Minister of Internal Affairs of October 10, 2014 on rewards and allowances for firefighters of the State Fire Service and the establishment of a fund for rewards and allowances for firefighters. A firefighter who is on duty receives what is known as a basic salary and salary allowances. Courage, fortitude, conscientiousness, discipline and good physical condition are qualities that are

considered to be extremely important. However, during rescue and firefighting operations, one should also not forget to cooperate fully with other firefighters and take care of each other's safety. Integration of firefighters allows building mutual trust. Joint participation in exercises while on duty, sports activities, participation in courses, training, firefighting competitions, or staff social gatherings make firefighters feel comfortable and at ease in each other's company, which is also reflected during joint firefighting and rescue operations. As part of their professional development, officers are expected to participate in sports activities a minimum of two hours a week. Larger scale classes are also organised quite often, but due to the type of premises, as well as the equipment available, these vary considerably depending on the resources available to a particular fire and rescue unit. As an effect, the ability of firefighters to maintain a high level of physical fitness is not uniform but mainly depends on their commitment and determination. Officers who are on duty on a 24-hour basis are accompanied by sports activities every duty. The situation is slightly different for employees working in the 8-hour system, as organizing activities for them is more difficult. In such a situation, commanders try to take care of the health and fitness of their officers by allowing the use of swimming pools or gyms outside of work, or even during the last two hours of work, for example, on Friday (Regulation of the Minister of Internal Affairs on awards and allowances for firefighters of the State Fire Service and the establishing of a fund for awards and allowances for firefighters of October 10, 2014). There are no legal regulations in Poland that specify how to conduct training to maintain the required fitness among officers. However, there is an annual fitness check for firefighters and it is up to the firefighters themselves to decide if and how they keep themselves in shape. It is important that fitness tests are carried out conscientiously, and the approach and manner of conducting classes by the supervisor have an encouraging effect on sports, as thanks to training, firefighters can improve their fitness, mobility, efficiency and feel more confident and safer while executing rescue and firefighting operations (Ordinance of the Minister of Internal Affairs and Administration on detailed conditions of occupational safety and health for firefighters of the National Fire Service of 31 August 2021). Practicing of sports by firefighters, both individual and team sports, helps integrate the group and teaches that much more can be achieved through cooperation. Sports successes require a lot of sacrifice, regularity, effort and diligence. Officers receive primarily financial gratification for sports achievements, but also material prizes, the opportunity to go to higher level competitions - domestic or foreign.

### **3. Fire sports vs. fitness of SFS firefighters**

In fire sports, the Poles made their debut in the now-defunct Yugoslavia in September 1966 during the Third International Fire Competition organized by the International Technical Committee for Fire Prevention and Fighting (CTIF).

Competitions in fire sports are as follows:

- climbing with the help of a hook ladder to the third floor of the climbing room
- overcoming 100 m fire obstacle course - the team appoints 8 players to perform the task who perform the task individually,
- overcoming the fire relay, consisting of 4 sections of 100 m each
- combat exercises.

Currently, sports competitions are held every year, which allows officers to compete individually and as a team at the district, provincial and national levels. It is also worth mentioning that every two years, starting from 1995, the Polish championships in firefighting biathlon take place. The CTIF also organizes international competitions in this sport, while the International Federation for Fire and Rescue Sports is responsible for holding world and European championships. The rules for holding a sports tournament are set forth in the Rules of Competition in Fire Sports of April 24, 2013 (Regulation of the Minister of Internal Affairs of October 10, 2014). Fire sports is not only a demonstration of the fitness of officers, but above all, an element in preparation for the performance of duty and the implementation of tasks that very often require a great deal of physical effort, reflexes, speed of action or teamwork skills. In individual competitions, each competitor is allowed to make two attempts, and the better time is taken into account for classification. The participant who completed the task by regulation and achieved a shorter time is ranked higher. As regards the double-jump, the classification consists of adding up the times achieved in climbing the climbing frame and overcoming the one-hundred-metre obstacle course. When analysing the team classification in competitions such as the obstacle course or climbing with a hook ladder, the best times achieved by the six best representatives of the team are added up. As regards the fire relay, two teams of 4 are competing to represent a team, but the better result of one of them, achieved during two approaches, is taken into account. The final ranking of the teams is determined on the basis of the score obtained by the teams of a given team in all competitions, except for the double-jump, where 1<sup>st</sup> position is one point, second place is 2, and so on. The winner is the team that managed to get the lowest number of points. Climbing with the use of a hook ladder to the third floor of the climbing room is a discipline that requires endurance, precision and physical fitness from firefighters. The competition takes place on the so-called climbing room - a tall structure. After hearing the command "start", the firefighter starts running towards the climbing room holding the ladder in any way. When the competitor reaches the climbing room he hangs the ladder on the sill of the second storey, climbs up the ladder and sits on the window sill, he does the same on the third storey, and then makes a jump onto the floor of the third storey or onto the measuring device installed there. It is important to note that making the ladder in any other way than sitting on the windowsill will result in the disqualification of the competitor. The time of the competition is counted from the command "start" until the firefighter's second leg touches the ground on

