ISSN: 2148-1148

IntJSCS

International Journal of Sport Culture and Science (IntJSCS)

International Refereed Scientific Journal

Volume 9 Issue 1
March 2021

International Refereed Scientific Journal

International Journal of Sport Culture and Science
March 2020 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS

IntJSCS

INTERNATIONAL SCIENCE CULTURE AND SPORT ASSOCIATION

www.iscs-a.org

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International Journal of Sport Culture and Science
March 2020 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.622

Adaptation of Dual Career Scale to Turkish in the Elite Athletes

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Type: Research Article (Received:04.12.2020– Accepted: 21.12.2020)

Abstract

This study aims to make the adaptation of Dual Career Scale to the Turkish in the Elite Athletes and to examine the dual career phenomenon by considering the views of international students- athletes. "Dual Career Scale in the Elite Athletes" is a valid, reliable and suitable for measurement tool in terms of dual career planning of athletes. 111 student-athletes have participated in this study consist of taekwondo, karate, volleyball, basketball, kickboxing, weightlifting, fencing, rugby, shooting, ice hockey, muaythai, bocce, judo, darts, handball, wrestling, table tennis, athleticism and wushu branches, 51 of them are woman (45,9), while 60 of them are man (54,1). Total 30 questions have been asked to the participants and these questions cover the demographic information (1-7), sports and university participation (8-12), the familiarities of student-athletes to dual career policies, programs, initiatives, ability to use the documents and dual career support at the personal, sports and academic levels (13-21). The student-athletes have stated that they suffered from long-term absenteeism to university courses (64,9%), missing the university courses due to training periods (60,4%), limited leisure time (59,5%) and overload due to double responsibility (46,8%) while they continue their dual careers. In addition to this, the participants have expressed that they were not familiar to the policies, programs or measures supporting the dual career process (61,3%) and that they were not aware of the dual career policies or initiatives (70,3%), and the existence of dual career policy documents (65,8%). Their responses have been collected through electronic communication tools and processed in SPSS v.25 package program.

Keywords: Dual Career, Elite Athlete, Scale Adaptation

Introduction

Individuals are obliged to make important and critical decisions during the time period when they live. One of these critical decisions is about the career choices of individuals (Ivancevich, 2004). Career emerges as a concept which continues to protect its importance increasingly both within the scope of businesses and individuals. It is stated that it is very important in terms of career planning for individuals receiving education at universities to have short and long-term goals for their future, to make discoveries about their careers during their education, to make a career route and to progress in this direction (Orhan, 2016; Pala, 2016). Based upon the findings in the literature, it can be seen how career concept occupies an important place in people's daily life.

Career is defined as a process that includes the works performed by the individuals during their studies and all activities regarding the developments, they have achieved in their business life. (Güney, 2015). At the same time, this concept is also expressed as the efforts that an individual exhibits to promote from the lower level to the higher levels in field of study chosen by him/her and to gain high wages, responsibility, place and appreciation in this process (Şimşek et al., 2007). It is stated that career satisfaction also increases as long as the status increases in working life (Karakullukçu, 2018).

In other words, career consists of the attitudes and behaviours perceived by people about the experience that they have gained during their life. Career covers not only working life, but also it covers the roles outside of working life (Şimşek, 2007).

While only individuals give importance to career in the past, in the recent times organizations have begun to think people-oriented and to develop strategies related to the career (Mathis & Jackson, 1997). Only individuals, who can improve themselves and make their career planning in their business life, can be successful (Fenwick & De Cieri, 2004).

Career planning is a preparation process of individuals serving at different levels in the business to succeed at the specified purposes or process of using of their individual abilities in the future" (Mucuk, 2013).

When the career planning is handled from a different viewpoint, it is a process that enables the individual to determine his / her professional goals and to reach these goals by means of choosing the most convenient route (Özgen & Yalçın, 2010).

Stambulova et al. (2009) has defined the sports career as a long-term sports activity that is voluntarily preferred by the individual and that aims to reach the highest level of personal success in sportive performance in one or more sports branches.

As regards to career planning in sports, it is a problem-solving and decision-making process that aims to establish the most convenient connection between the values and needs of athletes and their sports experiences and opportunities (Bingöl, 2011).

Various career problems arising from the individual or occurrence of organizational management or undesirable situations are encountered due to the expanding organizational structure and the system malfunctions consisting of reasons such as competitive enterprises and decrease of level of control as a result of globalization and developing technologies (Kol,

2011). One of the special problems encountered in the career field is the dual career concept (Aydın, 2007). Dual career is defined that an individual has more than one expertise and receives education and gains experience in different fields (Bayraktaroğlu, 2008). Although having dual career is considered as a way in order for the individual to receive education in more than one field and to gain experience and to reach his/her goal, it is a more logical action for an individual to concentrate on one of his/her professional fields in terms of his/her success in the business life. For decision making at this stage, the fact that the individual focuses on the field with which individual is interested very much in accordance with his / her goals will make it easier to reach the targeted career by increasing his/her work satisfaction and motivation (Aytaç, 2005).

Normally, the student, who has a sports background before he starts university education, tries to continue his/her sports career coming from the past throughout his/her school life. Accordingly, most of the students receiving education in the field of sports sciences are also athletes. Because athletic students are very much interested in sports, whether they continue their active sports life or not, they make application and work for jobs related to their branch or sports field to which they show interest in order to earn money even during their student years. It is known that students in this situation attend short-term certificate and document (coaching, being a trainer, refereeing, life coaching, etc.) programs before they finish their university education. It is an undeniable fact that the education received at the university and the diploma obtained after graduation are much more valuable than the programs and documents received to get a start in the business life in a short time (Bozyiğit & Gökbaraz, 2020).

When the literature is reviewed, it is observed that there are very few studies about the career planning of athletes. At this point, Giancarlo Condello et al. (2019) have developed a valid, reliable and suitable for purpose dual career scale towards dual career planning of elite athletes (Condello et al., 2019).

Within the scope of this research, it has been aimed to carry out Turkish Adaptation of Dual Career Scale in the Elite Athletes developed by Giancarlo Condello et al. (2019) and to perform its validity and reliability study.

Material and Method

This research aims to make Turkish adaptation of dual career scale in the elite athletes and to ensure its equivalence in terms of language and structure. In the scale adaptation process of the research, the English form, which is the original language of the scale, and Turkish form, which was adapted and controlled by field experts, has been applied to a study group consisting of 111 people to ensure the validity of language. By taking the parametric test assumption into the consideration, minimum sample size has been aimed to be at least 90 in the calculation of the correlation between two forms to ensure the validity of language (Köklü et al., 2007). In this context, thanks to the sampling method, which can be found easily, the application has been made on the participants who were volunteers and had the command of both languages.

Dual Career Scale in the Elite Athletes: Within the scope of the research, "Dual Career Scale in the Elite Athletes" has been used to evaluate dual career plans for students and athletes who are interested in sports.

Total 30 questions consisting of single or open-ended questions have been asked to the students and athletes participating in the research. These questions cover the following issues;
• Demographic characteristics which include the information about the branch, age, gender, educational background, professional field and previous sports experience (S1-7),
• Time spent for sports participation and transportation from home to the training area, time spent for transportation from the education and education place to the training area, sports and university participation which includes the problems encountered while performing the education and sports life together (S8-12),
• Familiarity and awareness of student and athletes about dual career policies, programs, initiatives and the availability of documents in their country and existing possible sources of information (Q13-21),
• Dual career support that athletes receive in person, sports and academic levels (S21-30)

In addition, it has been enable the participants to provide more detailed information about their responses to questions asked regarding their previous sports experience, the problems emerging in combining of sports and education, dual career policies, possible sources of information for programs and initiatives, bodies responsible for dual career and monitoring systems, dual career support and anticipated improvements at the corporate and personal levels.

Participants have been reached via social media, and they have been allowed to answer questions online and voluntarily. The athletes have been informed that they could withdraw from this study at any time without showing any reason.

Sport typology is categorized as individual in the form of (for example, karate, kickboxing, weightlifting, shooting, muaythai, bocce, athletics, fencing, judo, darts, table tennis, taekwondo, wrestling and wushu) and as team sports in the form of (for example, basketball, rugby, ice hockey, volleyball and handball) and as age in the form of 18-22, 23-27,> 27.

Department of the university is categorized as Social and Human Sciences (for example, business and management, communication, environmental sciences, human sciencesas , language-foreign languages, law, political-international sciences and psychological-pedagogical- social sciences) and as Physical Sciences and Engineering (for example, computer science, engineering and architecture, mathematics and physics) and as Life Sciences (for example, biomedical sciences, medicine and sports sciences) according to the European Research Council (2019).

Authors who developed the scale, original language of which is English, have been contacted by e-mail and permission has been requested them to carry out its Turkish adaptation. After the permission was obtained, the scale has been translated into Turkish by three experts who were familiar with the language of the scale developed in English and who are interested in the field of the developed scale. The translations made by the experts have been brought together and transformed into a single form, after they were evaluated in terms of their suitability to Turkish culture, the opinions of Turkish language experts as well as experts in the field of measurement and evaluation have been taken. Following the last changes, the final form of the scale, which was adapted to Turkish, has been translated into the original language by three other language experts, other than the experts who had the command of English language who were first determined. The translation made has been compared with

the original scale, which was made into a single form, and its consistency has been examined in terms of language. It has been reached the conclusion that there was no incoherency between the articles of scale in the original language and the articles of the scale which was translated back from Turkish to English (Hambleton et al., 2004).

While the application was carried out by the researcher himself/herself, it has been collected through electronic communication tools. In the application form, the participants have been given information about the purpose and importance of the research, the measurement tool used in the research has been introduced, and those who accepted to participate in the study on a voluntary basis have been included in the scope of the study.

This study has obtained approval from the Ethics Committee of Gazi University Assessment and Evaluation Ethics Sub-Working Group pursuant to the meeting dated 06.06.2020 and numbered 06 and the decision with 2020-355 research code.

At the analysis stage, the statistical significance level has been selected as $p < 0.05$ for all calculations and the data have been processed in the Statistical Package for the Social Science (SPSS) v.25. Single answer system (for example, 1,2,3,4,5,6,17,24,25) has been implemented in some of the questions asked to the participants, while multi-answer system has been implemented (for example; 7,12,18,19,20,21,22, 23,26,27,28,29,30) in other some questions. It has been allowed the participants to process their own values in the questions asked in the context of the sports and university participation and in the analysis phase, 3 classes (<11, 11-20 and 20 <hours) for questions 8 and 10, and 4 classes for questions 9 and 11 (<30, 31- 60, 61-90 and 90 <minutes) have been established.

A two-sided approach method has been used for inferential statistics. Firstly, Kolmogorov-Smirnov test has been applied to determine the normality of data distribution for the data obtained from questions 8-12. By taking into the consideration that data have not been normally distributed, paired comparisons for sports typology (e.g. individual and team sports) and department of university (e.g. social and human sciences, physical sciences and engineering and life sciences) and for sports and university attendance (weekly hours) and for the time required to travel from home and university to the training facility (in minutes in each direction) have been performed via Kruskall Wallis.

Cohen's effect (d) coefficient has been calculated for the differences observed in the parametric statistical analysis by taking into account insignificant (≤0.2), small (0.3-0.6), medium (0.7-1.2), and large (1.2 <) information (Cohen, 2013).

Findings

The findings belonging to the study are presented under four headings.

Question 1-7: Demographic information

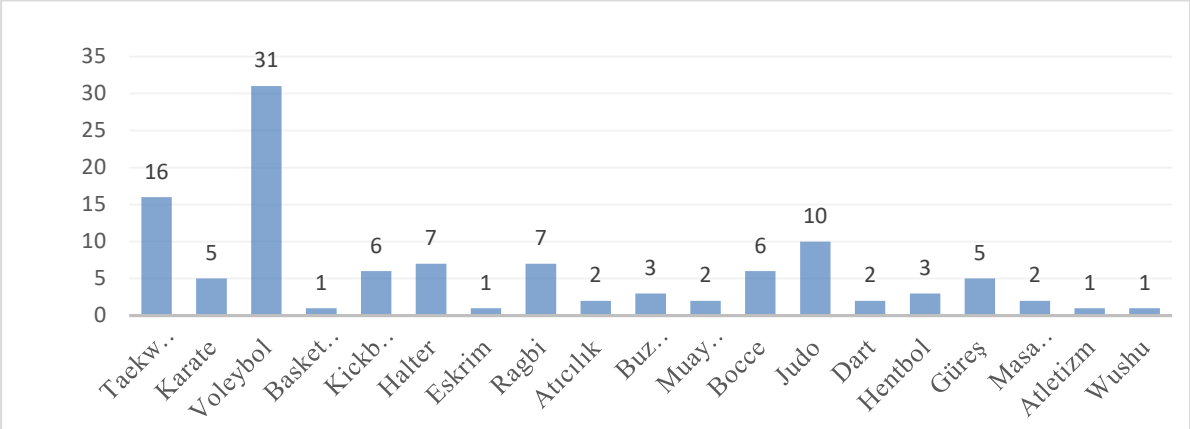
111 athletes take place in the research. 45,9% (n = 51) of the athletes participating in the research are women and 54,1% (n = 60) of them are men. When Graphic 1 is examined, it is seen that the athletes participating in the research engage in 19 different branches. These branches consist of karate, volleyball, basketball, kickboxing, weightlifting, fencing, rugby, shooting, ice hockey, muaythai, bocce, judo, darts, handball, wrestling, table tennis, athletics

and wushu. Volleyball is the most preferred branch with 27.9%, while taekwondo takes place on the second rank with 14.4% and judo takes place on the third rank with 9%.

While 59,5% (n = 66) of the athletes participating in the research are interested in team sports, 40,5% of them are interested in individual sports (n = 45).

While 61.3% (n = 70) of the athletes participates in an international competition for the first time, 36.9% (n = 41) of them takes place in an international competition before. There are single and multi-participants in international competitions from among these athletes. It has been stated by athletes that while 1.8% of them have participated in the Olympic Games, 17.1% of them have participated in the World Championships, 90.9% of them have participated in the World Cups, 94.5% of them have participated in the World University Championships and all the participants n = 111 have participated in other international competitions.

Graphic 1. Distribution of the participants according to their branches

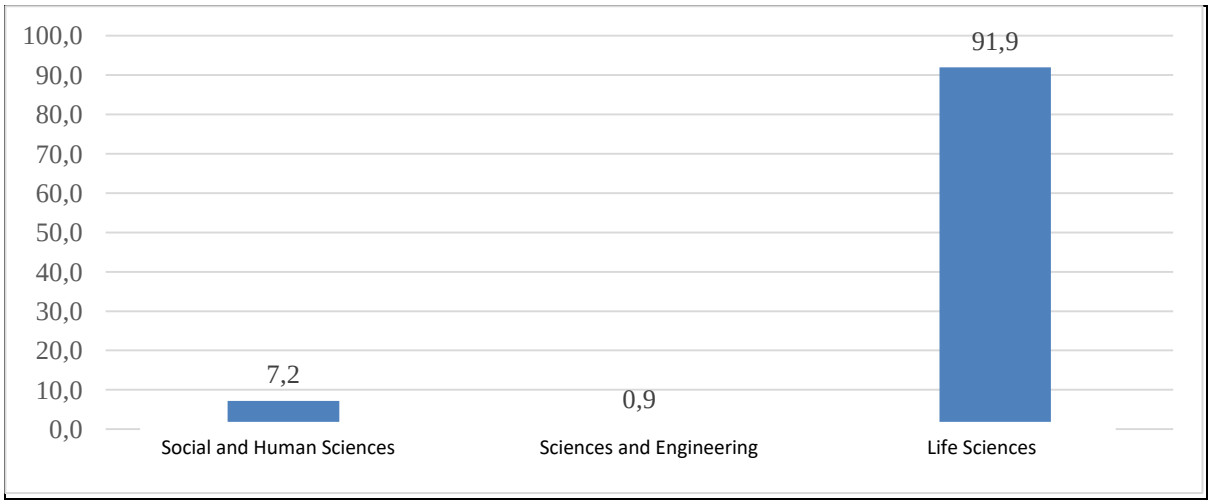


When distribution of the participants according to the age is examined; It has been determined that 40,5% of them (n = 45) were between 18-22 years old, 31,5% (n = 35) were between 23-27 years old, and 27,9% (n = 31) were above 27 years old.

When the education status of the participants shown in Graphic 2 is examined; It has been determined that 86,5% (n = 96) of the student-athletes had a bachelor's degree, 9% (n = 10) of them had a master's degree and 4,5% (n = 5) of them had a doctorate degree.

When the graduation status of the participants is examined; It has been determined that 7,2% of them (n = 8) graduated from social and human sciences, 0,9% of them (n = 1) graduated from science and engineering field and 91,9% of them (n = 102) graduated from life sciences.

Graphic 2. Distribution of the participants according to the department of the university



Question 8-12: Sports and university participation

It has been determined by the Kolmogorow-Simirnov test that the data did not show normal distribution. Then, Kruskall Wallis test has been used for two-sided comparisons. In two-sided comparisons, while the independent variables have been determined as sports typology (e.g. individual and team sports) and university department (e.g. social and human sciences, physical sciences and engineering, and life sciences), dependent variables have been determined as sport and university participation (in hours per week) and the time required (in minutes for both) to transfer from home and from the university to the training place have been determined (in second for both of them).

It has been understood that sports typology (team / individual) did not have any significant effect on sports participation ($p = 0.193$, Cohen's $d = 0.25116$) and university participation ($p = 0.343$, Cohen's $d = 0.01628$). Similarly, sports typology has no effect on going from home to the training facility ($p = 0.901$, Cohen's $d = 0.011003$) and going from school to the training facility ($p = 0.629$, Cohen's $d = 0.008616$).

In addition to these, it has been observed that university area did not have any significant effect on sports participation ($p = 0.182$, Cohen's $d = 0.065996$) and university participation ($p = 0.528$, Cohen's $d = 0.019633$) and going from home to the training facility ($p = 0.870$, Cohen's $d = 0, 009258$) and going from school to the training facility ($p = 0.040$, Cohen's $d = 0.059115$).

When the results were examined, it has been determined that all participants experienced problems in the dual career process. Moreover, the majority of the participants have reported more than one problem. These problems may be listed like long-term absenteeism to university courses (64.9%), missing the university courses due to training periods (60.4%), limited leisure time (59.5%) and overload due to double responsibility (46.8%).In addition, it has been stated by participants that 35.1% of them suffered from extension of university graduation year, 33.3% of them suffered from less allocation of time for trainings due to their university education and 27.9% of them suffered from financial uncertainty.

36.9% of the participants have stated that they are actively interested elite sports requiring high performance less than 11 hours per week in the peak time of the season and 29,7% of them between 11-20 hours per week and 33,3% of them more than 20 hours per week.

70,3% of the student-athletes have stated that they participated in university studies less than 11 hours a week, 22,5% of them participated between 11-20 hours and 7,2% of them participated more than 20 hours per week.

In addition, 39,6% and 94.6% of the participants has expressed that they need less than 30 minutes to go from home to the training facility and from the university to the training facility respectively. On the other hand, 25,2% and 5,4% of the student- athletes need 91 minutes or more to go to the training facility from home and from the university to the training facility respectively.

Questions 13-21: Familiarities and awareness of student-athletes about dual career policies, programs, initiatives and availability of documents

When the results are examined, the majority of the participants has stated that they were not familiar with policies, programs or measures that facilitate the combination of elite sports and studies (61,3%) and that they were not aware of dual career policies or initiatives (70,3%), and that they did not have any information about availability of dual career policy documents (65,8%).

In general, the internet has been accepted as a possible source of information about the dual career by the participants (31,5%). Despite this, 57,7% of the student-athletes have stated that they did not have any information about access to the documents related to dual career. Some student-athletes also have marked more than one option (4,5%) and 6,3% of them has stated that there are other ways of obtaining information.

In general, student-athletes have predicted that the area of activity of dual career policies consists of university (34,2%), sports (28,8%), national (6,3%) and national-regional (30,6%) levels.

23,4% of the participants has expressed that there is more than one competent authority regarding dual career policies. In addition to this, 33,3% of the student-athletes have stated that sports / education institutes are competent authority regarding dual career policies and 13,5 % of them have stated that state agencies are competent authority and 7,2 % of them have stated that private organizations are competent authority.

The majority of the sample (55,9%) within the scope of the research has stated that they were not aware of the public authorities which are active in the dual career policies, and 17,1% of them has stated that this responsibility belongs to the public institutions at the national level.

40.5% of the student-athletes have stated that the dual career monitoring criteria is ignored, 50.5% of them stated that it is evaluated on the basis of athletic and academic success, 5.4% of them have stated that it is evaluated on the basis of only athletic success and 3.6% of them have stated that it is evaluated on the basis of only academic success.

Questions 22-30: Dual career support at personal, sports and academic levels

48,6% of the participants of this questionnaire have stated that people who manager together their school and sports life received support in the field of education, 46,8% of them has

stated that they received financial support, and 3,6% of them has stated that received the support in the form of allocation of sports facilities in or near the university.

46,8% of the student-athletes have predicted that there would be improvements in terms of educational flexibility, 41.4% of them predicted as financially and 38.7% of them predicted in terms of legal regulations.

Students-athletes, who are interested in elite sports and received higher education, have stated the ratio of elite athletes who manage sports and school life together as 5,4% (81-100%), 15,3% (61-80%), 20,7% (41- 60), 19,8% (21-40%), 32,4% (<20%) and 6,3% of them have expressed that that they had no idea in this subject.

While 30% of the participants did not report any information about the actual number of students-athletes benefiting from dual career support, the highest estimates were associated with <20% (36%) and 21-40% (22,5%) categories.

It has been reported that support at the sports level is mostly received in the fields of trainers / strength / conditioning / improvement (51,8%), sports facilities (36,4%) and physiotherapy (32,7%) and that support regarding the education is received in the subjects such as flexible school attendance (20,7%), restaurants offering healthy-fresh and well-prepared meals (15,3%) and flexible exam program (13.5%).

The support received in the field of education can be listed as flexible school attendance (20,7%), restaurants offering healthy-fresh and well-prepared meals (15.3%) and flexible exam program (13.5%).

Table 1. Frequency table regarding the sources of support in personal, sports and educational life of participants

Personal Support		**Support in Sports Life**		**Support in Education Life**	
Supporter	%	**Supporter**	%	**Supporter**	%
Parents	%60,4	Coach	%55,9	Professors / Faculty Members	%33,3
Siblings	%35,1	Sports Manager	%15,3	Administrative staff	%7,2
Friends	%46,8	Physician	%6,3	University Sports Authorities	%22,5
Teammates	%31,5	Sports Psychologist	%9,0	Other	%56,8
Classmates	%21,6	Other	%40,5		
Other	%37,8				

As regards to the sports and academic levels, 34,2% of the student-athletes have stated that they received more than one support in the field of education and 55,9% of them have stated that they received more than one support in the field of sports.

In general, the participants have stated that they received the most support from coaches (55.9%), professors / lecturers (33.3%) and parents (60.4%) in their personal, sports and educational lives.

Discussion and Results

When the literature is reviewed, Giancarlo Condello et al. (2019) have stated that the "Dual Career Scale in the Elite Athletes" was a valid, reliable and suitable scale for the dual career planning of athletes. Since there is no study in the literature to measure the dual career planning of athletes, Turkish adaptation study of the "Dual Career Scale in the Elite Athletes" has been carried out.

In this context, "Dual Career Scale in the Elite Athletes" has similarities and differences with the original scale study. One of the main differences is that the original study has been performed internationally and the results obtained have been interpreted on a continental basis. Another difference is that there is no significant relationship between the sports typology and university / sports participation and the time required to going from home / university to the training facility and between the university area and the university / sports participation and the time required to going from the home / university to the training facility in contrast to the original study. In addition to all these, the student-athletes participating in both studies have stated that they did not have information about the subject, documents and programs although they put the internet in the first place in accessing information about dual career. The majority of the participants who consider the scope of the dual career policy as universities in general have stated that they were not aware of the public authorities which are active in dual career policies. In both studies, most of the student-athletes, who expressed that they received the most support from their parents in their personal lives and from their instructors in their education life and from their coaches in their sports life, have stated that they faced with more than one problem in the dual career process and that the most common of these problems was long-term absenteeism in university courses. Because of the fact that this scale adaptation study is the first application in Turkey, it is believed that it will shed light on the studies to be done more extensively in the future. When the similarities determined were evaluated, it has been understood that that the scale adapted to Turkish was a valid and reliable measurement tool that would provide an evaluation towards the dual career plans of the participants. This measurement tool can be used to determine the dual career plans of students-athletes above 18 years old.

Most of the student athletes participating in the study compete both in international level competitions and they receive education at bachelor's degree, master's degree and doctoral degree levels in various departments. Therefore, each student-athlete's career plan for the future may be different. While these career plans are made, it is necessary to make international agreements in concern with dual career services in order to give information to stakeholders such as university staff, coaches and sports institutions with which student-athletes establish a close contact, and to ensure that student-athletes are informed about career rights, opportunities, policies and programs. Moreover, the sports organizations and policy makers must include this issue in their political agendas in order to strengthen the requirement of a minimum standard for dual career programs and services (Capranica et al., 2016). In addition, it is thought that if the opinions of these people, who wish to manage their education and sports life together, are taken into consideration, this situation can positively shape the direction of their dual career initiatives.

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Appendix 1. Dual Career Scales in the Elite Athletes

Dear participant,
Below is the "Dual Career Scale in the Elite Athletes" consisting of 30 questions and prepared to evaluate your views about the dual career phenomenon. Please complete the questions by taking short explanations in parentheses into consideration.
Thank you for your participation.

1) Your Branch: ……. (Single response format)
2) Your Gender: …….
3) Your Birth Year…
4) Your Education Status
Bachelor's Degree
Master's Degree
Doctoral Degree
Other
5) Your Professional Field
Art-Art History-Music-Dance-Theatre
Biology-Biochemistry
Business-Economics-Management
Communication, Informatics, Journalism
Computer Science
Earth-Ocean-Atmosphere-Environmental Sciences
Education
Engineering-Bioengineering-Health
History
Language-Foreign Languages
Law
Social Sciences
Literature
Nutrition Sciences
Maths
Medicine
Military Sciences
Maritime Sciences
Pharmacy,
Philosophy
Physics
Political-International Sciences
Psychology,
Sociology-Social Sciences
Sport Sciences / Physical Education
Statistics,
Other
6) Which year did you start competing in the contests at international level?
7) In which international competitions did you compete?
Olympic Games
World Championships
World Cups

World Universities Championship
Other International competitions
8) How many hours in a week do you actively engage in the elite sports (competition training, physical therapy, etc.) that require high performance in the peak time of the season?
9) Write the time you need to go from your home to the training facility.
10) How many hours on the average per week do you actively participate in university studies in a period? Write down the weekly hours.
11) Please write the time you need to go from your university to the training facility.
12) What kind of problems did you encounter when you carried out your elite sports and school life simultaneously? You can mark more than one answer.
Long-term absenteeism in the university classes due to competitions / training camps,
Missing the university courses due to training periods,
Missing the exams and tests at the university,
The extension of the university graduation year,
Allocating less time for training due to university education,
Financial uncertainty,
Overload due to double responsibility,
Less leisure time
Other
13) Do you have any information about policies, programs or measures that facilitate the combination of sports and school at the elite level? (Answer format: Yes or No)
14) Is there a policy or initiative on "Dual Career" in your country? (Single response format)
Yes, I know an initiative or program.
Yes, there is more than one initiative or program.
No, I do not know.
15) Are there the policy documents in the field of "Dual Career" in your country? (Single response format)
Yes,
No,
I don't know.
16) Where can I find the documents belonging to this policy? You can mark more than one answer. (Multi-response format)
Internet,
Other,
I do not know.
17) What is the scope and field of activity of the 'Dual Career' policy in your country? (Single response format)
National, Regional,
Local,
Specific to sport,
Specific to university
18) Which is the competent unit related to the 'Dual Career' policies in your country? (Multi-response format)
Sports Institute
Education Institute
Private Companies
State Institutions
Private Dual Career Organizations
Other

19) Which institution regulates the operating of elite sports and school life? (Multi-response format)

State Institutions,
Universities / Schools,
National Olympic Committees,
Sports Federations,
National University Sports Federation,
Dual Career organizations
Job market
Other

20) Which level of public institutions is active in "Dual Career" policies? (Multi-response format)

National,
Regional,
Local,
I do not know,
Other,

21) How is the success of 'Dual Career' initiatives evaluated? (Multi-response format)

No evaluation,
It is evaluated on the basis of sportive achievements,
It is evaluated on the basis of academic achievements,
It is evaluated on the basis of sports and academic achievements,
I do not know,
Other.

22) What kind of support is provided to people who manage the sports and school life together in your country? (Multi-response format)

Financial,
Allocation of sports facility in or near the university,
Flexibility in education,
Private instructor at the university,
Private instructor in the sports facility,
Other

23) In which area do you foresee a possible improvement in the future? (Multi-response format)

Financial,
Sports facility close to the university,
Flexibility in education,
Private instructor at the university,
Private instructor in the sports facility,
In terms of legal regulations,
In terms of communication regarding current initiatives,
Other

24) In your opinion, what is the proportion of elite athletes who manage their sports and school life together in your country?

(Single response format)

81-100%,
61-80%,
41-60%,
21-40%,
<20%,
I do not know.

25) In your opinion, what is the rate of elite athletes who receive support from "Dual Career" support programs in your country? (Single response format)

81-100%,
61-80%,
41-60%,
21-40%,
<20%,
I do not know.
26) As an elite athlete, do you get support in the following areas in your sports life? (Multi-response format)
Boarding facilities,
Restaurants that offer healthy-fresh and well-prepared meals,
Sports facilities that offer international training opportunities,
Physiotherapy,
Coach / Strength / Conditioning / Improvement (Recovery),
Dietician, Sports Psychologist,
Medical support,
Private instructor for dual career,
Career counselling,
Training rooms which has internet equipment and recreation facilities,
Other.
27) As an elite athlete, do you receive support in the following areas in your education life? (Multi-response format)
Boarding facilities,
Restaurants that offer healthy-fresh and well-prepared meals,
Sports fields integrated into your education life
Flexible school attendance right
Flexible exam schedule
Private instructor for dual career,
Career counselling, incentives that can provide employment opportunity to the individual,
Work rooms which has internet equipment and recreation facilities,
Distance Learning,
Other
28) Who provides support for your 'Dual Career' in your sports life? (Multi-response format)
Coach
Sports Manager
Physician
Sports Psychologist
Other
29) Who provides support for your ‘Dual Career in your education life? (Multi-response format)
Professors / Faculty Members
Administrative Staff
University sports authorities
Other
30) Who provides support for your Dual Career in your personal life? (Multi-response format:
Parents,
Siblings,
Friends,
Teammates,
Classmates

International Journal of Sport Culture and Science
March 2020 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.623

An Analysis of The Impact of An 8-Week Tennis Training on The Improvement of Hit Percentage in Tennis Players

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Type: Research Article (Received: 28.01.2021– Accepted: 23.03.2021)

Abstract

The present study aims to analyze the impact of an 8-week tennis training on groundstroke depth, groundstroke sensitivity and serve strokes. A total of 70 students, 34 females and 36 males, aged between 18 and 24 and studying at School of Physical Education and Sports voluntarily participated in the present study. Tennis trainings were held in the indoor tennis court at Yozgat Bozok University. The first measurements were taken following a general two-week tennis training. Later, students were trained for groundstroke depth, accuracy and serve strokes, and second measurements were taken. The data were analyzed in terms of normal distribution, and it was found that total scores displayed a normal distribution. T test was used to analyze whether total preliminary and final test scores of groundstroke depth, groundstroke accuracy and serve stroke significantly differed. There were no statistically significant differences between preliminary and final test scores in terms of groundstroke depth (i.e. t (69)=1.82, p>.05). However, a statistically significant difference was found between preliminary and final test scores in terms of groundstroke accuracy (t(69)=8.45, p<.05). While preliminary ground accuracy test scores were =12.22, final ground accuracy test scores increased to =23.50. Similarly, a statistically significant difference was found between preliminary and final test scores in terms of serve stroke (t(69)=2.81, p<.05). Preliminary serve stroke test scores were =19.81, whereas final serve stroke test scores increased to =23.28. In conclusion, it can be suggested that the improvement of hit percentages in tennis directly influences match winning statistics and that a higher hit percentage may help a tennis player win a match by challenging the opponent. Therefore, studies on the improvement of hit percentages in professional athletes will improve their performances in the long run.

Keywords: Tennis, Accurate Shot, Evolution.

