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### **Original Article**

### Influence of sports facilities and programs on sports participation at Saudi Universities

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### Abstract:

Participation in physical activity without doubt has many benefits especially to students at all levels. It is however worrisome to note that this participation by a number of factors including availability of sport facilities and sport programs. Hence, the purpose of this study was to investigate the role or influence of sport facilities and programme on the participation in physical activity among the students in Saudi Arabia. In order to do this, the study adopted a descriptive approach with data collected with the aid of an adapted questionnaire administered on 643 undergraduate students who were randomly selected from 25 universities in Saudi Arabia. The data collected were analysed using Smart PLS software. It was revealed that there were inadequate sport facilities in the universities and this greatly affected students' sports participation at Saudi Arabia universities. In addition, findings revealed that (non)availability of sports programs had effects on the students' sports participation at Saudi Arabia universities. Therefore, these results showed that sports facilities provided by the universities could positively encourage students to use these facilities and participate in sports activities and that the sports programs provided by the universities had significant effect on students' participation. The study thus concluded that in order to increase the participation level of students, universities should offer them different types of programs, workshops and training, which enable them to discover their skills and participate in the sports that they believe they can enjoy the most with their colleagues. There should also be adequate provision of sport facilities for the use of the students. It is believed that through these, the students and the country will drive the maximum benefits of sports and sport participation.

Key words: Physical activity, Sports facilities, Sports programs, Education, Saudi universities.

#### Introduction

Sports and physical activities are important human endeavours that have huge immediate and long-term health benefits. For instance, it has been reported that regular activity can improve individual's quality of life. Hence, it is recommended that people of all ages participate in sports and physical activities based on the numerous benefits attached to it. As opined by Zia-ul-islam (2018), sports and physical activities are crucial in addressing physical and mental health problems, as well as in the rehabilitation process to heal several numbers of psychological, emotional and social disorders. Therefore, physical activity and sports participation could bring about such benefits as more self-esteem, self-confidence, cognitive and social development, better academic performance etc (Bailey, 2006). Additionally, as reported by Vail (2007), it can help to reduce anxiety, stress, depression and improves retentive memory. It is thus an essential precondition for young people's health, social, biological and psychological growth. Regular and adequate physical activity promotes energy, protects against illness and promotes a longer, healthier existence (Cerar *et al.*, 2017). In sum, there is no denying the importance of sport and physical activities participations for all categories of peoples. However, it is worrisome to note that, despite the huge benefits in participating in sports activities, studies have found that people do not actually participate.

There has been a persistent fall in physical activity participation levels, according to research. According to WHO (2011), around 31% of youths were insufficiently active in 2008 around the world. In particular reference to the Kingdom of Saudi Arabia, According to a national poll, 60% of the Saudi Arabian population is physically inactive, and 90% sit for more than two hours per day. (Alahmed & Lobelo, 2018). This is very disturbing, therefore, schools are one important place where countries can inculcate the value of sport participation in the populate especially the young ones. This is because educational 2302------

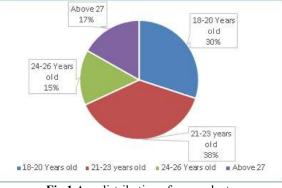
environments are regarded as the most important institutions that work towards achieving comprehensive, integrated and balanced development of students from every aspect such as psychological, physical, mental, social and health. These goals are accomplished through various cognitive, motor and cultural programs that are aimed at all students regardless of gender, age, skin colour or cultural and social status (Abedalhafiz, 2013). Specifically, universities are essential for creating a beneficial atmosphere for sport at Saudi universities by providing a favourable environment through Physical Education departments with a qualified director. A university's active Physical Education department with qualified staff is a good place to start when it comes to ensuring that undergraduate students participate in sports on a regular basis (Abidin, et al., 2020; Sayyd et al., 2021). Despite the roles that could be played by these educational institutions, it worthy of note that the influence of sport facilities and sport programs cannot be overemphasised. These include facilities such as sports halls, sport pitches, playing courts and swimming pools as well as sport programs such as those operated by sport clubs, commercial providers and city (Wicker et al., 2012). As a result, having proper sport infrastructure is critical to sport participation, as many sports cannot be conducted without it (Hallmann et al., 2012). Even though it varies depending on the sport and location, sport facilities play an essential role in anticipating sports participation. (Wicker et al., 2012). As argued by Downward and Rasciute (2011), more sport participation is experienced when individuals get a feeling of satisfaction with the use of facilities. It has also been proven that if there are less sports facilities available, the frequency of sporting activities decreases. According to Wicker et al. (2009), Inadequate infrastructure is a significant obstacle to sports participation. In addition, nearness of sports facilities inspires more individuals to participate (Limstrand and Rehrer, 2008).

