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### Study regarding the impact of online pétanque teaching on university students

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#### **Abstract**

Aim. The aim of this paper was to highlight the students' level of knowledge about pétanque and its benefits, as well as their perception of this game and attitude towards it (and towards sport in general) after the online presentation made during the physical education lesson.

*Methods.* A sample of 180 first-year students aged 18-20 from the Politehnica University of Bucharest (UPB), participants in online physical education and sport lessons, were administered a 19-item questionnaire before and after the online presentation of pétanque with the help of MS Teams digital tool, a platform used for physical education and sport lessons.

Results. Analysing the administered questionnaires and finding out that only 37.5% of students performed physical activity in general, and 79.6% did not play any sport, it was justified for us to assume that their level of knowledge about the game of pétanque had been extremely low before the online presentation, namely only 25% had been informed about this sport, but after the online presentation, the percentage reached 55%. Following the online presentation of the materials on this game, students' interest in playing it increased from 55% to 87%. The success of the presentation and promotion of pétanque is supported by the relevant fact that, after watching the materials, 100% of participants stated they would recommend the game to others (friends, family, acquaintances), their arguments being the benefits of this sport, namely fun, health, social interaction, simple rules, team play, attractiveness, etc.

*Conclusions*. The questionnaire survey administered to UPB students showed that the online presentation of this game had a positive impact on the learning and evaluation of their theoretical knowledge about pétanque but also on increasing their ability to focus and actively participate in the lesson.

Keywords: pétanque, university students, physical education lesson.

### Introduction

Starting with March 2020, when the COVID-19 disease was declared a pandemic situation, the Romanian education system (but not only) had to adapt to online teaching and learning. At that time, the World Health Organization said it was urgent to "move online" because of the pandemic (WHO, 2020). Online teaching and learning imply a certain pedagogical content knowledge that is mainly related to designing and organising for better learning experiences and creating distinctive learning environments with the help of digital technologies (Rapanta, 2020).

University teachers had to prepare and adjust their courses for home teaching, using appropriate technical support (Hodges, 2020). In this context, the Politehnica University of Bucharest was forced to adapt and switch to online teaching using the Moodle and Microsoft Teams platforms. Thus, physical education and sport as a practical academic subject had no choice but to adopt digital education using the two above-mentioned platforms. This type of teaching was operational until November 2021.

Online education led to a decrease in motivation for active participation in lessons, which in turn caused a more pronounced decrease in educational competencies, a phenomenon characterised by stagnation with a tendency towards diminution. During physical education classes, the traditional instructive-educational process needed to be complemented with the benefits of technology so that these lessons could be more dynamic and fun to stimulate students' interest and thus increase their motivation for the activity performed (Grigoroiu, 2021).

Therefore, we had to change the structure of the online physical education lesson by including a theoretical part that contained various topics specific to the field of physical education and sport. One of these themes was the presentation of pétanque. This game is little known in Romania and falls into the category of boules sports in which players throw their boules towards a target ball (Christophe, 2011). Pétanque is not difficult to play because athletes only need to throw their boules to stop near the jack (Ramdan, Yasep, Fajar et. al 2021). "Pétanque is a sport that requires manipulative skills (throwing) and visual object control where athletes must throw boules to land close to the jack to get points" (Samsudin 2017).



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"The game technique is simple and does not require extra effort to be executed" (Balan, 2018).

In this game, which is included in the types of small ball sports, accuracy and strategy are very important. Regardless of age, position or gender, anyone can play this sport (Souef, 2015). Based on its main mechanical objectives, pétanque is considered a sport where the goal is to achieve maximum accuracy (Hermawan, 2012). This means that the throw must be stopped or hit the target so that the result of the throw brings the winning point (Ramdan, Yasep, Dwie et. Al 2021).

In pétanque, there are two types of throws that are called pointing and shooting (Ramdan 2019). The pointing technique is a throw that aims to bring the boules closer to the jack, while the shooting technique refers to a throw that aims to keep the opponent's boules away from the jack (Souef, 2015).

This game can be played on hard ground, grass, sand or other soil surfaces. In addition, a pétanque player must clearly know the basic techniques of this sport and master its specific skills.

In the international literature, there are a limited number of articles about the game of pétanque. As regards its implementation in the field of physical education and sport in Romania, no research has been found so far. Therefore, our goal is to contribute to complementing the existing database on this game with the data collected by us during physical education and sport lessons conducted at the Politehnica University of Bucharest.

### Materials and Methods Research Aim

The aim of this paper was to highlight the students' level of knowledge about pétanque and its benefits, as well as their perception of this game and attitude towards it (and towards sport in general) after the online presentation made during the physical education lesson using the MS Teams platform.

