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**ABSTRACT. Background:** The beginning of 2020, more precisely the month of March, when the Covid-19 pandemic was declared, represents the beginning of one of the darkest pages in the history of world sport. The reason is a wellknown one, namely the fact that the implementation of measures to prevent the spread of the SARS-CoV-2 virus have led to the cessation of competitions and the training process, for certain periods of time, in almost all sports. The aim of this study was to see how these measures have influenced the sports activity in Romania, especially that of the sports organizations from Caraş-Severin County (C-S). Thus, a number of 43 sports organizations from CS County were targeted, of which 39.3% being clubs/associations that work only at the level of children and juniors, 12.5% are clubs/associations that have only senior team, and 48.2% are clubs/associations that have both senior team and children/junior teams. All participants agreed that information could be processed and used for scientific purpose, and the study has obtained Research Ethics Approval from The Scientific Council of the Babes-Bolyai University of Cluj-Napoca. **Methods:** An online questionnaire survey was conducted, with 31 items, which aimed to outline an accurate picture of the existing situation among sports organizations, which was the situation of sports competitions in 2020, respectively the 2019-2020 season, which was the situation of the training process in the 10 pandemic months of 2020, but more importantly, what are the current situation of the training process and that of the competitive system. Results: Compared to the sports activity carried out at the level of CS county, a number of 8 team sports and a number of 12 individual sports were taken into account, the answers offered being in proportion of 73% from the coaches from team sports, and 27% from individual sports coaches. It was observed that in team sports 78% of the respondents showed that the 2020-2021 competitive season had not vet started until January 2021, while 14.6% it started and was interrupted. Only 7.3% of the teams are in full competition season, the 2020-2021 championship not being embodied due to the Covid-19 pandemic. It was also found that after the resumption of stopped training, as a result of the application of measures to prevent the spread of the pandemic, the number of

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children decreased both in individual sports and team games. **Conclusion**: Based on the results, we can see the negative impact of sports organizations that are in the lower leagues, as well as those that are at the level of children and juniors. The fact that training has not been resumed, the measures imposed by the pandemic, the fear induced by a possible infection with the SARS-CoV-2 virus can cause the disappearance of a significant number of sports organizations, which will have a negative effect not only on the performance sport, but also on the level of public health.