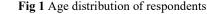
However, according to Sayyd, Zainuddin, *et al.*, (2020), people in Saudi Arabia have less access to sports facilities, and few opportunities are available to engage in sports activities. According to Alsahli (2016), Lack of sports facilities and institutional support were cited as major setbacks by female students at a Saudi university. This contributed to the loss of interest by the students. It is therefore important that the directorates of physical education at universities and colleges are aware of sports activities, continually improve education systems and establish supporting sporting activities. This will encourage the students to actively participate in extracurricular activities and sports programs (Anon, 2018; Sayyd *et al.*, 2020).

In summary, university students make up a considerable portion of the young adult population, which makes up the major part of young societies such as the Kingdom of Saudi Arabia (KSA) (Samara *et al.*, 2015). Providing suitable sports facilities and programs at universities is essential. Adults in Saudi Arabia participate in sporting activities to maintain their health and lose weight. However, the lack of sporting activities/facilities and programs is largely due to a lack of programming and a lack of space and facilities. (Van et al., 2016; Cerar et al., 2017; Al-hazzaa, 2018; Black et al., 2019). At Saudi universities, these factors have either been neglected or examined individually. Specifically, previous studies have only focused on a specific city and school, or demographic groups (e.g., adolescents) (Parks, Housemann and Brownson, 2003; Alsahli, 2016). As a result, empirical research on the links between sports activities, infrastructure, and programs that potentially influence sports participation at Saudi institutions is lacking.. Therefore, based on this, this study intends to identify the influence of sports facilities on sports participation in Saudi universities; and identify the influence of sports participation in Saudi universities.

#### Methods

This study used a descriptive approach that is based on a questionnaire. The questions in the questionnaire were obtained from previous sport participation studies. The questionnaire was created using Google Forms by the authors. Email and WhatsApp were used to send and receive the responses. The authors gathered information from Saudi university students of various ages and academic levels, a total of 25 universities were used for the study. These are public universities that are governed by the Ministry of Higher Education. Hence, the population used for the study was 643 respondents. Out of these, 38% were 21–23 years old (n = 245), whereas 30% were 18–20 years old (n = 193). A total of 97 respondents were 24–26 years old, which represents 15% of the sample, and 108 respondents were over 27 years old (17%) as indicated in figure 1.





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Most students were from Tabiah University (n = 245), followed by students from King Abdulaziz University (n = 51) and students from King Fahd University (n = 40). The rest of the students were distributed among different universities such as Jazan University (n = 37), Imam Abdelrahman University (n = 29) and Mohammed bin Saud University (n = 25) as shown in figure 2. When analysed, this information was sufficient to identify the influence of sports facilities and programs on sports participation at Saudi universities. Furthermore, this study used the SmartPLS software to analyse the results.

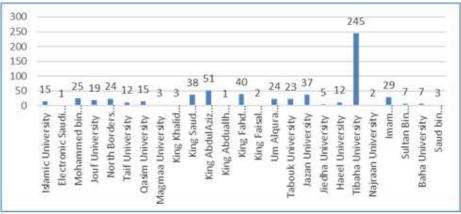


Fig.2.Universities involved in this study

#### Results

This section has to do with the result of the findings obtained through the administration of questionnaires. The results, as shown in table 1, indicate that programs and sports facilities had high influence and importance in sports participation. Programs support had the higher importance value towards sports participation (importance= 0.474, performance=48.902). This implies that a one-point increase in programs' performance increases the performance of sports participation by the size of the programs' importance value (0.474). Following programs, sports facilities have an important value of 0.301 and a performance value of 46.308.