#### Research Methods

This study was based on the questionnaire survey method. The questionnaire took about 10 minutes to complete and consisted of 19 items (4 identification items - gender, age, occupation and education, and 15 subsumed to the dimensions pursued in the research), being self-administered before and after the online presentation of pétanque during the physical education lesson.

All the questionnaire items were mandatory, and the student could not move on to the next question before responding to the previous one.

The questionnaire is one of the most elaborate methods of quantitative and qualitative analysis, providing access to information that is more difficult to obtain by other means. (Epuran, 2005)

The questionnaire focused on the following information:

- 1. The students' level of knowledge about pétanque and its benefits before and after the online presentation made using the MS Teams platform;
- 2. The students' interest, perception of and attitude towards new sports (pétanque) before and after the online presentation of pétanque (PowerPoint and video collage).

The questionnaire was administered using the Google Forms platform, and the data were processed with the help of MS EXCEL (university license) and JASP (non-commercially restricted) programs. The questionnaire survey was sent to students using the MS Teams digital tool, a platform used for online physical education and sport lessons.

### Participants and Location

The study was conducted during online physical education and sport lessons in the second semester of the academic year 2020-2021 at the UPB Bucharest. The research sample consisted of 180 first-year students aged 18-20 from the aforementioned university. Students were presented the procedures and characteristics of the investigation prior to the beginning of the study, and they participated voluntarily, respecting the research conditions and ethical standards.

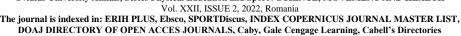
#### Research Design

This ascertaining study took place during the second semester of the academic year, namely in April and May 2021, when physical education classes at UPB were conducted only in online format on the Microsoft Teams and Moodle platforms. Each lesson lasted 100 minutes and was structured as follows: warm-up exercises in the first 15 minutes, and the next 40 minutes were dedicated to the fundamental part of the lesson, followed by cool-down stretching exercises for 5 minutes. The last 40 minutes focused on equipping students with basic theoretical knowledge in the field of physical education and sport, physiology and exercise hygiene, which were designed to facilitate students' awareness of the need for an active life (Grigoroiu, 2021). For this purpose, teaching materials were developed, which were presented in PowerPoint using the MS Teams platform.

Thus, in this last part of the lesson, the questionnaire survey was sent to students, who were asked to complete all its items. After this stage, they were presented a PowerPoint material with information on the game of pétanque, as well as a video collage meant to consolidate their notions about the rules of the game and its benefits.

At the end of the lesson, students were asked to complete once again the questionnaire survey to see whether there were changes in their knowledge about this game and their interest in this traditional French sport.







Starting with November 2021, hybrid courses were provided at the Politehnica University of Bucharest, meaning that physical education lessons started to take place on the UPB sports grounds. On this occasion, we organised workshops in which

131 of the 180 students participated voluntarily and had the opportunity to play the game of pétanque.

Analysing the administered questionnaires and finding out that only 37.5% of students performed physical activity in general, and 79.6% did not play any sport, and of those who did it, 35% played only football, it was justified for us to assume that their level of knowledge about the game of pétanque was extremely low. This was confirmed by the difference between the students' level of knowledge about pétanque before (25%) and after the presentation of online lessons (55%), as shown in Figure 1.

#### Results

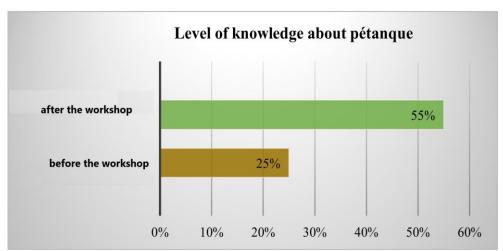
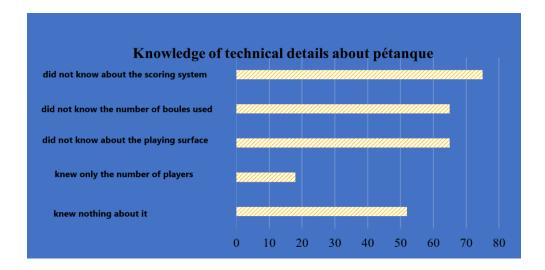


Figure 1. Level of knowledge about pétanque

Analysing the situation prior to the online presentation of pétanque, it was found, as seen in Figure 2, that 52% of students knew nothing about it, 18% knew only the number of players, 65% did not know about the playing surface (25% of them

mentioning cement, and 40% supporting the idea of any playing surface), 65% did not know the number of boules used (how many for each player and how many on the court), while 75% did not know about the scoring system





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Figure 2. Knowledge of technical details about pétanque

Prior to the presentation of the material on pétanque, therefore when students knew nothing about it, their interest in playing this game was 55% (Figure 3).

