

# Students' attitudes towards survival competencies before and after Covid-19 lockdown

## Authors' Contribution:

- ✍ A Study Design
- 📁 B Data Collection
- 📊 C Statistical Analysis
- 📄 D Manuscript Preparation
- 📁 E Funds Collection

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## Abstract

### Background and Study Aim:

Survival competencies should be one of the most elementary practical human skills. However, these competencies are not common both among contemporary young people and qualified adults. In 2020, societies around the world faced a new threat. This time it was a health-related threat – the Covid-19 pandemics. Lockdown, which was commonly used as one of the most important measures to fight the virus, has brought everyone before a new challenge – how to survive isolation. The main aim of the study was to provide the knowledge about attitudes of students towards survival competences before and after lockdown and whether isolation modifies these attitudes.

### Material and Methods:

Forty-four students (20 females, 24 males) of the University of Rzeszów took part in a questionnaire survey and an observation of survival classes conducted by the author. The first group ("before", BF code: 9 women, 12 men) was evaluated in 2019, while the second one was surveyed in 2020, one year after the Covid-19 lockdown ("after", AF code: 11 women, 12 men). In the questionnaire, the students stated i.a. the level of their survival competences, their motivation for the class, and their interest in this type of training. Their actual competences among Five Basic Survival Skills were assessed during a direct observation.

### Results:

Both groups declared to have comparable, relatively low competencies related to survival skills. Group AF declared to be more motivated to participate in classes and to have a significantly greater demand for survival training. As far as competences among Five Basic Survival Skills are concerned, the group AF obtained higher results. Students in the AF group claimed that lockdown had significantly contributed to their interest in survival competency courses.

### Conclusions:

As far as competences among Five Basic Survival Skills are concerned, the group AF obtained higher results. Students in the AF group claimed Isolation of students due to Covid-19 lockdown has increased their awareness of how necessary survival skills are. It has also substantially raised their motivation to participate in classes, thereby positively impacting effectiveness and interest in such trainings.

### Key words:

Five Basic Survival Needs • physical education in uniformed services • survival awareness • survival skills

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Authors have declared that no competing interest exists

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**Five Basic Survival Skills** – shelter, fire, food and water, first aid, rescue signalling.

**Survival abilities** – all traits, skills, knowledge and creativity needed to modify one's behaviour, depending on the situation and threats to health or life.

**Survival skills** – practical, manual, etc. skills needed to meet basic survival needs.

**SERE** – Survival, Evasion, Resistance, Escape (Evacuation), as a part of military training

**EFPA** – “extreme form of physical activity are extreme sports, often classified according to the environment in which they are performed (water, land, air), extreme form of physical recreation as well as gainful activity or voluntary service, and all varieties of physical activity that meet at least one classification criterion of the feature associated either with extreme risk of injury or death, or extreme body burden with high level of effort, or extreme coordination difficulty” [47, p. 19].

## INTRODUCTION

Survival competencies should be one of the most elementary practical human skills. However, these competencies are not common both among contemporary young people and qualified adults (e.g. Polish military pilots [1]). In 2020, societies around the world faced a new threat. This time it was a health-related threat – the Covid-19 pandemics. Lockdown, which was commonly used as one of the most important measures to fight the virus, has brought everyone before a new challenge – how to survive isolation.

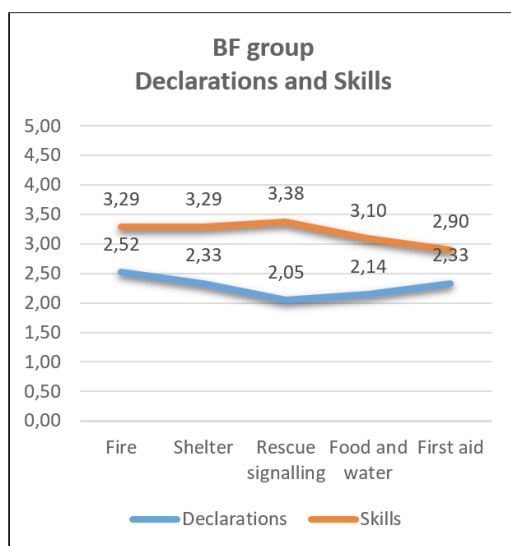
According to scientific studies to day [2-6], the forced isolation had a very negative effect on people's social behaviour and mental state. Restrictions imposed on social contacts was associated with rather common depressive conditions, among young people in particular. This demonstrates that there are serious shortcomings in broadly understood survival abilities. This term should be understood as all traits, skills, knowledge and creativity needed to modify one's behaviour, depending on the situation and threats to health or life. Such abilities are shaped as part of a professional training, e.g. in a military (SERE) and other services, and amateur activity (e.g. scouting). In the first case it helps acquire specific skills [7-10], and in the second one it is primarily practical and educational in nature [11, 12]. In addition, one part

(Resistance) of the military training (SERE) is dedicated to survival in captivity (forced isolation). High survival skills, apart from (somatic, mental and social) health, are also a measure of positive health in the broadest sense [13-15]. The phenomenon has been particularly pronounced during the pandemics.