#### Keywords: sports clubs, Covid-19 pandemic, training, competition, lockdown

REZUMAT. Impactul covid-19 asupra antrenamentului în organizatiilor sportive din județul Caraș-Severin. Introducere: Începutul anului 2020, mai exact luna martie, atunci când a fost declarată pandemia de Covid-19, reprezintă debutul uneia dintre cele mai negre pagini din istoria sportului mondial. Motivul este unul arhicunoscut si anume, implementarea unor măsuri de prevenire a răspândirii virusului SARS-CoV-2 au determinat sistarea competițiilor și a procesului de antrenament, pentru anumite perioade de timp, în aproape toate ramurile sportive. Tocmai pentru a vedea modul în care aceste măsuri au influentat activitatea sportivă din România, în special cea a organizatiilor sportive din județul Caraș-Severin (C-S), a fost inițiat acest studio. Astfel, au fost vizate un număr de 43 de organizații sportive care își desfășoară activitatea în judetul C-S, dintre acestea 39.3% fiind cluburi/asociatii care activează doar la nivel de copii si juniori, 12,5% sunt cluburi/asociatii care au doar echipă seniori, iar 48,2% sunt cluburi/asociatii care au atât echipă seniori, cât și echipe de copii și juniori. Metode: A fost realizat o anchetă pe bază de chestionar online, cu 31 de itemi, care a urmărit conturarea unei imagini cât mai exacte a situației existente în rândul organizațiilor sportive, care a fost situația competițiilor sportive în anul 2020, respective sezonul 2019-2020, care a fost situatia procesului de antrenament în cele 10 luni pandemice din anul 2020, dar și mai important, care sunt situația actuală a procesului de antrenament și cea a sistemului competițional. Rezultate: Raportat la activitatea sportivă desfășurată la nivelul județului C-S au fost avute în vedere un număr de 8 sporturi de echipă și un număr de 12 sporturi individuale, răspunsurile oferite fiind în proporție de 73% de la antrenorii de la sporturile de echipă, iar 27% de la antrenorii de la sporturi individuale. S-a putut observa că la sporturile de echipă 78% dintre respondenti au arătat că sezonul competitional 2020-2021 încă nu începuse până în luna ianuarie a anului 2021, iar pentru 14,6% a început si a fost întrerupt. Doar 7,3% dintre echipe sunt în plin sezon competițional, campionatul 2020-2021 neîntrupându-se din cauza pandemiei de Covid-19. De asemenea, s-a putut constata că după reluarea antrenamentelor sistate, ca urmare a aplicării măsurilor de prevenție a răspândirii pandemiei, numărul de copii a înregistrat o scădere atât la nivelul sporturilor individuale, cât și la jocurile de echipă. **Concluzii:** Ca urmare a rezultatelor se poate constata pericolul în care se află organizațiile sportive care își desfășoară activitatea în ligile inferioare, precum și cele care activează la nivel de copii și juniori. Faptul că nu au mai fost reluate antrenamentele, măsurile de prevenire a răspândirii pandemiei, teama indusă de o posibilă infectare cu virusul SARS-CoV-2 poate cauza dispariția unui număr important de organizații sportive, ceea ce va avea un efect negativ nu doar asupra sportului de performanță, ci și asupra nivelului de sănătate publică.

Cuvinte-cheie: cluburi sportive, pandemie Covid-19, antrenament, competiție, lockdown

#### Introduction

2020 will remain a reference year in the history of world sport, being the year when, for various time intervals, sport activities, whether we talk about performance sport or grassroots sport, have ceased to exist.

The reason for the appearance of such a situation was the emergence and spread of SARS-CoV-2 virus, as well as the worrying global increase of diseases, facts that have led the World Health Organization to declare as of 11 March 2020 the emergence of the Covid-19 pandemic.

The Covid-19 pandemic has quickly spread, so governments all around the world have adopted various measures, primarily aimed at physical and social distance, which has led to lockdowns of businesses, schools, and overall social life (Bas, Martin, Pollack, & Venne, 2020). The need for measures such us: social distance, on-line school, suspension of the activity of some economic agents as solutions in order to reduce the spread of disease, has also disrupted many aspects of everyday life, obviously including here both sport and recreational physical activities.

To protect the health of athletes and others involved, but also to prevent the spread of the virus, the most important international, regional, and national sport events have been canceled or postponed – from marathons to football tournaments, athletics championships, handball, basketball, rugby, hockey, and more. The Olympic and Paralympic Games, for the first time in the history of modern games have been postponed and will probably take place in 2021 (Bach, et al., 2020). In addition to negative effects on sport and social issues, the implementation of these anti Covid-19 measures has significantly contributed also to the global economic evolution. It is recognized that the overall value of the sports industry is estimated at 756 billion dollars annually (Somoggi, 2020), but in the new context, globally, many millions of jobs are directly affected not only for sport professionals, but also for those in related retail industries and sport services, which include travel, tourism, infrastructure, transport, catering and mass-media among others. Large sport organizations have shown their solidarity with efforts to reduce the spread of the virus. FIFA, for instance, has teamed up with the World Health Organization (WHO) and has launched the campaign "Pass the message to kick out coronavirus", leaded by star footballers, in 13 languages, urging people to follow five key steps to stop the spread of the disease by focusing on: handwashing, cough, avoid touching the face, physical distance and stay home in case of sickness (FIFA, 2020).

In Romania, even if the evolution of diseases has not seen a galloping increase, to limit SARS-CoV-2 infection among the population the authorities decided the establishment of an emergency state as of 16 March 2020, initially for one month, then extended until 14 May 2020.