Introduction

It is safe to argue that sports in today's world function and draw attention as a popular leisure time activity as it contains countless activities within itself thanks to a number of different branches, thus offering numerous options for an individual. One of these sports branches is tennis. It is a sportive game which is played on a straight ground with different physical conditions by using a racket to hit a felt covered ball and pass it over a net in the middle of a pitch (Kermen, 1996). Tennis mainly aims to keep the ball within the game and hit the ball more strongly and effectively with a less number of strokes and body movements (Ölçücü 2011). It is a sport that challenges an individual's technical, tactical, physiological and psychological abilities, and thus likely to improve their physical, mental, emotional and social development traits in the long term (Haşıl et al., 1998). Because it is an individual sports branch that develops within the course of time, it requires a lot of patience and endurance (Keskin et al. 2016).

Performance evaluation is one of the most important elements in sportive success because athletes display a higher performance when they are categorized and trained based on their sportive performances (Kamar, 2003). A regular analysis plays a major role in determining tennis players' problems and reasons for these problems in order to measure their technical, tactical, physical and mental levels (Kandaz, 2001). Therefore, tennis is not limited to technical and tactical aspects, and it is of vital importance to deal with various points such as training and training schedule, motor skills and technical skill tests (Ölçücü, 2011). A tennis player's values improving through physical and mental training is usually expected to have a higher hit percentage. ITN test is one of the scales used to measure these improvements. ITN stands for International Tennis Number. It was introduced by International Tennis Federation (ITF) in order to measure tennis players' levels around the world (ITF, 2004). ITN test evaluates a tennis player's strokes from a technical point of view and serve strokes, groundstrokes, volley strokes, which are 5 main strokes in tennis, in terms of stability, depth and strength as well as their physical fitness (Pektaş, 2016).

Hit percentage is one of the most significant components of a point during a high tempo tennis game (Signorile,2005). Therefore, trainings that address improving hit percentages bear utmost importance. The present study aims to analyze the impact of an 8-week tennis training on groundstroke depth, groundstroke sensitivity and serve strokes.

Method

Study Group

The study was conducted on 70 voluntary students, 34 females and 36 males, aged between 18 and 24 and studying at the department of coaching education at School of Physical Education and Sports. Tennis trainings were held in the indoor tennis court at Yozgat Bozok University. Necessary permissions were obtained from the related authorities prior to the beginning of training sessions.

Before the study, each participant was informed about all potential risks and disorders that may occur during the training sessions, and asked to sign a consent form for participation in the present study.

Data Collection

All participants were trained for 90 minutes twice a day. Seven groups of ten students were created before the training. A training schedule was formed for each group, and all students

participated in the same training program in different days. Training sessions were held between 14.00 and 15.30.

The first measurements were taken following a two-week tennis training. Later, students were put through an 8-week depth, accuracy and serve stroke training, and second measurements were taken.

International Tennis Number Test (ITN Test): ITN test is used by Turkish Tennis Federation (TTF) to measure a player's or a trainer's level of tennis skills (Keskin, Ateş and Kiper, 2016).

There is a suitable ITN number for each tennis player, be it a professional tennis player or a beginner level tennis player. They are categorized as ITN 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 10.1, 10.2 and 10.3. While a tennis player with the highest level is scored as ITN 1, ITN 10.3 represents the beginner level (ttf.org.tr, 2016).

Instead of technical aspects of tennis strokes, this test aims to measure stability, depth and strength elements in serve strokes, groundstrokes and volley strokes in a tennis player as well as physical movements (In each item of the following tests (except e), 1 point is given for each valid stroke and an additional 2 points is given for strokes that hit a strength area). In the present study, the measurement of serve stroke hit percentages was limited to serve stroke test measurement method in ITN test.

a- Groundstroke depth and strength test: The sum of 10 strokes (5 forehand-5 backhand) on the farthest point of the tennis court is calculated.

b- Groundstroke accuracy and strength test: In this test, trainees are asked to hit 6 strokes (3 forehand-3 backhand) on the farthest point of the parallel tennis court and 6 strokes (3 forehand-3 backhand) on the farthest point of the cross court.

c- Volley stroke depth and strength test: The sum of 8 strokes (4 forehand-4 backhand) on the farthest point of the tennis court is calculated.

d- Serve stroke test: In this test, trainees are asked to hit 12 strokes target and off-target serve points on the court.

e- Agility test: The trainees are asked to take the balls placed on five different points of the middle court to a racket placed on the center line. Then the duration of the training is scored (ttf.org.tr, 2016).

In the present study, all evaluations were performed using ITN Performance Test Evaluation Rules. Among different tests in ITN, only groundstroke depth and strength test, groundstroke accuracy and strength test, and serve stroke test were applied, and measurement values were categorized as preliminary and final test results.

Data Analysis

When skewness and kurtosis values were analyzed to observe whether the data displayed a normal distribution, it was observed that skewness and kurtosis values were (.794; 1.172) for preliminary depth test, (.774; .391) for preliminary accuracy test, (-.008; -.774) for preliminary serve stroke test, (.994; .610) for final depth test, (.627; .635) for final accuracy test, and (-.523; .216) for final serve stroke test. Thus, it can be stated that total scores of the study group display a normal distribution because they have a skewness value between +1 and -1 (Morgan, Leech, Gloeckner and Barret, 2004, p. 49), and a kurtosis value lower than 3 (Tabachnick and Fidell, 2015, p. 79). T test was used to determine whether there was a

statistically significant difference between students' total preliminary and final depth, accuracy and serve stroke scores.

Findings

Table 1. Descriptive Statistics

Demographic Information		f	%
Gender	Female	34	48.6
	Male	36	51.4
Branch	Team	41	58.6
	Individual	29	41.4

Table 2. Descriptive Statistics

Demographic Information	n	$\overline{X}$	S
Age	70	21.12	3.12967
Height	70	171.60	7.94984
Weight	70	66.50	11.40906
Athletic age	70	7.74	3.82473

Table 3. T test results related to total preliminary and final depth test scores

Measurement	n	$\overline{X}$	S	sd	t	p
Preliminary test	70	19.72	10.65	69	1.82	.073
Final test	70	16.38	10.51			

No statistically significant differences were observed between students' preliminary and final depth test scores ($t(69)=1.82$, $p>.05$).

Table 4. T test results related to total preliminary and final accuracy test scores

Measurement	n	$\overline{X}$	S	sd	t	p
Preliminary test	70	12.22	7.36	69	8.45	.000
Final test	70	23.50	10.80			

A statistically significant difference was found between students' preliminary and final accuracy test scores ($t(69)=8.45$, $p<.05$). While their preliminary accuracy test scores were =12.22, this value increased to =23.50 in the final accuracy test. Therefore, it can be argued that tennis training remarkably increased students' accuracy performance.

Table 5. T test results related to total preliminary and final serve stroke test scores

Measurement	n	$\overline{X}$	S	sd	t	p
Preliminary test	70	19.81	7.55	69	2.81	.006
Final test	70	23.28	6.79			

A statistically significant difference was found between students' preliminary and final serve stroke test scores ($t(69)=2.81$, $p<.05$). The students' preliminary serve stroke test scores were

=19.81, whereas it increased to =23.28 in the final serve stroke test following their tennis training, demonstrating that tennis training remarkably increased students' serve stroke performance.

Discussion and conclusion

The present study applied an 8-week tennis training to voluntary students to analyze potential changes in their levels of groundstroke depth, groundstroke accuracy and serve stroke.

ITN test used in the present study was introduced by TTF in order to measure both players' and trainers' level of tennis skills (Keskin, Ateş and Kiper, 2016). When ITN test was applied to voluntary students during an 8-week tennis training, it was demonstrated that no statistically significant differences were observed in terms of groundstroke depth, while some statistically significant differences were found in terms of groundstroke accuracy and serve stroke as a result of preliminary and finals tests.

In the present study, no statistically significant differences were found between students' preliminary and final groundstroke depth test ($t(69)=1.82$, $p>.05$). This may attributed to the insufficiency of the training duration because depth is a difficult skill to acquire for tennis players. Given that scoring system used for the depth requires a higher level of tennis skills compared to groundstroke accuracy and serve stroke, it is very likely that this training did not greatly contribute to beginner level tennis players' groundstroke depth skills.

There was a statistically significant difference between students' preliminary and final groundstroke accuracy test scores ($t(69)=8.45$, $p<.05$). While students' preliminary groundstroke accuracy test scores were =12.22, these scores increased to =23.50 in the final test following the tennis training. Therefore, it can be stated that tennis training increased students' groundstroke accuracy performance. However, considering that accuracy is a simpler tennis skill to acquire compared to depth, it is not surprising that preliminary and final accuracy test scores were higher compared to preliminary and final depth test scores. As a result, it is evident that an 8-week tennis training influences beginner level tennis players' accuracy skills positively and that this skill will improve in a direct proportion to the duration of tennis training.

Ertem et al. (2013) focused on the impact of coordination improvement exercises on female tennis players on forehand and backhand skills, and reported statistically significant differences ($p<0.05$) among mean ITN accuracy test scores.

Keskin et al. (2016) conducted a study on the impact of an 8-week tennis trainings on ITN level and agility and indicated that there was a statistically significant difference ($p<0.03$) among preliminary and final forehand/backhand accuracy test scores.

In the present study, a statistically significant difference was observed between students' preliminary and final serve stroke scores ($t(69)=2.81$, $p<.05$). While students' preliminary serve stroke test scores were =19.81, it increased to =23.28 in the final serve stroke test following the tennis training, indicating that tennis training increases beginner level tennis players' serve stroke performance at a certain level. It can also be added that a longer duration

of tennis training may improve their performance and increase the above-mentioned significant difference.

It must be noted that ITN test results did not yield any statistically significant differences in terms of serve strokes, which can be considered as a stepping stone in tennis. Challenging an opponent in tennis is directly proportional to the hit percentage of a tennis stroke. Therefore, the improvement of serve strokes plays a vital role in beginner level tennis players. If a tennis player can hit a stroke on a point that cannot be reached by the opponent, it will be more difficult for the opponent to receive the serve.

Ölçücü (2011) carried out a study on tennis players and reported that plyometric training had a positive effect on serve stroke hit percentage.

Gül et al. (2017) found a statistically significant difference between control and experiment groups in their analysis results in terms of serve stroke hit tests ($p<0.05$), and reported that technical and plyometric training contributed to serve stroke hit percentage positively in control and experiment groups, respectively, which eventually improved their tennis skills.

Given that nearly 75% of all strokes in a tennis game consist of forehand and serve strokes (Ellenbecker et al 2006), the critical position of hit percentages in forehand/backhand and serve strokes in a tennis game cannot be denied. In addition, it can also be argued that the ball speed also bears an important role at this point.

Similar to other sports branches where hit percentages play a major role, it is impossible to win a point in a tennis game with a certain hit percentage. Therefore, in addition to tactical and technical details, the analysis of various details such as training, training schedule, motor skills and techniques must not be ignored in tennis studies (Ölçücü, 2011). Apart from techniques, tactics, coordinating and endurance, it is clear that hit percentage is also a vital element in tennis, and thus tennis trainings must be organized accordingly.

In summary, it can be concluded that the improvement of hit percentages in tennis directly influence match winning statistics. A tennis player can win a point and, as a result, a match by challenging the opponent thanks to a higher hit percentage. It is evident that further studies on the improvement of hit percentages will greatly contribute to professional tennis players in the long term.

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International Journal of Sport Culture and Science
March 2020 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.624

Axiology of *Gobak Sodor* As A Traditional Sport In Indonesia

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Type: Research Article (Received: 04.01.2021– Accepted: 14.02.2021)

Abstract

The *gobak sodor* axiology is a study that examines the values contained in the traditional sport of the *Gobak Sodor* to improve students' characters in their daily life. These values have the elements of self-confidence, cooperation, leadership, honesty, responsibility, physical health and sportsmanship. This study aims to determine people's perceptions of traditional sports from the perspective of the *gobak sodor axiology* in Indonesia. The method used in this research was a survey supported with a questionnaire instrument. The population in this study consisted of 800 Indonesian citizens from 5 provinces, namely Central Java, East Java, West Java, North Sumatra and South Sulawesi. The analysis technique used was descriptive quantitative in the form of a percentage. The results in the study showed that most of the subjects had positive perceptions of the values contained in the traditional *gobak sodor* sport, namely the Very Good category with the largest percentage of all instrument answer choices being in Strongly Agree (SS) criteria, namely 53%; Agree (S) 39.4%; Neutral (N) 6.9%; Disagree (TS) 0.9%; and Strongly Disagree (STS) 0.2%.

Keywords: Axiology, Gobak Sodor, Indonesia

Introduction

Traditional sports are a special part of the global sports system that provides views of old, exotic, and endangered cultures (Groll et al., 2015). UNESCO has recognized the importance of traditional sports because of their intrinsic cultural values and their ability to increase participation in physical activity and sports for nearly two decades (Khan & Tluehan, 2019). In European countries, traditional sports can foster regional culture and strengthen the sense of nationalism (Bronikowska & Groll, 2005). One of them is the Nordic countries, namely countries in Eastern Europe and the North Atlantic, where in the world of education and the world of cultural and health education policies, traditional sports have become historical heritage, regional resources and innovations in the world of education that make traditional sports a national identity (Eichberg, 2005). For that reason, traditional sports are an inseparable part of the world of students playing that those sports are being used as mediums of learning (Kylasov, 2019).

Awareness of the importance of traditional sports has grown in Asian countries. In Thailand, people has accepted traditional sports as a cultural heritage that must be preserved (Sukdee et al., 2020). In China, the society considers that physical fitness is an important characteristic that needs to be maintained so that the body is not susceptible to disease (Guo & Li, 2017). Along with the increasingly fast rate of globalization, China continues to exchanging experiences with western countries in the fields of culture, sports and other fields that can strengthen the China's comprehension (Sun, 2016). Meanwhile in Philippines, the Generation Z or Millenial still plays traditional sports which are part of Filipino culture and become the number one hobby of the millennial generation. (Booc et al., 2019).

Indonesia has many traditional sports which have become the nation's cultural heritage, for example *Engrang, Getrik Kayu, Rangku alu, Gobak Sodor, Benteng, Lari Karung*, etc (Astiti, 2017). *Gobak* Sodor is one of the traditional sports that can develop the social characteristics and improve the psychomotor, cognitive, and affective aspects. This traditional sport give many benefits to students so they can learn new things, in which without they realizing, have given positive impacts for their development. When children adapt to the environment and their peers, the nature directly teaches them to develop children's characteristics (Yudiwinata & Handoyo, 2014). Childhood is a time when the child's world is full of games to support optimal growth and development, and it is a very important period in development and learning that determines the success of life in the future (Suherman et al., 2019). Therefore, traditional sports will be the right physical activities to develop the children's potential and character (Irmansyah et al., 2020).

Axiology is the study of value (Edgar, 2015; & Rescher, N., 2013). Basically, axiology in the philosophy of sports includes an important part involving ethics and aesthetics (Bloodworth, A., McNamee, M., & Bailey, R, 2012). Sports ethics discusses the influence of sports on the wider society, thus sports can foster the virtues of players that shape ethical behavior in the non-sports universe (Bloodworth et al., 2012). Another value that sports have is aesthetics (Edgar, 2013). Sports is all about aesthetics, life enhancement, and giving meaning to everyday life (Edgar, 2015). The axiological aspect discusses the values that apply in daily life (Abadi, T. W., 2016).

The values contained in *gobak sodor* include self-confidence, cooperation, leadership, honesty, responsibility, physical health and sportsmanship. This is in line to Prasetio et al (2020) who stated that the character values of traditional sports are cooperation, confidence, responsibility and honesty. In addition, *gobak sodor* can build students' character and social skills such as responsibility, hard work, care and cooperation (Shinta et al., 2019).

Penetration of modern games such as Playstation, Online Games, and E-Sports in Indonesia have eroded the existence of traditional sports. The presence of modern games have led children and teenagers to forget about the traditional sports (Septaliza & Victorian, 2017). Thus, the values and aesthetics that exist in traditional sports are left behind indirectly. This study on the axiology of *gobak sodor* as a traditional sports in Indonesia is also based on the awareness of maintaining cultural identity by preserving traditional sports.

However, the axiology of *gobak sodor* as a traditional sports is rarely studied despite the fact that it is very useful in society. With 260 millions of citizen which number keeps on growing each year, the age of 6-12 years old is the productivity time to improve the character of students in Indonesia.

Literature study shows that previous studies mostly examines the influence of traditional games and traditional sports-based learning models. In this study, the author wants to emphasize that traditional games need an in-depth study of the values contained in *gobak sodor* traditional sports. Thus, the axiology contained in *gobak sodor* with its relation to the community can be useful for the growth and development of students.

This study aims to determine the values contained in *gobak sodor* traditional sports. The benefits of this study will be; 1) theoretically, this study provides insight into science and education, especially for the public and sports education academics; 2) this study is expected to add knowledge regarding the values contained in *gobak sodor*; 3) this study is expected to become a parameter reference for the quality of further research. The limitations of the authors in this study are the sample, area and duration of the study.

Material and Method

This study used descriptive qualitative method to determine the values contained in *gobak sodor* as a traditional sports in Indonesia. The population in this study consisted of 800 people, which were then used as samples. Those people come from 5 provinces in Indonesia: 200 people from Central Java, 150 people from East Java, 130 people from West Java, 120 people from West Sumatra, and 200 people from South Sulawesi. This study employed survey method. The data were collected using questionnaires and scores obtained by using descriptive qualiative analysis.

This study was conducted in 5 biggest provinces in Indonesia by using Google Form questionnaires and distributing them via social media such as Facebook, Twitter and WhatsApp. The data were collected from 1 – 31 Maret 2020. This research used questionnaires for the data-collecting instrument. The statements in the questionnaires were compiled using a Likert scale. This study gave positive statements to people with the following scores: SS (Strongly Agree) = 5; S (Agree) = 4; N (Neutral) = 3, TS (Disagree) = 2; STS (Strongly Disagree) = 1.

Tabel 1. The number of samples in five provinces

No	Name	Total
1.	Central Java	200 people
2.	East Java	150 people
3.	West Java	130 people
4.	North Sumatera	120 people
5.	South Sulawesi	200 people
	Total	**800 people**

Findings

The data description of *gobak sodor* traditional sports from the 5 provinces in Indonesia (Central Java, East Java, West Java, North Sumatera, and South Sulawesi) were then presented in the following table:

Table 2. Respondents' answers to each indicator of *Gobak Sodor* traditional sports

No	Indicators	Nbr of Item	Statement Criteria										Avg. score	TC (%)	Note
			SS		S		N		TS		STS				
			F	%	F	%	F	%	F	%	F	%			
1.	Confidence	2	993	62.1%	457	28.6%	127	7.9%	21	1.3%	2	0.1%	4.5	90.2%	Very Good
2.	Cooperation	5	2246	56.2%	1574	39.4%	154	3.9%	23	0.6%	3	0.1%	4.5	90.0%	Very Good
3.	Leadership	4	1536	48.0%	1478	46.2%	157	4.9%	17	0.5%	12	0.4%	4.4	88.0%	Very Good
4.	Honesty	4	1611	50.3%	1193	37.3%	382	11.9%	9	0.3%	5	0.2%	4.2	83.0%	Very Good
5.	Responsibility	2	667	41.7%	659	41.2%	221	13.8%	52	3.3%	3	0.2%	4.2	84.2%	Very Good
6.	Physical Health	2	1017	63.6%	555	34.7%	72	4.5%	2	0.1%	3	0.2%	4.6	92.3%	Very Good
7.	Sportsmanship	1	393	49.1%	390	48.8%	14	1.8%	2	0.3%	1	0.1%	4.5	90.0%	Very Good
	Rata-rata Total	20	8463	53.0%	6306	39.4%	1127	6.9%	126	0.9%	29	0.2%	4.4	88.2%	Very Good

Table 2 above shows the scores of *Gobak Sodor* traditional sports data research from 5 provinces in Indonesia. The average score is 4.4 with an achievement rate of 88.2%. The total average score and the level of achievement in this study indicate that the axiology value of *gobak sodor* is very good. Majority of respondents answered strongly agree that the *Gobak Sodor* has values that can improve psychomotor, cognitive and affective in students. The largest percentage of the 7 indicators of instrument answers are in Strongly Agree criteria (SS) 53.0%; Agree (S) 39.4%; Neutral (N) 6.9%; Disagree (TS) 0.9%; and Strongly Disagree (STS) 0.2%.

The results are presented in the following diagram:

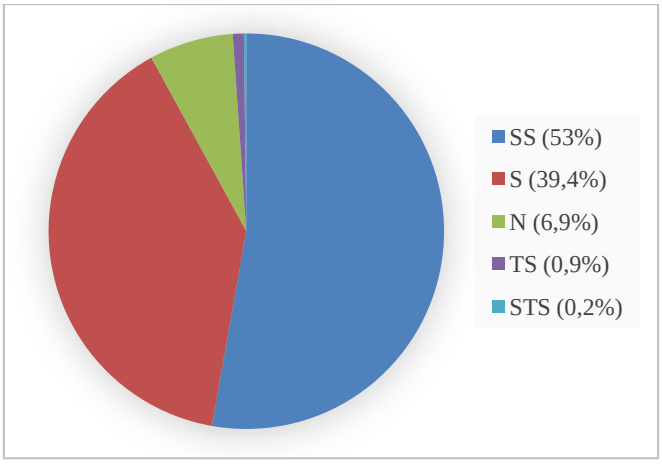

Image 1. Diagram of *Gobak Sodor* Axiology Criteria as A Traditional Sports in Indonesia

Image 1 illustrates 7 indicators as *gobak sodor* axiology. Thus, Indonesian people understand that *gobak sodor* has the values of Confidence, Cooperation, Leadership, Honesty, Responsibility, Physical Health, and Sportsmanship.

Confidence Indicator

The study result on confidence indicator shows that the average score is 4.5 and the achievement level is 90.2%, which means this indicator falls into 'very good' category. The percentage of all instrument answer choices are 62.1% Strongly Agree (SS); 28.6% Agree (S); 7.9% Neutral (N); 1.3% Disagree (TS); and 0.1% Strongly Disagree (STS). The confidence indicator is presented in the following diagram:

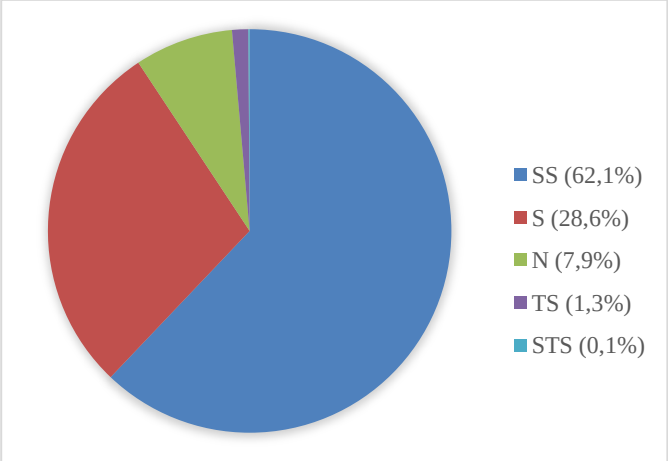

Image 2. Diagram of Confidence Indicator on *Gobak Sodor* Axiology as A Traditional Sports in Indonesia

Cooperation Indicator

The study result on confidence indicator shows that the average score is 4.5 and the achievement level is 90%, which means this indicator falls into 'very good' category. The percentage of all instrument answer choices are 56.2% Strongly Agree (SS); 39.4% Agree (S); 3.9% Neutral (N); 0.6% Disagree (TS); and 0.1% Strongly Disagree (STS). The cooperation indicator is presented in the following diagram:

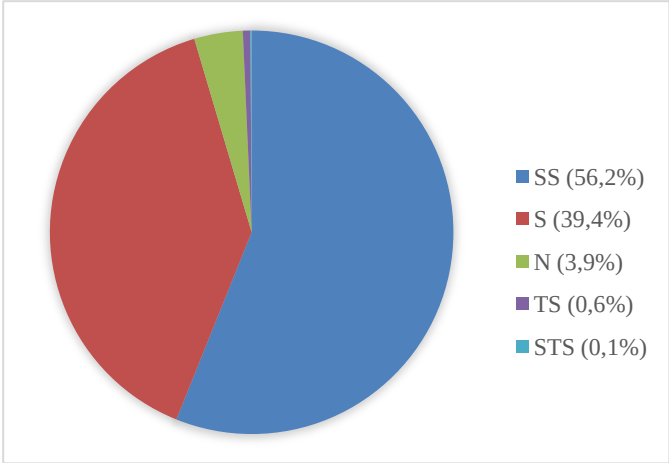

Image 3. Diagram of Cooperation Indicator on *Gobak Sodor* Axiology as A Traditional Sports in Indonesia

Leadership Indicator

The study result on leadership indicator shows that the average score is 4.4 and the achievement level is 88%, which means this indicator falls into 'very good' category. The percentage of all instrument answer choices are 48% Strongly Agree (SS); 46.2% Agree (S); 4.9% Neutral (N); 0.5% Disagree (TS); and 0.4% Strongly Disagree (STS). The leadership indicator is presented in the following diagram:

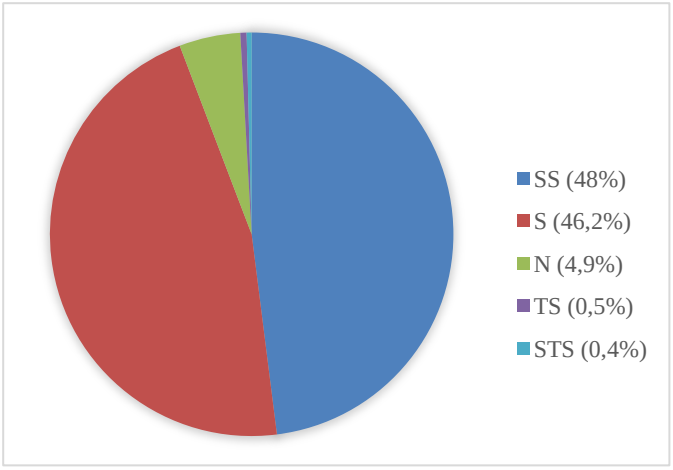

Image 4. Diagram of Leadership Indicator on *Gobak Sodor* Axiology as A Traditional Sports in Indonesia

Honesty Indicator

The study result on honesty indicator shows that the average score is 4.2 and the achievement level is 83%, which means this indicator falls into 'very good' category. The percentage of all instrument answer choices are 50.3% Strongly Agree (SS); 37.3% Agree (S); 11.9% Neutral (N); 0.3% Disagree (TS); and 0.2% Strongly Disagree (STS). The honesty indicator is presented in the following diagram:

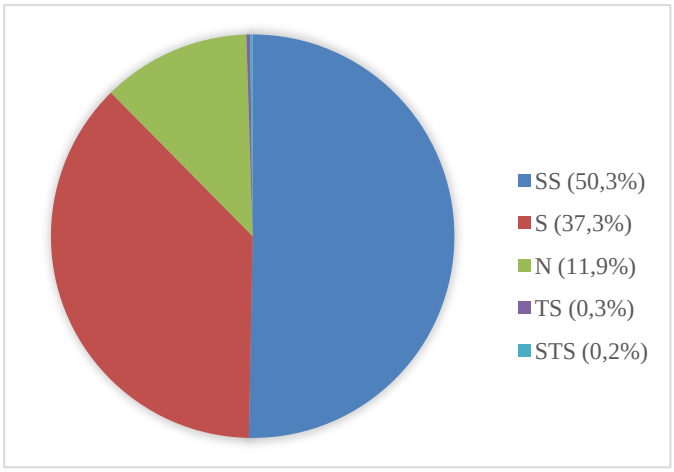

Image 5. Diagram of Honesty Indicator on *Gobak Sodor* Axiology as A Traditional Sports in Indonesia

Responsibility Indicator

The study result on responsibility indicator shows that the average score is 4.2 and the achievement level is 84.2%, which means this indicator falls into 'good' category. The percentage of all instrument answer choices are 41.7% Strongly Agree (SS); 41.2% Agree (S); 13.8% Neutral (N); 3.3% Disagree (TS) and 0.2% Strongly Disagree (STS). The responsibility indicator is presented in the following diagram:

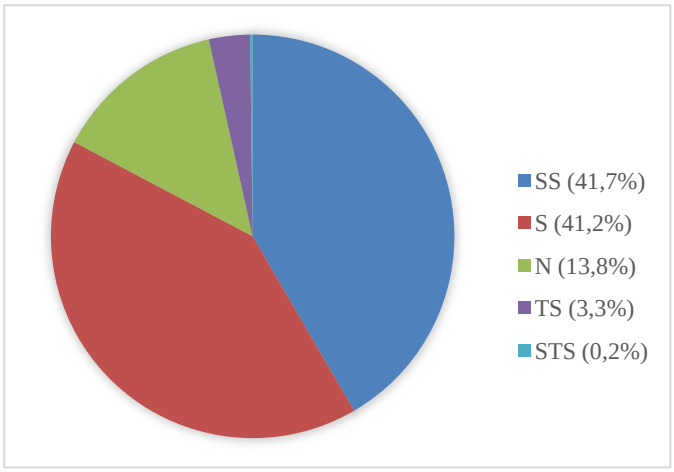

Image 6. Diagram of Responsibility Indicator on *Gobak Sodor* Axiology as A Traditional Sports in Indonesia

Physical Health Indicator

The study result on physical health indicator shows that the average score is 4.6 and the achievement level is 92.3%, which means this indicator falls into 'very good' category. The percentage of all instrument answer choices are 63.6% Strongly Agree (SS); 34.7% Agree (S); 4.5% Neutral (N); 0.1% Disagree (TS); and 0.2% Strongly Disagree (STS). The physical health indicator is presented in the following diagram:

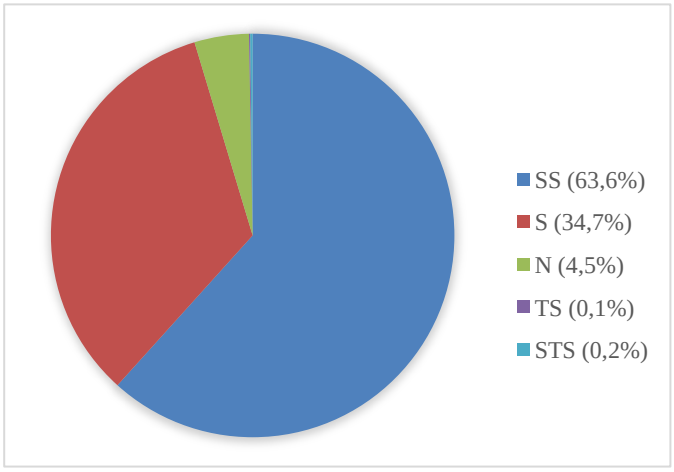

Image 7. Diagram of Physical Health Indicator on *Gobak Sodor* Axiology as A Traditional Sports in Indonesia

Sportsmanship Indicator

The study result on sportsmanship indicator shows that the average score is 4.5 and the achievement level is 90%, which means this indicator falls into 'very good' category. The percentage of all instrument answer choices are 9.1% Strongly Agree (SS); 48.8% Agree (S); 1.8% Neutral (N); 0.3% Disagree (TS); and 0.1% Strongly Disagree (STS). The sportsmanship indicator is presented in the following diagram:

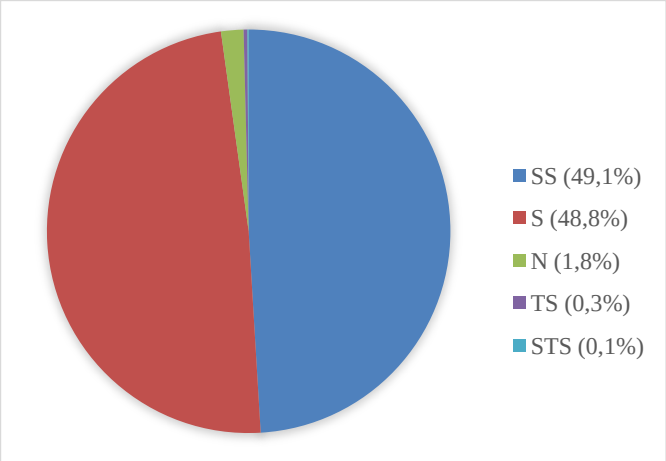

Image 8. Diagram of Sportsmanship Indicator on *Gobak Sodor* Axiology as A Traditional Sports in Indonesia

Discussion

Axiology is a science that defines the nature or morals from the philosophy of science perspective (Kattsoff dalam Wibawa, S., 2013). Axiology is a part of philosophy that contains truth and moral values in a normative perspective for the application of science in daily life (Abadi, T.W.,2016). From the axiology point of view, the *Gobak Sodor* sport has the characteristic values of Confidence, Leadership, Cooperation, Responsibility, Honesty, Physical Health, and Sportsmanship.

The values contained in *Gobak Sodor* traditional sport are very good to be implemented in daily life, especially students in recognizing the values contained in the game (Irmansyah et al., 2020). So, *Gobak Sodor* traditional sport indirectly provides values, namely Confidence, Leadership, Cooperation, Responsibility, Honesty, Physical Health, and Sportsmanship for students. The values contained in *Gobak Sodor* aim to shape the character of students, in which they can instill an understanding of the student's personality (Andriani. T., 2012). It is with one expectation that students will be able to understand the values contained in the *gobak sodor* traditional sport and become provisions for students to be applied in the community in particular and in general.