the third storey of the climbing room or he turns the measuring device off (with the second leg). The 100-meter firefighting obstacle course is a competition that consists of covering a distance of 100 meters in the shortest possible time. At the command "start" or a short acoustic signal, the competitor starts on their track running with a streamer. At the 23rd metre mark of the track, they must overcome the first obstacle, which is a wall. After descending or jumping off the wall, the firefighter takes the two sections of hose prepared beforehand, coiled in a circle, runs with them to a balance beam set at 38 metres and climbs onto it. Then, the competitor merges the hoses together, connects one end of the hose line to the manifold, which is set just behind the balance beam, while connecting the other end to the nozzle and runs towards the finish line, unrolling the hose. It should be noted that the competitor can connect the hoses to each other, to the manifold and to the nozzle right behind the balance beam, in any way and order - both while running and while standing. Also it is important that at the time of connecting, the distributor must not be moved or lifted. The time to perform the competition commences from the command "start" until the competitor's torso (from waist to neck), touches the vertical plane of the finish line, at the height of the photocell that is at a height of about 1.2 meters from the ground. The 4 x 100-meter fire relay is a team competition. Each team consists of 4 competitors. The competitor starting first is equipped with a nozzle and a ladder. After the start, the firefighter runs to the house set at the 30th metre of the track and, using a ladder, climbs to its roof, runs on it already without a ladder to the platform, which he must touch with any part of his body, after which he jumps onto the track and runs to the change zone, where he passes the nozzle to the next competitor. It is important that the nozzle is passed from hand to hand, it must not be thrown. The task of the competitor on the second section of the track is to overcome the wall and pass the nozzle to the next representative of the team. The officer who covers the third section of the track must run to the hoses and cross the balance beam with them. He then connects the hose line, connects one section to the manifold, and then connects the other section to the nozzle. The nozzle with the hose section must be connected before the 280th meter of the track, and it is disconnected as soon as it crosses this line. In the change zone, the firefighter hands the nozzle to the last competitor. After receiving the nozzle, the competitor starts running towards the fire extinguisher, grabs it in any way they can, and heads with it to the bathtub, where using the powder in the extinguisher they must extinguish the burning mixture in the bathtub, consisting of 30 litres of water, 2.5 litres of kerosene and 0.25 litres of gasoline. The mixture is set on fire as soon as the second competitor crosses the wall. Once the fire is extinguished, the competitor puts the extinguisher down so that it does not touch the tub and continues running all the way to the finish line. In the event that the burning liquid cannot be extinguished, or if the primary extinguisher is damaged, the competitor has the right to use the reserve equipment, located 1.5 m in front of or behind the tub, on the right side of the track. The time to complete the task is counted in the same way as for the fire



obstacle course. The last competition is a combat exercise, commonly referred to as a “militia”. It involves 7 competitors. This is a run accompanied by real rivalry and a lot of excitement. The team is equipped with the appropriate equipment, namely: a motor pump, a Storz strainer, two sections of suction hoses, two coupler wrenches, 3 sections of W75 discharge hoses, 4 sections of W52 discharge hoses and also two nozzles and a distributor. The above-mentioned equipment is placed by the firefighter on the platform so that it does not protrude beyond it - only the suction hoses can protrude beyond the outline. What is more, the equipment must not touch the ground or be joined together. At the “start” signal, the team runs up to the platform on which the equipment is located and is allowed to do it by any means possible. Competitors unroll hose lines and aim two streams of water at the target holes of two tanks. When both tanks are filled with 10 litres of water, the activity is considered as passed and completed. When performing this task, it is extremely important to properly set the parameters of the motor pump, namely - the pressure on the discharge nozzle so that the water stream flowing out of the nozzle is compact (Regulation of the Minister of Internal Affairs of October 10, 2014).