Practically, this was the period when on Romanian territory all sport activities were stopped, whether we discuss about training or competitions. In fact, these measures aimed to eliminate the possible agglomerations caused by the organization of various sport events which in Europe have caused outbreaks of SARS-CoV-2 virus spread (Wackerhage, et al., 2020). The measures taken in Romania were not different from most countries in the world, the few countries that have not suspended the sport competitions make some exceptions.

After the Second World War, the year 2020 was the period with the worst influences on the way we live, on health and economy (ibidem), but also with the worst moments in the history of sport, when not only the spectators/ fans were deprived of their presence on the stadium, but also athletes. Or, as it is well known, the lack of coaching periods causes decreases in physical capacities of athletes, each week means a decrease by around 10% (Peña, et al., 2020).

Because of limited opportunities to leave the house and to train intensively and systematically, when players are allowed to practice for a shorter period, they tend to overcome efforts to maximize the impact, which could increase the injuries and could trigger a feeling of doubt and frustration, the reason is as time passes without coaching or competition, the sense of self-identity of athletes is also contested. In addition, the pressure on performance athletes is also caused by ongoing replanning of sport coaching, trying to keep in shape, but they risk losing important sponsors, which, in turn, can no longer honor agreements initially concluded. Although most of athletes have been negatively affected by this situation, others might have considered it positively. This could include injured athletes, who following the suspension of competitions and coaching sessions had more time to recover (Samuel, Tenenbaum & Galily, 2020).

Thereafter, the lifting of the state of emergency and the setting up of a state of alert, until the end of 2020, period during which preventive measures on the new SARS-CoV-2 infection and combating the COVID-19 epidemic have

been adopted, offered the opportunity to resume coaching and certain competitions without the presence of the spectators, under strict rules, aiming continuously to avoid physical contact and maintain both personal and environmental hygiene rules. Although people thought restrictive measures had been relaxed, the rules to which clubs'/sports associations had to comply have created a lot of issues in resuming the activity at all levels competitive and all age groups. Thus, sport organizations have seen put themselves in a position to reviewing their entire coaching activity, they have to adapt also to the requirements of the new context, to be able to participate in organized competitions.

The result was as expected, in year 2020 in a very small number of national competitions the winners have been chosen on the field, the most affected being team games. There have been situations in which the final ranking was the one recorded at the time of the interruption of the championship as a result of the measures required by the adoption of the state of emergency or due to the state of alert, as was the case with the male and the female volleyball, or National Super League of polo or they have not been awarded the titles of champions, such situations having been recorded in the National Handball League (male and female), National Basketball League (male and female).

Thus, neither the activity carried out by athletes nor teams from Caraş-Severin County (C-S) could not make a note of discrepancy with the issue registered at national level.

### **Research design**

Ten months after the declaration of the COVID-19 pandemic, we have proposed ourselves to assess the impact of the measures implemented during this period on sport organizations from Caraş-Severin County.

In this respect we conducted an investigation based on online questionnaire aiming clubs'/ sport associations/ school establishments for extracurricular activities/ other sport entities contained in the national competitive system organized by the federations/ specialized leagues or other competitions organized at county level/ regional by structures subordinated to the specialized federations.

A number of 43 sport organizations acting in Caraş-Severin County were considered; 37 of these are public clubs, 5 private clubs, 6 sports associations and 8 other entities, this category includes schools for extracurricular activities (Children's Palace) and sport groups active in the National Minifootball Championship. 39.3% of these are clubs/ associations competing only at children and juniors' level, 12.5% are clubs/ associations with senior team only, and 48.2% are clubs/associations with senior team, but also children and junior teams too.