Gobak Sodor axiology as a traditional sports in Indonesia has the character of confidence. Confidence is an aspect of personality that encourages children's ability to achieve success which is formed through the children's learning process in its application in their environment (Fitri et al., 2018). Therefore, in traditional sports, the confident characteristic will encourage you to have the concept of relying on yourself.

Gobak Sodor axiology as a traditional sports in Indonesia has the character of cooperation. *Gobak Sodor* is inseparable from team cooperation concept. Great cooperation between team members will create a strong team. Cooperation is a group of teams where the members support and rely on each other in achieving a goal (Johnson, 2014). It shows that cooperation in *Gobak Sodor* sports will provide positive values in everyday life.

Siagawati and Prastiti (2007) mentioned that the leadership value of *Gobak Sodor* is obtained by imitating older children in leading and managing the *Gobak Sodor* game, so it indirectly stimulates a child's leadership spirit. Leadership means someone who has the ability to influence and motivate others in achieving a common goal (Wahyudi, 2019). These values in the traditional sport gobak Sodor will be very useful if leadership characters can be applied in everyday life and can maintain the culture of Indonesia's ancestors in the midst of the progress of the times.

Gobak Sodor axiology as a traditional sports in Indonesia has the character of honesty. Honesty is a laudable attitude that has a responsible behavior for what is done (Inten, 2017). The character of honesty in *gobak sodor* traditional sports ndirectly provides great benefits to others. Honesty is a fundamental life value that is taught to students, so in its application, a person's honesty is judged by the accuracy of what someone is talking about with the truth and the reality that happened (Chairilsyah, 2016). Thus, the honesty character in *gobak sodor* will provide positive energy to convey something without any lies (Prasetio et al., 2020).

Gobak Sodor axiology as a traditional sports in Indonesia has the character of responsibility. Being responsible is a person's inner calling in carrying out obligations because of the impulse in him (Erfayliana, 2015). Thus, in *gobak sodor* traditional sports, students can indirectly accept obligations in carrying out certain tasks in words, actions and attitudes..

Conclusion

The *gobak sodor* axiology gives the view to the public that *gobak sodor* traditional sports does not only play a role as an ordinary sport but there are also values that are used as media or methods in the learning process in the educational environment, especially for elementary and junior high school students. *Gobak sodor* provides many benefits for society in general and society in particular in everyday life, especially the characteristics found in students when playing the *gobak sodor* traditionaal sports. This traditional sports is able to make students to behave ethically and aesthetically towards peers and the surrounding environment. The values in *gobak sodor* consist of confidence, cooperation, leadership, honesty, responsibility, physical health, and sportsmanship. The results of this study can be proven by the very good category in perspective of the Indonesian people towards the *gobak sodor* axiology as a traditional sports in Indonesia.

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March 2020 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS

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International Journal of Sport Culture and Science
March 2021 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.625

Database Knowledge Management in Sport

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Type: Review Article (Received: 24.11.2021– Accepted: 06.03.2021)

Abstract

Today, data-based management technologies that can serve as a basis for sports management, aiming to improve the efficiency in sports services, provide opportunity to intervene in possible problems faster and more accurately, offer a better quality of service or product and targeting transition to an inclusive, transparent and accountable knowledge management approach. It's clear that quality, efficiency and effectiveness can be increased in sports management areas if the data-based management models offered by today's developing technology are used in sports management fields. In the research, database management applications and the contributions of these applications on the field of knowledge management in sports has been examined in line with the information gathered from various sources. The study emphasizes the importance of database sports management applications in line with today's developments and is expected to contribute to the transition to an integrated sports knowledge management model in countrywide.

Keywords: Sports, Management, Knowledge Management, Database, Database Management

Introduction

The development in field of information and communication technologies, the effects of globalization and the "network economies" arising from the combination of these dynamics, have led to an inevitable paradigm transformation of the social dimension. This is the transformation that has left its mark in our time and defined by the terms such as "information revolution" and "knowledge society". Knowledge on the base of capital and information on the basis of economic activity is circulating and encompasses the world with a network structure, this is not limited only to the economy, it's established also in social relations with the surplus value offered by the networks interaction and also dominates the social dimension. This socio-economic transformation affects diresctly the management styles and the functioning mechanisms of the state (Uçkan, 2002).

Societies transformed by information to knowledge society, point to a new social order, based on information technologies and informatics systems, where production processes evolve to be information-based or knowledge-driven (Akyazı, 2007). In the light of these developments, the traditional understanding of public administration in the social order is now being replaced by the "new public administration" approach. Along with the downsizing of public administration, the governments became more efficient, state has led to a faster delivery of public services and a trend towards a customer-oriented approach in public services. The new public management approach also adopts “total quality management” and a “customer-oriented” approach that is an important part of it. In addition, developments such as the use of information and communication technologies in public administration, increase demands of citizens for quality service from public administration, transparency in burocracy and guide those who benefit from public services to participate more in the decision-making process and lead public administrations to adopt a customer (citizen)-oriented approaches. In this respect, it is now a necessity for the administrations to target the quality in public services and new changes and transformations should take place at the level of thought and implementation (Sezer, 2008).

In this respect, the only way for today's operators to identify and implement the right strategies and policies is to make decisions in the light of sound and reliable data. As long as this is not realized, the goals set by the organizations cannot be realistic and go beyond estimates. For this reason, systematically kept data provides information about the real positions of the businesses, as well as the opportunity to make comparisons with competitors and to determine the desired goals by acquiring more realistic ideas. Accordingly, the cause-effect relationships in the events taking place within the institution should be analysed using statistical methods whenever possible. The basic condition of development is to ensure continuous improvement by preventing errors in the production / service phase (Alpullu, 2006).

In this direction, thanks to the database management systems developed today, significant steps have been taken to meet the need for specific information for adopting a knowledge based management transformation. Managing information means moving towards what works for us and what is useful for the tasks we perform. Using a database management system, added and collected data to the system's database is no longer subject to disorder and accident. Data is now more accessible and easier to integrate with the rest of our works. Managing information using the database enables us to be strategic users of the data which we possess (Watt & Eng, 2014). Such systems and technologies developed today offer an opportunity for transition to quality management understanding. Especially, technologies that include

database management systems make it easier for individuals to access necessary products and services and by presenting information regarding their needs to management levels, necessary measures can be taken quickly. If we can talk about concepts such as quality, speed, transparency, easy accessibility or new public administration, "e-government" in the services performed in Turkey today, it is possible with the contributions of database technologies. Thanks to the aforementioned technology, the E-government system is considered to function as an important tool in bringing the masses together with products and services, while providing important facilities especially in the public service sector. There has been a need to examine the contributions of database management systems to the new public administration and the service sector, regarding the reflections of the sports sector today.

METHOD

The purpose of this study; to recognize and define data-based sports management practices that have been developed in the guidence of today's technological developments in order to realize a better sports management based on knowledge on behalf of everyone involved in sports institutions and organizations. In addition, it is to emphasize the importance of data-based sports management applications that can provide information to sports management levels by gathering sports management services under a single roof. With this study, we try to give information about the databases in line with the new public administration and the applications that have gained popularity in the world. Hereby the current data-based sports management applications needed by the Turkish sports management were handled and evaluated accordingly. The description method was used in the research and literature review techniques were also used.

FINDINGS

Relationship Between Data, Information and Knowledge

In today's business life, managers, whether private or public, make their managerial decisions by analysing data from lower-level work and transaction processes. In other words, in today's businesses, the information transferred to management levels by analysing the data filtered from production and service processes shapes the decisions of managers. The data, information and knowledge that managers need are linked, but they are not the same thing. Here in Table 1. are some definitions of data, information and knowledge.

Table 1: Definitions of Data, Information, Knowledge

Data	**Information**	**Knowledge**	**Autor**
Are symbols	Processed data to be useful	Capability to answer ‘‘How’’ questions	Ackoff (1989)
	Data in context	Integrated information in context	Gallup et al. (2002)
Unstructured facts and figures that have the least impact on the typical manager. (Thierauf, 1999)	Ordered data useful for decision making and analysis	based on experience of experts	Thierauf and Hoctor (2006)
Converted sensors outputs	Data fusion; creating a network that connects both data and relationships between data	Placing knowledge in its broader context (a necessary condition for understanding)	Desouza (2005)
Unorganized, static and unprocessed facts. Different facts about the events	Facts based on processed or reformatted data. Collection of data that facilitates decision making and has a purpose, meaning and relevance	The higher level of abstraction found in people's minds. Includes skills, perception, common sense, education, advertising experiences	Awad and Ghaziri (2004)

Ackoff (1989) was formulating Data-Information-Knowledge-Wisdom hierarchy (or DIKW for short) in an article for a presidential address to the International Society for General Systems Research. This Figure 1. may help us to explain his approach.

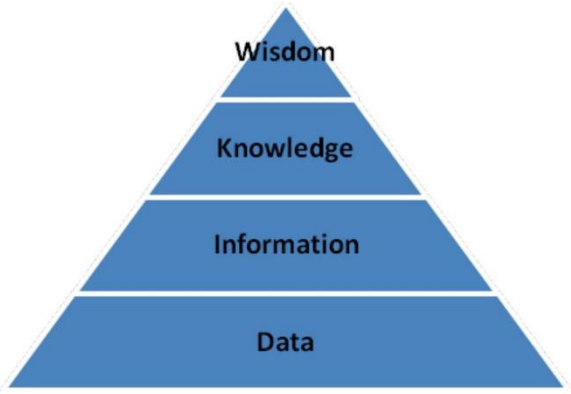

Figure 1. The Data-Information-Knowledge-Wisdom hierarchy as a pyramid (Ackoff, 1989)

In his terms, data are the product of observations and symbols and have no value until they are transformed into a usable form to become information. When it comes to information, they are now included in the answers of the questions. The next layer, knowledge, by refining the information "provides the conversion of information into instructions and control of the system" (Ackoff, 1989), which ensures the efficient operation of the system. Although there is no common understanding in detail about the transformation process between layers of the hierarchy, Rowley (2007) assumes that information is created based on data, knowledge is created based on information and wisdom is created on knowledge. According to Mutongi

(2016), putting information in a hierarchy makes the information itself smaller. Knowledge is greater than the DIKW hierarchy and reside in all levels such as data, information, knowledge and wisdom. In organizations, knowledge is found in every department and stage. Knowledge is the main factor that enables the organization to survive in a competitive environment. Wiig (1998) states that the process by which we develop knowledge, uses previous knowledge to make sense of new information and when accepted for inclusion, internalizes new insights by connecting with previous knowledge. Therefore, new knowledge is a function of previous knowledge as well as input received. Hence he emphasizes the discontinuity between information and knowledge. Thus, discontinuity is created between the received information inputs and the new information that comes out.

As pointed out by Liew (2007), the key to understanding the relationship between knowledge and information is knowing, where information resides. It is useful to know that the essence of information is a message generated from activities and situations. However, information exists in the form of data in storage media (database, print, video tapes, etc.) and in the human mind (in the simplest "What" form or more advanced "How" and "Why" form). In this way, the overlap between information and knowledge between data and information becomes clear, ie they occupy different space at the same time. This also explains why many people perceive data and information as interchangeable, as well as information and knowledge. "… Depending on the context, one man's data may be another man's knowledge and vice versa" (Stewart, 2002). However, they are not interchangeable with regard to their accepted definitions. So what is a book: data, information or knowledge? These are all of the above in various contexts. The book is knowledge from the author's point of view, information for the potential reader and also data on a storage platform (called a "book").

Knowledge Management (KM)

There are many definitions of knowledge management (KM), some of which are as follows. O'Dell and Grayson (1998) define Knowledge Management as a conscious strategy that delivers the right knowledge to the right people at the right time and helps people share information and put it into action in ways that seek to improve organizational performance. According to Davenport and Prusak (1998), Knowledge Management leverages the resources that the organization may already have in on-site information systems management, organizational change management and human resource management practices. Jennex, M. (2007) defines knowledge management as the selective application of knowledge from previous decision-making experiences to current and future decision-making activities with a clear purpose to increase the effectiveness of the organization. Davenport, Long & Beers (1999) defines knowledge management "to manage knowledge combined with experience, context, interpretation and reflection". Ruggles (1997) define as an approach to add or create value by making more active use of the knowledge, experience and judgment found within and in most cases outside of an organization.

Looking at the definitions, we can say that KM's is involved with practices, process, insights, technologies, people, advice, improvement etc. Hence, knowledge management includes several other functions as explained below.

1. Knowledge generation and sourcing - Innovation, learning and building knowledge from external sources: From outside and internal experts, R&D and learning syllabus, books, articles, etc. by gathering information.

2. Knowledge collecting and transforming - Organizing, keeping and remembering information in memory: Reconstructing, verifying and organizing the inventory, extracting old and false information, etc.

3. Dissemination of knowledge - Pooling and distribution of knowledge from many sources: Dissemination - placement of knowledge to people or systems where it is needed.

4. Knowledge application and value realization - Applying knowledge to study objects: Using knowledge to create and deliver products and services.

According Wiig, (1997) KM involves four areas cited above from a managerial perspective. Briefly they are systematic of emphasis which focus on top-down monitoring and facilitation of knowledge-related activities, creation and maintenance of knowledge infrastructure, organizing and renewing knowledge assets, and applying (using) the knowledge assets.

Databases Developments

Mankind has begun to store information long time ago. The origin of the database goes back to the times when libraries, government agencies, business and health records were kept before computers invention. Once people perceive that they need tools to store data and protect data files for retrieval later, they sought ways to index, store and retrieve data. In ancient times, detailed database systems were developed for government offices, libraries, hospitals and business organizations. The concepts and principles used in the construction of these systems are still used today. From ancient times to relational and objective relational systems today, database technology has passed over several generations and the historical development process has been quite impressive. With the development of computers, the database world has changed rapidly and databases have become an easy, cost-effective and less space-consuming tool. (Berg, Seymour, & Goel, 2012). Today's managers can obtain meaningful information by comparing and analysing the data they obtain with various computer-based software. According Vincent (2009) database is; a collection of logically related records or files that are integrated into a common repository and provide data for one or more uses.

Database management systems were invented in the 1960s to support hierarchical databases. The first systems (alphabetical, numerical or chronological) are arranged in order to access data indexes directly or randomly, we had to wait for development of data storage devices. Among the best known data-based management systems at that time were IBM Information Management System and CA Integrated Database Management System (Bastien, 2019). In the 1970s, database management models such as the "Entity-Relationship Model" developed by Pin and Chen (1976), including systems such as "network model", "relational model" and "entity set model", stand out. Software based on this type of relational model was developed in the 1970s. Today, managing such a relational database remains a popular method. Currently, the most well-known relational DBMS are Microsoft SQL Server, Oracle Database, IBM DB2 and MySQL. A standardized programming language used to manage relational databases and perform various operations on the data is SQL (Structured Query Language). This language was created in the 1970s and continues to be used regularly by database administrators (Bastien, 2019). With the explosion of computer purchases in the 1980s and the emergence of the database market for businesses, the commercialization of relational data-based systems begins (Taylor, 2007). In 1986, the American National Standards Institute (ANSI) was adopted an official SQL standard. In 1987, the International

Standards Organization (ISO) also acknowledged this standard and it has been updated more than six times since then (Bastien, 2019). In the mid-1990s, the Internet / World Wide Web emerged and became widely available. This development allowed remote access to computer systems with existing data and as the client-server craze reached the desktop of the average users, Internet / VT has grown exponentially (Berg, Seymour, & Goel, 2012). Although electronic applications in information centers have a history of more than 30 years, it has moved to a new dimension especially in the 2000s. Web 2.0 applications, the first examples of which we started to see in the 2000s and recent developments in the analysis of semantic Web and large amount of data, affect information services in electronic media in a multifaceted way. Developing of technological possibilities, allow processing in the huge information pool and establishing relationships between complex data sets. However, what all these systems need is content that is digital, structured as much as possible, in other words defined metadata fields in accordance with standards (Külcü, 2018).

Databased Management Systems (DBMS) Structure

Database management system is a set of software that provides communication between the user and the database. In more detail, a database management system is a software that allows an organization to manage data effectively and provides easy access for application programmers to access stored data. The database management system ensures that; more than one information is kept in the same environment, rapid access to this information, the prevention of information repetition, accurately and quickly performed continuous transactions, using by more than one person at the same time the same information and data security. (Alp et al. 2011).

Database management system (DBMS) is a collection of programs that allows users to store, maintain, control and access to the created databases. The main purpose of a DBMS is to provide both a useful and efficient environment for users to obtain and store information (Watt & Eng, 2014). In other words, a database is a self-defining aggregate of records. Registration is a representation of some physical or conceptual object. Since a database contains a description of its structure, we can say that it defines itself. This definition is called metadata - data about data. The database is integrated to include relationships and includes its own data as well as other data items (Kroenke & Auer, 2007).

Database management system term; it includes a complete database and all the software related to management on. It is possible to divide the databases into two levels:

- Logical Layer
- Physical Layer

Accordingly, the layer, which is the logical layer and expressed relative to the above, is the layer that is closer to human thought and is more comfortable for people to think and use. The layer expressed by the physical layer is about how and where computers keep data. The system meant by database management system includes these two layers as a core. Database management systems are systems that contain many additional software such as user management, system backup and restore, performance monitoring and improvement and distributed database operation (Şeker, 2019).

Databases play an increasingly important role in traditional management (accounting, sales, decision making, etc.) practices, especially in e-commerce or customer relationship

management, that concern corporate information systems. Database systems have an important place especially in management and informatics today (Gardarin, 2003).

Big Data

Big data; is the form of converting all data collected from various sources such as social media posts, networks, blogs, photographs, videos and log files into meaningful and processable form. As usual, it's an unstructured data collection that remains outside of the structured data kept in relational databases and has not been used much until recently. According to the widespread computing belief which is now demolished, unstructured data was worthless, but big data showed us something that it is the only system that is enormously important, usable, useful and has led to the emergence of treasure from the garbage dump today. Big data; It consists of a large amount of information such as web server logs, internet statistics, social media publications, blogs, microblogs, information from climate sensors and similar sensors, call logs from GSM operators.

Recent advances have reached the climax of advancement making big data possible in the ability to quantify, store and analyse data. The first progress in this area has been made in "data generation". The digitization of information gathered from communication devices and digital sensors has enabled the quantification of many qualities that have never been converted into data before. The second development is that the data storage capacity increases exponentially and the costs decrease accordingly. In 2000, only a quarter of the information stored in the world was digital and the rest consisted of analog (paper, book, film, photograph, cassette, etc.) data, while by 2007 only 7% of the data remained analog. It is estimated that more than 98 percent of all data in 2013 was digital. Today, stronger computer processing capabilities and advanced algorithms are developed, allowing information to be analysed in new and interesting ways. Big data is a major source of competitive advantage already existing for companies and new initiatives are emerging to use big data in innovative ways. A series of predictive machine-generated content whether users are aware of it or not; examples of e-commerce are available today, such as an alternative writing for your web search, the next book you might want to read, which ads interest you or the ideal time to buy a low-priced airline ticket (Dunham, 2015).

Database Management Applications in Sports Management

Today, the success of an organization depends on its ability to manage activities such as obtaining accurate and instantaneous data from its own actions, using and analysing the acquired data more than at any time (Ramakrishnan & Gehrke, 2002). The use of multimedia databases in sports has the potential to revolutionize the way which coaches, athletes, managers and society approach sport. In this way, social approach to sports such as evaluating sports branches, selecting athletes for teams, applying training programs, and mass participation in amateur and professional sports can be affected. Many talented, top coaches and sports managers make decisions based on intuition and the influence of past experience. Effective use of performance databases encourages sports managers to use an evidence-based decision-making approach. This does not mean that they should let go of their "intuition", rather it is ensured that the valued data is included in the decision making process. If the data based information does not support the intuition, it may be wrong, but at least there is reason to justify the decision. With the emergence of online databases in sports, evidence-based decision making has now become practical (Vincent et al., 2009).

Databases with tools such as data acquisition, storage, management, retrieval, integration, analysis, interpretation, reporting and dissemination have the potential to be a powerful model in sports science. Knowing how information will be collected, stored, accessed, retrieved and consolidated is essential for effective performance analysis and decision making. Databases, as they provide structure and access to information in many other applications, should form the basis of application tools used in sports sciences (Vincent et al., 2009).

Data-based sports software developed today can generate instant data, information and statistics that can meet the needs of sports clubs, organizations and federations, starting from the basic competitions. Here, useful data and information can be produced based on the principle of responding to the needs of institutions, organizations and businesses in general, regardless of whether it is a club, private sports facility or a federation. These statistical data can include the financial status of the enterprise, as well as generate many useful information about staff, customer and facility utilization. The services mentioned below are some examples of the services that such software can offer to sports managers.

• *Competition Management*: Here can define the competitions to be played in the sports management system in detail. It can provide the management of competition elements such as location, date / time information, week, league, competition number, home team, visitor team, referee, assistant referee, observer, last report upload date and task tracking services.

• *Performance Management*: It provides a service that enables the performance of the athletes to be instantly evaluated during the match or training.

• *Accounting Management Service*: In the sports management process, financial accounting, cost analysis and estimation, monitoring of cash flows, income-expense status related to the financial side of the business and customer and profitability analysis can be provided.

• *Warehouse Management Service*: In the event that sports businesses and organizations provide services and products, warehouse planning and control services can be provided in order to estimate the costing and future supply need for goods used or sold in the service process.

• *Customer Management Service*. In addition to preserving the customer portfolio base in sports applications, it is also possible to keep records of customer characteristics and implement a customer-oriented visual course program in sports businesses (including corporate ones). Here, the concept of Customer Relationship Management (a management approach that develops new working strategies in the light of the information obtained by collecting customer data of an enterprise (asen.com.tr)) also comes into play. These applications find a usage area as a software product developed according to the business fields, infrastructure, number of employees and customers by following the work flows in the enterprises.

• *Personnel Management Service*: Enterprises can have the opportunity to monitor the performance of the personnel with the automatic service generation, warning and notifications of the software. By integrating the production module into sports applications, it is possible to monitor the performance of the employees by recording the task timing and service completion of the personnel. Part-time wages and percentages can also be calculated automatically here.

• *Reporting and Documentation Service*: Since related applications store all information in a database, almost any report for management needs can be obtained easily. These types of reports can be generalized, personalized or customized according to management needs and can also be used for analysis and forecasting. As an example; it's possible to create reports such as participatory, attendance, finance management, service completion, marketing, customer analysis and profit analysis.

• *Marketing service*: Actually, no organization can do without publicity today, because such negligence will cause a loss of customers or mass in the enterprises. With the marketing module included in sports management applications, it enables the audience or customers to evaluate the investments in a reasonable way, to analyse the resources and to justify advertising campaigns with various tools (SMS, E-mail bg ..).

These examples of management services that we have explained are just a few of the features that can be added to database sports management applications. For example, database applications such as sport management, also can include; Sports medicine, physical education, nutrition, exercise, recreation, sports and exercise psychology, fitness training, coaching, mental preparation, physical endurance, physical therapy, etc. It should not be forgotten that today's technologies and social needs are in a continuous development. Therefore, it is possible to increase the variety of services outside of the titles mentioned above. In this direction, services that sports management applications can offer are briefly listed in Table 1 below.

Table 2: Database Application Services for Sports (Atasoy & Özer, 2019)

Accounting Management	Team Management	Advertising Management
Facility Management	Competition Management	Store Management
Customer Management	Training Management	Communication Management
Personnel Management	Athlete Management	Media Management
Marketing Management	Performance Management	Volunteer Management
Time Management	Infrastructure Management	Member Management
Organization Management	Sponsor Management	Document Management
League Management	Fan Management	Statistics Management
Club Management	Product Management	Reporting Management

Thanks to this database sports management applications; Achieving the ultimate professional sports results, taking into account the challenging situations, competitiveness of other countries and clubs, superior preparation, use of the latest advanced information about sports activity and the opponent, support from information management during identification and selection of athletes and monitoring their progress, to support the organization of sports events and final results are achieved. Fulfilling these goals requires being prepared, keep

endurance, professional approach, competition culture and knowledge management in all activities and processes that will ensure the sustainability of sports clubs and organizations (Manev & Jakimovski, 2017).

Database Sports Management Practices in The World and Turkish Republic

It is possible to come across various database sport applications worldwide in Russia, Australia, Canada, USA, France, UK, Netherlands etc. We can list the sports management applications commonly used in developed countries in the field of sports as follows: Active Sports, PlayyOn, Ususport, TeamSnap, Club Manager Central, Omni Sport Management, SportsPlus, Team App, SportEasy, Dak Stats, Mobilsporcu, Zedsport, Teamstuff, Sports Engine, C Sharp Sports (Sport Applications, 2019). In addition, existing applications have multiple language options to cover many countries. With addition of the language options to related applications they exceed their existing limits, that enables them to easily take place in international markets and to make more effective analysis by collecting data from the international area. In addition to these applications, some site applications work within the same logic and exhibit similar features. For exemple, site like “injep.fr” the National Youth and Popular Education Institute (INJEP), established by the Ministry of Education and Youth in France, produces useful statistical information and studies by analyzing and synthesizing the data obtained from the field of sports. On the other hand, as in the example of the "Statista" page, statistical content can be produced for many leagues in North America and Europe. Such pages can provide statistical information, facts and market data on various topics related to sports and recreation. In the example of Statista, statistical information about many professional sports (leagues), sports events and marketing, sports activities, health, hobbies as well as parks and outdoor spaces and the arts and culture market are also presented on this page and on related topic pages (Statista, 2020).

In Turkey where sports is offered as a public service, a database application example appears as a system by the Ministry of Youth and Sports under the name of Dynamic - Sports Information System. That system enables the transfer of all sport related work processes within the scope of the ministry's fields of activity and services to the information technology environment with developed software. Persons authorized by the ministry can enter to the Sports Information System at spor.sgm.gov.tr and all citizens via e-Government can enter and carry out related transactions. In the Sports Information System application within the e-Government are; talent screening, athlete, sports staff, private sports facilities, leave procedures, club procedures, penalty information form, international organization procedures, e-signature, training, referee transactions, school sports, athlete health, federation transactions, licensing, sport card and document verification menus. Related transactions can be performed through these menus (Özer & Atasoy, 2019). In the Sports Information System, there are services used by real and legal persons via e-government. In this context, individuals are able to view self-information, can obtain verifiable documents and can fill out applications throughout the e-Government gateway. By transferring all works processes and information technology of the sports media through the Sports Information System, the Ministry of Youth and Sports is forming a database of Turkish sport and is working to ensure the use of sport data from a single source.

As a result of the activity of transferring public services to the electronic environment, e-government aims to create a state structure that has increased its information processing

capacity, prepared for situations that require urgent decisions and responds quickly to needs. In addition, the state's ability to be effective and efficient in providing public services to citizens, develops in direct proportion to its capacity to use information technologies (Ünal & Kiraz, 2016).

While the bureaucratic needs are met at the state levels with the e-government applications that form the basis of the new public administration, database management applications are still being developed on access to different services throughout the society. Today, the need for presenting the supply and demand of real and legal persons for sports products through different data-based platforms, still continues.

DISCUSSION & CONCLUSION

There are some periods in human history when knowledge production has increased exponentially. Within a few decades since the printing press began to be used in Europe, the number of books printed has reached more than the number of books printed in all of Europe until then. With the advances in data processing and storage technologies, the data produced in just a few years reaches several times the analogue and digital data produced so far. In the past, the "sampling" model, which was preferred due to the limitations of data processing tools, even if the data was accessed has now begun to leave its place to a new era where all the data is analysed. Thus much more accurate and detailed analysis can be reached. In addition, with the advent of the internet, data-based monitoring activities have become both easier and more comprehensive. Such activities, which were previously carried out only by intelligence organizations, are applied much more comprehensively by the Internet sites, which have become an indispensable part of our lives, through the information is provided by the user voluntarily. Facebook knows what we like and include our social relationships, Google search habits, Twitter keep our thinks and e-commerce sites know our shopping habits. Mobile operators know who we are talking to, even with whom we spend our holidays and leisure time and how close we are to which friend. Not only companies, but also states capacity to monitor 'citizens' and transactions made over the Internet has increased significantly. Accordingly in the world and Turkey database sports management practices gaining steadily popularity. In all stages of information flow, obtained by the process analysis programs which can be data-driven, controlled, auditable and reportable, helping us to build knowledge for effective management. In addition, these applications create a connection between the providers and consumers of sports services and they can ensure that decisions are taken more accurately and quickly in accordance with the needs. In the work of Manev and Jakimovski (2017) they state that with a management approach based on knowledge, they will be able to successfully develop the sports organization, sports staff and athletes, take good care of their supporters and followers and support them at all times. At the same time, they stated that sports organization strategies could be implemented successfully and if necessary could be changed according to the conditions in sports and that everything could be monitored and analysed simultaneously in the ongoing sports organization.

Based on previous definitions, if we express "knowledge management" as a fluid process formed by the evaluation of past experiences, values, intuitions and information in the minds of those who generally know, the importance of these processes that feed the knowledge in our mind can be emphasized again. In this respect, using such database management systems that provide us information, the database software created for the sports sector helps to make

all stages of the services provided by sports management controllable, auditable, reportable and analytical. On the other hand, one of the most important features of database sports applications is that sports services can be organized in virtual and real environments by establishing a connection between the providers of sports products and services according to works principles. In this way, sports can be organized from the base and it is possible to follow them from the smallest ring.

In traditional public administration, the ethical, democratic and professional values (impartiality, effectiveness, efficiency, accountability, etc.) on which the public service is based; responsibility, accountability, partnership, restructuring, equality, innovation, teamwork, perfectionism, honesty, quality values such as clearance developed over time in the private sector are also added. Among these, accountability has started to be seen as both an ethical and a democratic value in this transformation process, as well as being an important concept in traditional public administration. It is claimed that a new public service will only emerge when the state places itself a strong and stable democracy at the heart of society, when it solves social problems by cooperating with the citizen, when it develops services and when it is compatible with the needs and values of the society (Genç, 2010). Therefore, it is certain that database management applications in sports will add a more advanced dimension based on evidence and objective criteria in management towards ethics, efficiency and productivity. Considering the sports management applications with database used in the world and in our country; it's possible to say that in sports management process in Turkey is yet on the early stages of knowledge management in sport. The reason for this can be said no popularity of database software application use and hereby no enough information acquired who are the possible source of knowledges for sport managers. Therefore, enough sports data cannot be created, the data cannot be compared and analysed in sports management stages. In this case, sports management decisions may be far from objectivity, rather instinctive or intuitive. In this direction, with the database sports software applications subject to our research, can gaining popularity and penetrating into the society. Practical analysis will be possible with real-time data flow from lower-level task groups to management levels. In the light of data and information taken from this database, the manager’s skills can be based on knowledge and hereby they can improve their investment programs and the sports events can be planned more accurately by taking into account the needs and potential of the public. With database information management, we can list some possible gains to management in sports as follows.

• With the follow-up of successful athletes (training, nutrition, mental preparation, etc.), sustainable sportive success will not be left to chance and successful examples can be followed by creating athlete and training memories.

• The development of sports is possible by enabling and facilitating the interlocking of the people with new sports and social ties in the smallest ring. Therefore, with database management applications in sports, the most basic stakeholders such as Referee, Athlete, Trainer, Manager, Official will be able easly to come together around sportive activities or events.

• With the instant and accurate flow of data obtained from database management applications in sports, it will ensure success in providing quality and effective sports services, by increasing knowledge of manager on events and its components.

Transition in knowledge management in sports undoubtedly passes through data, which is the smallest unit of knowledge. Therefore, if the way to be strong in management is to make the

right decisions with the right information, the way to do this is based on reliable and timely taken data. Futher, while the efficiency of management can be measured by making knowledge-based decisions, the knowledge itself depends on the production capacity of the reliable information flow from the smallest unit; data. Since databases are the systems that enable data to be obtained from fast, efficient and reliable environments, the transition to knowledge management in sports management will also be possible thanks to these databases.