#### **4. Operations versus operational risk and security**

Working in units of the State Fire Service involves full readiness while on duty, and each incident requires immediate response. Therefore, it is extremely important to check to what extent officers are prepared to carry out the tasks included in operational activities. Operational activities of SFS units are understood as all actions taken to save people’s lives and property, for example, by combating the effects of natural disasters or catastrophes. In addition, there are interventions related to fires, local threats, or false alarms. In order to assess the correctness of firefighters’ fulfilment of duties that are part of operational activities, operational readiness inspections are carried out. The main subjects of the assessment comprise the response time of firefighters from the moment of being alerted of the danger to the moment of departure from the place of stationing, as well as the equipping state of rescuers, the completeness and efficiency of the equipment on the fire engines and the amount of extinguishing or neutralizing agents. Ensuring operational readiness is the most important task of any unit. Rescue operations during an action are closely related to the concept of operational risk, since an incorrect, inappropriate decision or unforeseen events can result in loss of health, or worse, life. Operational risk determines how resilient and effective organizational internal processes are so that the organization can function smoothly and achieve its goals. Directly related to operational risk are security and business continuity. All three of these concepts form the so-called Risk - Security - Business Continuity triad. This triad stands for risk containment, which involves prevention against threats that disrupt the organization’s operations and ways to respond to eliminate them.



In managing operational risk, it is important to define the role of both management and employees. Effective risk management is contingent on using a process approach and integrating it into all management processes (Zawiła-Niedźwiecki, 2013). The way operational risk is managed is significantly influenced by the relationship of risk to the organization's resources. The ability to dispose of and maintain these resources at an appropriate level is seen as a manifestation of safety (Zawiła-Niedźwiecki, 2013). In the units of the State Fire Service, safety is an extremely important and key aspect. It is safe to say that during rescue and firefighting operations, the most important thing is the safety of rescuers, rescued people and property. It depends not only on the experience and training of firefighters, but also on the given situation, which during the operation changes in a dynamic and often unpredictable way. Ensuring the safety of rescuers is closely related to their awareness of the dangers lurking, which is why it is so important to constantly acquire knowledge and take care of physical fitness. The leader of the rescue operation is the person responsible for the safety of rescuers. After all, not only does the health and life of the rescuers themselves depend on them, but also the efficiency and effectiveness of operations.

## **5. Influence of practicing sports on improving fitness, integration and motivation of firefighters in the context of operational activities of SFS units**

The subject of the empirical research was the impact of sports on improving fitness, integration and motivation and safety of firefighters in the context of operational activities based on two different environments - the District Headquarters of the State Fire Service in Włoszczowa and representatives in fire sports. The research was carried out as an anonymous questionnaire, consisting of 24 questions sent out separately to employees of the command and representatives of the staff. Thanks to the survey, it was possible to ascertain to what extent does sport improve motivation, integration and safety of firefighters, how many hours are allocated to physical education classes in SFS units, and in what form and place they are conducted. The research had the character of a qualitative study and was conducted in November/December 2021 among both division and office employees of the District Headquarters of the State Fire Service in Włoszczowa and among officers from all over Poland who represent their unit in fire sports. Thirty-seven of the command's 47 employees and 100 staff representatives took part in the survey. The survey consisted of single-choice and multiple-choice questions. Participation in the survey was completely anonymous and voluntary, and the respondents were informed of the purpose for which the survey was being conducted. The results obtained are presented separately for employees of the Włoszczowa Fire Department and separately for representatives in fire sports.

**Table 1.** Summary of survey results (November, December 2021)

No.	Question for respondents (single-choice)	Answers	
		District Fire Department Headquarters in Włoszczowa	Personnel in firefighting sports
1.	Sex: Men Women	89% 11%	100% 0%
2.	Age: younger than 25 26–30 31–35 36–40 older than 40	22% 35% 30% 13% 0%	5% 65% 20% 10% 0%
3.	Education: vocational secondary higher	0% 32% 68%	0% 28% 72%
4.	Length of service in the SFS: less than 3 years 4–8 years 9–14 years 15–20 years more than 20 years	22% 38% 35% 5% 0%	5% 55% 30% 10% 0%
5.	Population in the locality of duty: less than 10 000 10 001 – 20 000 20001 – 50 000 50 001 – 100 000 10 001 – 400 000 more than 400 000	0% 100% 0% 0% 0% 0%	10% 30% 25% 27% 8% 0%
6.	Work system: 8 hour 12 hour 24 hour	19% 0% 81%	28% 0% 72%
7.	Position: trainee lifeguard/driver - lifeguard/technician junior insp./equipment operator spec, inspector/specialist - lifeguard senior insp./mid. Spec of the dept. specialist/section commander sr. spec./ shift commander / deputy shift commander comm. firefighting unit commander/assistant firefighting unit commander/man in charge Clerk/position for: organization/quartermaster/technical/managerial/ financial affairs commander/deputy /head of department	0% 41% 5% 11% 0% 0% 8% 11% 19% 5%	5% 60% 0% 10% 0% 0% 15% 0% 10% 0%