Figure 1. Disposal of research clubs

Typology of Sport Structures	Public club		Private club		Sport associations		Other	
Club/association/ children and juniors' team	14	63.64%	3	13.64%	3	9.09%	3	13.64%
Club/association/ seniors team	1	14.29%	0	0%	1	14.29%	5	71.43%
Club/association/ seniors + children and juniors	22	81.48%	2	7.40%	2	11.11%	0	0%

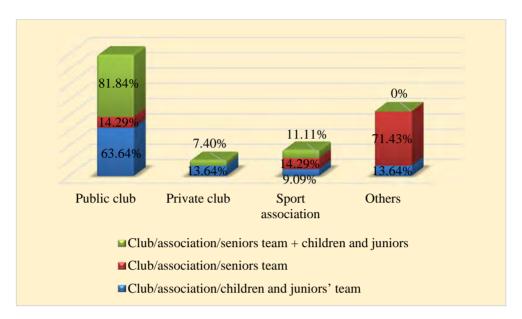


Figure 2. Typology of research sport structures

Competiti	<b>Competitive level</b>			
Leagu	2			
League 2		2		
Leagu	1			
National championships	National championships	10		
	children/ juniors	11		
	County /local championships	17		
County /local championships	League 5	2		
	children/ juniors	17		

**Table 2**. Clubs representation at a competitive level

The questionnaire applied consisted of 31 items aiming:

- the regular development of sport coaching at clubs/associations/sport organizations before the COVID-19 pandemic;

- the situation of coaching during the states of emergency and alert;

- which sports sectors/disciplines have more easily adapted to the measures required by the prevention of the spread of the SARS-COV-2 virus in the organization and conducting of coaching process and competitions;

- the situation of the completion of sport competitions held in competition year 2019-2020;

- the situation of the beginning of sport competitions for the season 2020-2021;

- if all the 2020 competitions were held according to the initial planning or some changes have been recorded.

The information requested was strictly related to the activity of coaches and children teams/ juniors/ seniors, i.e. of those involved in practice activity, which was intended to gather the most accurate information about the conducting of coaching and sport competitions since the Covid-19 pandemic started on the Romanian territory and about the implementation of preventive measures against the new coronavirus infection.

### **Results and debates**

Once the responses have been centralized, analysed and interpreted, we can state that among the respondents of the survey of this research 87% were male coaches, 13% were female coaches, and 71.4% of them coach children and juniors while 28.6% coach senior's teams.

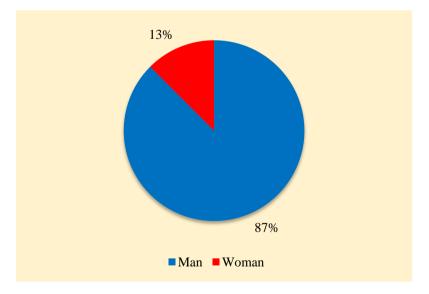


Figure 3. Gender of coaches participating in research



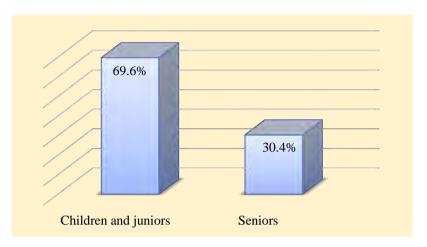


Figure 4. Age category that respondents are coaching

60.71% of coaches working with children and juniors' groups are men and 10.71% are women, while at seniors' level 26.79% of coaches are men and only 1.79% women.

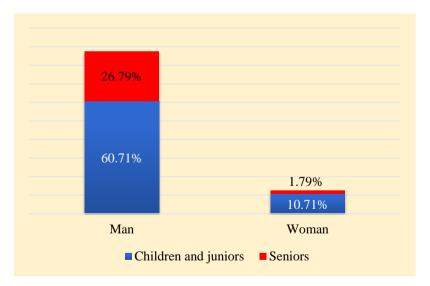


Figure 5. Coaches distribution by age and gender

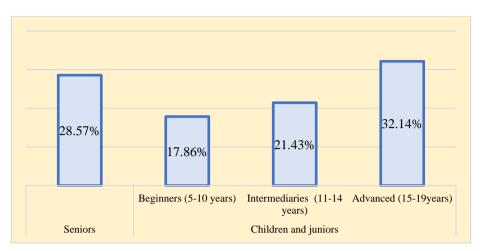


Figure 6. Coaches distribution by level of preparation

As regards the level of qualification of coaches we can notice a large group of qualified coaches, only 12.50% having no qualification in this area.