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International Journal of Sport Culture and Science
March 2021 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.626

Examination of Folk Dances Athletes' Evaluation of Coach Behaviors According to Some Demographic Variables

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Type: Research Article (Received: 06.03.2021– Accepted: 23.03.2021)

Abstract
The purpose of this study includes evaluation of folk dance coaches, who have a great role in promoting the cultural heritage, by their athletes. By examining the main foundations of success in sports, the effects of the concept of coach on sports and athletes, and how effective of a role the team coaches play in the development of athletes in competitions or shows are examined. The sample of the research consists of a total of 396 volunteers, 223 females and 173 males, competing from various clubs and associations from seven regions of Turkey in the 2019-2020 season. For the participants to evaluate their coaches, the "Coaching Behavior Scale for Sport (CBS-S)" was developed by Côté, J., Yardley, J., Hay, J., Sedgwick, W. & Baker, J. (1999) and adapted to Turkish by Yapar and İnce (2014) was used. CBS-S consists of 47 items, 7 sub-dimensions, and a 7-point Likert scale. SPSS 24.0 package program was used in the evaluation of the data. According to the ANOVA test results of the research findings, there is a significant difference in the "physical training and planning and positive personal rapport" sub-dimensions according to the education level of the coach ($p < 0.05$). Besides, a significant difference was found in the "physical training and planning, technical skills, goal setting, competition strategies, and personal rapport" according to the monthly income variable ($p < 0.05$). As a result, it was concluded that education improves physical training and planning of the folk dance coaches of the athletes and changes negative personal rapport behaviors of the coaches during an important training or competition.

Keywords: Folk dances, coach, coach behavior

Introduction

Physical education and sports basically consist of athlete, coach, and training relationships. These connections require a careful effort for success in sports. The development of an athlete depends on the coach's intention to provide technical, tactical, conditioning, psychological, sociological, and mental development to the athlete by providing appropriate training to the athlete in a general or related sports branch, and to make them a high-level elite athlete.

To be successful in sports, it is not enough just to perform the tasks given by the coach or to be talented. Athletes need coaches who will help them reveal their skills to have leadership qualities (Cengiz et al. 2012). The approach of the coaches to the athletes should have the goal of establishing a productive and healthy cooperation with the athlete. Because the behaviors of the coaches will strengthen the communication and will help to eliminate the factors that may negatively affect the athletes' performance (Güven, 1996). Athletes not only expect the coach to train them well, but they also want them to have good personality traits. In this sense, they may demand that their coach, with whom they are in constant communication, be with them not only in sports performance but also in all kinds of personal problems (Yücel, 2010).

Since primitive societies, people have described their lifestyles, feelings, and thoughts by harmoniously combining the sounds made with an instrument or instruments with movements. In modern societies, Folk Dances are seen as cultural values peculiar to the past (Avşar, 1984). Anatolia, a place where many different types of states were established on throughout the history , therefore a place where plenty of cultures were lived on, has served as a strong bridge between eastern and western cultures. Therefore, folk dances, which are an important element of folk culture and life, have a great variety and richness in this region (Türkmen and Seleciler, 2020). Folk Dance is an aesthetic phenomenon that includes physical activity by blending music and movement, which is often combined with anonymous folk music, organized in a way that is pleasing to the ear and the eye as a concept, and it creates an excitement and aesthetic effect with balanced and measured movements (Ekmekcioğlu, 2001; Bozkuş, 2013).

Folk dances are measured, regular movements that express an important aspect of folk culture, reflect an event, joy, sadness, have their origins in religion and magic, made with or without music, and presented with one person or in groups. (Bozkuş, 2002). Folk Dances were not only performed in the regions of their origin, but were performed by various dance groups over time, reaching large audiences through competitions, shows, and international presentations and they became a stage art. Although folk dances have emerged by various communities without any concerns about being watched and admired, the point reached by technology in our century and the improvement of the international relations and the change of the cultural level have attracted large audiences to these dances (Gerek, 1997). In folk dance teams, the coach should take care of the athletes by providing a sufficient level of communication in training and conditioning, technical skills, mental health, goal setting and competition strategies. Starting from the pre-stage behaviors and attitudes of the athletes, their performance on the stage, their communication with each other, and their post-stage behaviors and attitudes should be carried out with the instructions of the coach. The most important way to being a successful coach and training successful athletes at the same time is through strong and correct communication with the group.

Therefore, the success of the folk dance athletes in competitions or shows largely depends on the good interaction of the coach with the athletes and making the athletes love performing the folk dances. For this reason, the evaluation of the coaches by the athletes has been

examined in order to improve the folk dances that have been passed on from the past to the present. In an issue where the importance of the concept of a coach is so clear, this study aims to "examine the coach behavior" of folk dance coaches. At the end of the study, important information will be contributed to the field on the importance of ethical behaviors, principles, communication skills, and successful fulfillment of duties in the development of the concept of a successful coach or efficient coaching.

Method

Research Model

In the study, in accordance with the purposes of this research, the "Descriptive and Relational Screening Model" was used. Descriptive screening models are defined as screening of the whole of the population or a group of samples of the population in order to make a general judgment about the population consisting of many elements (Karasar, 2012). Relational screening models, on the other hand, are research models that aim to identify the existence and/or degree of correlational change between two or more variables (Karasar, 2015).

Population and Sample

The population of the research consists of Turkish Folk Dance athletes who actively participated in shows and competitions in the 2019-2020 season. The sample group of the research consists of a total of 396 volunteers, 223 females and 173 males, competing from various clubs and associations from seven regions of Turkey in the 2019-2020 season.

Data collection tools

As a data collection tool, the "Coaching Behavior Scale for Sport" (CBS-S; Côté, et al., 1999) developed and the "The Adaptation of Coaching Behavior Scale for Sport (CBS-S) into Turkish: A Validity and Reliability Study" (Yapar and İnce, 2014) was used. As demographic characteristics, the participants were asked about their gender, age, how many years they have been interested in folk dances, how many years they have been working with their coach, their education level, monthly personal income, and marital status.

The scale consists of 47 items and 7 sub-dimensions. Six sub-dimensions of the scale are related to positive personal understanding dimensions and one sub-dimension is related to the negative personal understanding dimension. Positive personal understanding includes 1) physical training and planning, 2) technical skills, 3) mental preparation, 4) goal setting, 5) competition strategies and 6) personal rapport, and the negative personal understanding dimension includes 7) negative personal rapport. The scale is evaluated on a 7-point Likert scale ranging from 1 (never) to 7 (always).

Data Analysis

SPSS 24.0 package program was used in the evaluation of the data. Parametric tests were used since it was found that the data has a normal distribution after the Skewness-Kurtosis test was performed to determine whether the data has a normal distribution. Therefore, frequency, percentage, ANOVA analysis were used in the analysis of the data.

Findings

Table 1. Distribution of Demographic Characteristics of the Participants

Demographic Variables	Groups	Frequency	Percentage
Age	15-20 years	193	48.7
	21-25 years	103	26
	26-30 years	46	11.6
	31-35 years	26	6.6
	36 or above	28	7.1
Gender	Male	173	43
	Female	223	55.5
Education Level	Primary school	38	9.5
	High School	264	65.7
	Associate Degree	46	11.4
	Bachelor's Degree	48	11.9
Marital Status	Single	322	81.3
	Married	74	18.7
Years Spent Coaching	1-5 Years	210	52.2
	6-10 years	132	32.8
	11-15 years	41	10.2
	16-20 years	12	3
	21-30 Years	1	0.2
Monthly Income	0-1000 TL	205	51.8
	1001-2000 TL	91	23
	2001- 3000 TL	56	14.1
	3001 TL or above	44	11.1
Years Spent Performing Folk Dances	1-5 Years	105	26.5
	6-10 years	186	47
	11-15 years	72	18.2
	16-20 years	22	5.6
	21-30 Years	10	2.5

According to the table, of the 396 participants of the study, 48.7% were between 15-20 years old, 26% were between 21-25 years old, 11.6% were between 26-30 years old, 6.6% were between 31-35 years old, and 7.1% were 36 years old or above. 43% of the participants are Men and 57% are Women. 9.5% of the participants have an education level of primary school, 65.7% high school, 11.4% associate degree, and 11.9% undergraduate degree. 81.3% of the participants are single and 18.7% are married. 52.2% of the participants have been coaching for 1-5 years, 32.8% for 6-10 years, 10.2% for 11-15 years, and 3% for 16-20 years. 51.8% of the participants have a monthly income of 0-1000 TL, 23% of 1001-2000 TL, 14.1% of 2001-3000 TL, and 11.1% of 3001 TL or above. 26.5% of the participants have been doing folk dances for 1-5 years, 47% for 6-10 years, 18.2% for 11-15 years, 5.6% for 16-20 years, and 2.5% for 21-30 years.

Table 2. X and SS Values of Behavior Evaluation Sub-Dimensions

Behavior Evaluation Sub-Dimensions	Skewness	N	X	SS
Physical Training and Planning	-0.745	396	5.4278	1.02229
Technical Skills	-1.703	396	6.2215	0.72862
Mental Preparation	-1.42	396	6.0572	0.82518
Goal Setting	-1.64	396	6.0347	0.80206
Competition Strategies	-0.987	396	6.0957	0.81582
Positive Personal Rapport	-1.559	396	6.0949	0.79882
Negative Personal Rapport	1.982	396	2.5219	1.22326

As seen in Table 2, when the sub-dimensions of coaching behavior for sport are examined, Physical training and planning sub-dimension mean score was found to be $\overline{X}$ = 5.42, technical skills $\overline{X}$ = 6.22, mental preparation $\overline{X}$ = 6.05, goal setting $\overline{X}$ = 6.03, competition strategies $\overline{X}$ = 6.09, personal rapport $\overline{X}$ = 6.09, and negative personal rapport $\overline{X}$ = 2.52 (See Table 2).

Table 3. Coaching Behavior for SportNormality Test Result

Behavior Evaluation Sub-Dimensions	Skewness	Kurtosis	X	SS
Physical Training and Planning	-0.745	0.411	5.4278	1.02229
Technical Skills	-1.703	0.936	6.2215	0.72862
Mental Preparation	-1.42	0.219	6.0572	0.82518
Goal Setting	-1.64	0.797	6.0347	0.80206
Competition Strategies	-0.987	0.497	6.0957	0.81582
Positive Personal Rapport	-1.559	0.66	6.0949	0.79882
Negative Personal Rapport	1.982	0.396	2.5219	1.22326

According to the table, when the data of the sub-dimensions of the Coaching Behavior for Athletesare examined, we can state that our data is normally distributed, as the Skewness and Kurtosis test values vary between +1.5 and -1.5. Tabachnick and Fidell (2013). Parametric tests will be used in the following analyses.

Table 4. ANOVA Test Results of Coaching Behavior for Sport According to Educational Status Variable

Sub-Dimension	Demographic Variable	N	X	SS	P
Physical Training and Planning	Primary school	38	4.7669	1.11719	0.001
	High School	264	5.4074	0.94057	
	Associate Degree	46	5.6304	0.94116	
	Bachelor's Degree	48	5.869	1.18642	
Technical Skills	Primary school	38	6.2599	0.62963	0.775
	High School	264	6.2228	0.62676	
	Associate Degree	46	6.1277	0.8876	
	Bachelor's Degree	48	6.2734	1.0884	
Mental Preparation	Primary school	38	6.0947	0.64889	0.758
	High School	264	6.0775	0.74731	
	Associate Degree	46	5.9435	0.95932	
	Bachelor's Degree	48	6.025	1.16956	
Goal Setting	Primary school	38	6.0553	0.69887	0.855
	High School	264	6.0456	0.69814	
	Associate Degree	46	5.937	0.93827	
	Bachelor's Degree	48	6.0521	1.20045	
Competition Strategies	Primary school	38	5.8033	0.87183	0.081
	High School	264	6.133	0.71217	
	Associate Degree	46	6.0124	0.96036	
	Bachelor's Degree	48	6.2019	1.08574	
Positive Personal Rapport	Primary school	38	5.8772	0.86358	0.127
	High School	264	6.1303	0.66853	
	Associate Degree	46	5.9551	0.95041	
	Bachelor's Degree	48	6.2069	1.15443	
Negative Personal Rapport	Primary school	38	2.2937	1.26351	0.005
	High School	264	2.4595	1.10109	
	Associate Degree	46	2.4647	0.87467	
	Bachelor's Degree	48	3.1008	1.84196	

According to Table 4, when it is examined whether the education level variable creates a significant difference between the scores of the coaching behavior for sport sub-dimensions, a significant difference was found in the physical training and planning sub-dimension. As a result of the Post-Hoc analysis regarding the source of the difference ($p < 0.05$), it was found that the mean scores of the participants whose education level is a primary school were significantly different from the mean scores of the other participants. In addition, when it was examined whether the education level variable creates a significant difference between the scores of the coaching behavior for sport in the study, a significant difference was found in the negative personal rapport sub-dimension ($p < 0.05$). In the Post-Hoc analysis regarding the source of the difference, the average scores of the participants whose education level was undergraduate degree were found to be significantly higher than the average scores of the other participants.

Table 5. ANOVA Test Results of Coaching Behavior for Sport According to Monthly Income Variable

Sub-Dimension	Demographic Variable	N	X	SS	P
Physical Training and Planning	0-1000 TL	202	5.2942	1.01303	0.01
	1001-2000 TL	90	5.4934	0.90141	
	2001- 3000 TL	56	5.3584	1.21245	
	3001 TL or above	42	5.852	0.8894	
Technical Skills	0-1000 TL	202	6.2184	0.63843	0.006
	1001-2000 TL	90	6.1663	0.6553	
	2001- 3000 TL	56	6.0134	1.10877	
	3001 TL or above	42	6.5268	0.54138	
Mental Preparation	0-1000 TL	202	6.0448	0.75685	0.226
	1001-2000 TL	90	6.0267	0.73573	
	2001- 3000 TL	56	5.9143	1.13897	
	3001 TL or above	42	6.2619	0.80908	
Goal Setting	0-1000 TL	202	6.0802	0.68937	0.088
	1001-2000 TL	90	5.9833	0.74202	
	2001- 3000 TL	56	5.7952	1.14215	
	3001 TL or above	42	6.131	0.84627	
Competition Strategies	0-1000 TL	202	6.0217	0.79103	0.007

	1001-2000 TL	90	6.0693	0.6759	
	2001- 3000 TL	56	6.0128	1.06671	
	3001 TL or above	42	6.4898	0.71404	
Positive Personal Rapport	0-1000 TL	202	6.0708	0.73732	0.04
	1001-2000 TL	90	6.0115	0.68899	
	2001- 3000 TL	56	6.0119	1.14453	
	3001 TL or above	42	6.4111	0.6962	
Negative Personal Rapport	0-1000 TL	202	2.5304	1.1884	0.288
	1001-2000 TL	90	2.3147	0.8619	
	2001- 3000 TL	56	2.6891	1.45465	
	3001 TL or above	42	2.5149	1.33982	

According to Table 5, when it is examined whether the Monthly Income variable creates a significant difference between the scores of the coaching behavior for sport sub-dimensions in the study, a significant difference was found in Physical training and planning, Technical Skill, Goal Setting, Competition Strategies, and Personal Rapport sub-dimensions. ($p < 0.05$) As a result of the Post-Hoc analysis regarding the source of the difference, it was found that the mean scores of the participants whose monthly income is 3001 TL or above were found to be significantly higher in the physical training and planning sub-dimension. In the Technical Skills sub-dimension, it was found that the mean scores of the participants whose monthly income is 3001 TL or above are significantly higher than the mean scores of the others. In the Competition Strategies sub-dimension, it was found that the mean scores of the participants with a monthly income of 3001 TL or above are significantly higher than the mean scores of the other participants. In the Personal Rapport sub-dimension, it was found that the mean scores of the participants with a monthly income of 3001 TL or above are significantly higher than the mean scores of the other participants.

Discussion and Conclusion

Sports have multidisciplinary structures. Sports activities are carried out in cooperation with many fields of science. In this structure, superior performance and satisfaction levels are very important for athletes. For athletes to have high-performance levels is only possible in an organized process. The leader who can provide the functionality to this process and direct the athletes to the same goal and target, who can create vision and strategies, is the coach.

The coach has certain authority due to their position in sports competitions. The coach encourages and prepares the athletes for competitions. For the coaches to be able to use their authority well depends on their level of knowledge. The knowledge power of the coaches depends on a system that will enable them to access the technological and theoretical developments in their area.

The scales for evaluating coach behavior and athletes' evaluation of coaches are one of the few scales that aim to examine the relationships between athletes and coaches in-depth. Examining the relationship between coaches and athletes, as a result of a literature review on the subject, it is seen that Coarkendal (2014) examined the coaching behaviors that the athletes prefer and expect and whether the coaches meet these expectations.

This study aims to examine the folk dance athletes' evaluation levels of coaching behavior according to some demographic variables. A total of 396 folk dance athletes, 173 male (43%) and 223 female (55.5%), voluntarily participated in the study. The results obtained in this context are presented by discussing in the light of the relevant literature.

These differences in the samples are the limitations of the study and in light of the findings obtained from the CBS-S applied to the sample group of folk dance athletes, the results obtained regarding the research hypotheses and the evaluation of these results are given below.

When athletes' evaluations of coaching behaviors were examined according to the educational level variable, it was found that there is a statistically significant difference in Physical training and planning and the Negative Personal Rapport sub-dimensions, while there is no significant difference in the other sub-dimensions. When the differences in the physical training and planning and Negative Personal Rapport dimensions were examined, it was observed that the mean scores of athletes with undergraduate education levels are higher than those with primary, high school, and associate degree education levels.

When the relevant literature is examined, a causal relationship was found between coaching behaviors and sports anxiety in the study conducted by Smith, Smoll, and Barnett (1995). It was observed that negative coaching behaviors increased athletes' anxiety levels and that athletes evaluated coach behaviors more negatively (Cote et al. 1999). In another study, when the results of the study conducted by Abakay (2010) with football players are examined, it was concluded that as the education level of athletes increase, their communication levels with their coaches increase as well. The results of this research support our study findings. As a matter of fact, the concept of training is important not only for the personal development of

the athletes but also for the athletes to be able to manage their self-regulation and establish better relationships. In the research conducted by Gül (2015), it was found that the high education level of the coaches positively affects the athletes' views of the coach. Bektaş (2014), who conducted research on the leadership attitudes of coaches, reached the conclusion that higher education levels of the coaches create a positive significant difference in leadership behaviors.

When the athletes' evaluations of coach behaviors were examined according to the monthly income level variable, it was found that there is a statistically significant difference in the Physical training and planning, Technical skills, Goal setting, Competition strategies, and Personal Rapport sub-dimensions. It was observed that there is no significant difference in the other sub-dimensions. When the differences in physical training and planning, technical skills, goal setting, competition strategies, and personal rapport are examined, it is seen that the average scores of athletes with a monthly income of 3001 TL or above are higher compared to the athletes with a monthly income level of 0-1000 TL, 1001-2000 TL, and 2001-3000 TL. It is thought that in sub-dimensions that differ significantly, folk dance athletes may have an idea about the future and established a connection between the future and income.

In parallel with the findings of our study, in the study "Determining the Leadership Styles That Amateur Football Players Want to Have in Coaches" by Özsarı (2010), comparing the leadership characteristics of the coaches according to the monthly income of the football players, no statistically significant difference was found in educational-supportive, democratic behavior, explanatory-rewarding behavior, and autocratic behavior characteristics according to the monthly income of the football players. Güzel (2008), in the study examining whether there is a significant difference in the expectations of amateur athletes from their coaches according to the economic gain variable, the views of amateur athletes about the expectations from their coaches did not have a significant difference according to the economic gain variable.

As a result, it was concluded that education level improves physical training and planning of the folk dance coaches of the athletes and changes negative personal rapport behaviors of the coaches during an important training or competition.

Recommendations

It will be important for folk dance coaches to attend vocational training seminars in order to improve their attitudes towards athletes.

It will be beneficial for folk dance trainers to attend various seminars and conferences in order to improve the education level of the branch.

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International Journal of Sport Culture and Science
March 2021 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.627

Examination of Gender Perceptions of Students Studying at the Faculty of Sports Sciences

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Type: Research Article (Received: 27.11.2021– Accepted: 24.03.2021)

Abstract

The aim of this study is to reveal whether education and learning gender perceptions in the faculty of sports sciences show a significant difference according to gender and education departments. The sample group of the study was 144 students (58 women and 86 men) from the departments of physical education, coaching, recreation and sports management studying faculty of sports sciences. “Gender Perception Scale” developed by Altınova and Duyan was used as the data collection tool. According to the findings, it is seen that women’s gender perceptions are significantly higher than men’s. In addition, it is seen that the gender perceptions of others in sports management departments are at a lower level compared to the other three departments. As a result male students and sports management department students have a more traditional perspective on gender perceptions than women and other departments. In order to transform the real perspective on gender perception and roles of male university students, it can be suggested to create educational programs and to spread the egalitarian perspective.

Keywords: Sport science students, gender, gender roles, gender perceptions

Introductıon

Although the concept of femininity and masculinity is not biologically changeable, they are concepts based on gender and vary according to social factors (Bora, 2014). On the other hand, the concept of "gender" is defined as the roles and responsibilities of women and men drawn by the social environment (Akın, 2008). The concept of gender is closely related to how societies perspective male and female roles and what kind of behaviors they expect from them (Akın, 2008). While factors such as parents, teachers, schools, peers, media, games, language, art, music and religion determine gender (Basow, 1992), this concept is institutionalized through policies (Akın, 2008). Gender basically refers to the meaning attributed to the gender by society and traditions according to the male and female gender and the expected behavior towards these genders (Dökmen, 2014). Oakley (1985) states that the concept of gender emerged not by biological change between men and women, but by transmitting gender stereotypes from generation to generation. Similarly, Bee and Boyd (2009) state that people do not have psychological qualities specific to different genders when they are born and that gender discrimination occurs in socialization and behavior. According to Steinberg (2007), gender is the result of women and men being influenced by the society in order to behave according to their gender. In summary, while biological characteristics determine sex, culture affects gender.

With the emerge of gender gain, taboo judgments about male and female roles also begin to increase (Bee and Boyd, 2009). Gender-appropriate roles increase especially in women as a result of the pressure exerted by the social environment. While men are regarded as independent, logical, ambitious, strong, aggressive and are expected to display appropriate behaviors, women are seen as lacking authority, low status and inadequate, and they are expected to be social, soft, polite, empathetic (Hyde and Delamater, 1997).

According to studies on gender in sports environments, there is an opinion that sports increases gender inequality (Connell, 1987). In the context of gender, women's participation in sports begins with the biological difference between men and women and the taboo of male supremacy created by this difference. According to Koca and Bulgu (2005), the current position of women in the sports environment is closely related to the perception and evaluation of sports activities that support biological differences. As long as sports are defined by superior physical characteristics, high performance, success, skills and records, biological differences are normalized and transformed into social subordination of women(Koca and Bulgu, 2005). For example, according Young (1979), some discourses stemming from the biological difference of women and their normalization, the view that the female body is sensitive and women should live as a weak entity, prevent them from participating in physical activities that require strength.

The perception of sports by the society as a biological field that belongs only to men can be determinant especially for boys to define themselves. In a study, when they asked boys to define themselves, regardless of social class, all men identified themselves with the sport they were interested in, whereas girls, only licensed athletes identified themselves with the roles of athletes (Bourdieu, 1978). It can be argued that this difference stems from gender perceptions (Bourdieu, 1978).

According to the studies in Turkey, women's experiences that exist in athletes' sports environment and female students physical education setting is ignored (Koca, 2006). However, physical education as a social field should be considered independent of gender

(Koca and Demirhan, 2006). However, especially in patriarchal societies, the woman who is depicted as a good wife and mother is mostly seen in relation to a poor area that gives birth to a child and is consequently surrounded by a house, while the male is rather perceived to be directly related to external public spaces outside the home. It is known that this distinction has an important effect on determining the roles of women and men. Considering that gender taboos and sexist behaviors based on these taboos are generally carried out on the female body (biological weakness, bodily appearance), it is said that women positioning themselves in the society and realizing their physical abilities will positively affect their self-perception and self-confidence (Koca and Bulgu, 2005).

While Turkey's population is roughly 50 % female, but women only account for 2 out of the 7 million licensed athletes(Sports General Directorate [SGD], 2018). These data, on the one hand, show how large the difference between male and female athletes is, on the other hand, the cultural position of women in society.

There are studies in the literature on gender perception of university students. Studies show that the main effect of gender on gender perceptions of university students is more egalitarian of female students than male students (Altınöz et al.,2018; Aydın et al., 2016; Aylazet al., 2014; Çetinkaya, 2013;Güzel, 2016; Seçgin and Tural, 2011; Varolet al., 2016; Uçar et al.,2017; Yılmazet al., 2009). Moreover, there are studies in which both male and female students have moderate positive gender equality attitudes (Yılmaz et al., 2009). According to the results of this studies, the gender perception of university students is related to cultural factors, educational status of the family, especially the mother, media and traditional gender roles (Altınöz et al.,2018; Çetinkaya, 2013; Direk and Irmak, 2017). However, when the studies on gender are conducted in sports settings, there is an opinion that sports increases gender inequality (Connell, 1987; Koca and Bulgu, 2005). The experiences of female athletes in the sports environment, sports activities in which they can show themselves and even the skills of female students are ignored in physical education lessons (Koca, 2006). However, the field of sports and physical education should be considered independent of gender (Koca and Demirhan, 2006). Sports, as it is a tool for socialization in society, is cultivated in the development of individual and social relations. In addition, it has an important role in the physical, mental and social development of the individual. Therefore, gender perception is also important in sports sciences (Ramazanoğlu et al., 2005). However, it is seen that studies on gender related sports sciences are limited. In particular, it is important to explain where women studying in sports sciences see themselves in society and where men see women in society. In this context, the main purpose of this study is to investigate whether the gender perceptions of students studying at sports sciences faculties differ significantly among gender and the departments they study.

Material and Method

Participants

The research group is located in the west of Turkey who is studying in the faculty of sport sciencesin Pamukkale University. Participants arestudying physical education, coaching, recreation and sports management. The sample of the study consists of 144 out of a total of 480 students studying in the departments of physical education(N = 39), coaching (N = 47), recreation (N = 29) and sports management (N = 32) (Table 1).

Measures

Gender Perception Scale: Gender Perception Scale developed by Altınova and Duyan (2013). Scale used to measure the gender perception of the participants. The original scale consists of 5-point Likert type questions and initially include 30 items. Following a validity study of the scale, the factor analysewas determined by principal component analysis method and according to the findings obtained, the scale consisting of 30 items was reduced to 25 items (Altınova and Duyan, 2013). It is seen that the validity coefficients of the remaining 25 items are at the desired level. The eventually applied scale consists of 10 positive and 15 negative statements. The items containing a negative statement are scored in reverse The scale consists of a single factor. In order to determine the reliability of the scale, it is seen that the reliability coefficient (Cronbach Alpha: 0,872) calculated as the internal consistency measure for the whole scale is at the desired level (Altınova and Duyan, 2013).

Personal Information Form: A personal information form consisting of open- and closed-ended questions was prepared by the researchers to determine the socio-demographic characteristics of the students and transferred to the participants along with the scales. In the personal information form, questions about socio-demographic data such as gender, education status of their parents, family income levels and place of birth are administered to students.

Data Collection

Data were collected from a total of 144 students studying in the physical education, coaching, recreation and sports management departments of the sports sciences faculty at a state university in the 2018-2019 academic year. After the necessary permissions for the research were obtained from the participants and the institution, the scale was explained by the researchers during the lesson. Participants required an average of 20 minutes to complete the scale.

Data Analysis

The data obtained using the Gender Perception Scale was transferred to the computer and statistical analyzes were performed using the Statistical Package for Social Sciences (SPSS) version 21 package program. While İndependent Sample T-Test was used to look for the difference between the genders, One-Way ANOVA test was used to look for the difference between departments.

Results

In this section, the results of theIndependent Sample T-Test and One-Way ANOVA analyzeswere used. Descriptive information is given in Table 1. According to this, 144 students participating in the study received a maximum of 125 and a minimum of 56 points from the scale, and on average 97,868 points. The ages of the participants vary between 18-33 and their average is 22,146. (Table 1).

Table 1. Students' Descriptive Information Table

	N	Min	Max	Mean	SD
Score	144	56	125	97,868	16,880
Age	144	18	33	22,146	2,602

In order to understand whether there is a significant difference in gender perceptions of students studying at sports sciences faculty, independent sample t-test statistical analysis was conducted in independent groups (Table 2). Accordingly, it is seen that there is a highly significant difference between men and women in favor of women ($p < 0.01$). While the average score obtained by women from the scale is 107,572, the average score obtained by men is 91,325.

Table 2. The Result Of Statistical Analysis Of Gender Perceptions Of Sports Sciences Students According To Gender

Cinsiyet	N	Mean	SD	F	*p*
Women	58	107,572	1,448	15,990	,000**
Men	86	91,325	1,837		

p<0 ,01**

One-way analysis of variance (ANOVA) was applied to understand whether there is a significant difference in the gender perceptions of the students studying at the faculty of sports sciences according to the departments of physical education, coaching, recreation and sports management. According to this table, there is a significant difference in terms of gender perception according to the departments studied (Table 3). The parts of this difference originate from Table 4 in detail.

Table 3. The Result Of Statistical Analysis Of Gender Perceptions Of Students Studying At The Faculty Of Sports Sciences According To The Departments

Section	N	Mean	SS.	Min.	Max.	F	*p*
Physical Education	39	105,794	2,235	56,00	125,00		
Coaching	48	96,437	2,596	59,00	123,00		
Recreation	24	101,166	3,022	73,00	122,00	7,910	,000**
Sports Management	33	88,181	2,235	65,00	119,00		
Total	144	97,868	2,596	56,00	125,00		

p< 0,01**

As a result of the Post-Hocanalysis (Bonferroni), it is seen that the variables were homogeneous and therefore One-Way Variance (ANOVA) analysis was used. According to this, the gender perceptions of the students studying in the physical education department are significantly higher than the students studying of coaching and sports management. The gender perception of the students studying in the coaching department is significantly higher than the students studying in the sports management department, but it is significantly lower than the students studying in the physical education department. The gender perceptions of the students studying in the recreation department are significantly higher than the students studying in the sports management department. The gender perception of the students studying in the department of sports management is significantly lower than all other departments (Table 4).

Table 4. The Result Of The Post Hoc Analysis Of Gender Perception According To The Departments Of Education

Department	**Department**	**Mean Differences**	**SS**	***p***
Physical Education	Coaching	9,357*	3,400	,007*
	Recreation	4,628	4,092	,260
	Sports Management	17,613*	3,731	,000*
Coaching	Physical education	-9,357*	3,400	,007*
	Recreation	-4,729	3,943	,233
	Sports Management	8,255*	3,567	,022*
Recreation	Physical education	-4,628	4,092	,260
	Coaching	4,729	3,943	,233
	Sports Management	12,984*	4,232	,003*
Sports Management	Physical education	-17,613*	3,731	,000*
	Coaching	-8,255*	3,567	,022*
	Recreation	-12,984*	4,232	,003*

$p< 0,05$ *

Discussion

The aim of this study physical education, coaching, recreation, sports management students, who study at Pamukkale University, to examine social gender perceptions.According to the results of the study, when the gender perceptions of the students studying in different departments of the faculty of sports sciences are examined,high scores from the Gender Perception Scale indicate that university students' perceptions of gender are positive. Several other research support this finding (Kodan Çetinkaya, 2013; Yılmaz et al., 2009). This situation can be occured becuse of (1) open-minded, contemporary and egalitarian perspectives depending on the level of education; (2) students studying in sports sciences are aware that the next generation will take them as an example and become potential role models for young people (Yıldız and Keçeci, 2016).

According to Kara and Güngörmüş (2018), students studying in the field of sports sciences have a gender-sensitive perspective, albeit partially; (3) supporting the literature, according to the results obtained from this study, it is seen that the gender perception of the students studying in sports sciences is generally positive. It can be said that this positive view stems from the high level of personal awareness of the students studying at thefaculty of sports sciences. According to Kara and Güngörmüş (2018), it is thought that the activities of units such as the departments of women's studies, women's studies research and application centers within the university support this perspective. However, there are also studies in the literature regarding the negative perception of gender in studies on university students (Öngen and Aytaç, 2013). For example, in their study, Esen, Siyez, Soylu, and Demiryüz (2017) concluded that both female and male participants had the idea that women's entry into the workplace would lead to disruption of housework and that housework was seen as the duty of women. In addition, although women take an active role in business life, they feel the housework as their own responsibility. This situation stems from the role of cultural learning and factors (Özçatal, 2011). In addition, while men define themselves in a masculine role, women define themselves in a feminine role and this bringing along the tendency of not equal for women in bilateral relations (Kuiper, 1990).

According to the findings obtained from this study, it shows that gender perception scores of women are higher than men's. This result is similar to previous studies and indicates that male students have a more traditional perspective on gender perception than female students. However, both national and international studies on university students show that female students' attitudes towards gender are more equitable than male students (Aşılı, 2001; Aylaz et al., 2014; Çelik, 2013; Daşlı, 2019; Kimberly and Mahaffy, 2002; Kodan Çetinkaya, 2013; Kulik, 1999; Öngen and Aytaç, 2013; Yılmaz et al., 2009). As a result of this study, it was found that female university students displayed a more positive attitude towards reducing the possible stereotypes in society and transforming the traditional perspective together with the traditional roles assigned to women and men, supporting the literature. On the other hand, male students having a more traditional perspective on gender perceptions can be associated with the fact that this situation is for the benefit of men and is also supported by the society (Vefikuluçay et al., 2007). However, it can be imagined that men reinforce this attitude because they are satisfied with the power they have and receive social support (Aylaz et al., 2014). The fact that women have a more egalitarian attitude in terms of gender perceptions can be explained by their strong desire to have an equal position with men (Kodan Çetinkaya, 2013; Kulik, 1999).