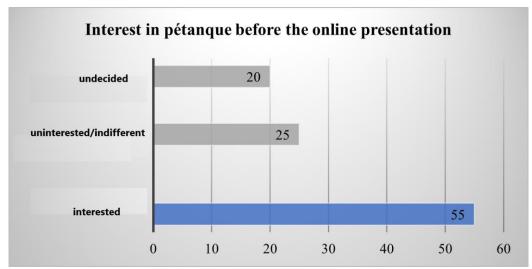


Figure 3. Students' interest in playing pétanque before the online presentation

After the PowerPoint presentation of pétanque, a significant change was found in the percentage of students interested in playing this sport (Figure 4).

Thus, 87% of respondents said they were open to play it (with arguments such as fun, attractiveness, health, socialisation, movement).

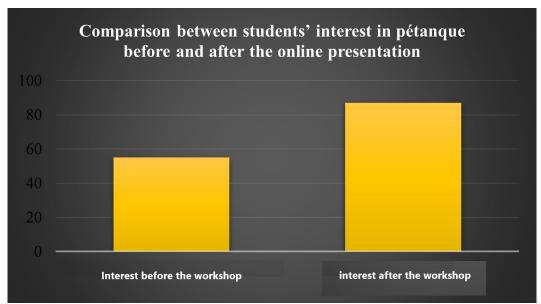
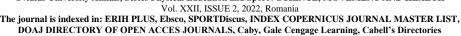


Figure 4. Comparison between students' interest in pétanque before and after the online presentation

The success of the presentation and promotion of pétanque is supported by the relevant fact that, the PowerPoint, after watching 100%

participants stated they would recommend the game to others (friends, family, acquaintances), their arguments being the benefits of this sport, namely







fun, health, social interaction, simple rules, team play, attractiveness, etc.

Most respondents believe that the disadvantage of playing this game is the weight of the boules (55%), as shown in Figure 5.

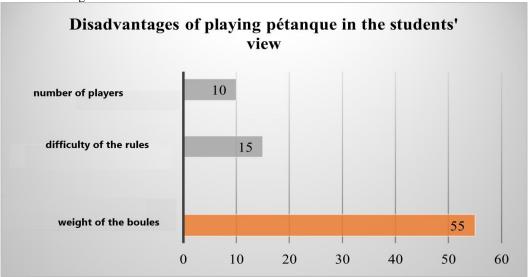


Figure 5. Disadvantages of playing pétanque in the students' view

Regarding the students' attitude towards learning the rules (difficult/easy level) and playing the game of pétanque, it was found that, after the online presentation, 95% of them no longer considered it difficult to learn, as they had said

before the PowerPoint presentation (Figure 6). So, the goals of gaining attention and increasing interest and the motivation to play it have been reached.

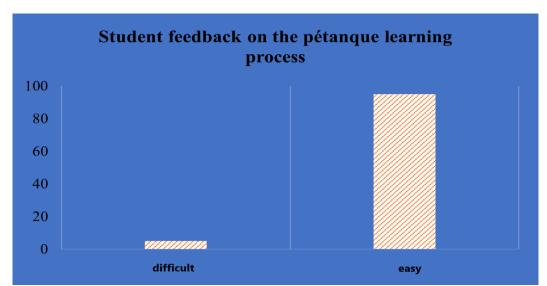


Figure 6. Student feedback on the pétanque learning process

Regarding the students' perception of pétanque, it was highlighted that 80% of them considered that its rules were not complicated at all, saying that they clearly understood them after the PowerPoint presentation and the video material about this game (Figure 7).



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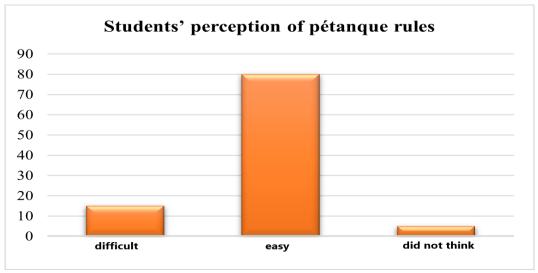


Figure 7. Students' perception of pétanque rules

It should also be noted that, after participating in the online presentation, over 75% of respondents (Figure 8) gained detailed knowledge about the

game infrastructure (number of players, scoring system, playing surface, refereeing, etc.).