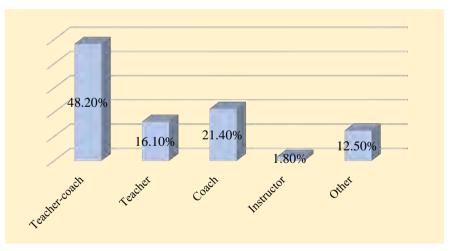


Figure 7. Level of qualification of respondents

Among coaches who replied to the questionnaire applied, related to the sports profile they coach, 73% are team sports coaches, and 27% are individual sports trainers. In Caraş-Severin County a number of 8 team sports and 12 individual sports were considered, 66.1% of respondents involved in research come from public clubs, 8.9% from private clubs, 10.7% sport associations, 14.3% from other sport organizations.

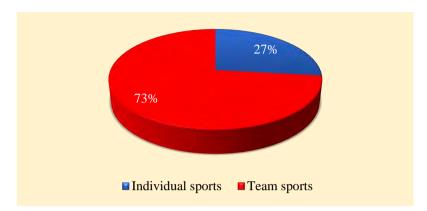


Figure 8. Profile of the sports they coach



Figure 9. Profile of responding sport structures

At the questionnaire answered teachers/coaches from 6 team sports, with the mention that basketball is a club in training, not participating in any sports competition, still at selection level, and teachers/coaches from 8 individual sports.

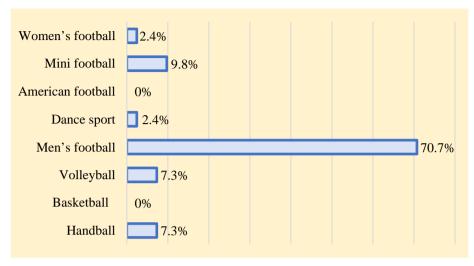


Figure 10. Representation of team sports included in this research

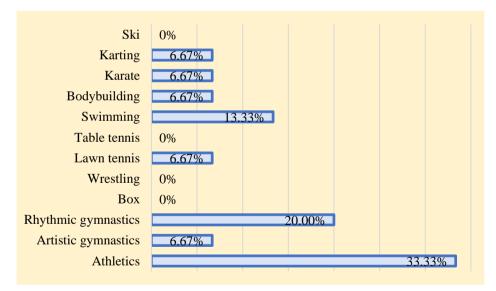


Figure 11. Representation of individual sports included in this research

From the responses provided by respondents who coach in individual sports, we can notice that at none of the sport disciplines included in this research, in 2020, for athletes from Caraş-Severin County sports competitions were no longer held according to the competitive calendar established at the beginning of the year, thus in 100% of cases the competitive calendar has

changed, whether we talk about competitions organized at national/ regional/ county or local level. As regards team sports, 100% of respondents state the league edition 2019-2020 was not completed on the field. In fact, only play-off games in League 2 of football managed to complete the championship 2019-2020 on the field, this was not the case of Reşiţa team.



Figure 12. Fulfilment of sports calendar in year 2020

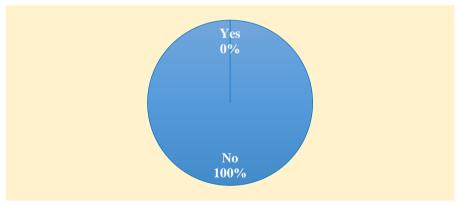


Figure 13. Completing the season competitions of 2019-2020

Nowadays, team sports coaches from Caraş-Severin County state that for 78% of respondents the competitive season 2020-2021 had not yet started by January of year 2021, and for 14.6% had started and interrupted. Only 7.3% of teams are in the middle of a competitive season, the championship 2020-2021 was not interrupted due to the Covid-19 pandemic.