According to Kılıç and Şener (2013), low socio-cultural, socio-economic levels and limitations of opportunities play an important role in the development of individuals on the basis of participation in recreational activities. Therefore, students' gender perceptions are the result of adopting a traditional perspective depending on the level of education and the opportunities offered. Moreover, considering that the gender of the students, the region they live in before starting school and their economic situation have significant effects on the gender perception of students (Özpulat, 2016), the location of recreational activities should be evaluated separately.

According to the findings obtained from this study, the gender perceptions of students studying at the faculty of sports sciences differ significantly according to departments. Accordingly, the gender perception scores of the students studying in the department of physical education are significantly higher than the students studying in other departments.

Research findings are similar to other studies conducted in Turkey (Çuhadaroğlu and Akfırat, 2017; Yıldız and Keçeci, 2016). There are also studies showing that pre-service teachers' perception of gender is low. Erdol, Özen and Toraman, (2019) have examined students view in different parts of the education faculty on gender. Accordingly, it was observed that pre-service teachers had negative views on gender equality and these views were negatively affected during their time at the education faculty. This situation suggests that it is possible to transfer gender inequality to the society through teachers (Acar et al., 2019). However, in this study, the fact that the gender perception scores of the students of the physical education department is significantly higher than the other departments (coaching, recreation and sports management) is thought to be due to the fact that the students have to be a role models and the determining qualities of the teaching profession.

According to the results of this study, the gender perceptions of the students studying in the physical education, coaching and recreation departments are significantly higher than the students studying in the sports management department. When the literature is examined, although the gender perceptions of the students studying in sports sciences are generally high (Kodan and Çetinkaya; 2013; Yılmaz et al., 2009), the findings of this study are against the students of sports managers. This may be due to the fact that the students who are accepted to other departments are admitted to the school with their athlete resume and exam score (Basic Proficiency Test [TYT]), while the students studying in the sports management department are accepted only with the university entrance exam score (TYT) regardless of the athlete's background (yokatlas.yok.gov.tr). When the literature is examined, it is seen that individuals who actively participate in sports have more positive perceptions of gender and their perspective towards women in society (Koca, 2006). In addition, it is thought that the reason for the low gender perception of the students of the sports management department may be due to the fact that women's management status is not accepted, because women have entered into working life much later than men and under more difficult conditions in the historical process, and their participation in management positions in business life is going through a difficult process (Onay and Heptazeler, 2014).

Conclusion

As a result, the gender perceptions of the students studying at the faculty of sports sciences differ according to the departments they study and according to the gender variable.

Accordingly, women have a more positive perception of gender than men. Gender perceptions of students studying in physical education departments are significantly higher than students studying in other departments. On the other hand, gender perceptions of the students studying in the sports management department are significantly lower than the students studying in other departments.

Within the scope of the findings of the research, it can be suggested to spread the egalitarian perspective by raising the awareness of university students through intervention and education programs in order to transform the traditional perspective on gender perception and roles. The gender role issue can also be included in the content of these intervention programs. In particular, given that male students have a more traditional perspective, it can be said that planning intervention programs for men is important. In addition, it can be suggested that the factors affecting these attitudes of university students

who are determined to have traditional values on gender equality should be examined in depth by using qualitative research methods.

It is recommended that the students studying in the department of sports management should be included in universities with their athlete's background and exam score (TYT) as in other departments. Because it is the opinion that individuals who actively participate in physical activity have more positive gender perceptions (Koca, 2006).

Finally, the awareness level of university students can be increased with seminars or conferences to transform the gender perception. In symposiums and panels to be organized on the subject, it is considered important to ensure that gender and roles are discussed together by male and female students by supporting the participation of male students. In these symposiums and panels, the importance of recreational activities should also be discussed. In this way, future sports managers, trainers, physical education and recreation leaders can be trained more equitably.

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International Journal of Sport Culture and Science
March 2021 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.628

Investigation of Psychological Resilience Levels of Boxing Sports

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Type: Research Article (Received: 10.01.2021– Accepted: 23.03.2021)

Abstract
This study aims to examine the psychological resilience levels of athletes who do boxing in sports clubs in Istanbul according to various variables. In the study 315 (166 females, 149 males) athletes participated. To measure athletes' psychological resilience in the study, Ego-Resilience Scale, which was developed by Block and Kremen (1996) adapted into Turkish by Karaırmak (2007), was used. In research statistics; Since the data showed normal distribution, independent samples t-test and ANOVA, which are parametric tests, were used (α=0.05). According to the research results, in the comparisons made according to the gender variable, no significant difference was found between the groups ($p>0.05$). According to the study results, no significant difference was found between the groups in the comparison made according to the age variable of physical education teachers ($p>0.05$). However, it was determined a significant relationship between the sportsmen's active sports and their expressions in daily life and their psychological resilience ($p<0.05$). In line with the findings obtained; It has been determined that athletes' active sports and self-expression levels have a significant effect on their psychological resilience.

Keyword: Sports, Box, Psychology, Psychological Resilience

Introduction

It has been accepted by many studies that there are many factors affecting success in performance sports and that studies with a wide range of goals are required for success (Vast, et al., 2010). Psychological resilience stated that the individual should have psychological protective factors that can resist difficulties and troubles (Masten & Obradovic, 2006). These protective factors are defined as situations that alleviate or eliminate the effects of difficulties and improve their competencies. Studies have shown that skill can only emerge fully after the correct mental processes occur (Campo et al., 2011; Yan, 2010). This context has led to the thought that sportive competition cannot be done without reaching the necessary mental intensity. Therefore, it is necessary to compete with the right mind for proper performance. This study has been deemed necessary to bring the athletes' performance to the desired level and reveal the athletes' lives and current competencies/insufficiencies in their sportive life.

Today, psychological resilience, which is seen more and more, appears as a deficiency ignored by individuals but decreases life when it is not realized. This situation is considered as low morale and trauma in the life process (Hickey & Fricker, 1999). Recent studies show that elite athletes' psychological resilience tends to increase, necessitating a more detailed and analytical study of psychological resilience (Norville & Tofler, 2005).

When the literature is examined, it is seen that most of the studies on psychological resilience are aimed at individuals whose psychological resilience levels are found to be deficient, and sports practices are also included. When these studies are examined, it is stated that sports can be considered as an additional factor in eliminating the psychological resilience levels. However, when the literature is examined, a limited written descriptive study is found to determine the athletes' psychological resilience levels or the psychological resilience levels that should be shown at the appropriate performance level. With this study, it is planned to conduct an analytical examination of psychological resilience in terms of age, gender, active sports or not, how you feel in daily life. It is thought that this study can help increase the performance awareness and psychological resilience levels of athletes in the current situation.

Literature Review

Psychological Resilience

Post-WWII psychology has become a healing science based on the "disease model"; With this model, human strengths are ignored, and the focus is on repairing the damage (Seligman, 2002). However, a new era has begun in psychology with the idea that focusing on pathology will not be enough to help people use their full potential. In his 1998 presidential speech of the American Psychological Association (APA) and his article published in the American Psychologist, Seligman introduced the field of positive psychology as a way to increase the study of psychological characteristics that are supposed to be beneficial to general well-being (McNulty & Fincham, 2012). Thus, in the last 20 years, a strong effort has arisen to study psychological characteristics and processes that have been attributed as beneficial and positive for general well-being in the literature. Psychological resilience refers to dealing with stress or a negative situation or overcoming this process. Psychological resilience is a process that

includes the interaction of the individual's current life conditions and past life experiences, rather than being the personality trait of individuals (Meredith et al., 2011).

Psychological stability in the Western culture attempts to over the years, but new research areas studied in Turkey since the early 2000s. There is no consensus on how to translate the term "Resilience" into Turkish, and there are different expressions in the literature such as "resilience" (Öğülmüş, 2001), "psychological resilience" (Gizir, 2004), and "self-recovery" (Terzi, 2006). In this study, "psychological resilience" was preferred as the equivalent of the word resilience. Different researchers regarding psychological resilience put forward different definitions. Psychological resilience is used as a structure referring to positive adaptation in the face of disaster, stress, or trauma (Masten, 2001). Fraser, Richman, and Galinsky (1999) expressed psychological resilience as the ability to achieve positive and unexpected success under challenging conditions and to adapt to extraordinary conditions and situations. Psychological resilience is defined as a personality trait or a process in which personal, interpersonal, and environmental protection mechanisms are included. Studies that define psychological resilience as a personality trait leave its place in dynamic vision.

Although studies have tried to explain the relationship between psychological resilience and various factors, few studies have focused on understanding the underlying psychological resilience mechanisms. Tugade and Frederickson (2004) hypothesized that psychological resilience is related to the use of positive emotions. Psychological resilience is, in most cases, the result of the functioning of basic human adaptation mechanisms. Research on psychological resilience began with realizing that some individuals may manage the situation when exposed to setbacks, while others cannot manage the situation and exhibit psychopathology. As a result of research, there is an understanding that psychological resilience results from the complex interactions of personal characteristics and environmental conditions (Embury, 2010). What makes psychological resilience important is emotional resilience. He stated that the protective factors valid for individuals with high psychological resilience are personality traits, familial factors, and situational factors (Jaffe, 1998). In individuals with high psychological resilience, personality traits have characteristics such as easy adaptation, recovery ability immediately after sadness, positive thinking, high level of self-esteem and tolerance to frustration, and determination. In terms of family-related factors, these children can establish good relationships with their parents and receive support from other adults. In terms of situational factors, they also have support systems from the supportive school environment and outside the family.

According to Larsen (2010), protective factors supporting psychological resilience are examined in three main categories. These factors are; individual factors, family factors, and social factors. In another definition, psychological resilience is defined as individual qualities that enable the individual to develop despite adverse situations (Connor, & Davidson, 2003). Psychological resilience is a relatively stable personality trait that enables an individual to be resistant to adversities (Pavlovic et al., 2013). Researchers have investigated in which regions of the brain psychological resilience is functional. Accordingly, psychological resilience means coping with difficulties and adapting to the environment. It depends on the maturation level of the neuron circuits in the frontal region of the brain. According to this perspective,

psychological resilience uses neuron systems similar to the brain's executive functions (Martel et al., 2007). In this context, when the concept is examined, it is seen that there is a development in the definition of psychological resilience. While psychological resilience was a matter of concern only on an individual basis in the past, today, it is emphasized with different individual and environmental expressions.

Psychological Resilience in Sports

Sport has become one of the essential parts of societies in today's world. Many people actively or indirectly play sports, participate in sports activities or follow sports events (Li et al., 2001). It is seen that much researches have been done on the concept of resilience in recent years. These studies considering it is noteworthy that the concept of resilience is defined in different ways. The concept of psychological resilience is defined so differently from each other is not the difference of researchers, but the change in individuals' psychological resilience due to different situations and reactions. Since each individual's psychological state is unique to the person, there are also differences in each person's psychological resilience level. Because every individual gives an unusual reaction to stress and stressors, their characteristics and skills interact with their environmental lives that cause people to react and behave differently. Some people are better able to cope with stress and all the factors of stress at certain times. These people are defined as "people with high psychological resilience" (Mumford, 2001).

In their study titled Psychological Resilience in Athletes: Investigation of Stressors and Protective Factors, they stated that athletes with good psychological resilience in sports could use several mental features better to withstand the pressures they experience (Sarkar & Fletcher, 2014). Another study examining the mental well-being of individual and team athletes is that it can be said that the results obtained from university athlete students, who can be considered as the higher age group, cannot be supported by the current study (Demir et al., 2018).

When the literature was examined, it was determined that there is no relationship between sports experience (sports age) and psychological resilience (Grgurinović & Sindik, 2015; Solomon, 2015). In the research of Desai (2017), it was found that male participants had a significantly higher score than female participants. Kajbafnezhad et al. (2012) found a significant relationship between psychological skills, self-esteem, motivation for success, and performance. Martinek and Hellison (1997) stated that sport is a very suitable tool for improving young people's psychological resilience. It improves their social competence and instills hope and optimism in young people. This information encountered in the literature review determined that psychological resilience is one of the parameters that affect athlete performance.

Methodology

Research Goal

The research is a study in the scanning model. Scanning models are research approaches that aim to describe a past or present situation as it exists. The event, individual, or object subject

to research is tried to be defined in its conditions and as it is. No effort is made to change or influence them in any way. What is wanted to be known exists and is there. The important thing is to be able to "observe" it appropriately (Büyüköztürk et al., 2012; Karasar, 2005).

Sample and Data Collection

The study group of the study consists of 166 females, 149 males, totally 315 boxing athletes in different sports clubs in Istanbul.

Ego-Resilience Scale / Psychological Resilience Scale

The Ego-Resilience Scale was developed by Block and Kremen (1996). The adaptation study of the scale into Turkish was done by Karaırmak (2007). The scale, which consists of 14 items, is graded in a 4-point Likert type. The scale has a triple factor structure called personal strengths for recovery, positive evaluations towards oneself, and openness to innovations. The variance rate explained in the scale was reported as 47%. Three sub-dimensions obtained from explanatory factor analysis were supported by confirmatory factor analysis. The scores the individual gets from the scale constitute the total psychological resilience score. High scores from the scale indicate a high level of psychological resilience. It is recommended to use the total score obtained from the scale instead of sub-dimension scores.

The internal consistency coefficient of the scale was tested using Cronbach's alpha and test-retest methods. The Cronbach alpha value obtained from the scale items was found to be 0.80. The test-retest internal reliability coefficient, performed three weeks apart, was reported as 0.76.

Analyzing of Data

Within the research scope, the data obtained from the measurements were tried to be evaluated by using the SPSS 25.0 program. The frequency distribution of the athletes in the research group and their psychological soundness scores were evaluated by considering the data's characteristics in line with the independent variables. In this context, t-test with independent samples for groups with two different independent variables and ONE-WAY ANOVA test for groups with three or more independent variables.

Findings

The findings obtained from the study were evaluated by the psychological resilience scale used in the study, and investigations were made according to the variables accepted as independent variables. Accordingly, the findings are cited in four subtitles.

Tablo 1. Demographic characteristics of the participants

Variables	Category	N	%
Gender	Female	166	52,7
	Male	149	47,3
Age	13-18	100	31,7
	19-25	86	27,3
	26-30	37	11,7
	31-39	39	12,4
	40 and over	53	16,8
Active Sport	Yes	218	69,2

	No	97	30,8
How to Feel Yourself in Daily Life	Quiet	85	27,0
	Social	163	51,7
	Angry/Aggressive	20	6,3
	Inward-oriented	18	5,7
	Hyperactive	29	9,2

When Table 1 is examined, 31.7% of athletes participating in the study are 13-18 years old, 27.3% are 19-25 years old, 11.7% are 26-30 years old, and 12.4% of them are 31-39 years old. It was determined that 16.8% were 40 and over. The gender distribution determined that 52.7% were 166 women and 47.3% were men. It is determined that 69.2% of 218 people answered yes, and 30.8% of 97 answered no. To the question of how you define yourself in daily life, 27.0% of the group '85 people are calm, 51.7% of them are 163 people, 6.3% of them are 20 are angry and aggressive, 5.7% of them are 18 are introverted, and It was determined that 9.2% of the 29 people were hyperactive.

The psychological resilience levels of the athletes participating in the research are given below, according to the gender variable.

Table 2. Psychological Resilience Test Independent Samples T-Test Results According to the Gender Variable of the Athletes Participating in the Research

	Gender	**N**	$\overline{X}$	**SD**	**t**	**p**
Psychological Resilience	Female	166	39,0783	4,9750	,747	,237
	Male	149	39,7919	5,7106		

When Table 2 is examined, psychological resilience $\overline{X}$ = 39.07 + 4.975 of female athletes (N=166) and male athletes (N=149) were determined as $\overline{X}$ = 39.79 + 5.710. When Table 2 is examined, no significant difference was found between the groups according to the athletes' scores in the study on the gender variable of the athletes' psychological resilience scale (t =,747; p> 0.05).

According to the active sports variable, the psychological resilience levels of the athletes participating in the research are indicated below.

Table 3. Psychological Resilience Test Independent Samples T-Test Results According to the Active Sports Variable of the Athletes Participating in the Research

	Active Sport	**N**	$\overline{X}$	**SD.**	**t**	**p**
Psychological Resilience	Yes	218	39,9954	5,3645	1,697	**,004***
	No	97	38,1134	5,0700		

When Table 3 is analyzed, if the individuals participating in the study do active sports (N=218) yes ($\overline{X}$ = 39.99 $\pm$ 5,364 if no (N=97), the person is active $\overline{X}$ = 38,11 $\pm$ 5,070 between the status of the sport of the athletes participating in the research and their psychological resilience levels significant differences were detected (t=1.697; p <0.05).

Psychological resilience levels are given below according to the age variable included in the study.

Table 4. Psychological Resilience Subtest According to Age Variable Participating in the Research ANOVA Test Results

	Age	N	$\overline{X}$	SD	F	p
Psychological Resilience	13-18	100	39,5100	5,6129	1,348	,252
	19-25	86	39,2209	5,4823		
	26-30	37	38,6757	5,2071		
	31-39	39	38,4872	4,4890		
	40 and over	53	40,7547	5,1549		
	Total	315	39,4159	5,3389		

According to the scores obtained by the athletes participating in the study on the psychological resilience scale by age variable (F=1,348; p> 0.05), there was no significant difference between the groups.

The psychological resilience levels of the athletes participating in the research are indicated below according to how you define yourself in daily life.

Table 5. How to Define Yourself in Daily Life of Athletes Participating in the Study Psychological Resilience Subtest ANOVA Test Results

	How to Express Yourself in Daily Life	N	$\overline{X}$	SD	F	p
Psychological Resilience	Quiet	85	37,6824	5,8538	9,369	**,000***
	Social	163	40,8528	4,5095		
	Angry / Aggressive	20	37,3500	5,1224		
	Inward-oriented	18	35,5556	4,0032		
	Hyperactive	29	40,2414	6,0983		
	Total	315	39,4159	5,3389		

Significant differences were found between the psychological resilience levels of the athletes participating in the study according to how you define yourself in daily life (p <0.05).

Discussion and Conclusion

According to the findings of the research results obtained in this section's study results and some suggestions. Compared with research findings related areas in line with the study's hypothesis and reviewed possible reasons for the findings.

This study, it is aimed to examine the psychological resilience levels of athletes who box in sports clubs in Istanbul according to various variables.

When the study results were examined, there was no significant difference between the groups according to the gender variable of the athletes participating in the study and the athletes' scores on the psychological robustness scale. This research determined no significant difference between male and female athletes in the overall psychological endurance level (Çelik, 2018). Kumar, Singh, and Mitra concluded that the participants' mental endurance levels did not differ by gender (Kumar et al., 2016). Hosseini and Besharat stated no significant difference between male and female athletes (Hosseini & Besharat, 2010). Saka and Ceylan's research found that female adolescents had significantly higher psychological

endurance scores than male adolescents (Saka & Ceylan, 2018). Desai's research showed that male participants had significantly higher scores than female participants (Desai, 2017).

In an analysis conducted by the variable still doing active sports in the study, significant differences were detected with resilience. In the literature, Grgurinović, sports, and Solomon Sindik experience research and have determined an association between psychological resistance (Grgurinović, Sindik, & Solomon, 2015). From the perspective of these two levels of resilience, research results show similarities with current research results. In contrast to the present study results, Sar determined that her psychological endurance increased as sports duration increased (Sar, 2016). Their scores on the scale resilience of the athletes participating in the survey showed no significant difference among the variables according to age groups. Considering the results of other studies, it appears that there are different results from existing research results. Gooding, Hurst, Johnson, and Tarrier, have concluded that young people's resilience is higher than the level of the elderly in the study (Gooding, Hurst, Johnson, & Tarrier, 2012). Range and small, have studied female resilience of the national boxer and has identified the young national athletes and national sports star to be higher than that by the resilience (Erim, & Küçük, 2017). It decreased with increasing age resilience in the present investigation, a transition period of adolescence as a cause of hormonal changes that may be due to reveal some weaknesses from a psychological perspective. However, a statistically significant and positive relationship between age variables with resilience was found in the study by waste (Atik, 2013). How the athletes participating in the study's daily lives were significant differences between resilience levels by the variables you define the question.

When the findings obtained from the research are evaluated, psychological resilience is an influential factor for performance, and psychological resilience does not significantly affect female and male groups. According to the age variable, there was no significant difference between the groups according to the athletes' scores participating in the study on the psychological resilience scale. In the study, significant differences were determined between the psychological resilience of active sports and how you define yourself in athletes' daily lives.

In this context, the results of research;

Psychological variables as perceived robustness should be involved in a training program. More detailed studies on the effectiveness of mental training work should be done. Psych systematically examining the robustness should be enriched with work areas according to different environments and athletes. On the other hand, a limited number of variables in this study were discussed. Different variables associated with resilience for future research (section, class, such as branches) can be examined.

*This study was carried out as a online virtual presentation at the 2020 ERPA International Education Congress (“11-12 April 2020” Belgrade / SERBIA).

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International Journal of Sport Culture and Science
December 2020 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.629

Softball Umpires Call More Walks than Strikeouts when the Pitcher Plays for a Historically Black College and University

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Type: Research Article (Received: 24.11.2020 – Accepted: 07.03.2021)

Abstract

The purpose of this investigation was to determine whether softball umpires were more likely to call walks than strikeouts when the pitcher on the mound played for a historically black college and university (HBCU). As the acronym hints, an HBCU is a United States university that primarily serves individuals from the African American community while a predominantly white institution (PWI) has a student population that is mostly Caucasian. There is a well-developed line of research which has indicated that referee bias is common and suggested that racial factors can influence umpire decisions. However, there is no research which has specifically centered on umpire decision-making in the sport of softball. This study revealed a statistical difference on a criterion that is known as the strikeout to walk ratio. Umpires called a greater proportion of walks than strikeouts when the softball pitcher played for an HBCU relative to when the softball pitcher played for a PWI. These findings were uncovered in two different divisions and over the course of two different seasons which spanned from 2018-2019 through 2019-2020. The uncovered results point to the notion that cultural affiliation and racial factors can adversely influence the decision-making of softball umpires in certain contexts.

Keywords: Referee bias, historically black colleges and universities (HBCUs), softball, race, intercollegiate athletics.

Introduction

One of the main responsibilities of referees is to fairly enforce the rules of play. It is also imperative that referees correctly enforce the rules. However, there is a well-developed line of research on referee bias which has identified instances of officiating error. For example, previous scholarship has revealed that men's basketball referees were more likely to call fouls on the visiting team (Anderson & Pierce, 2009) and indicated that boxing judges were more likely to award extra scorecard points to male boxers whose nationality matched the location of the prize fight (Balmer et al., 2005). The lion share of referee bias literature has centered on European men's football where scholarship by Schwarz (2011) uncovered evidence of compensation tendencies in the Bundesliga League as referees had the proclivity to award an equal number of penalty kicks to each team during a game. Additional research on the men's soccer pitch has found that referees were prone to give yellow cards to the away team in the Football Association (FA) Cup in England (Downward & Jones, 2007) and claimed that crowd density was positively associated with referees making favorable calls for the home team in Union of European Football Associations (UEFA) matches (Goumas, 2014). Collectively, these empirical studies tell us that flawed officiating is not uncommon in men's sports while a subset of the referee bias literature has concentrated on determining why these biases are prevalent.

Previous research has revealed that time variables and social pressure often contribute to incorrect calls being made in the field of play. The findings of Helsen et al. (2006) suggested that the error percentage of referees was the most pronounced during the first 15 minutes of the game in their analysis of the 2002 FIFA World Cup. Scholarship on American football by Snyder and Lopez (2015) provided evidence that referees were more likely to call penalties in the middle of the game and less likely to call penalties at the end of the game. It was back on the soccer pitch that Riedl et al. (2015) reported that referees allowed for additional injury time play if one team was leading in comparison to games where the score was level (Riedl et al., 2015). Research that centered on the effects of time and social pressure by Garicano et. al (2005) found that referees were more likely to award extra stoppage time to home teams who were trailing at the end of regulation to provide extra opportunity for the equalizer goal to be scored. Literature on soccer matches in the Primera Liga by Buraimo and colleagues (2012) suggested the social pressure of home fans had less influence on referee decision making if the soccer pitch was surrounded by running tracks. Pettersson-Lidbom and Priks (2010) studied the effects of the social pressure of fans in the Italian Serie A and the Italian Serie B leagues after spectators were banned due to hooligan violence. Their findings indicated that home teams were penalized more harshly by the referees in games without spectators and found that the home team was penalized less harshly in games where spectators were present (Pettersson-Lidbom & Priks, 2010). These studies on referee bias reveal the effects of time and social pressure are salient, but there is novel evidence that racial factors influence the decisions of referees in a sport that is inherent to the culture that exists in the United States of America.

Baseball is a sport which requires frequent decision-making because home plate umpires have to assess the quality of a pitched ball when a batter does not swing. The scholarship of Hamrick and Rasp (2015) examined more than seven million pitches in Major League Baseball (MLB) over a time period that spanned from 1989 through 2010. Their racialized findings revealed the ethnicity of the pitcher influenced whether the umpire called the pitch a ball or a strike, but the effect sizes were minimal (Hamrick & Rasp, 2015). Similar MLB literature by Tainsky et al. (2015) concentrated on pitched balls from the 1997 season through

the 2008 season. Tainsky and colleagues (2015) found that home plate umpires called a higher percentage of strikes if the pitcher was White as opposed to Black or Hispanic (Tainsky et al., 2015). Analytic research on MLB by Kim and King (2014) examined over 750,000 pitches from the 2008 season through the 2009 season. Results from their study indicated that umpires judged pitches more favorably for White pitchers who had a good reputation in the league relative to Black pitchers who had a good reputation in the league (Kim & King, 2014). Parsons et al. (2011) looked at more than three million pitches from the 2004 season through the 2008 season in MLB. Their research uncovered evidence that: "White umpires, the overwhelming majority, judge minority pitchers more harshly than they judge White pitchers" (Parsons et al., 2011, 1,418). Research by Dix (2020a) examined the number of walks allowed per nine innings (BB/9) from the 2008 season through the 2017 season in college baseball. Dix (2020a) revealed that umpires were more likely to adversely assess pitches and call walks when the pitcher played for a historically black college and university (HBCU) relative to when the pitcher played for a predominantly white institution (PWI). Taken together, this research on referee bias hints that racial factors influence umpire decision making in baseball, but there is a very similar sport in which the extant scholarship on referee bias has been silent.

There have been no empirical studies that solely focused on referee bias in women's softball. This gap in the literature is surprising considering the popularity of softball and because home plate umpires in softball are required to frequently make decisions within the scope of an individual game. The rules for women's college softball closely mirror the rules for men's baseball. Home plate umpires in women's college softball have to decide on whether to call a strike or a ball if the batter does not swing at a pitched ball. Akin to the rules of baseball, a pitched ball that is deemed to be hittable is called a strike by the umpire while a pitched ball that is not deemed to be hittable is called a ball by the umpire. The culmination of calling a pitched ball as a strike or a ball affects the criterion that is known as the strikeout to walk ratio (K/BB). The K/BB ratio reveals how many strikeouts are recorded for each walk that is allowed. The ratio for a team is revealed by dividing the total number of strikeouts by the total number of walks. Differences are often subtle, but higher ratios are considered to be good for the pitching team. For instance, a K/BB ratio of 2.0 means the pitching team secures two strikeouts for every one walk. Conversely, a K/BB ratio of 1.0 means the pitching team secures one strikeout for every one walk allowed. The strikeout component of this ratio can be influenced by swinging strikes, but the walk component of the K/BB ratio is almost solely influenced by the decision-making of the home plate umpire. All things considered, the sport of women's softball needs to be investigated (a) because women's college softball umpires have the ability to impact the results of any individual game, (b) because more attention needs to be devoted to referee bias in women's sports, and (c) because racial factors may be influencing the decisions of home plate umpires.

The purpose of this investigation is to determine whether home plate umpires in women's college softball called a greater proportion of walks than strikeouts when the pitcher played for an HBCU relative to when the pitcher played for a PWI. As alluded to previously, HBCUs are universities that have historically enrolled African American students whereas PWIs are universities in which the student population is heavily comprised of Caucasian students. Scholarship within this niche has found that referees call a disproportionate amount of penalties against HBCU football teams relative to PWI football teams (Dix, 2017), found that more walks are called against HBCU baseball teams in comparison to PWI baseball teams (Dix, 2020a), and indicated that basketball referees call more fouls against HBCU women's

college basketball teams relative to PWI women's college basketball teams at the Division I level (Dix, 2019) and at the Division II level (Dix, 2020b). Therefore, it is based on the extant referee bias scholarship and based on previous empirical research which has revealed that referees disproportionately penalized HBCUs that the following hypotheses are offered. The central hypothesis is that HBCUs will be more penalized than PWIs by umpires on the K/BB ratio for the sport of women's college softball. It is also being hypothesized that HBCU softball pitchers will incur more walks than strikeouts in both Division I and Division II. Furthermore, it is hypothesized that not a single PWI will incur an unfavorable K/BB ratio that is statistically significant. This research also posits that multiple HBCUS will incur an unfavorable K/BB ratio over the course of two different seasons. Collectively, this study sought to statistically determine whether umpires negatively evaluated HBCUs in comparison to PWIs on the fields where women's college softball is being played.

Materials and Method

The data for this study was obtained from https://stats.ncaa.org/rankings/change_sport_year_div. This aforementioned webpage houses statistical data from the National Collegiate Athletic Association (NCAA). Data was extracted by executing a series of different steps on this webpage. First, the sport of "softball" was selected from the first drop-down box. Second, the year of "2019-2020" was selected in the next drop-down box. Third, the roman numeral "I" was selected in the third drop-down box. Fourth, the tab of "team" was then selected from the new pop-up window that emerged. Fifth, the "strikeout-to-walk ratio" criterion was selected in the drop-down box on the far left. Sixth, clicking on the option of "excel" on the right yielded (a) a report that illustrated the strikeout-to-walk ratio for every women's college softball team in Division I for the 2019-2020 season.

This same process was completed an additional three times to (b) create a report that illustrated the strikeout-to-walk ratio for every women's college softball team in Division II for the 2019-2020 season, (c) create a report that illustrated the strikeout-to-walk ratio for every women's college softball team in Division I for the 2018-2019 season, and (d) create a report that illustrated the strikeout-to-walk ratio for every women's college softball team in Division II for the 2018-2019 season. The only difference from the initial report was that the year of "2018-2019" was inputted when appropriate and the roman numeral of "II" was inputted when appropriate in order to change the year of analysis and the division of interest. The four Excel spreadsheets were then merged into one master Excel spreadsheet. It was in this master Excel spreadsheet the data were organized so that each year had their own column and each women's college softball team had their own row. Women's college softball teams who moved out of Division I or Division II or were suspended for an entire season were removed from this analysis. Executing these steps yielded a master Excel spreadsheet that was organized and imported into the Statistical Program for the Social Sciences (SPSS).

Data Analysis

This study used SPSS to analyze the collected data. The average K/BB ratio for each individual team was computed by adding their K/BB ratio for the 2018-2019 season to their K/BB ratio for the 2019-2020 season. Their individual team total was then divided by two

(since two different seasons were being analyzed). Two seasons were analyzed in this research because that was the only publicly available data at the time of this report. This process was completed for a total of 572 women's college softball teams.

A series of different *t*-tests and a *z*-score analysis were completed to compare HBCU softball teams and PWI softball teams. Softball teams were categorized as an HBCU or PWI based on the information that was posted on their university website. This information was double-checked on the HBCU website of https://hbculifestyle.com/list-of-hbcu-schools/ to confirm that each team was accurately categorized. Means and standard deviations were also calculated. The *z*-score analysis was completed to determine probability based on a normal distribution. Statistical significance was set at .05 and a one-tailed conversion table was used to determine the critical value. Utilizing a one-tailed directional hypothesis and a one-tailed conversion table set the critical value at 1.645. It was appropriate to use a *z*-score analysis to flush out data on the associated *p* value and to make comparisons to the mean.

Findings

It was hypothesized that a statistical difference would be observed on the K/BB ratio when comparing softball teams from HBCUs against softball teams from PWIs for Division I and Division II for the two seasons which spanned from 2018-2019 through 2019-2020. As predicted, statistically significant findings emerged after the completion of an independent samples *t*-test whereby cultural affiliation (e.g., HBCU or PWI) was entered as the grouping variable (t (570) = -6.127, $p < .001$). The K/BB ratio for PWIs for these two seasons across these two divisions was 1.86 (sd = 0.85) while the K/BB ratio for HBCUs for these two seasons across these two divisions was 1.09 (sd = 0.51). Stated differently, this finding reveals that umpires are more likely to call walks than strikeouts when the softball pitcher plays for an HBCU relative to when the softball pitcher plays for a PWI.