No.	Question for respondents (single-choice)	Answers	
		District Fire Department Headquarters in Włoszczowa	Personnel in firefighting sports
8.	Number of PE classes per week:		
	0–2 hours	24%	0%
	3–4 hours	22%	7%
	5–6 hours	41%	76%
	7–8 hours	8%	12%
	more than 8 hours	5%	5%
9.	Number of hours per week spent on doing sports:		
	0 hours	24%	0%
	1–4 hours	8%	7%
	5–6 hours	54%	76%
	7–8 hours	8%	12%
	more than 8 hours	6%	5%

Source: own work<sup>1</sup>

**Table 2.** Summary of survey results (November, December 2021)

No.	Question for respondents (multiple-choice)	Number of answers given by respondents	
		District Fire Department Headquarters in Włoszczowa	Personnel in firefighting sports
1.	A place to practice sports in spring and summer:		
	Swimming pool	0%	27%
	Clubhouse	9%	29%
	Climbing gym	22%	88%
	Artificial pitch	9%	94%
	Gym	37%	100%
	Gymnasium	25%	85%
	Grass pitch	37%	97%
2.	A place to practice sports in autumn and winter:		
	Swimming pool	0%	40%
	Clubhouse	15%	67%
	Climbing gym	17%	44%
	Artificial pitch	25%	83%
	Gym	37%	100%
	Gymnasium	29%	94%
	Grass pitch	25%	77%

<sup>1</sup> Research conducted under the direction of Ewa Frankowska

table 2 cont.

No.	Question for respondents (multiple-choice)	Number of answers given by respondents	
		District Fire Department Headquarters in Włoszczowa	Personnel in firefighting sports
3.	Form of activities:		
	Fire sports	19%	97%
	Pool	0%	40%
	Running	10%	81%
	Darts	0%	15%
	Billiards	0%	77%
	Gym	37%	100%
	Table football	29%	69%
	Table tennis	25%	86%
	Basketball	0%	17%
	Handball	0%	24%
	Soccer	37%	93%
Volleyball	37%	85%	
4.	Rating of the number of PE classes:		
	Sufficient	65%	57%
	There should be fewer	0%	0%
	There should be more	22%	43%
	There should be no PE classes	0%	0%
No opinion	13%	0%	
5.	The effects of playing sports:		
	I don't do sports	5%	0%
	Recognition with superiors	0%	0%
	Participation in competitions	25%	100%
	Possibility of faster promotion	2%	0%
	Easier passing of annual fitness tests	32%	99%
	Meeting interesting people	32%	97%
	Injuries	3%	27%
	Losing weight	15%	45%
Improving fitness, mobility and confidence	32%	100%	
6.	Reliability of conducting fitness tests:		
	Yes	67%	69%
	No	22%	26%
No opinion	11%	5%	
7.	Past sports history:		
	Yes	68%	91%
No	32%	9%	
8.	Attitude and manner of the supervisor:		
	Encouraging	76%	64%
	Not encouraging	13%	30%
No opinion	11%	6%	

No.	Question for respondents (multiple-choice)	Number of answers given by respondents	
		District Fire Department Headquarters in Włoszczowa	Personnel in firefighting sports
9.	The way to perceive an athlete: Positively Negatively No opinion	86% 0% 14%	88% 0% 12%
10.	Playing sports vs. career (promotion information): Yes No No opinion	87% 5% 8%	73% 7% 20%
11.	The impact of sports on integration and sense of security: Yes No No opinion I do not do sports	86% 0% 0% 14%	100% 0% 0% 0%
12.	The impact of sports participation on improving fitness and sense of security; Yes No No opinion I do not do sports	81% 0% 19% 0%	92% 0% 8% 0%
13.	The impact of playing sports on improving motivation: Yes No No opinion I do not do sports	86% 0% 0% 14%	100% 0% 0% 0%
14.	Physical fitness scale: 1 2 3 4 5 6	0% 14% 27% 32% 27% 0%	0% 0% 0% 9% 59% 32%
15.	Is doing sports important in taking care of health: Yes No No opinion	89% 0% 11%	100% 0% 0%