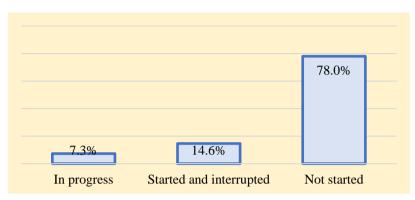
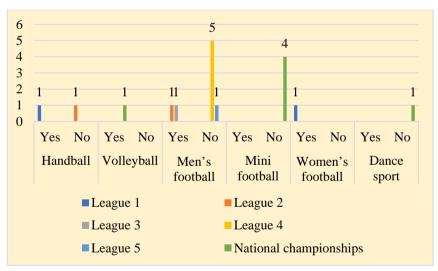


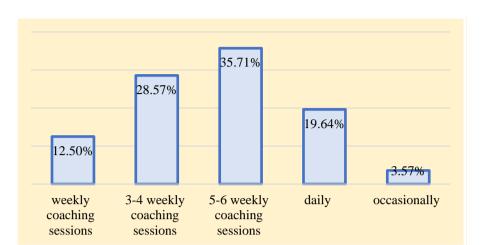
Figure 14. Situation of season 2020-2021 for teams from Caraş-Severin County

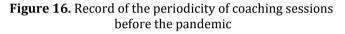
As regards team games in season 2020-2021, we can note that sport competitions started only for the top leagues, lower leagues as well as children and juniors' competitions have not started yet.



**Figure 15.** Record of the beginning of competitions in season 2020-2021 depending on team sport and category

Regarding the training schedule, before the Covid-19 begins, only 3.6% of respondent's state teams/athletes they are preparing had been coaching occasionally, for the rest 96.4% were coaching regularly, the number of coaching sessions varies from 1 to 2 weekly and daily.





Since the beginning of the pandemic until now, coaching programs of all teams/associations have changed, no sport organization has been operating normally.

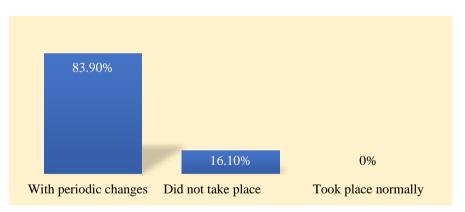
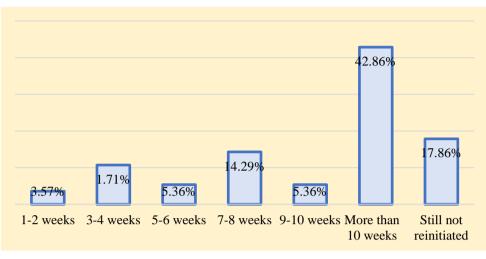
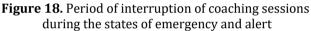


Figure 17. Record of changes in the coaching process during March-December

Most of the coaches (42.86%) state the period of interruptions of coaching has overcame 10 weeks, and in 17.86% of cases coaching has not yet resumed.





The period with the most rigorous measures for sport life in Romania was recorded during the state of emergency when 73.2% of coaches say they had no training session. As restrictions are relaxed, with regard to sport coaching the number of teams that reinitiated coaching has increased, the percentage of those who did not have any coaching session dropped from 73.21% to 17.86%.