Statistical analyses concentrated on each individual division for Division I and Division II college softball were then computed. The findings from the independent samples *t*-test in which cultural affiliation (e.g., HBCU or PWI) was inputted as the grouping variable for Division I were statistically significant (t (292) = -4.537, $p < .001$). The mean K/BB ratio for PWIs in Division I college softball from the 2018-2019 season through the 2019-2020 season was 1.89 (sd = 0.86) but the mean K/BB ratio for HBCUs in Division I college softball from the 2018-2019 season through the 2019-2020 season was 1.07 (sd = 0.38). Likewise, the results from the independent samples *t*-test in which cultural affiliation (e.g., HBCU or PWI) was inputted as the grouping variable for Division II yielded results that were also statistically significant (t (276) = -4.107, $p < .001$). The mean K/BB ratio for PWIs in Division II college softball from the 2018-2019 season through the 2019-2020 season was 1.84 (sd = 0.85) whereas the mean K/BB ratio for HBCUs in Division II college softball from the 2018-2019 season through the 2019-2020 season was 1.12 (sd = 0.60). Taken together, HBCU pitchers incurred a worse K/BB ratio than PWI pitchers in both divisions and over the course of two different seasons.

Z-score analyses were completed to determine if any individual college softball teams were penalized at a level that was statistically significant. As Table 1 indicates, the five universities who incurred the worst K/BB ratio in both divisions from the 2018-2019 season through the 2019-2020 season were all HBCUs. Multiple HBCUs incurred a K/BB ratio that was

statistically significant in a bad way while not a single PWI incurred a K/BB ratio that was statistically significant in a bad way. The HBCU of South Carolina State University had the worst K/BB ratio during the 2018-2019 season through the 2019-2020 season in both Division I and Division II for the sport of college softball (M = 0.19; $z_{\text{penalties}}$ = -1.878; p = 0.03). The HBCU of Lincoln University (PA) had the second worst K/BB ratio from the 2018-2019 season through the 2019-2020 season in both Division I and Division II for the sport of college softball (M = 0.29; $z_{\text{penalties}}$ = -1.761; p = 0.04). The HBCU of Miles College had the third worst K/BB ratio from the 2018-2019 season through the 2019-2020 season in both Division I and Division II for the sport of college softball (M = 0.39; $z_{\text{penalties}}$ = -1.645; p = 0.05). All three of these HBCUs suffered a K/BB ratio that was statistically significant (although Miles College incurred a K/BB ratio that was significant right at the .05 level). The HBCU of LeMoyne-Owen College incurred the fourth worst K/BB ratio for the aforementioned period of time albeit not statistically significant (M = 0.41; $z_{\text{penalties}}$ = -1.621; p = 0.053) and the HBCU of Tuskegee University incurred the fifth worst K/BB ratio for the aforementioned period of time although it was not statistically significant (M = 0.53; $z_{\text{penalties}}$ = -1.482; p = 0.069). In sum, only softball teams from HBCUs were penalized at a level that was statistically significant.

Discussion

This study found that home plate umpires called a greater proportion of walks than strikeouts when the softball pitcher played for an HBCU as opposed to a PWI. The uncovered data was unearthed in Division I and Division II from the 2018-2019 season through the 2019-2020 season. Only HBCUs incurred an unfavorable K/BB ratio that was statistically significant. Not a single PWI incurred an unfavorable K/BB ratio that was statistically significant. The paragraphs which follow put forth discussion which illustrate implications from the current research, dissect possible reasons why these findings emerged, illuminate demographic data on HBCU student-athletes, address alternative explanations, highlight the limitations of this study, and offers some general conclusions.

There are practical implications from this study that should be noted. First, the finding that pitchers from HBCU softball teams disproportionately incurred an adverse K/BB ratio that was statistically worse than pitchers from PWI softball teams falls in line with a well-developed research track that has exposed referee bias against HBCUs. Specifically, the results of this study corroborate with previous literature that has revealed referees call more penalties against football teams from HBCUs relative to football teams from PWIs (Dix, 2017), has found that baseball umpires were more likely to call walks when the baseball pitcher played for an HBCU relative to when the baseball pitcher played for a PWI (Dix, 2020a), and has revealed that referees call more personal fouls on women's college basketball teams from HBCUs than women's college basketball teams from PWIs in Division I of the NCAA (Dix, 2019) and in Division II of the NCAA (Dix, 2020b). The softball findings from this study further contribute to the empirical literature which has revealed that differential treatment is being negatively inflicted against HBCUs relative to PWIs. It is imperative for HBCU practitioners in intercollegiate athletics to look closely at this recurring pattern of negative officiating data that has plagued HBCUs. Practitioners at both HBCUs and PWIs can use this data in an effort to challenge the NCAA to investigate their training of officials and to conduct a review on why HBCUs are on the bad end of subjective decision-making data as it

relates to how officials perceive HBCU behaviors within the field of play relative to their PWI counterparts.

There are also research implications from this study that should be noted. It could be argued that one possible reason why HBCUs were more likely to have walks called than strikeouts relative to PWIs is tied to racial considerations. The notion that racial factors influenced how umpires assessed the quality of a pitch as it pertains to the K/BB ratio for this study supports previous empirical research on baseball which has found that racial factors influence whether the home plate umpire called a pitch as a strike or a ball (see Hamrick & Rasp, 2015; Kim & King, 2014; Parsons et al., 2011; Tainsky et al., 2015). The demographic data on NCAA student-athletes further points towards racial factors influencing the uncovered results. For example, it was during the 2019 season that in Division I college softball that across all teams 68% of women's college softball players identified as White females, 24% were listed as female other, while 8% were listed as Black females (NCAA Diversity Data, 2020). Comparatively speaking, it was in the traditionally HBCU conference in Division I known as the Southwestern Athletic Conference (SWAC) that 55% of student athletes identified as Black females, 28% were categorized as female other, while only 17% were categorized as White females (NCAA Diversity Data, 2020). Likewise, it was in the other traditionally HBCU conference in Division I that is known as the Mid-Eastern Athletic Conference (MEAC) that 46% of student-athletes identified as Black, 30% were classified in the female other category, while only 24% of female student-athletes were listed as White (NCAA Diversity Data, 2020). In short, teams in the traditionally HBCU conferences (a) incurred a worse K/BB ratio and (b) these were the same teams who had considerably more Black players. Since it would be reckless to assume that race was the only factor that contributed towards referees calling more walks then strikeouts against HBCU softball players relative to PWI softball players, it is necessary to consider alternative explanations.

There are alternative explanations for these softball results that have to be acknowledged. One alternative explanation is that PWI women's softball teams may have better pitchers than HBCU women's softball teams. It is conceivable that higher profile softball pitchers at PWIs may have more natural ability to consistently pitch strikes with more accuracy than softball pitchers at HBCUs. This variable could not be controlled for because that data is not publicly available and because the range of talent for college softball pitchers varies across the scope of 572 different universities. Another alternative explanation is that game scenarios could have influenced the K/BB ratio data that was unearthed. There are some scenarios in which an intentional walk or pitching around a batter may offer a strategic advantage for the pitching team. The publicly available data did not provide a breakdown on whether the walks that were awarded by umpires were intentional or based on the decision making of the home plate umpire. A different alternative explanation is that swinging strikes and foul balls adversely influenced the K/BB ratio that was uncovered in this study. This certainly influenced the K portion of the K/BB ratio because it did not require the subjective decision making of the umpire. However, the influence of swinging strikes and foul balls should in theory be roughly equivalent for HBCUs and PWIs. All things considered, several factors including race, talent level, and game scenarios likely contributed to an unfavorable K/BB ratio being inflicted upon HBCUs relative to PWIs.

There are three major limitations of this study. First, the demographic data of the umpires could not be obtained. Knowing the racial makeup of the umpires would have allowed for advanced statistical testing. Second, only two years of data were available at the time this

study was completed. Moreover, the data for the 2019-2020 season was limited due to the COVID-19 pandemic. However, utilizing a sample that was comprised of 572 teams who were spread across two different divisions was sufficiently robust. A third limitation was the outlier pitchers who play for a university that does not match their racial identify. For instance, there are a minimal amount of Black pitchers who play for PWIs and some White pitchers who play for HBCUs. This was another variable that was difficult to control for in the current research.

Conclusion

In conclusion, this research filled a gap in the extant literature because it was the first empirical study to focus on how racial factors intersected with referee bias in women's softball. This scholarship puts forth evidence that home plate umpires are evaluating the quality of pitches differently depending on whether the pitcher was affiliated with an HBCU or a PWI, which is in turn influencing the K/BB ratio in women's softball. Video analyses should be used in future HBCU research to support or challenge the quantitative findings which revealed that 0.00% of PWIs incurred an unfavorable K/BB ratio that was statistically significant while multiple HBCUs incurred an unfavorable K/BB ratio that was statistically significant (despite HBCUs representing only 8.39% of the sample). Completing qualitative analyses in person via observing the subjective decision making of umpires on whether to call a softball pitch as a ball or strike would provide additional insight on why this differential data on the K/BB ratio is occurring in the softball fields. The rules of softball dictate that a ball hit between the lines is fair, but observational softball research in the future could help determine if home plates umpires are being fair or foul when it comes to assessing the quality of pitches for women's college softball players from HBCUs.

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Table 1. Mean Number of the Strikeout to Walk (K/BB) Ratio and Z-Scores for the Strikeout to Walk (K/BB) Ratio in Women's Softball for Division I and Division II of the National Collegiate Athletic Association (NCAA) from the 2018-2019 Season through the 2019-2020 Season for the 100 Most Adversely Impacted Teams

	University/Team	Mean Number of the Strikeout to Walk Ratio (K/BB) for Women's Softball Teams from the 2018-2019 Season Through the 2019-2020 Season	Mean Number of the Strikeout to Walk Ratio (K/BB) for Women's Softball Teams in (Z-Scores) from the 2018-2019 Season Through the 2019-2020 Season
1.	**SOUTH CAROLINA STATE (MEAC)**	0.19	-1.87753**
2.	**LINCOLN (PA) (CIAA)**	0.29	-1.76113**
3.	**MILES (SIAC)**	0.39	-1.64472*
4.	**LEMOYNE-OWEN (SIAC)**	0.41	-1.62144
5.	**TUSKEGEE (SIAC)**	0.53	-1.48175
6.	Santa Clara (WCC)	0.53	-1.47593
7.	UTEP (C-USA)	0.54	-1.46429
8.	**GRAMBLING (SWAC)**	0.57	-1.43518
9.	**SHAW (CIAA)**	0.59	-1.41772
10.	Notre Dame de Namur (PacWest)	0.59	-1.4119
11.	Western N.M. (Lone Star)	0.6	-1.40608
12.	Felician (CACC)	0.61	-1.38862
13.	Adams St. (RMAC)	0.63	-1.37116
14.	Colorado St.-Pueblo (RMAC)	0.65	-1.34788
15.	Purdue Fort Wayne (Summit League)	0.66	-1.33042
16.	Southern Utah (Big Sky)	0.7	-1.28385
17.	**MISSISSIPPI VAL. (SWAC)**	0.71	-1.27803
18.	Humboldt St. (CCAA)	0.72	-1.26057
19.	Lafayette (Patriot)	0.72	-1.26057
20.	**DELAWARE STATE (MEAC)**	0.73	-1.25475
21.	**BOWIE STATE (CIAA)**	0.73	-1.25475
22.	Glenville St. (MEC)	0.73	-1.24893
23.	Southwestern Okla. (GAC)	0.73	-1.24893
24.	**CLARK ATLANTA (SIAC)**	0.75	-1.23147
25.	**ELIZABETH CITY ST. (CIAA)**	0.75	-1.23147
26.	East Central (GAC)	0.75	-1.23147
27.	Saint Peter's (MAAC)	0.75	-1.23147
28.	Quinnipiac (MAAC)	0.76	-1.21401
29.	**ARKANSAS PINE-BLUFF (SWAC)**	0.77	-1.20237
30.	Cal St. East Bay (CCAA)	0.77	-1.20819
31.	St. Bonaventure (Atlantic 10)	0.77	-1.20237
32.	Northwestern Okla. (GAC)	0.78	-1.19073
33.	**FLORIDA A&M (MEAC)**	0.79	-1.17909
34.	N.M. Highlands (RMAC)	0.81	-1.1558
35.	**COPPIN STATE (MEAC)**	0.82	-1.14416
36.	Dominican (CA) (PacWest)	0.82	-1.14416
37.	Saint Martin's (Great Northwest)	0.83	-1.13834
38.	Morehead St. (OVC)	0.83	-1.13252
39.	Wayne St. (NE) (NSIC)	0.83	-1.13252
40.	**BENEDICT (SIAC)**	0.84	-1.1267
41.	La.-Monroe (Sun Belt)	0.84	-1.12088

42.	Chaminade (PacWest)	0.85	-1.11506
43.	Clarion (PSAC)	0.85	-1.11506
44.	Simon Fraser (Great Northwest)	0.85	-1.11506
45.	Maryland (Big Ten)	0.85	-1.10924
46.	MSU Moorhead (NSIC)	0.85	-1.10924
47.	New Mexico (Mountain West)	0.86	-1.10342
48.	Furman (SoCon)	0.86	-1.0976
49.	San Fran. St. (CCAA)	0.86	-1.0976
50.	**N.C. A&T (MEAC)**	0.88	-1.08014
51.	**LANE (SIAC)**	0.89	-1.0685
52.	**MARYLAND EASTERN SHORE (MEAC)**	0.89	-1.06268
53.	Shorter (Gulf South)	0.89	-1.06268
54.	Mo. Southern St. (Mid-America Inter.)	0.9	-1.05686
55.	(Mid-America Inter.)	0.9	-1.05686
56.	Barton (Newman Conference Carolinas)	0.9	-1.05104
57.	Omaha (Summit League)	0.91	-1.0394
58.	Cal St. San Bernadino (CCAA)	0.92	-1.03358
59.	Eastern N.M. (Lone Star)	0.92	-1.03358
60.	Goldey-Beacom (CACC)	0.92	-1.02776
61.	**MORGAN STATE (MEAC)**	0.93	-1.01612
62.	Northern Ill. (MAC)	0.93	-1.02194
63.	Barry (Sunshine State)	0.94	-1.00447
64.	Hawaii Pacific (PacWest)	0.95	-0.99865
65.	Chadron St. (RMAC)	0.96	-0.98701
66.	Abilene Christian (Southland)	0.96	-0.98119
67.	**HOWARD (MEAC)**	0.97	-0.96955
68.	Weber St. (Big Sky)	0.98	-0.96373
69.	Western Caro. (SoCon)	0.98	-0.96373
70.	Converse (Conference Carolinas)	0.98	-0.95791
71.	UIW (Southland)	0.98	-0.95791
72.	**JOHNSON C. SMITH (CIAA)**	0.99	-0.95209
73.	Hartford (America East)	0.99	-0.94627
74.	Azusa Pacific (PacWest)	1	-0.94045
75.	St. John's (NY) (Big East)	1	-0.94045
76.	CSU Bakersfield (WAC)	1.01	-0.92881
77.	Canisius (MAAC)	1.02	-0.91717
78.	Cal St. San Marcos (CCAA)	1.02	-0.91135
79.	Mercy (ECC)	1.02	-0.91135
80.	Christian Brothers (Gulf South)	1.03	-0.90553
81.	Concordia (NY) (CACC)	1.03	-0.90553
82.	Elon (CAA)	1.03	-0.90553
83.	Pittsburgh (ACC)	1.03	-0.90553
84.	Rider (MAAC)	1.03	-0.90553
85.	Tex. A&M Int'l (Lone Star)	1.03	-0.90553
86.	Hillsdale (G-MAC)	1.04	-0.88807
87.	Mount St. Mary's (NWC)	1.04	-0.88807
88.	Wis.-Parkside (GLIAC)	1.04	-0.88807
89.	Minot St. (NSIC)	1.05	-0.87643
90.	UC Riverside (Big West)	1.05	-0.87643
91.	Wagner (NEC)	1.05	-0.87643
92.	**PRAIRIE VIEW (SWAC)**	1.06	-0.87061
93.	IUPUI (Horizon)	1.06	-0.87061
94.	Indiana (PA) (PSAC)	1.06	-0.86479
95.	**VIRGINIA UNION (CIAA)**	1.07	-0.85897
96.	**FORT VALLEY STATE (SIAC)**	1.07	-0.85314
97.	**WINSTON-SALEM (CIAA)**	1.07	-0.85314
98.	Cal Poly (Big West)	1.07	-0.85314
99.	Siena (MAAC)	1.07	-0.85314
100.	**ALCORN (SWAC)**	1.08	-0.84732

Note: The teams in capital letters and boldface represent Historically Black Colleges and Universities (HBCUs).
**p <.05, * p =.05001

International Journal of Sport Culture and Science
March 2021 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.630

The Analysis of Athletes Levels of Coronavirus-19 Phobia

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Type: Research Article (Received: 26.02.2021– Accepted: 24.03.2021)

Abstract

The present study aims to analyze athletes' levels of coronavirus phobia. The sample of the present study consists of 156 individual and 62 team athletes in different sports branches in Yozgat province of Turkey during the season 2019-2020. Athletes' demographic features were obtained using a "personal information form". Athletes' levels of coronavirus phobia were measured using Coronavirus-19 phobia scale developed by Arpacı, Karataş and Baloğlu (2020). The statistical analysis of the obtained data was performed using SPSS 18 package program. In addition, normality test, frequency analysis, percentage analysis, arithmetic means, T test, ANOVA analysis and post hoc tests were used. The data analysis demonstrated the mean scale test score was 50.03. In terms of various variables such as sports branch (individual or team), age, history of coronavirus case in an acquaintance, monthly income from the sports branch, measures taken by managers in sports facilities and other people's personal hygiene during the past/future trainings, statistically significant differences were found among participants' mean total coronavirus phobia scale scores ($p<0.05$). It was found that participants performing team sports had a higher level of coronavirus phobia compared to those performing individual sports. Participants aged 21 and older had a higher level of coronavirus phobia compared to those aged 20 or younger. Participants with a history of coronavirus case in an acquaintance had a higher level of coronavirus phobia compared to those who did not witness such cases in their social circle.

Keywords: Coronavirus, Sports, Athlete

Introduction

World Health Organization (WHO) reported pneumonia cases whose etiology was unknown in Wuhan city of China on 31 December 2019. On 7 January 2020, these cases were defined as a new type of coronavirus (2019-nCoV) which has not been detected in humans before. Later, the disease was define as COVID-19, and WHO classified the pandemic as a "public health emergency of international concern" on 30 January 2020. Due to the emergence of COVID-19 cases in other countries outside China where the first cases broke out as well as the spread and severity of the disease, it was defined as a global pandemic on 11 March 2020. COVID-19 pandemic became a major national concern in Turkey on 10 January 2020, as the Ministry of Health Scientific Committee organized its first meeting on 22 January 2020. The main strategy which has been adopted since the first COVID-19 case in Turkey is to reduce the rate of cases through various public health measures (Republic of Turkey, Ministry of Health Covid-19 Guide, 2020; WHO, Coronavirus Disease (COVID-19) Outbreak, 2020).

COVID-19 pandemic has so far affected various sectors from an economic, social and commercial perspective around the globe. Among these are health, education, industry, transportation, tourism and sports. Sports, which is one of the affected sectors, is an important field which leads to numerous economic, cultural and commercial consequences (Aygün and Ünal 2020). Thanks to scientific and technological developments, the interest in sports branches is increasing day by day (Aygün and Murathan, 2020). Sports is a global product which is watched, performed and consumed by millions of individuals in the world (Ratten and Ratten, 2011). Sports is one of the foremost activities helping a health life and plays a vital role in an athlete's protection against diseases (Aygün and Ünal, 2020).

National and international federations have taken a number of measures to protect athletes' health due to the current COVID-19 pandemic, as manifested by the close contact between International Olympic Committee (IOC) and WHO (The International Olympic Committee, 2020). Staying at home is the main step towards the reduction of pandemic spread in terms of athlete and public health. However, these measures may lead to immobility and thus increase anxiety and depression (Chen et al., 2020). Exercises and trainings may help reduce the risk of anxiety and depression and protect athletes' mental health to some extent (Hull et al., 2020). Given the importance of an athlete's mental health, protective measures taken as a result of the pandemic may also cause various anxiety and stress problems in athletes.

Pandemics are known to cause traumatic effects and increase individuals' levels of anxiety and stress (Bandelow and Michaelis, 2015; Zhang et al., 2020). As for healthy individuals under the threat of a pandemic, their psychological state may be negatively influenced by various factors such as the risk of disease for their families and social circle, losing their jobs, freedom and other financial means and having difficulty in leading a routine life, which results in various behavior disorders. Individuals' perceptions about a certain disease inevitably affect their reaction to that disease, and behaviors during a disease play a role in the spread of a pandemic and loss of lives. Therefore, it bears utmost importance to gain insight into psychological behaviors during a pandemic and manage them for the struggle against it (Bandelow and Michaelis, 2015; Kwok et al., 2020; Kıroğlu, 2020).

Phobia can be defined as a specific situation and/or object which an individual tries to avoid (Öztürk, 1994). Scientific and natural fears cannot be classified as phobias because the latter usually involves an exaggerated reaction. Organism energy increases due to the natural stress experienced during a fear and the individual develops an ability to remain calm against the

threat (Tarhan, 2020*)*. Therefore, the feeling of control should not be lost in order to improve this ability against COVID-19. Otherwise, an individual will be immersed in negative feelings such as death, which causes the brain to release stress hormones affecting the immune system negatively. Thus, it may increase the risk of spread for the pandemic (Aslan, 2020).

Individuals who suffer from coronavirus phobia need to do mental exercises and read books on religious faith and reliance on God to control their anxiety and stress. Controlled anxiety is necessary during the COVID-19 pandemic. To this aim, individuals need to take all scientific measures, protect their health and avoid primitive beliefs such as "nothing will happen to me". It must be remembered that the "new normal" after COVID-19 pandemic will provide all individuals with a strong, health and safe lifestyle (Aslan, 2020). Thanks to the measures taken against coronavirus phobia, it is possible to help athletes return to their sportive routine and reduce the negative effects of the phobia on their performance.

It was reported that an athlete would become an effective factor for the spread of coronavirus (Dores and Cardim, 2020). In this respect, WHO and IOC published a list of protective measures for the development of sports and athlete health. Some of these measures are as follows:

-Keeping social distance in all sports branches due to a threat of COVID-19 infection among athletes,

-Paying attention to social distance and wearing protective masks,

-Giving clean water to athletes in disposable bottles,

-Obeying hygiene rules and providing sufficient ventilation,

-Providing athletes with personal protection sets such as disposable towels, information cards about measures and reporting, wearing medical masks against symptoms such as fever and cough, using disposable glasses, thermometers and hand sanitizers,

-Prevention of sharing personal equipment among athletes,

-In addition, the following recommendations were made for athletes and spectators who will participate in a sportive organization: Individuals who will attend an organization should check their health regularly and should not attend the organization and inform the authorities in case of coronavirus symptoms.

-Athletes should wash their hands regularly and close their mouth and nose with a disposable towel or crook of the arm when they cough. There should be hand sanitizer points in team buses.

-Athletes should avoid contact with positive tested patients and obeying social distancing rules. Technical staff who work with sportive materials should always wear gloves (Turkish National Olympic Committee 2020).

The above-mentioned measures are recommendations for the prevention of COVID-19 pandemic and acceleration of return to daily life in a relatively shorter duration. In addition to bearing importance for the continuity of sports organizations and athlete health, these measures also reveal the close relationship between sports and health (Aygün and Ünal 2020).

The present study aims to analyze athletes' levels of coronavirus phobia and answer the following research questions:

-What are athletes' levels of coronavirus phobia?

-Is there a statistically significant difference among athletes' levels of coronavirus phobia in terms of:

-Gender, age?

-Sports branch / individual / team), sports branch (contact / no contact).

-History of coronavirus case in an acquaintance.

-Dialogues with other individuals about coronavirus.

-Paying attention to personal hygiene.

-Monthly income from the sports branch.

-Necessary measures taken by managers in sports and training facilities

-Other people's personal hygiene during the past/future trainings?

Method

This section presents information about the study group, data collection tools and data analysis of the present study.

Study Group

The study group of the present study contains 156 licensed individual and 62 licensed team athletes in different sports branches in Yozgat province of Turkey during the season 2019-2020.

Data Collection Tools

The data collection tools of the present study are described in this section.

Personal Information Form

The personal information form used for data collection about participants' demographic features consisted of 10 questions

Coronavirus-19 Phobia Scale

The participants' levels of coronavirus phobia were measured using Coronavirus-19 Phobia Scale developed by Arpacı, Karataş and Baloğlu (2020). A 5-point Likert type self-assessment scale, it was developed to measure phobia against coronavirus. The scale items are scored between 1 "Strongly Disagree" and "5 "Strongle Agree". 1st, 5th, 9th, 13th, 17th and 20th items measure Psychological Sub-dimension, 2nd, 6th, 10th, 14th and 18th items measure Somatic Sub-dimension, 3rd, 7th, 11th, 15th and 19th items measure Social Sub-dimension, and 4th, 8th, 12th and 16th items measure Economic Sub-dimension. Total sub-dimensions scores are calculated using the sum of scores in responses to those items. Total C19P-S score is obtained using the sum of sub-dimension scores and it ranges between 20 and 100. A higher score points to a higher level of coronavirus phobia in the sub-dimensions and general scale. The reliability co-efficient of the scale was calculated as 0.92 (Arpacı, Karataş and Baloğlu, 2020). In the present study, too, the reliability co-efficient of the scale was calculated as 0.92.

Data Analysis

The data obtained from the present study was analyzed using SPSS 18.0 package program. The obtained data must be prepared for statistical analysis prior to the statistical data analysis. Kurtosis and skewness coefficients play a crucial role at this point (Şimşek, 2007; 74). In

normal distribution, skewness coefficient is 0. A skewed distribution to the right points to a negative skewness coefficient, while a skewed distribution to the left points to a positive skewness coefficient (http 1). A skewness and kurtosis coefficient between (+-2 and +-7) represents a normal data distribution (West et al., 1995; Şencan, 2005; 376, Şimşek, 2007: 74). Kline (2005) suggests that a skewness coefficient of ±3 and a kurtosis coefficient of ±10 indicates a normal data distribution. In the present study, skewness and kurtosis coefficients were calculated as -0.161/1.481 and -0.194/-1.370, respectively. It can be understood from these figures that the obtained data displayed a normal distribution, and parametric tests were used in the data analysis. Frequency analysis was used to describe participants' demographic features. T test, ANOVA analysis and post hoc tests were used to find significant differences among mean total coronavirus phobia scale scores in terms of selected variables. The level of statistical significance in the tests was taken as 0.05.

Results

Table 1. Athletes' Demographic Features

		N	%
Gender	Female	116	53.2
	Male	102	46.8
Sports Branch	Individual Sports	156	71.6
	Team Sports	62	28.4
Sports Branch	Contact	185	84.9
	No Contact	33	15.1
Age	20 or under	141	64.7
	21 and over	77	35.3
Monthly Income from the Sports Branch	No income	182	83.5
	1-1000 TL	16	7.3
	1001-2000 TL	5	2.3
	2001-3000 TL	4	1.8
	3001 TL and more	11	5.0
Has any of your acquaintances been diagnosed with coronavirus?	Yes	35	16.1
	No	183	83.9
Do you think that managers in charge of sport facilities where you do your trainings have taken necessary measures?	Yes	129	59.2
	No	24	11.0
	I have no idea	65	29.8
Do your dialogues about coronavirus (COVID-19) with other people (teammates, coach, managers or other employees) influence your view on the disease?	Yes	132	60.6
	No	86	39.4
Do you pay attention to personal hygiene rules?	Yes	209	95.9
	Partly	9	4.1
	No	0	0.0
Do other people (teammates, coach, managers or other employees) around you pay attention to personal hygiene rules?	Yes	155	71.1
	Partly	57	26.1
	No	6	2.8

As can be seen in Table 1, 116 athletes (53.2%) are females, while 102 of them (46.8%) are males. 156 athletes (71.6%) are engaged in individual sports branches, whereas 62 of them are engaged in (28.4%) team sports. While 185 athletes (84.9%) perform contact sports, 33 of them (15.1%) perform no contact sports branches. 141 athletes (64.7%) are aged 20 or under, whereas 77 of them (35.3%) are aged 21 and over. 182 athletes (83.5%) stated that they did

not earn any income from their sports branches, while 16 (7.3%), 5 (2.3%) and 4 (1.8%) of them stated that they earned a monthly amount of 1-1000 TL, 1001-2000 TL and 2001-3000 TL, respectively. The question "Has any of your acquaintances been diagnosed with coronavirus?" was answered in the positive by 35 athletes (16.1%) and in the negative by 183 athletes (83.9%). The question "Do you think that managers in charge of sport facilities where you do your trainings have taken necessary measures?" was answered in the positive by 129 athletes (59.2%) and in the negative by 24 athletes (%11.0), and 65 athletes (29.8%) stated that they had no idea about the question. The question "Do your dialogues about coronavirus (COVID-19) with other people (teammates, coach, managers or other employees) influence your view on the disease?" was answered in the positive by 132 athletes (60.6%) and in the negative by 86 athletes (39.4%). While 209 athletes (%95.9) stated that they paid attention to personal hygiene rules, 9 of them (4.1%) stated that they partly obeyed these rules. The question "Do other people (teammates, coach, managers or other employees) around you pay attention to personal hygiene rules?" was answered in the positive by 155 athletes (71.1%) and in the negative by 57 athletes (26.1%), while 6 athletes (2.8%) stated that these people partly obeyed personal hygiene rules.

Table 2. The Findings Related to Mean Total Coronavirus Phobia Scale Scores

	N	Minimum	Maximum	$\bar{x}$	Sd
Coronavirus Phobia Scale	218	20.00	100.00	50.03	16.88

It can be understood from Table 2 that mean total coronavirus phobia scale scores were calculated as 50.03. It can be thus stated that participants had a moderate level of coronavirus phobia.

Table 3. T Test Findings

	Gender	**N**	**Mean**	**Sd**	**t**	**p**
Coronavirus Phobia	Female	116	51.38	16.84	1.262	.208
	Male	102	48.50	16.87		
	Sports Branch	**N**	**Mean**	**Sd**	**t**	**p**
Coronavirus Phobia	Individual	156	48.13	16.54	-2.675	**.008***
	Team	62	54.82	16.91		
	Sports Branch	**N**	**Mean**	**Sd**	**t**	**p**
Coronavirus Phobia	Contact	185	50.08	16.89	.081	.936
	No contact	33	49.82	17.06		
	Age	**N**	**Mean**	**Sd**	**t**	**p**
Coronavirus Phobia	20 or under	141	46.34	16.55	-4.570	**.000***
	21 and over	77	56.80	15.40		
	Coronavirus Diagnosis in an Acquaintance	**N**	**Mean**	**Sd**	**t**	**p**
Coronavirus Phobia	Yes	35	56.57	17.03	2.530	**.012***
	No	183	48.78	16.61		
	Influenced by Others' Words about Coronavirus	**N**	**Mean**	**Sd**	**t**	**p**
Coronavirus Phobia	Yes	132	51.40	16.46	1.491	.137
	No	86	47.93	17.39		
	Personal Hygiene	**N**	**Mean**	**Sd**	**t**	**p**
Coronavirus Phobia	Yes	209	50.18	17.02	.631	.529

Partly	9	46.55	13.39	

Table 3 indicates that no statistically significant differences were found among participants' total coronavirus phobia scale scores in terms of gender (p>.05). However, it was observed that female athletes' levels of coronavirus phobia were higher compared to male athletes ($\bar{x}$=51.38).

A statistically significant difference was found among participants' total coronavirus phobia scale scores in terms of individual and team sports (p<.05). It was emerged that athletes engaged in team sports had a higher level of coronavirus phobia compared to those engaged in individual sports ($\bar{x}$= 54.82).

There were no statistically significant differences among participants' total coronavirus phobia scale scores in terms of contact and no contact sports (p>.05).

There was a statistically significant difference among participants' total coronavirus phobia scale scores in terms of age (p<.05). It was demonstrated that athletes aged 21 and over had a higher level of coronavirus phobia compared to those aged 20 or under ($\bar{x}$= 56.80).

A statistically significant difference was observed among participants' total coronavirus phobia scale scores in terms of history of a coronavirus case in an acquaintance (p<.05). Athletes who responded to this question in the positive had a higher level of coronavirus phobia compared to those who responded in the negative ($\bar{x}$= 56.57). No statistically significant differences were observed among participants' total coronavirus phobia scale scores in terms of their dialogues with other people (teammates, coach, manager or other employees) about coronavirus in the past/future trainings (p>.05). No statistically significant differences were observed among participants' total coronavirus phobia scale scores in terms of paying attention to personal hygiene rules (p>.05).