Source: research conducted under the direction of Ewa Frankowska, PhD

## **6. Conclusions of empirical studies**

The study confirmed that sports positively affect the motivation, integration, improvement of fitness and safety of firefighters, constituting an important element of self-improvement and professional development. The vast majority of respondents have a positive attitude towards sports activities at the workplace, and on top of that, they actively participate in them because they hope to achieve better mobility, fitness and conditioning, which are all extremely important during rescue operations. As regards the command's employees, when asked about the frequency of activities, 65% of them considered the number to be sufficient, while a large proportion of the staff representatives in fire sports (43%) said that there could be even more activities. Although sports require many sacrifices and above-average physical fitness, they allow better performance at work and improve the sense of safety. It is also noteworthy that for both command and cadres, the supervisor in charge of organizing physical education classes in the unit is perceived positively, and his attitude clearly motivates people to practice sports. As an effect, a presumption may be made that what the supervisor represents has a very strong influence on the attitude and conduct of firefighters. Only a small percentage of respondents state otherwise, which may have to do with, for example, a conflict between a supervisor and an employee, or simply classes conducted by the leadership cadre are not in the interests of the respondent and they prefer to improve fitness on their own. Interestingly, physical education classes most often assume the form of gym exercises and team sports that influence cooperation among employees, and among cadres - treated as a form of preparation for competitions - climbing gym exercises, among others. For many officers sports activities, in addition to positively affecting their daily fitness and form, contribute to easier passing of annual tests, participation in competitions, meeting many interesting people and integrating with colleagues. It is interesting to note that none of the surveyed representatives of the cadre in fire sports were promoted to a higher position. Perhaps another form of gratification, such as monetary or material rewards, has been adopted in the units where the respondents work. It should also be noted that many of the respondents rated their physical fitness as being very good, even excellent. Analysing both the responses of the command's employees and representatives in fire sports, the vast majority are of the opinion that sports have helped them get to know each other better and integrate with their co-workers and have significantly improved their fitness and sense of security, as well as their confidence during rescue operations. If someone takes proper care of their health, body, fitness and physical strength, it will have an impact on their mental condition, which is so important in the firefighting profession.

## 7. Conclusion

Work should be a place where employees can become fulfilled, build their self-esteem, feel noticed and appreciated, and develop their skills. What kind of approach we adopt to our duties depends on us, but above all on the attitude of the supervisor. They should unite the team, persuade them to cooperate, create a good atmosphere in the working environment, and motivate them to act. These activities, of course, are not the easiest, but certainly, they are worth the effort. This article addresses the aspect of sports in the life of a firefighter, as well as in an organization such as the National Fire Service. Sports and professional development in the life of an officer is extremely important - it allows enhancing speed, efficiency, fitness and readiness for action. All these qualities have a huge impact on the trust that citizens place in firefighters. It is not without reason that they are considered to be extremely brave people who are willing to help others. To summarise, working in the fire service involves a great deal of risk. In addition to physical fitness, it is extremely important for firefighters to be able to work in a team and make quick decisions - so the ability to make an accurate risk analysis and perceptiveness also counts. The officer should be aware that when making a decision, they are responsible for their own health and life, as well as that of as well as that of others who take part in the rescue operation.

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## WPŁYW UPRAWIANIA SPORTU NA POPRAWĘ SPRAWNOŚCI, INTEGRACJĘ I MOTYWACJĘ W KONTEKŚCIE BEZPIECZEŃSTWA STRAŻAKÓW STRAŻY POŻARNEJ PODCZAS DZIAŁAŃ OPERACYJNYCH

### Abstrakt

Sport jest ważnym elementem samodoskonalenia i rozwoju zawodowego każdego człowieka, a przede wszystkim strażaka, gdyż jego służba polega na niesieniu pomocy ludziom i ratowaniu mienia w szczególnie niebezpiecznych i często ekstremalnych warunkach. Artykuł jest oceną wpływu sportu na poprawę sprawności, integrację i motywację strażaków w kontekście bezpieczeństwa podczas działań operacyjnych jednostek Państwowej Straży Pożarnej na przykładzie dwóch różnych środowisk – Komendy Powiatowej Państwowej Straży Pożarnej we Włoszczowie i reprezentacji polskich strażaków w sportach pożarniczych. Badania empiryczne przeprowadzono za pomocą kwestionariusza ankiety. Wyniki badań i sformułowane wnioski podsumowują artykuł.

**Słowa kluczowe:** sport, sporty pożarnicze, motywacja, Państwowa Straż Pożarna, ryzyko operacyjne, bezpieczeństwo