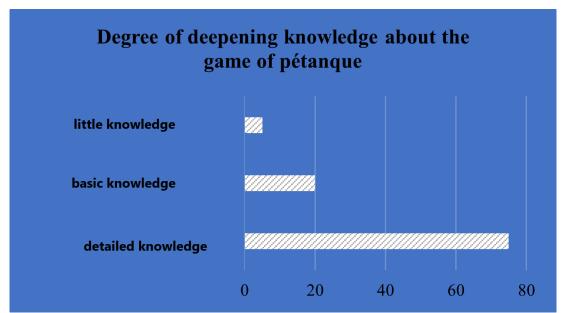


Figure 8. Degree of deepening knowledge about the game of pétanque

The game of pétanque is perceived by the respondents as interesting and attractive (over 70%), as a sport that stimulates competition (over

50%) and encourages fun/social interaction (over 70%), as shown in Figure 9.



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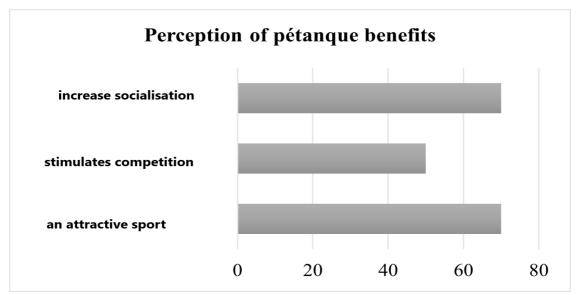


Figure 9. Perception of pétanque benefits

#### **Conclusions**

In conclusion, the above percentages indicate that the research objectives have been achieved. The online presentation of the game increased students' interest in new sports (pétanque), changing their attitude towards sport (greater openness) and exercise in general. At the same time, they acquired knowledge about the pétanque rules and practice, effectively popularising the benefits of sport in general (overall well-being, improved health, good mood, socialisation, competition, positive thinking, increased selfconfidence and ambition, etc.) and pétanque in particular. These benefits were intensely debated and assimilated by students during the presentation of the game).

The questionnaire survey administered to university students showed that the online presentation of this game had a positive impact on the learning and evaluation of their theoretical knowledge about pétanque but also on increasing their ability to focus and actively participate in the lesson.

Also, playing the game of pétanque was a unique experience during face-to-face physical education classes, which led to capturing the interest of students due to the opportunity of interaction between the teacher and other colleagues.

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All authors have equally contributed to this study and should be considered as main authors.

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#### References

Balan V, Gherghel CL, Mareș GA, Corbeanu M, Mujea AM, 2018, Technical Aspects Of The Bocce Game, Discobolul - Physical Education, Sport and Kinetotherapy Journal Vol. XIV no. 2 (52)

Christophe C, Petanque- la passion du jeu. Editura Hugo&Cie, 2011

Epuran M, 2005, Metodologia cercetării activităților corporale, ediția a 2-a, București: **FEST** 

Grigoroiu C, Pelin RA, Branet C, Pricop AD, Wesselly T, 2021, Usefulness of the kahoot! digital tool in the physical education and sport online university proceedings of the 17th international scientific conference "Elearning and software for education "Technologies and best practices", vol. II, Bucharest, Romania, pp. 365-372

Hermawan I, 2012, Gerak Dasar Permainan Olahraga Petanque. Jakarta: Deputi Pemberdayaan olahraga, Kemenpora.

Hodges C, Moore S, Lockee B, Trust T., & Bond,. 2020, The difference between emergency remote teaching and online learning. Educause March. https://er.educause.edu/articles/2020/3/t



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- he-difference-between-emergency-remoteteaching-and-online-learning
- Ramdan P, Anom RI, Yasep S, 2019, Study of correlation between power of the arm muscle and rom (range of motion) of shoulder with the results of 9 meters distance shooting in petanque athlete faculty of sport science state university of Jakarta, Indonesia European Journal of Physical Education and Sport Science volume 5 issue 9 pp 8-18
- Ramdan P, Yasep S, Fajar D, Liliana PS, Abdurrahman, Rizka A, Yusmawati, 2021, The effect of arm length, arm endurance and self-confidence on petanque shooting. Journal of Physical Education and Sport ® (JPES) Vol 21 (Suppl. issue 4), Art 319 pp 2381-2388
- Ramdan P, Yasep S, Dwie A, Sukiri, Intan S, Rizka A, 2021, Pointing skills training model for

- petanque athletes Jurnal Ilmiah Pendidikan Jasmani 5 (1)
- Rapanta C, Botturi L, Goodyear P, Guàrdia L, Koole M, 2020, Online University Teaching During and After the COVID-19 Crisis: Refocusing Teacher Presence and Learning Activity. Postdigital Sci. Educ. 2020; 2, 923– 945
- Samsudin NA, Low JFL, 2017, The effects of different focus of attention on throwing skills among autistic spectrum disorder children. Journal of Fundamental and Applied Science, s 2017, 9(6S), 1312-1322
- Souef G, 2015, The Winning Trajectory. Franch Copy Media
- World Health Organization (n.d.). Coronavirus disease (COVID-19) pandemic.