Table 4. ANOVA analysis findings

	Monthly	**N**	**$\bar{x}$**	**Sd**	**F**	**p**	**Difference**
Coronavirus Phobia	No income	182	48.54	17.12	3.260	.013	2,3>1
	1-1000 TL	16	60.31	16.31			
	1001-2000 TL	5	60.40	7.09			
	2001-3000 TL	4	42.00	12.00			
	3001 TL and more	11	57.90	7.89			
	Measures Taken by Managers	**N**	**$\bar{x}$**	**Sd**	**F**	**p**	**Difference**
Coronavirus Phobia	Yes (1)	129	49.00	15.53	4.892	.008	2>1,3
	No (2)	24	60.00	18.71			
	I have no idea (3)	65	48.40	17.78			
	Personal Hygiene in Other People	**N**	**$\bar{x}$**	**Sd**	**F**	**p**	**Difference**
Coronavirus Phobia	Yes (1)	155	48.19	16.61	5.132	.007	2,3>1
	No (2)	6	66.83	18.90			
	Partly (3)	57	53.28	16.24			

It can be seen in Table 4 that a statistically significant difference was found among participants' total coronavirus phobia scale scores in terms of monthly income (p<.05). It was observed that athletes who had a higher level of monthly income also had a higher level of coronavirus phobia compared to those who did not earn any income.

There was a statistically significant difference among participants' total coronavirus phobia scale scores in terms of their views on measures taken by managers in their training facilities ($p<.05$). It was found that athletes who believed that their managers did not take necessary measurements had a higher level of coronavirus phobia.

A statistically significant difference was observed among participants' total coronavirus phobia scale scores in terms of attention to personal hygiene by other people (teammates, coach, manager or other employees) around them ($p<.05$). It was found that athletes who believed that people around them did not pay attention to personal hygiene had a higher level of coronavirus phobia.

Discussion and Conclusion

The present study, which aimed to analyze athletes' levels of coronavirus phobia in terms of demographic variables, focused on 156 individual and 56 team sports athletes.

No statistically significant differences were observed among participants' total coronavirus phobia scale scores in terms of gender ($p>.05$). However, it was found that female athletes had a higher level of coronavirus phobia compared to male athletes ($\bar{x}=51.38$). This finding can be associated with the fact that men behave more calmly compared to women who have a more vulnerable psychological state and thus display a higher level of coronavirus phobia.

WHO reported that the number of male deaths due to COVID-19 pandemic was higher compared to the number of female deaths (female death by 2.8%, male death by 4.8%) and that women's health was more affected by the diseases compared to men (WHO, 2020). Similarly, in a study on sports faculty students' levels of anxiety during COVID-19, Acar et al. (2020) reported that women's levels of anxiety were higher compared to men. Keskin et al. (2013) too indicated that mental disorders were found to be higher in women due to some social, cultural, economic and biological factors. Çoban et al. (2020) concluded in their study that the income levels of football players and their individual training status were effective on the self-confidence and shot accuracy of the athletes.

There was a statistically significant difference among participants' total coronavirus phobia scale scores in terms of being engaged in individual and team sports ($p<.05$). It was observed that athletes engaged in team sports had a higher level of coronavirus phobia compared to those engaged in individual sports ($\bar{x}= 54.82$). It can be suggested that athletes engaged in individual sports take more measures against the disease and thus believe that they are protected against it, while athletes engaged in team sports cannot ensure that they are protected against the diseases due to their close contact with other teammates. In addition, their obligation to contact other teammates during the trainings and matches may cause them to suffer from a higher level of coronavirus phobia.

There were no statistically significant differences among participants' total coronavirus phobia scale scores in terms of contact and no contact sports ($p>.05$).

A statistically significant difference was found among participants' total coronavirus phobia scale scores in terms of age ($p<.05$). It was observed that athletes aged 21 and over had a higher level of coronavirus phobia compared to those aged 20 or under ($\bar{x}= 56.80$). As the mass media, ministry of health and members of scientific committee reported during the pandemic that elderly people and people suffering from chronic diseases were affected by the

virus at a higher level, it can be inferred that individuals aged 20 or under had a lower level of coronavirus phobia.

A statistically significant difference was found among participants' total coronavirus phobia scale scores in terms of history of coronavirus case in one of their acquaintances ($p<.05$). It was demonstrated that athletes who answered this question in the positive had a higher level of coronavirus phobia compared to those who answered this question in the negative ($\bar{x}=56.57$). Because close contact with people is one of the most commonly seen ways one of coronavirus infection, it is very likely for an athlete whose acquaintance was diagnosed with COVID-19 to develop a coronavirus phobia. It was also reported by Brooks et al. (2020) that even individuals who were not diagnosed with COVID-19 were also negative influenced by the pandemic at a psychological level. They also stated that the increasing number of cases triggered various public concerns about social and economic activities and reduced individuals' psychosocial strength. Similarly, Burtscher et al. (2020) and Grant et al. (2020) reported that isolation measures caused individuals to develop a fear of infection, quarantine and stigmatization and led to the flow of excessive misinformation, which eventually resulted in chronic stress and created a risk factor for anxiety and depression due to a heavy burden on their mental health. These findings overlap with the findings of the present study.

There were no statistically significant differences among participants' total coronavirus phobia scale scores in terms of their dialogues with other people (teammates, coach, manager or other employees) about coronavirus in the past/future trainings ($p>.05$).

There were no statistically significant differences among participants' mean total coronavirus phobia scale scores in terms of paying attention to personal hygiene rules ($p>.05$).

A statistically significant difference was observed among participants' total coronavirus phobia scale scores in terms of monthly income ($p<.05$). It was found that athletes who had a higher level of monthly income had a higher level of coronavirus phobia compared to those who did not earn any income from their sports branches. It can be argued that athletes with a higher level of monthly income view their sports branch as a profession and are thus concerned about losing their source of income during the pandemic. However, Acar et al. (2020) did not report any statistically significant differences among participants in terms of monthly income.

A statistically significant difference was found among participants' total coronavirus phobia scale scores in terms of their views on measures taken by managers in their training facilities ($p<.05$). It was observed that athletes who believed that their managers did not take necessary measures in their training facilities had a higher level of coronavirus phobia. No cases of such pandemics in recent history, the declaration of the disease as a pandemic by WHO, various developments in the international and national press about the pandemic and the fact that measures are taken by the authorities step by step depending on the current developments can be considered as leading factors which caused athletes participating in the present study to believe that their managers have not taken necessary measures yet, thus increasing their level of coronavirus phobia. In a similar study in China, Wang (2020) observed that offering citizens detailed, actual and accurate health information (such as treatment and local cases) and encouraging them to take personal measures (such as hand hygiene, wearing masks) helped reduce psychological effects of the pandemic on individuals and prevent various disorders such as stress, depression and anxiety.

A statistically significant difference was found among participants' total coronavirus phobia scale scores in terms of attention to personal hygiene by other people (teammates, coach,

manager or other employees) around them ($p<.05$). It was demonstrated that athletes who believed that their friends did not pay attention to personal hygiene rules had a higher level of coronavirus phobia. Personal hygiene rules occupy an importance position in the struggle against coronavirus. However, even though many athletes pay attention these rules, they are also aware of the fact that they may be influenced negatively by other people's negligent behaviors due to their close contact, which accounts for these participants' higher level of coronavirus phobia.

In conclusion, the present study found statistically significant differences among athletes' total coronavirus phobia scale scores in terms of sports branch (individual or team), age, history of coronavirus case in an acquaintance, monthly income from the sports branch, measures taken by managers in sports facilities and other people's personal hygiene during the past/future trainings ($p<0.05$). Athletes who are engaged in team sports had a higher level of coronavirus phobia compared to those who are engaged in individual sports. Athletes aged 21 and over had a higher level of coronavirus phobia compared to those aged 20 or under. Athletes whose acquaintances were diagnosed with COVID-19 had a higher level of coronavirus phobia compared to those whose acquaintances were not. Athletes who had a higher level of monthly income had a higher level of coronavirus phobia compared to who did not earn any income. Athletes who believed that their managers took necessary measures in their training facilities and that other people around them paid attention to personal hygiene had a higher level of coronavirus phobia. On the other hand, no statistically significant differences were observed among athletes' total coronavirus phobia scale scores in terms of gender, contact or no contact sports, dialogues with other people about coronavirus and paying attention to personal hygiene rules ($p>0.05$).

It can be concluded that provincial public health councils and directorates of health should coordinate in order to help athletes receive psychological counselling from related institutions in this coronavirus pandemic process, which will eventually contribute to their general mental health and success in their respective sports branches.

***Acknowledgment:** This study was presented as a verbal presentation at the Eurasia 7th international congress of applied sciences.

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International Journal of Sport Culture and Science
March 2021 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.631

The Effect of Secondary School Students' Sports Activity on Bullying Tendency

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Type: Research Article (Received: 03.01.2021– Accepted: 07.03.2021)

Abstract

This study was conducted to determine the effect of secondary school students' sports activity on their bullying tendencies. This descriptive study was conducted with the participation of 996 students from four secondary schools in a city located in the Central Anatolia Region. The data in the study were collected by using the "Child Descriptive Information Form", "Sports Activity Assessment Form", "Peer Relationships Question Form" and "Bullying Tendency Scale". The average age of secondary school students participating in the study is 12.21 ± 1.24, 51.1% of them are female and 94.8% live in the city. 91.5% of the students stated that they do team sports, 89.0% of them do individual sports, while 13.0% of them stated that they do martial arts. The scores of students' individual sports affected the using force sub-dimension while doing martial arts significantly affected the scores of the sub-dimensions of negative reflection, justification, upsetting others, and using force ($p < 0.05$). It was concluded that individuals who do individual sports have a high tendency to establish superiority based on individual force, and those who do martial sports have a high tendency to direct their negative emotions to those who are weak, to exhibit attitudes of justifying their bullying behaviors, to enjoy bullying and upsetting others, and to establish superiority based on individual force.

Keywords: Child, Sports, Bullying

Introduction

Peer bullying is a common behavior among children in schools, which has destructive effects and aims to harm the target child or children (Gökkaya & Sütcü, 2018). This type of bullying occurs when one or more students deliberately, excessively, and constantly threaten, tease, humiliate, nickname other weaker students as well as when they ignore them as friends or while playing in groups or when they use physical force such as kicking, beating or pinching (Olweus, 2005; Pişkin, 2002). It has a wide range of negative effects on the child who is exposed to these behaviors in peer bullying (Bridge, 2003). A child who is being bullied has problems such as losing motivation to attend school, experiencing fear and anxiety throughout life, absenteeism to avoid school, and a decrease in academic success. When children fail to fight against bullying, they tend to resort to dangerous methods such as carrying guns and knives to defend themselves. Such situations have psychological implications (Gökler, 2009). As students being bullied direct their attention to the subject of how to avoid being the target of bullies, their attention and interest in lessons decrease, and thus, their success in school decreases (Whitted & David, 2005; Furniss, 2000).

Developing appropriate strategies to prevent peer bullying and reducing its prevalence and effects through prevention programs is vital for the mental health of the child (Gökler, 2009). However, the source of the problem must be determined while developing the strategy. Children who have experience of violence in the family, have a weak relationship with their parents and have been exposed to negative behaviors or rejected have low self-esteem due to many reasons may tend to bully. These children can use aggressive behaviors as a way of attracting attention from others and making the people around them feel strong (Ayas, 2008).

Being an educational activity, sports develops the skills of setting common goals, appreciating the success of other athletes, being tolerant, taking responsibility, showing a collaborative approach, and creating a sense of belonging to a social group and society (Çiriş, 2014). Participation in sports activities supports the social development of individuals by contributing to their social interactions with their environment (Aytan, 2010). Due to the predictive effect of the attitude towards violence, sports activities are important in terms of developing the correct attitude towards violence and thus, preventing school bullying. For this reason, planned sports activities are among the important activities that change the attitudes towards violence (Ünalmış & Şahin, 2012). According to the results of the study conducted by Mahoney and Stattin (2000), it is estimated that being considered by adolescents as a leisure activity, sports enables them to reach their satisfaction, leading to fewer anti-social behaviors called peer bullying. In another study conducted by Forbes et al. (2006), it is stated that students who regularly participate in sports activities show less bullying behavior than their peers (Forbes et al., 2006). A sports activity has great importance in the lives of individuals, as it has a positive effect on psychological well-being, increasing success in school and the enjoyment of life by making life meaningful (Ardahan, 2013). On the other hand, studies report that students who bully are physically strong, aggressive, and angry as well as generally want to have power and control, like to inflict pain on others, and believe that the victim deserves punishment (Austin & Joseph, 1996; Andreou, 2000; Rigby, 2004; Olweus, 2005). This suggests that the tendency to bullying can change positively or negatively depending on the type of sports. Therefore, this study was conducted to determine the effect of secondary school students' sports activities on their tendency to bully.

Material and Method

Research Model

The general survey model, which is one of the descriptive survey research models, was used. Descriptive research is carried out to enlighten a given situation, make evaluations, and reveal possible relationships between events (Çepni, 2018). General survey models are studies conducted with the aim of making a general judgment about the population which consists of a large number of elements, or studies on a group or sample taken from it (Büyüköztürk et al., 2013).

Population and Sample

The population of the research consisted of 2596 students selected from four secondary schools within the Provincial Directorate of National Education in the Central Anatolian Region of Turkey through the sortition. The sample of the study consisted of the voluntary students whose families' consent was received to approve the participation of the students. For the sample size of the research, firstly, the sample size was determined by power analysis aimed at reaching at least 176 children to have 95% of a confidence interval and 80% power. However, the sample size of the study consisted of 996 secondary school students. For the institutions where the research was conducted, approvals were obtained from the Provincial Directorate of National Education, school administrators, students, and parents.

Data Collection Tools

The data were collected between February and April 2016. In the study, "Child Descriptive Information Form", "Sports Activity Assessment Form", "Peer Relationships Question Form" and "Bullying Tendency Scale" were used as data collection tools.

Child Introductory Descriptive Form

Prepared by the researchers, this form includes questions about the socio-demographic characteristics of the child and his/her family.

Sports Activity Assessment Form

Prepared by the researchers in line with the literature (Janzen, 2016; Gano-Overway, 2013; Öz et al., 2011), this form contains items for evaluating the status of the sports of the students and the types of sports they do.

Peer Relationships Question Form

Containing items about children's experiences of bullying in their relationships with their peers, this form was developed by the researchers in line with the literature to evaluate children's exposure to and display of bullying-related behaviors such as pushing-hitting, teasing, and nicknaming (Olweus, 2005; Gökler, 2009; Whitted & David, 2005); Rigby, 2004; Swearer et al., 2008).

Bullying Tendency Scale

This scale, developed by Dölek in 2002, can be applied individually or as a group (Dölek, 2002). The scale consists of 6 sub-dimensions containing 26 items. These are negative reflection (5 items), lack of emotional sharing (6 items), justification (4 items), upsetting others (4 items), using force (6 items) and not being disturbed (1 item). There are reverse scoring items in the sub-dimensions of the scale including lack of emotional sharing, upsetting others, and not being disturbed. The high score obtained from the scale indicates that the bullying tendency is high, while the low score indicates that the bullying tendency is

low. The Cronbach alpha coefficient for the internal consistency reliability of the scale is 0.67 (Dölek, 2002). The Cronbach alpha coefficient of the scale was calculated as 0.87 with the data obtained from this study.

Data Analysis

The analysis of the data obtained from the research was carried out with the SPSS 21.00 package program. Descriptive statistics and independent t-test were used in the statistical evaluation of the data. In the statistical analysis of the study, the level of significance was accepted as $p<0.05$.

Findings

Table 1. Descriptive characteristics of the students

	Characteristics	**Number**	**%**
Gender	Female	509	51.1
	Male	487	48.9
Residence	City	944	94.8
	District	41	4.1
	Village	11	1.1
Perceived Income Level	We can meet our needs	957	96.1
	We cannot meet our needs	39	3.9
Whether there are older students than the participants	Yes	670	67.3
	No	326	32.7
Whether there is any sort of punishment	Yes	127	12.8
	No	869	87.2
Education Level of Mother	None	19	1.9
	Primary-Secondary School	732	73.5
	High School	147	14.8
	University	97	9.7
	Graduate	1	0.1
Education Level of Father	None	11	1.1
	Primary-Secondary School	494	49.6
	High School	260	26.1
	University	231	23.2
	Total	996	100

The average age of secondary school students constituting the research group is 12.21 ± 1.24, and the average number of siblings is 1.88 ± 1.23. It was determined that 51.1% of the students are female and 94.8% live in the city. When asked about their perceived income level, most of the children stated that they could meet their needs (96.1%). Most of them stated that they had friends older than themselves in the classroom (67.3%), they did not receive any school punishment (87.2%), and the education level of their mothers (73.5%) and fathers (49.6%) was at the primary school-secondary school level (Table 1).

Table 2. Distribution of information about whether students do sports or not

Characteristics	**Yes**		**No**	
	Number	**%**	**Number**	**%**
Team sports	911	91.5	85	8.5
Individual sports	886	89.0	110	11.0
Martial arts	129	13.0	867	87.0
Whether families support students with doing sports	866	86.9	130	13.1

It was determined that 91.5% of the students do team sports, 89.0% do individual sports and 13.0% do martial arts, while 86.9% of the students believe that they are support from their families when doing sports (Table 2).

Table 3. Distribution of mean scores of the sub-dimensions of the bullying tendency scale

Sub-dimensions of the bullying tendency scale	Mean	SS	Lowest and Highest Scores
Negative Reflection	8.38	3.55	5-20
Lack of Emotional Sharing	9.88	3.23	6-24
Justification	8.78	2.97	4-16
Upsetting Others	6.78	2.32	4-16
Using Force	10.06	3.75	6-24
Not Being Disturbed	1.85	1.06	1-4

The students' mean scores of the sub-dimensions of the Bullying Tendency Scale including lack of emotional sharing, justification, upsetting others, using force, and not being disturbed are 8.38±3.55, 9.88±3.23, 8.78±2.97, 6.78±2.32, 10.06±3.75, and 1.85±1.06, respectively (Table 3).

Table 4. Peer bullying tendencies according to whether students do sports or not

Characteristics		Negative reflection	Lack of emotional sharing	Justification	Upsetting others	Using force	Not being disturbed
Individual sports	**Yes**	8.43	9.85	8.78	6.79	10.14	1.85
	No	7.99	10.11	8.73	6.68	9.40	1.85
Test and p value		t: 1.247	t: -0.809	t: 0.175	t: 0.479	**t: 1.972**	t: -.0.001
		p: 0.213	p: 0.419	p: 0.861	p: 0.632	***p: 0.049**	p: 0.999
Team sports	**Yes**	8.40	9.83	8.82	6.79	10.09	1.84
	No	8.25	10.4	8.38	6.65	9.76	1.92
Test and p value		t: 0.354	t: -1.542	t: 1.281	t: 0.511	t: 0.769	t: -0.679
		p: 0.723	p: 0.123	p: 0.201	p: 0.61	p: 0.442	p: 0.497
Martial sports	**Yes**	9.17	10.16	9.72	7.43	11.35	1.89
	No	8.27	9.84	8.64	6.68	9.87	1.84
Test and p value		**t: 2.709**	t: 1.054	**t: 3.899**	**t: 3.431**	**t: 4.228**	t: 0.424
		***p: 0.007**	p: 0.292	***p: 0.000**	***p: 0.001**	***p: 0.000**	p: 0.672

t: Independent t test; *: $p<0.05$

It was determined that the students of the research group who do individual sports got significantly higher scores from the using force sub-dimension of the bullying tendency scale ($p<0.05$) and that there was no statistically significant difference between the scores obtained from other sub-dimensions of the bullying tendency scale according to the individual sports ($p>0.05$). It was also determined that there was no statistically significant difference between

the mean scores of the sub-dimensions of the scale according to the team sports ($p > 0.05$). Students doing martial arts were found to have significantly higher scores in terms of the sub-dimensions including negative reflection ($p<0.01$), justification ($p<0.001$), upsetting others ($p<0.01$), and using force ($p<0.001$). Besides, no significant difference was found between the scores of lack of emotional sharing ($p>0.05$) and not being disturbed ($p>0.05$) according to the martial arts (Table 4).

Discussion

Today, bullying is an alarming maladaptive behavior that students in primary and secondary schools often encounter around the world (Peguero, 2008). The findings obtained from this study, conducted to evaluate the effect of secondary school students' sports activity on the bullying tendency, are discussed in this section in line with the relevant literature.

According to the findings, it was determined that the students who do individual sports got significantly higher scores in terms of the using force sub-dimension of the bullying tendency scale. Although it was observed that there was no statistically significant difference between the scores obtained from other sub-dimensions of the bullying tendency scale according to the individual sports, the levels of negative reflection, justification, and upsetting others were higher in students who do individual sports than do not. It is suggested that participation in individual sports activities can have an enormous, far-reaching, and positive effect on the general health and well-being of individuals (Gano-Overway, 2013). On the other hand, in the study conducted to evaluate the aggression levels of athletes engaged in team sports and individual sports, it was concluded that players who do individual sports are more aggressive than players who do team sports (Tutkun et al., 2010). The competitive nature of sports can unwittingly create a supportive environment for bullying incidents and bullying behaviors can also be displayed among athletes (Çelik & Demir, 2016).

It is stated that female adolescents who adopt masculine behavior are more associated with bullying and victimization (Young & Sweeting, 2004). The results also show that the attitudes of using force against others and self-esteem based on the force are significantly higher in children who do individual sports. Individual sports, by their nature, include tactical attempts, physical contacts, purposeful movements, frustration by the opponent and anger in an attempt to win. These attempts of the winner player to get points can serve as a reinforcing stimulus by making individual sports children experience a sense of success. During the development of attitudes towards using force, it is thought that those doing individual sports struggle and take responsibility alone in winning or losing, which leads to an increase in the tendency of using force to achieve or not to achieve the expected scores.

In the study, it was determined that there was no statistically significant difference between the bullying tendencies sub-dimension mean scores of the students according to the team sport. However, the tendency levels of the sub-dimensions of negative reflection, justification, upsetting others and using force were higher in students doing team sports. Lack of emotional sharing and the tendency not to be disturbed is lower in students interested in team sports. It is thought that sports can be effective in ensuring the physical, psychological, and social development of children/young people and preventing them from heading towards negative behaviors (Janzen, 2016). In a study, it was stated that team sports increases the cooperation between students, provides opportunities for them to interact with each other in a positive and comprehensive manner, and helps create harmony and compassion among students (Swearer et al., 2008). On the other hand, physical and verbal interventions, obstructions, referee attitudes, social pressure, the tension that may arise from time to time in organized team sports can lead children to aggression that can harm both sides (Peguero, 2008). In addition,

some team trainers' approaches to reward aggression in order to motivate the athletes or to reduce the motivation of the opponent team and these trainers' attitudes of maneuvering the athletes into slogans such as "no pain, no gain", "play hard or go home" show that aggression is learned in a sports environment (Çobanoğlu, 2005). In a study conducted with male professional footballers, the athletes stated that they were excluded and psychologically abused by their teammates before, during, and after the match (Iyem, 2013).

It was found that students engaged in martial arts got significantly higher scores from the negative reflection, justification, upsetting others, and using force sub-dimensions of the bullying tendency scale. According to this finding of the study, students who do martial arts tend to direct their negative emotions to people who are less powerful than those who do not; they have the attitude of believing that the victim deserves the punishment and assert their righteousness in bullying and enjoying making others upset and they use force against others and have self-esteem based on the force. On the other hand, it was found that although there was no statistically significant difference, the students' lack of emotional sharing and the tendency not to be disturbed were higher in those who were engaged in martial arts. Martial arts especially attracts children and adolescents with aggression tendencies and therefore makes contact with them easier (Keçici, 2018).

In a study conducted with female karate athletes in Tehran, it was concluded that as the lack of social security increases, the sense of aggression increases, the masculine behavior increases, the social class increases, the family support increases, the resistance to gender stereotypes increases, and the orientation towards karate increases (Seifi & Mahdavi, 2015). In a study examining the violence tendency levels of kickboxing trainers, it was revealed that female trainers are slightly more prone to violence than male trainers (Karadağ, 2018). In another study conducted on the aggression levels of physical education and sports college students, the physical aggression, verbal aggression, hostility and anger average scores of individuals who watched sports with fighting content for more than 4 hours per week were found to be approximately half a score higher than those who never watched (Dever & Bulut, 2017). This finding suggests the effect of social learning.

Conclusion and Recommendations

It has been concluded that individual sportsmen have a high tendency to establish superiority based on individual force, and those who do martial sports have a high tendency to direct their negative emotions to those who are weak, to exhibit self-righteous attitudes in bullying behaviors, to enjoy bullying and upsetting others, and to establish superiority based on individual force.

In this direction, the students should be directed to appropriate sports branches by considering their psychological characteristics and bullying tendencies. It is recommended to follow the tendencies of students who do individual sports to establish force-based superiority.

***** *The summary of this research was presented as an oral presentation at the 3rd International Child Protection Congress (30 September-3 October 2018 Ünye-Ordu).*

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International Journal of Sport Culture and Science
March 2021 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.632

The Relationship Between Perceived Freedom in Leisure and Job Satisfaction: A Research on Private Sector Employees

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Type: Research Article (Received: 17.02.2021– Accepted: 24.03.2021)

Abstract

This study aimed to determine the relationship between perceived freedom in leisure and the job satisfaction of private-sector employees. The study sample consisted of 512 people (398 males and 114 females) working in a private company in Istanbul. The participants were selected using a purposeful sampling method. The data collection tools included a personal information form and "Perceived Freedom in Leisure Scale-25," developed by Witt and Ellis (1985) to determine the participants' perceived competence, perceived control, and perceived intrinsic motivation. Lapa and Ağyar (2011) adapted the scale to Turkish, and its validity was tested by Lapa and Kaas (2019). Besides, the "Minnesota Job Satisfaction Scale" was another instrument of the study. It was developed by Weiss et al. (1967) and adapted into Turkish by Baycan (1985). The data were analyzed using independent t-test, ANOVA, MANOVA, and Pearson Correlation analysis. Independent t-Test results revealed no difference in the perceived freedom in leisure by gender and marital status—however, the perceived freedom in leisure varied by working hours and weekly leisure to the ANOVA results. MANOVA results showed no significant effect of gender and marital status on job satisfaction levels, but meaningful differences were found in job satisfaction levels by working hours and weekly leisure. Finally, a positive and low-level relationship was seen between perceived freedom in leisure time and job satisfaction. In conclusion, the perceived freedom in leisure and job satisfaction levels differed by specific socio-demographic characteristics, and as the level of freedom perceived in leisure increased, so did the job satisfaction.

Keywords: Leisure, Perceived Freedom in Leisure, Job Satisfaction

Introduction

Nowadays, developments in the field of industrialization and technology have reduced the working hours of individuals and increased leisure thanks to the convenience they provide in daily life (Yaşartürk & Yılmaz, 2019). In the constantly changing world, people's physical and mental characteristics have changed from past to present. In this developing and changing world, leisure and recreation are important for the protection of people's physical and mental health (Demirel et al., 2017). In this context, leisure can generally be defined as a time when individuals get rid of all obligations or connections for themselves and others and can engage in an activity they will prefer (Soyer et al., 2017; Çuhadar, 2019). In other words, leisure is also defined as the period in which individuals feel free and can express themselves (Henderson & Bialeschki, 2007; Kara et al., 2018). Perceived freedom in leisure is explained by Neulinger related to 3 terms as perceived competence in leisure, control in leisure, and intrinsic motivation in leisure (Lapa & Kaas, 2019; Stelzer, 2000). Ellis and Witt (1994) have stated the perceived freedom concept as a cognitive motivational structure that affects leisure competency perceptions, control over leisure experiences, the satisfaction of leisure needs and depth of participation, leisure behaviour, and life satisfaction (Poulsen et al., 2007). Perceived freedom in leisure reflects individuals' assessments of their ability to participate in leisure activities, and therefore they are affected by the events that occur in their lives (Janke et al., 2010). In other words, individuals who experience a high level of perceived freedom in their leisure perceive themselves as competent and can control what happens before, during, and after the leisure (Sıegenthaler & O'Dell, 2000). In modern societies, work is among the most basic and important activities for people. Accordingly, work is at the centre of human life and has an extremely important place (Snir & Harpaz, 2002; Sop, 2014). The effective and productive working of individuals in business life and their contribution to the production process is also related to the activities carried out in social life. (Demir & Demir, 2014). Another important factor necessary for people to be happy and fulfil in their lives is the satisfaction they receive from their work. For people to be satisfied in their lives, also they must be equally happy and satisfied in their jobs. (Çevik & Korkmaz, 2014). In this context, the job satisfaction concept is defined as an attitudinal variable that reflects people's feelings about their profession, and it is accepted as an indicator of how happy or unhappy an employee is with their job. (Spector, 1996; Kelecek et al., 2015).

As a result of the studies conducted in the literature on the subject, it has observed that there are a very limited number of studies examining the relationship between perceived freedom in leisure and job satisfaction. The concept of perceived freedom in leisure in literature is often studied with topics like leisure satisfaction (Lapa, 2013; Koç, & Er, 2020; Serdar & Ay, 2016; Ağyar, 2014; Gökçe et al., 2020), leisure benefit (Serdar, 2020), leisure attitude (Sıegenthaler & O'Dell, 2000), leisure motivation (Munchua et al., 2003), perception of being bored in leisure (Kara, 2019; Serdar et al., 2019), leisure constraints (Demirel et al., 2017) and the meaning of leisure (Harmandar Demirel et al., 2017). The concept of job satisfaction, on the other hand, is studied together with the concept of leisure satisfaction and boredom in leisure (Doğan et al., 2019) and participation in leisure activities (Başarangil, 2018). As a result, the study aimed to determine the relationship between the level of perceived freedom in leisure and job satisfaction levels of individuals working in the private sector in their leisure.

Material and Method

Research Model

Following the aim of the study, the relational screening model was used in the research. The relational screening model was defined as trying to determine the existence, direction and severity of change of two or more variables together (Karasar, 2014).

Research Group

The research group consisted of 512 people, 398 males ($Mean_{age}$=38.50±7.44) and 114 females ($Mean_{age}$=34.03±7.35), who were working in a private company and operating in the private sector in Istanbul, and selected by purposeful sampling method. Moreover, it was determined that while the marital status of 79.5% of the participants was "Married", 27.1% was working for "16 years and more" at the workplace, 28.1% had leisure of "6-10 hours" per week.

Data Collection Tools

Personal Information Form: "Personal Information Form" prepared by the researcher consisted of questions such as gender, age, marital status, working period in the workplace and weekly leisure to collect information about the individuals involved in the study.

Perceived Freedom in Leisure Scale-25: The Perceived Freedom in Leisure Scale developed by Witt and Ellis (1985) to determine the perceived competence, perceived control and perceived intrinsic motivation of individuals in leisure, first adapted to Turkish by Lapa and Ağyar (2011) and later, Lapa and Kaas (2019) used the "Perceived Freedom in Leisure Scale-25 (PFLS-25)", whose construct validity was tested. The scale had 25 items and a single sub-dimension, and the reliability coefficient was determined to be 0.93. Items in the scale were scored as (1) Strongly Disagree, (5) Strongly Agree. In this study, the reliability coefficient for PFLS-25 was determined as 0.89.

Minnesota Job Satisfaction Scale: The Minnesota Job Satisfaction Scale (MJSS), developed by Weiss et al. (1967) to determine the job satisfaction levels of the participants and adapted into Turkish by Baycan (1985), was used. The scale consisted of 20 items and 2 sub-dimensions. The sub-dimensions were (1) Internal Satisfaction and (2) External Satisfaction. Answers given to the scale were scored as (1) Not Never Satisfied to (5) Very Satisfied. As a result, it was determined that the Cronbach Alpha internal consistency coefficient of the scale was 0.70 for the "Internal Satisfaction" sub-dimension and 0.71 for the "External Satisfaction" sub-dimension.

Data Analysis

SPSS 20.0 package program was used to analyse the data. The percentage and frequency method were used to determine the distribution of the personal information of the participants. The skewness and kurtosis values were examined to determine whether the data show normal distribution, and it was understood that the data showed normal distribution. In this context, in the analysis of the data, Independent t-Test, ANOVA, MANOVA and Pearson Correlation analyses were used. Finally, Cronbach Alpha coefficients were calculated to determine the reliability of the scales.

Results

Table 1. Distribution of scale scores

	Sub-dimensions	Items	n	Mean	Ss.	Skewness	Kurtosis
PFLS-25	Perceived freedom in leisure	25	512	3.74	0.48	-0.38	1.85
MJSS	Internal Satisfaction	12	512	3.87	0.57	-0.71	1.34
	External Satisfaction	8	512	3.53	0.71	-0.53	0.43

When the mean scores of the participants in Table 1 were examined, the mean score of PFLS-25 was (3.74). It was determined that the highest mean of MJSS sub-dimensions was in the "Internal Satisfaction" (3.87) sub-dimension, and the lowest mean was in the "External Satisfaction" (3.53) sub-dimension.