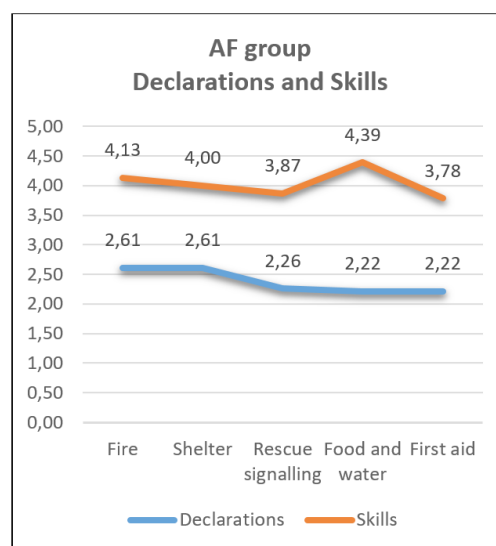
The main aim of the study was to provide the knowledge about attitudes of students towards survival competences before and after lockdown and whether isolation modifies these attitudes.

## MATERIAL AND METHODS

Forty-four students (20 females, 24 males) of the University of Rzeszów took part in a questionnaire survey and an observation of survival classes conducted by the author. The first group (“before”, BF code: 9 women, 12 men) was evaluated in 2019, while the second one was surveyed in 2020, one year after the Covid-19 lockdown (“after”, AF code: 11 women, 12 men). In the questionnaire, the students stated i.a. the level of their survival competences, their motivation for the class, and their interest in this type of training. After the classes, they were also asked to list the main skill among the so-called Five Basic Survival Skills (shelter, fire, food and water, first aid, rescue signalling). Their actual competences among Five Basic Survival Skills were



**Figure 1.** Students' declarations and assessment of their practical skills – group BF



**Figure 2.** Students' declarations and assessment of their practical skills – group AF

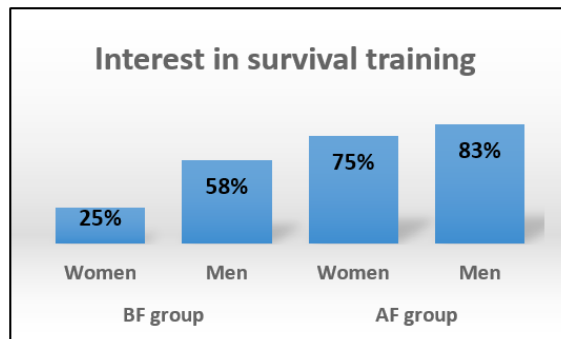
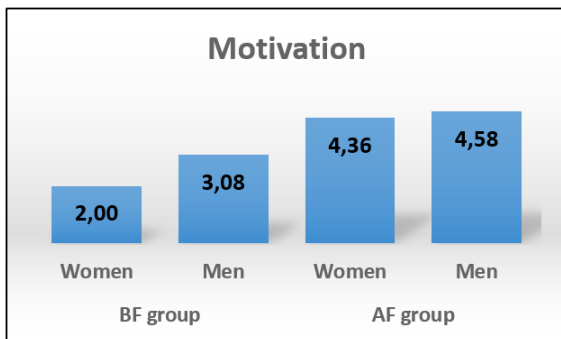


Figure 3. Students' motivation to participate in classes (scale 1-5)

Figure 4. Students' interest in survival training (yes or no)

assessed during a direct observation. Particular attention was drawn to students' creativity in solving subsequent tasks related to survival skills.

The validity of comparing the results of two independent groups of students (BF and AF) is based on the assumption of many similarities between women and men participating in identical (in terms of subject matter and number of teaching hours) classes included in the study programme in successive years. The ordinal variable shown on figures presenting the results is based on the principle from the highest ratio of the empirical variable to the lowest one.

## RESULTS

Both groups declared to have comparable, relatively low competencies related to survival skills (Figure 1 and 2 - Declarations), with men stating to have greater skills in both groups.

Group AF declared to be more motivated to participate in classes (Figure 3) and to have a significantly greater demand for survival training (Figure 4).

As far as competences among Five Basic Survival Skills are concerned, the group AF obtained higher results (Figure 1 and 2 - Skills). Students in the AF group claimed that lockdown had significantly contributed to their interest in survival competency courses.

Food and water (33%) and first aid (52%) were the most important skill among Five Basic Survival Skills (Figure 5 and 6) in group BF and AF, correspondingly.

During the individual interviews, the vast majority of AF students identified a deficit of social contacts as one of the most important negative effects of lockdown.