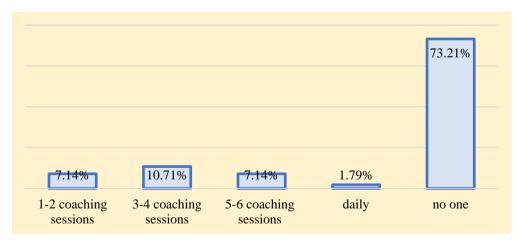


Figure 19. Frequency of coaching sessions during March-April

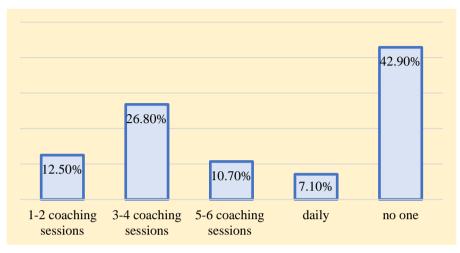


Figure 20. Frequency of coaching sessions during May-June

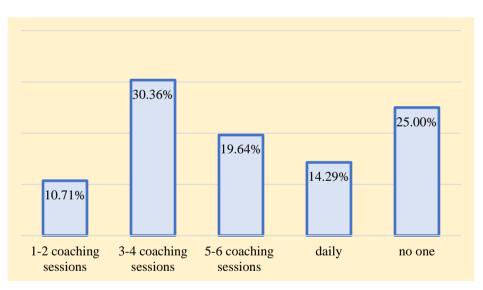


Figure 21. Frequency of coaching sessions during July-September

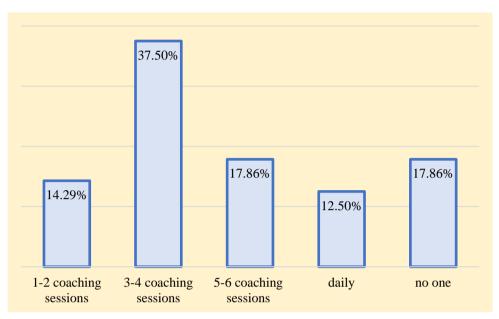


Figure 22. Frequency of coaching sessions during October-December

Overall, coaching activity has started to improve from one pandemic stage to another, but unfortunately, we are still talking about 17.86% of coaches who have not resumed the activity with their groups.

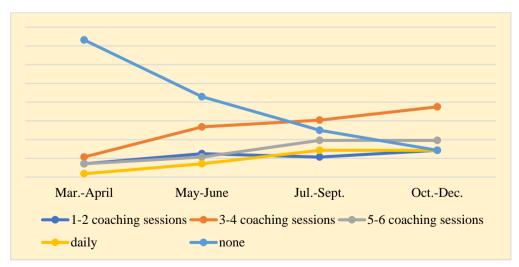


Figure 23. Evolution of the frequency of coaching sessions during March-December

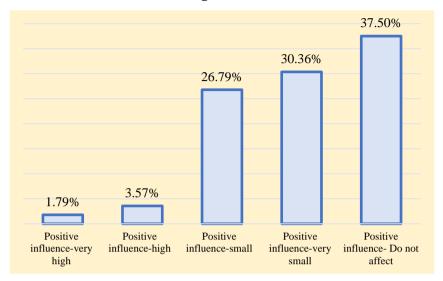


Figure 24a



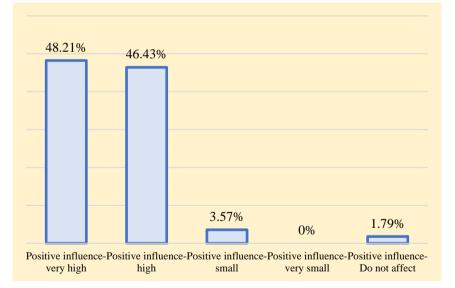


Figure 24 (a & b). Coaches opinion related to the influence of the measures imposed during the pandemic period on coaching

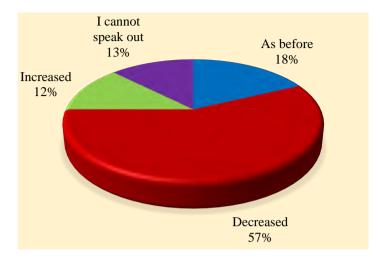


Figure 25. Percentage of children who have come/returned to coaching after the relaxation of restriction measures

We can notice that most of the decreases in the number of children were recorded in individual sports, coaches responded unanimously there has been a decrease in some disciplines. There have been decreases of players in team sports too, with one exception: the women football team, this is actually a team of seniors participating in League 1.