Table 2. Analysis Results of PFLS-25 and MJSS Scores According to Gender of Participants

Scales	Male (n=398)		Female (n=114)	
	Mean	**Sd.**	**Mean**	**Sd.**
PFLS-25	3.76	0.48	3.68	0.46
MJSS				
Internal Satisfaction	3.88	0.56	3.82	0.62
External Satisfaction	3.53	0.71	3.54	0.73

The analysis results were given in Table 2 according to the gender of the participants. According to the results of the independent t-Test analysis, no significant difference was found between the PFLS-25 scores according to the gender of the participants ($t = 1.605$; $p > 0.05$). According to the results of the MANOVA analysis, the main effect of the gender of the participants on the sub-dimensions of MJSS was not significant, and no significant difference was found at the level of the sub-dimensions [$\lambda = 0.994$, $F_{(2,509)} = 1.425$; $p > 0.05$].

Table 3. Analysis Results of PFLS-25 and MJSS Scores According to the Marital Status of the Participants

Scales	Married (n=407)		Single (n=105)	
	Mean	**Sd.**	**Mean**	**Sd.**
PFLS-25	3.73	0.49	3.80	0.43
MJSS				
Internal Satisfaction	3.87	0.58	3.86	0.73
External Satisfaction	3.51	0.71	3.61	0.73

In Table 3, analysis results were given according to the marital status of the participants in the study. According to independent t-Test analysis results, it was found that there was no significant difference between PFLS-25 scores regarding the marital status of the participants ($t = -1.391$; $p > 0.05$). According to the results of the MANOVA analysis, the main effect of the marital status of the participants on the sub-dimensions of MJSS was not significant, and there was no significant difference at the sub-dimensions level [$\lambda = 0.992$, $F_{(2,509)} = 1.975$; $p > 0.05$].

Table 4. Analysis Results of PFLS-25 and MJSS Scores According to the Working Period of the Participants

Scales	Less than 1 year (n=94)		1-5 years (n=124)		5-10 years (n=75)		11-15 years (n=80)		16 years and more (n=139)	
	Mean	**Sd.**	**Mean**	**Sd.**	**Mean**	**Sd.**	**Mean**	**Sd.**	**Mean**	**Sd.**
PFLS-25	3.84	0.46	3.77	0.39	3.68	0.51	3.80	0.58	3.66	0.47
MJSS										
Internal Satisfaction	4.15	0.45	3.82	0.57	3.67	0.72	4.03	0.61	3.74	0.44
External Satisfaction	3.94	0.54	3.48	0.59	3.23	0.79	3.65	0.81	3.39	0.68

In Table 4, analysis results were given according to the working hours of the participants in the research. According to the results of ANOVA analysis, it was determined that there was a significant difference between the PFLS-25 scores according to the working periods of the participants ($F = 2.639$; $p < 0.05$). It was determined that employees who had a period of less than 1 year in the workplace had a higher level of perceived freedom in Leisure. Similarly, it was determined that the main effect of the participants' working period in the workplace on the sub-dimensions of MJSS was significant [$\lambda = 0.877$, $F_{(8,1012)}=7.810$; $p<0.05$]. At the level of sub-dimensions, a statistically significant difference was found in both the "Internal Satisfaction" sub-dimension [$F_{(4-507)}=11.875$; $p<0.05$] and the "External Satisfaction" sub-dimensions [$F_{(4-507)}=14.099$; $p<0.05$]. In the Internal and External Satisfaction sub-dimensions, it was determined that the mean scores of the participants who had a period of less than 1 year in the workplace were higher than the mean scores of the other participants.

Table 5. Analysis Results of PFLS-25 and MJSS Scores According to Weekly Leisure of the Participants

Scales	1-5 Hours (n=115)		6-10 Hours (n=144)		11-15 Hours (n=123)		16 hours and above (n=130)	
	Mean	**Sd.**	**Mean**	**Sd.**	**Mean**	**Sd.**	**Mean**	**Sd.**
PFLS-25	3.71	0.46	3.68	0.45	3.74	0.46	3.84	0.54
MJSS								
Internal Satisfaction	3.93	0.57	3.99	0.65	3.79	0.65	4.02	0.65
External Satisfaction	3.61	0.63	3.63	0.72	3.48	0.81	3.69	0.77

Table 5 showed the analysis results according to the weekly leisure of the participants in the study. According to the results of ANOVA analysis, a significant difference was found between PFLS-25 scores according to the weekly leisure of the participants ($F = 2.858$; $p < 0.05$). It was observed that the participants who had 16 hours or more per week had higher levels of perceived freedom in leisure. Similarly, it was determined that the main effect of the participants' weekly leisure on the sub-dimensions of MJSS was significant [$\lambda = 0.954$, $F_{(6,1016)}=4.037$; $p<0.05$]. At the level of sub-dimensions, it was determined that there was a statistically significant difference in both the "Internal Satisfaction" [$F_{(3-508)}=7.479$; $p<0.05$] sub-dimension and the "External Satisfaction" sub-dimensions [$F_{(3-508)}=5.405$; $p<0.05$]. In the Internal and External Satisfaction sub-dimensions, the mean scores of the participants who have 16 hours or more per week were higher than the mean scores of the other participants.

Table 6. Results of the Correlation Analysis Between PFLS-25 and MJSS

	PFLS-25	Internal Satisfaction	External Satisfaction
PFLS-25	1		
Internal Satisfaction	0.183*	1	
External Satisfaction	0.113*	0.748	1

According to the results of the Pearson Correlation analysis performed to determine the relationship between PFLS-25 and MJSS in Table 6, it was found that there was a positive and low-level statistically significant difference between PFLS-25 and MJSS ($p<0.05$).

Discussion and Conclusion

This study aimed to determine the relationship between perceived freedom in leisure and the job satisfaction of private-sector employees. In this context, the obtained results were discussed and interpreted in this section.

İt was no significant found difference between the level of perceived freedom in leisure by the participants according to the gender variable. According to the obtained result, while studies conducted by Yaşartürk and Yılmaz (2019), Serdar et al. (2019), Serdar and Ay (2016), Demirel et al., (2017), Harmandar Demirel et al., (2017) and Çakır (2019) were parallel to this study, the results of the studies conducted by Lapa (2013) and Kara (2019) the results of this research was not parallel. When the job satisfaction level of female and male were examined, it was determined that the main effect of the gender of the participants on their job satisfaction levels was not significant and there was no significant difference in the sub-dimensions. When the literature on the subject was examined, while this study was parallel the results of the study conducted by Elsherbeny and El-Masry (2018), it was found that the results of studies conducted by Doğan et al. (2019), Türkoğlu and Yurdakul (2017), Hwang and Ramadoss (2017), and Ordu (2016) was not. No significant difference was found between the levels of perceived freedom in leisure by the participants according to the marital status variable. This situation can explain as that the marital status of individuals was not an important factor in determining their level of perceived freedom in leisure. When the researches on the subject were evaluated, the results of the research conducted by Yaşartürk and Yılmaz (2019) and the results of this research were in parallel. It was determined that the main effect of the marital status of the participants on their job satisfaction was not significant and there was no difference in the sub-dimensions. In this context, while the results of the study conducted by Türkoğlu and Yurdakul (2017), Elsherbeny and El-Masry (2018) and Koç and Er (2020) were in parallel with the results of this study, the results of the study conducted by Hoboubi et al. (2017) did not match the results of this study. A difference was found between the individuals' perceived freedom level in leisure according to their working period in the workplace. In other words, individuals who work in the workplace for 1 year or less had a higher level of perceived freedom in leisure compared to other individuals. Moreover, it was determined that the satisfaction levels of the individuals who worked in the workplace for 1 year or less were found to be higher in both internal and external sub-dimensions of the job satisfaction of the participants according to the period of work. In this context, the results of the studies conducted by Türkoğlu and Yurdakul (2017) were parallel to the results of this study. A statistically significant difference was found between the levels of freedom perceived by individuals in leisure according to their weekly leisure. In another definition, perceived levels of freedom by individuals with the leisure of 16 hours or more per week was more than any other individual. This situation could be interpreted as that as the weekly leisure of individuals increased, their perceived freedom level increased in free. When the

literature on the subject was examined, the results of the study conducted by Serdar (2020) was not parallel to the results of this study. Moreover, it was determined that individuals who had leisure of 16 hours or more weekly had higher levels of both internal and external satisfaction than other individuals. This could be explained by the fact that individuals' use of this period according to their wishes and desires, together with the increase in their weekly leisure, had a positive effect on their job satisfaction. Moreover, it was determined that there was a positive and low level statistically significant relationship between perceived freedom in leisure and job satisfaction. In other words, this situation could be interpreted as the level of freedom that individuals perceive in their leisure increased in parallel with their job satisfaction levels.

As a result, although there was no statistically significant difference, it was determined that male participants' perceived levels of freedom in leisure were higher than females, and married individuals had higher levels of their internal satisfaction. It was found that individuals who had worked in the workplace for 1 year or less had higher levels of perceived freedom and internal and external satisfaction in leisure. Besides, it was observed that participants with the leisure of 16 hours or more per week had higher levels of perceived freedom in leisure and job satisfaction. Finally, it could be said that as individuals' perceived freedom levels in leisure increased, their levels of job satisfaction also increased.

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International Journal of Sport Culture and Science
March 2021 : 9(1)
ISSN : 2148-1148
Doi : 10.14486/IntJSCS.2021.628

Structuring of Sports Associations During Ataturk Period and Their Activities

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Type: Research Article (Received: 01.02.2021– Accepted: 23.03.2021)

Abstract

Ataturk's views and intellection of sports in the period when the Republic was founded, not only for the governments of that time, but also maintain the same value and validity today, are the opinions and basic principles that advanced countries still apply in sports and backward countries have to apply. With the declaration of the Republic, it was deemed necessary to consider sports as a cultural and physics action of the country, to reveal the national sports philosophy, to arouse interest in sports in Turkish nation, to traditionalize sports, to make a mass action. The aim of this study is along with the proclamation of the Republic to reveal the phases of the associations that contribute to the development of Turkish sports in the State of the Republic of Turkey under the leadership of Ataturk and their services to Turkish sports. The study has been evaluated through the document analysis technique which is one of the qualitative research designs. As a result of the study, it has been concluded that Alliance of Training Community of Turkey, Turkish Sports Association and General Directorate of Physical Training, organized between 1923 and 1938, contributed to the development of Turkish sports despite their many shortcomings.

Keywords: Ataturk, Associations, Republic, Sports

Introduction

Sports has always played an important role in the social structure of the Turkish nation, which has kept body strength at the forefront. Historical documents, monuments, landmarks in arrow squares, stories from word of mouth clearly reveal the identity of the Turkish nation's athletes. Sports such as hunting, shooting, horse riding, wrestling, javelin, sword-shield have been the sports branches identified with the Turks (Beden Terbiyesi Umum Mudurlugu, 1943). With the proclamation of the Republic, one of the aims of the Turkish revolution was to make Turkish society a country of the 20th century through sports (Asaf, 1933). New associations related to sports management were established in the country and popularizing sports throughout the country and increasing the diversity of sports categories was presented as the two most important goals. With the republic period, society was wanted to be introduced with modern sports as well as ancestor sports such as wrestling, archery and hunting (Fisek, 2003). Ataturk, the founder of the Republic, as a statesman who knew that sports should be included among the reforms he tried to do in every area, pioneered the meeting of the Turkish nation with sports.

Ataturk assigned Grand National Assembly of Turkey and Government in sports activities and considered sports as an issue that the State should not neglect in the education of the nation. His most important statement corroborating this idea is: *"It is necessary to consider all kinds of sports activities as the main elements of the national education of Turkish youth."* (Ataturk Kultur, Dil ve Tarih Yuksek Kurumu, 1997). Ataturk's views and intellection of sports in that period, not only for the governments of that time, but also maintain the same value and validity today, are the opinions and basic principles that the advanced countries still apply in sports and the backward countries have to apply. In this context, the Republic period is a period in which there was a consensus that sports should be handled with great importance, as in economic, social and cultural areas (Akyol, 1976).

Before the foundation of the Republic, sports activities were carried out with private initiatives. A few sports clubs in the metropolitans usually played football matches between them, and occasionally they played matches with the teams they brought from Europe. In addition, gymnastics, wrestling and swimming activities were organized in a very narrow framework (Asaf, 1933). Turkish nation, in which raised robust men until the beginning of the 19th century, experienced the problems during the reign caused unhealthy and weak generations to grow. With the declaration of the Republic, it was deemed necessary to consider sports as the cultural and physics action of the country, to reveal the national sports philosophy, to arouse interest in sports in the Turkish nation, to traditionalize sports, to make a mass movement (Apak, 1936).

In this study, along with the proclamation of the Republic, the phases of associations that contribute to the development of Turkish sports in the State of the Republic of Turkey under the leadership of Ataturk and their services to Turkish sports will be discussed.

Methods

Research Model

The study has been evaluated through the document analysis technique, one of the qualitative research designs. Document review covers the analysis of written materials involving information about the phenomenon or facts to be researched. In qualitative research, when direct observation and interviews are not possible, research can be conducted through written

materials related to the research problem studied (Yildirim & Simsek, 2006). For this reason, documents (official notes, archive documents, journals, etc.) especially belonging to the research period were analyzed (Creswell, 2018). Records, documents, artifacts and archives traditionally defined as "material culture" in anthropology constitute a rich data source (Patton, 2018).

Results

The structure and activities of the Alliance of Training Community of Turkey (1922-1936) and Turkish Sports Association (1936-1938), which were tasked with carrying out the sports activities of the State of the Republic of Turkey between the establishment of the Republic and the death of Ataturk, will be transferred, the philosophy of the establishment and the first actions of the General Directorate of Physical Training will be mentioned in the study.

Period of Alliance of Training Community of Turkey

Being active as a youth organization in the Ottoman Empire, Young Men's Christian Association (YMCA) received great reactions on the grounds that it made Christian propaganda and excluded football (Yildiz, 1979). While 13 clubs, which were active in Istanbul in 1920, were trying to organize football competitions among themselves, they focused on the idea of establishing a union. For this purpose, the first meeting was held in Kadikoy on July 26, 1920 with the participation of all club delegates. In April 1921, a commission consisting of club delegates called "Temporary Committee of Alliance of Training" started working on the draft translated from the regulations of the Swiss Federations and Sports Association. Temporary Committee of Alliance of Training finished its work on September 7, 1921. On 25 November 1921, they applied to the government for a formation according to the law of societies. The Temporary Committee worked until May 22, 1922, under the name of the "Temporary Central Committee", in order to ensure the establishment of the Training Alliance. After the legal procedures were completed, by gathering all club delegates under the chairmanship of Galatasaray Club President Cevdet Bey at Fenerbahçe Club building they elected the first central delegation of Alliance of Training Community of Turkey on Sunday, 14 July 1922 (Beden Terbiyesi Umum Mudurlugu, 1943).

In the first article of the regulation of Alliance of Training Community of Turkey, the purpose of the organization is explained as "A society called Alliance of Training Community of Turkey has been established to work on the dissemination and maturation of training in Turkey within the framework of scientific principles and to be authorized to represent Turkish training at home and abroad." (Turk Spor Kurumu, 1938b).

This organization, whose activities were limited to Istanbul in the early days, could not perform an important activity until Istanbul was liberated by the National Government. In August 1923, Ali Sami Yen and Selim Sırrı Tarcan visited the Minister of National Education Safa Bey and Prime Minister İsmet İnönü in Ankara, they presented their project on the expansion of the alliance throughout the country and participation in the 1924 Paris Olympic Games. The government gave 17 thousand liras to the order of the Alliance for the participation in the Olympics and added another 10 thousand liras later (Beden Terbiyesi Umum Mudurlugu, 1943). This is an important indicator of the support of the State of the Republic of Turkey for the education of the people through sports. For as much as, this financial aid to sports by a country that is just out of the National Liberation War, financially and morally tired, reveals the importance of sports in the founding philosophy of the Republic of Turkey.

With the support of the Government of the Republic, the headquarters of the Alliance of Training Community of Turkey, selected the athletes to participate in the 1924 Paris Olympic Games. At Eskişehir, in March 1923, football players, athletes and wrestlers who would go to the Olympics were selected with the participation of the athletes from Ankara, Istanbul, İzmir and Trabzon. A camp was set up in Istanbul to train selected athletes and wrestling coach Raul Peter and football coach Billy Hunter were brought to Turkey for the first time by the Government's decision (Beden Terbiyesi Umum Mudurlugu, 1943). Since these years, it has become a tradition to bring coaches to contribute to the development of various sports (Asir, 1938).

Alliance of Training Community of Turkey, which was taken among the useful associations by a government decree of 16 January 1924 participated in the Olympics in Paris in May 1924 with three athletes, three cyclists, one fencer, four wrestlers, one weightlifter, nineteen football players but athletes couldn't get a degree (Beden Terbiyesi Umum Mudurlugu, 1943). Nevertheless, Alliance of Training Community of Turkey accepted as an association for the public interest was both authorized to represent Turkey abroad and actively undertaken the task of establishing a federation by the establishment of the Turkey Football Federation in 1923 (Fisek, 1985).

After the Paris Olympic Games Alliance of Training Community of Turkey tried to establish the headquarters of the alliance of organizations within the country, beginned to get in touch with sports clubs in the provinces and constituted a training alliance zone in provinces with three clubs. 161 delegates from Ankara, Istanbul, Izmir, Adana, Antalya, Bursa, Edirne, Eskisehir, Samsun, Balikesir, Kocaeli, Konya, Trabzon regions and clubs attended the first general congress that was held in Ankara between 5-12 September 1924, Military Academy and Navy regions delegates also attended the congress representing the army land troops and the navy. These two regions were later affiliated to Army Sports Organization. Some arrangements were made on the regulation in the congress. Athletics, Wrestling, Football and Bicycle Federations were represented in the first general congress (Beden Terbiyesi Umum Mudurlugu, 1943). In this congress, it was decided to establish federations of horse riding, fencing, marksmanship (shooting), hockey, boxing, maritime, shot gun, tennis and water sports considered as military preparation sports (Tayga, 1990; Beden Terbiyesi Umum Mudurlugu, 1943). Later, at the Second General Congress of the Alliance of Turkey Training Community, which was held in Ankara in 1925, these sports branches were established as separate federations within the Army Sports Organization (Tayga, 1990).

For the first time, Turkish championships were held in Ankara on the occasion of the first general congress of the Alliance of Training Community of Turkey, 15 region's football, wrestling, cycling and athletics competitions were held (Beden Terbiyesi Umum Mudurlugu, 1943). Thus, the State of the Republic of Turkey started sports tournaments covering the entire country, albeit in limited sports, and began to take steps to ensure that the Turkish people who had fallen weak and forceless after the national struggle were both healthy and acted together.

Alliance of Training Community of Turkey tried to be beneficial to the country's sports within the same principles and with its expanding dimensions from 1923 to April 1936. Initially limited only to football, it tried to diversify sports activities with other branches and spread the sports to corners of the country where there were no sports activities (Turk Spor Kurumu, 1938b). As a warrior nation, importance was given to the shooting sports, shooting centers were opened in big cities such as Istanbul, Edirne, Balikesir, Izmir and Ankara in 1935 (Apak, 1936).

The State of the Republic of Turkey began allocating appropriations from the budget between 1926-1938 to newly established sports organizations from 1926. Government allocated 40 thousand in 1926, 33 thousand in 1927, 30 thousand in 1928, didn't allocated in 1929, provided 100 thousand in 1930, 40 thousand in 1931, 50 thousand in 1932, 70 thousand in 1933, 80 thousand in 1934, 203 thousand in 1935, 239 thousand in 1936, 239 thousand in 1937, 239 thousand in 1938 and a total of 1.363.000 TL monetary aid. Apart from these, the clubs in the regions were assisted by the special provincial accounts and the budgets of the municipalities (Turk Spor Kurumu, 1938b). The Republican People's Party, with a circular it sent to its organizations, divided the provinces into eight degrees and provided the special administrations to support sports every year (Beden Terbiyesi Umum Mudurlugu, 1943).

The Government and the Party's interest and assistance in sports gradually increased and the works of this financial and moral support started to be seen with the increase in the number of clubs and athletes. In 1923, when the Alliance of Training Community of Turkey was established, the number of clubs was 14, while in 1933 it was 230 and at the beginning of 1938 it was 442. The number of registered athletes in the clubs included in the Alliance of Training Community of Turkey was 827 in 1923, while reached to 6,380 in 1928, 10,450 in 1933 and 27,631 in 1938. Depending on the number of clubs and athletes, the number of regions also increased. While the number of regions was limited to 13 in 1925, it reached 16 in 1926, 19 in 1927, 22 in 1933 and 63 in 1938 (Turk Spor Kurumu, 1938b).

As the reasons for the nationalization efforts that resulted in Alliance of Training Community of Turkey's transformation into the Turkish Sports Association, it can be said that the state's sports policies could not be applied in the same way all over the country and the community did not adopt the idea of spreading sports to every corner of the country (Caglar, 1936b). In fact public health was considered important in the main philosophy of the sports policies of the State of the Republic of Turkey. In other words, the development of physical, sanity and mental health of each individual was noticed.

Abali (1974) brought a different interpretation to the end of the era of the Alliance of Training Community of Turkey as he stated that the government found appropriate to leave the responsibility for the management of sports under the control of Republican People's Party, which works in parallel with the State and incorporated Community Centers into its structure.

Period of Turkish Sports Association

At the 8th General Congress of the Alliance of Training Community of Turkey held in Ankara in 1936, with a decision made by the congress general delegation unanimously, it was accepted that the organizational charter was not adequate in the face of 13 years of development and that a regulation bearing new provisions was made (Turk Spor Kurumu, 1938b). Important sportsmen of the period attended this congress, a new regulation was prepared by discussing the problems of sports (Caglar, 1936a). With the new regulation, the organization was named as the Turkish Sports Association since 18 April 1936. In addition, the congress delegation wished for the acceptance of the Turkish Sports Association to the Republican People's Party with the decision taken in alliance. This wish was accepted by the Party General Assembly and and the Turkish Sports Association acquired the status of a party organization affiliated to the Republican People's Party (Turk Spor Kurumu, 1938b).

During this period, the Republican People's Party affiliated Olympic Association of Turkey which was an independent organization to the Turkish Sports Association. Turkish Sports Association differently from Alliance of Training Community of Turkey expanded its headquarters numerically, made a great effort to bring the sport in order, increased the

influence and weight of federations by providing the authority of the headquarters in accordance with the essence and logic of sports (Fisek, 1980). Federations, on the other hand, gave great importance to clubs. Until this period, very few clubs had developed with the financial and moral support they received from grand institutions. Other clubs did not have a center, sports grounds or equipment. These clubs were interested in football under the name of sports and, to a very small extent, athletics and seasonal sports. Almost all of these clubs had more debts than their annual budgets (Baydar, 1937).

One of the nine branches within the Community Centers established in 1932 became a sports branch. These branches worked to unite the people and to educate them in accordance with the conditions of the modern world (Cavdar, 2004). The Turkish Sports Association, together with Community Centers' Sports Branches, initiated the development, advancement and spread of sports clubs that did or did not enter the association. Community Centers raised clubs that were not eligible to be affiliated with a federation to the level required by the regulations of the Turkish Sports Association and ensured the establishment of clubs in places where there were no clubs. In places where there were clubs, it worked to raise the awareness of sports among young people who were excluded by the clubs and to make them active members of sports clubs (Caglar, 1937). It allowed clubs to socialize by increasing their contacts with each other, it gave place in their own buildings to the clubs, which did not have a meeting place. It was interested in ancestor sports such as wrestling, sword-shield, javelin, shooting, and by organizing these sports, it counted races and trips in its program and regulations. It organized pedestrian, horseback and bicycle trips, took the young people of the country to the camps that were set up in the villages, provided the spread of hunting, table tennis, billiards, tennis, developed mountaineering, skiing and sea sports with the contributions of Community Centers' Sports Branches (Kirsan, 1938).

During the period of the Turkish Sports Association, the constructions of the sports fields were planned and it was decided to establish at least two clubs in each province center and one club in each district center. Importance was given to the matter of instructors that will ensure the development of sports according to technical rules (Beden Terbiyesi Umum Mudurlugu, 1943). For example, "Football Coach Course" was opened in Ankara on March 1, 1938 to train trainers and make coaching a profession (Asir, 1938). During this period, the number of athletes was increased, and technical rules were determined by encouraging sports organizations to follow a more disciplined and technical path. Monitors were sent to certain regions where free wrestling is common, one of the national sports that Ataturk emphasized while watching the wrestling competitions in the Ankara Community Center and Turkish championships were organized. Thanks to the regional and Turkish championships organized by the Cycling Federation, interest in the sport of cycling increased. As a result of the diligent studies of the Athletics Federation, great improvements were made in athletics. With the studies of Mountaineering and Winter Sports Federation, other than Bursa Uludağ winter sports facility, chalets were built on the foothills of Erzurum Kop mountain, Kastamonu Ilgaz and Ankara Elmadağ (Turk Spor Kurumu, 1938b). Two years after the establishment of this federation, the number of skiers exceeded 2.000 (Yaman, 1941). The first cross-country race in Turkey was also held during this period (Beden Terbiyesi Umum Mudurlugu, 1943).

The Turkish Sports Association decided to assist the Turkish Aeronautical Association, which was organized under the name of "Turkish Bird", as one of the main articles of its regulation (Caglar, 1936a). In the meantime, it was interested in Turkish sports history and published its study titled "Researches on Ancient Turkish Sports" that was prepared by one of the relevant experts. At the same time, it made researches in national museums and libraries and tried to identify important documents in terms of Turkish sports history. In addition, a law was

enacted that allowed 19 May to be accepted as the Youth and Sports Day from 1937 (Turk Spor Kurumu, 1938b).

The first place won in Greco-Roman wrestling in the 1936 Berlin Olympic Games, also the degrees of the cycling team and the sailors in water sports are among the important achievements of the Turkish Sports Association period. In addition, successes were achieved in international competitions in cycling in Soviet Russia and in the Balkans (Turk Spor Kurumu, 1938b). After the 1936 Berlin Olympic Games, the sports press got busy with what moves should be made in sports affairs. The Republican People's Party gradually increased its effectiveness in sports by competing athletes with the party emblem on their breasts in the Olympics, and made all licensed athletes members of the party with ceremonies held in provinces and districts on October 29, 1936 (Atabeyoglu, 2001).

The General Secretariat of the Republican People's Party took the decision on August 14, 1937 to appoint provincial party heads to the regional presidencies in order to ensure more efficient and disciplined work in sports activities. This situation ensured that the local needs of sports institutions in the country were met on-site and easily and many problems were solved (Kirsan, 1937). Party heads were asked to establish regions in provincial centers where sports zones were not established. While at least 3 clubs affiliated to the federation were required to establish a region in one place during the Alliance of Training Community of Turkey, the regulation of the Turkish Sports Association decided to establish a region even in provinces where there are no sports clubs (Turk Spor Kurumu, 1937).

The Turkish Sports Association somewhat centralized management, directed to sports to the areas that serve for homeland defense other than football such as winter sports, shooting, sailing flight sports, also gave importance to national sports. On the one hand, increasing interest in sports and the sports enthusiasm of young people in the country, on the other hand, the Turkish Sports Association, which was seen to be unable to meet the needs and requirements of the period with its modest staff and amateur organization, fulfilled its duty as a period of maturation (Turk Spor Kurumu, 1938b). But the experience gained by the Alliance of Training Community of Turkey and the Turkish Sports Association period, and new ideas and movements seen in the sport management of States in Europe in those years revealed that sports should be handled as a state affair (Turk Spor Kurumu, 1938a). The establishment duration of the Turkish Sports Association and all policies followed in a short time, it has been interpreted that period of Turkish Sports Association is as being more successful than the period of Alliance of Training Community of Turkey (Fisek, 1980).

However, while Turkish Sports Association was an autonomous organization that was elected and authorized to spend its revenues in the establishment phase, participation of the government and military members in the general assembly and the authorized bodies of the Republican People's Party to approve the institution's budget and work programs, receiving instructions from the party in its actions caused it to become a semi-official structure (Keten, 1974).

Period of the General Directorate of Physical Training

Turkish Sports Association, under the control of the Republican People's Party, blended statism and partisanship in sports, and the necessity of state authority for Turkish sports became inevitable (Sumer, 1989). Depending on factors such as the interference of the personal ambitions and goals of the Party administrators in sports, and the thought that the negative events in sports are thought to be caused by the party, the Party decided to exclude

sports from its constitution and so that to affiliate it to the Government and therefore to the State (Fisek, 1985).

Stating the preparation of the Physical Training Law in his speech dated 1 November 1937, Ataturk set forth that the State should handle this study with a new understanding by saying "All kinds of sports activities should be considered as one of the main elements of the national upbringing of Turkish youth. In this work, it should be considered important that the government behaves more seriously and carefully than ever before, and that the Turkish youth should be raised carefully in terms of sports and national excitement." (Baydar, 1939).

With the approval of the Physical Training Law numbered 3530, in the Grand National Assembly of Turkey's meeting on June 29, 1938, Turkish Sports Association left its place with its all rights to the General Directorate of Physical Training affiliated to the Prime Ministry. The General Directorate of Physical Training, whose establishment, regulations and activity style were different from the previous ones, were assigned the responsibilities of establishing, regulating, implementing and following up, and started to work with the power of the State authority (Beden Terbiyesi Spor, 1939b). Before the Physical Training Law, sports activities carried out in schools, in the army and in the clubs with very different programs and mentalities, included all Turkish youth in a fundamental and competent organization, and ensured their management from a center by linking physical training and sports activities to the program (Yaman, 1941).

According to Article 1 of the Physical Training Law; the definition of physical training was made by stating as "A General Directorate of Physical Training has been established under the Prime Ministry in order to manage games, gymnastics and sports activities that ensure the development of the physical and moral abilities of the citizen according to national and revolutionary purposes." According to the 13th article of the law, the association that would make young people workout also became a club outside the army and school in this law, and it was decided to establish a club in villages, towns, cities with 50 or more young people and in towns and cities with no less than 200 and more than 500. In article 21 of the Law, organizations with more than 500 civil servants and workers were obliged to build facilities such as gymnasium, sports field, swimming pool and to have a specialist instructor or trainer (Beden Terbiyesi Spor, 1939a).

At the meeting of the Central Advisory Committee on May 31, 1939, 9 federations comprised of Athletics, Football, Wrestling (Boxing and Weightlifting), Water Sports (Swimming, Water Polo, Rowing, Sailing, Boat Sports), Cycling (Motor Vehicle Sports), Shooting (Hunting, Archery), Mountaineering and Winter Sports, Sports Games (Tennis, Handball, Basketball, Volleyball, Golf) were established. In addition, the Federation of Scouting and Gymnastics was established with the decision of the delegation dated 29 April 1940 and numbered 3470. Right along with preparing regulations and circulars, federations organized work programs and competitions. They drafted international regulations and orders and circulars on programs, materials, construction and maintenance of facilities on preparation, promotion and championship competitions. By the international regulations, they made up orders and regulations regarding programs on preparation, encouragement and championship competitions, materials, construction and maintenance of facilities. The General Directorate, while establishing the central organization on the one hand, on the other hand contacted the regions and gave the necessary instructions for the formation of the clubs and groups of the Regional Advisory Committees. Advisory Committees were established in 63 regions, many of the existing clubs complied with the Physical Training Law and again 470 clubs, 689 groups were established and started their activities. In addition, they planned the construction

of the facility according to the climate and population status of the country and sent the necessary information, sketches and plans to the regions and examined them in local plans (Beden Terbiyesi Umum Mudurlugu, 1943).

The period of the General Directorate of Physical Training is a period that the management of sports passed to the State administration with the need for a new structure by showing a precedent in countries that sports was administrated by the state and.

Conclusion

Ataturk is a statesman who saw that the sports administration of the country cannot be carried out with Alliance of Training Community of Turkey that had a private association status but assisted by the Government of the Republic of Turkey and semi-official Turkish Sports Association under the direction of the Republican People's Party. However, Alliance of Training Community of Turkey and Turkish Sports Association that were organized between the years 1923-1938, contributed to the development of Turkish sports despite their many shortcomings. Alliance of Training Community of Turkey was not able to become an authority and carry sports to the desired level because it was an independent organization. As to Turkish Sports Association served as a preparatory bridge between Alliance of Training Community of Turkey and General Directorate of Physical Training, it remained as a party organization. The Republican administration, which realizes that sports in the country cannot remain under party rule and control, established the General Directorate of Physical Training by making Turkish sports under the state administration. As a result, Ataturk was a statesman who pioneered the organization and institutionalization of Turkish sports, diversification of sports activities and spread throughout the country with the legislative regulations issued by following the latest developments in the world.

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