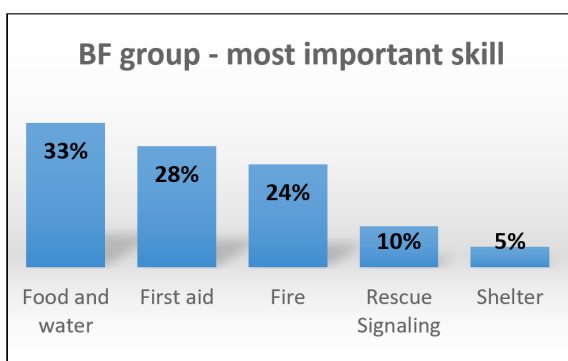


Figure 5. Most important skill – group BF.

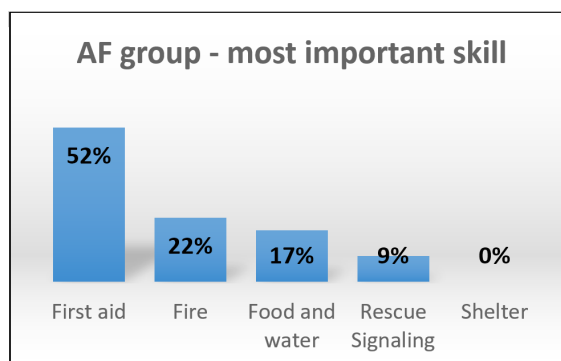


Figure 6. Most important skill – group AF.

## DISCUSSION

The Covid-19 pandemics has severely affected communities around the world. We have not experienced such an epidemic since the Spanish flu pandemics (1918-1920). Despite the awareness and inevitability of the threat of infectious diseases, we proved to be insufficiently prepared, both globally and personally. Taking objective factors contributing to the pandemics into consideration, huge mobility of people in the modern world in particular, attention should be drawn to lack of awareness of basic hygienic behaviour associated with the protection of one's own health and that of others. Irrational everyday behaviours, e.g. stockpiling food and toiletries, were as pronounced. Isolation of people (lockdown) was used as the main and obvious way to fight the disease from the very beginning. Young people have had a particularly hard experience, and it is estimated that at least 1.5 billion schoolchildren and students in 160 countries were not attending classes in the peak period of the pandemics (March 2020) because schools and universities were closed [16]. This has had negative effects, mainly on the mental state of young people.

The analysis of attitudes of the students surveyed particularly highlighted the effect of isolation on classes in survival abilities. In addition to a significantly increased motivation to participate in the classes among group AF, interest in survival education has significantly raised as compared to group BF. This may indicate that students became aware of their shortcomings in this area and found these skills elementary and needed in everyday life. It is also extremely significant that the group AF has chosen first aid skills (Figure 6) as the most important among Five Basic Survival Skills. This is empirical evidence of the demand for first aid education, especially in its survival variant (minimum resources and accessories), based mainly on improvisation (multidimensional simulations [17-23]). This conclusion corresponds with the results obtained by Kałużny in long-term stimulation studies [24, 25] and descriptions of observers of human behaviour in isolation for many months in extreme climatic conditions [26].

Therefore, the results of these studies and references to published theoretical and empirical findings provide an important argument that it is reasonable to implement both an extreme form

of physical activity [27-29] and elements of innovative agonology [30-33] at all education levels. It is necessary to take into account the need to overcome mental, cultural, administrative, etc. barriers [34-36].

By observing the students the author was also able to interview each participant individually. Opinions of students from group AF were particularly interesting. They emphasised that their attitudes were definitely determined by events related to lockdown. It raised awareness of survival, but most of all they quickly realised how valuable contact with their peers is. Even though modern communication technologies are widely available and the pandemic threat still exists, they definitely preferred a direct contact. This is another empirical proof that the concept of judo developed by professor Jigoro Kano from Japan in the 19th century [37-40] and the modern formula of fun forms of martial arts [41, 42] based on a direct contact between training people are of great importance for education and human psychophysical development. While judo in a professional sports formula, like almost any sport, may entail even death during competitions and trainings [43, 44], fun forms of martial arts used by competent didacticians bring benefits concerning all health-related dimensions [45] and are accepted by students [46].

In summary, it should be concluded that a person properly prepared for survival in terms of knowledge and psychomotor competences will be able to cope even when faced with the most difficult threats.

## CONCLUSIONS

Isolation of students due to Covid-19 lockdown has increased their awareness of how necessary survival skills are. It has also substantially raised their motivation to participate in classes, thereby positively impacting effectiveness and interest in such trainings. A deficit of social contacts identified by the students may have a negative effect on mental status of the respondents. This gives empirical grounds for further interdisciplinary studies, with particular emphasis on issues from psychology, sociology, ethics and other sciences.

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