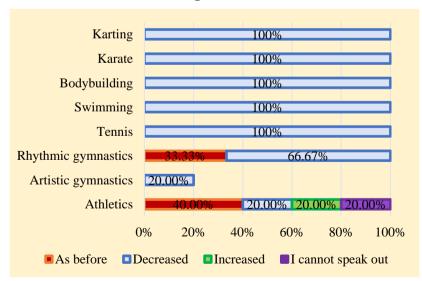


Figure 26a

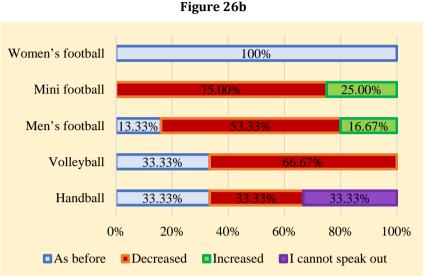


Figure 26 (a & b). Situation of coming/returning to coaching

in individual and team sports

Almost one year after the Covid-19 pandemic was declared, on Romanian Territory the clubs coaching process is carried out at 73.21%, adapted to the measures required to prevent the spread of SARS-CoV-2 virus and at 26.79% of teams the activity is interrupted.

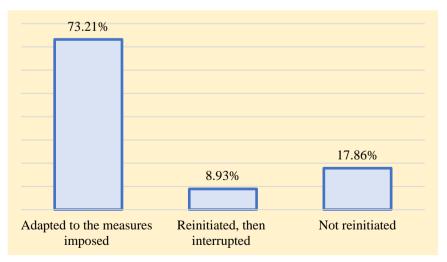


Figure 27. Current coaching methods

### Conclusions

Today, one year after the beginning of Covid-19 pandemic, we can state without fear of making a mistake there is no longer any activity which has not been affected by the measures required in an attempt to reduce the spread of SARS-CoV-2 virus.

The COVID-19 pandemic has had and will have significant effects on sports world, and the physical and mental well-being of the people in the whole world. In this respect, it is recommended that governments and other interested parties to support measures to reopen sports events safely and to support physical activity during and after the pandemic.

Regarding sport coaching, breaks caused by the restrictions have caused a decrease in athletes' efficiency, and the current measures, although much more permissive make training difficult, as 83.93% of coaches have pointed out, while 10.71% of those state breaks make coaching impossible. Most of the issues were encountered by teams in the lower, children and juniors' leagues where during this period, especially in teams' games no official competition has taken place.

The new context has led to a decrease in number of athletes in both individual and team sports. This is not a situation to create a favourable perspective for sport performance, long periods of inactivity stop the value growth of athletes, there is a risk that an increasing number of young people quit sport activities.

Moreover, even if it may be early to give a concrete perspective on the future of performance sport, as a result of the fact that the Covid-19 pandemic has not yet been eradicated, measures to prevent the spread of SARS-CoV-2 virus still exist, and researches still analyse the various influences that the pandemic had globally. With the examples so far, we can predict the major risk to disband many sports structures acting at the lower leagues, their financial support is increasingly difficult to achieve as a result to the financial issues faced by local authorities and economic entities.

### Acknowledgments

We would like to thank all the coaches who showed their willingness to participate in this research, trying in this way to outline a more accurate picture of the influences of COVID-19 on the activity of sports organizations in Caraş-Severin County.

### Authors' contributions

AIB designed the study, coordinated the data collection activity, participated in the analysis and interpretation of the results and edited the final version of the manuscript. IC participated in designing the analysis and interpretation of the study results. VMG participated in the design of the study, data collection and edited the initial version of the manuscript. All authors have read and approved the final version of the manuscript, and agree with the order of presentation of the authors.

### **Competing interests**

The authors declare that they have no competing interests.

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