Independent Constructs	Importance to sports participation	Performance	Path coefficient (significant level)	
Programs	0.474	48.902	Significant	
Sport Facilities	0.301	46.308	Significant	

Table 1: Constructs categorization based on their importance

Similarly, the results obtained from bootstrapping indicate that all the two factors significantly affect sports participation. Specifically, it was revealed that sports facilities provided by the universities can positively encourage students to use these facilities and participate in sports activities ( $\beta = 0.265$ , t-value = 5.425). More importantly, the sports programs provided by the universities have the higher positive and significant effect on students' participation ( $\beta = 0.403$ , t-value = 6.024). Finally, the empirical evidence from the bootstrapping test showed that facilities and programs were significant and positive predictors for students' sport participation. Table 2 summarizes the results of each factor.

Table 2. Path coefficient results

Factor	Path	Original Sample (O)	T- value	P- values	Path coefficient (significant level)
1-	Sport Facilities -> Sport Participation	0.265	5.425	0.00	***
2-	Sport Programs -> Sport Participation	0.403	6.024	0.00	***

#### Discussion

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The obtained results suggest that the availability of sports facilities has a positive effect on students' participation in sports activities. This result is consistent with those in previous studies from both the international (Abedalhafiz, 2013; Black *et al.*, 2019) and Saudi context (El-Gilany *et al.*, 2011; Alsubaie, Omer and Predictors, 2015; Samara *et al.*, 2015; Alahmad, 2016; Elsawi Khalafalla *et al.*, 2017). From the perspective of studies conducted outside the Saudi context, for example, Black *et al.* (2019) determined that sports facilities significantly affected students' health and socio-economic status in the UK. The abovementioned study concluded that when students attended schools with inadequate sports facilities, this had a long-term impact on

decreasing their sports participation during adulthood. In addition, Omar-Fauzee et al. (2009) investigated two groups, i.e., users and non-users of the university sports recreation centre. The results of the experiment revealed that one of the main reasons for the users' group to continue utilizing the university sports recreation centre was the good facilities provided by the centre. El-Gilany et al. (2011) examined the barriers for sport and physical activities among students at one university in Egypt, and the results showed that the lack of accessible places and pieces of equipment was one of the major barriers. Moreover, the same results were obtained in studies conducted in the Saudi Arabia context. For example, a study by Alahmad, (2016) highlighted that, based on the international guidelines, 70% of the surveyed students were inactive with regards to their level of sport and physical activity participation. The study also showed that among the main barriers that students were facing in participating in sports activities at schools and universities was the lack of facilities and accessibility. Similar results were emphasized by Alsubaie and Omer (2015), who surveyed students in the Saudi capital city Riyadh and determined that the lack of sports facilities was the greatest barrier from the students' perspective and accounted for 74% among other barriers. This result indicates that the availability of facilities at the university is essential for male and female students. Previous studies that targeted female students highlighted the same issues. For example, previous studies (e.g., Samara et al., 2015; Aljaaly, 2017) confirmed that the lack of available facilities at schools and universities was one of the main hindrances for being active by participating in sports. Based on this, it implies that offering students a good plan for sports programs that they can participate in during the semester may not be sufficient if the facilities at the university are less accessible or have limited choices. Thus, access to adequate sports facilities at the university results in a greater level of participation in different types of sports. Moreover, university management has a key role in reinforcing the motivation to engage in sports activities by creating more facilities and structured places that can provide integrated sports facilities for students.

Furthermore, this study suggests that sports programs at the universities have a positive effect on students' participation. The results of hypothesis testing showed a positive relationship between sports programs and students' participation. This result agrees with those in previous studies (Howard, 2011; Abedalhafiz, 2013; Alahmad, 2016; Aljaaly, 2017). For example, Abedalhafiz (2013) empirically identified lack of physical education classes as an obstacle that hindered students from participating in sports activities at schools and universities. Similarly, Al-Sobayel et al. (2015) emphasized that when promoting sports programs among students, it was highly recommended to take into account gender issues and differences. Howard (2011) identified a positive effect of sports activities classes on the student participation levels. Overall, these results imply that to increase the participation level of students, universities should offer them different types of programs, workshops and training, which enable them to discover their skills and participate in the sports that they believe they can enjoy the most with their colleagues. In a recent study by Alizadeh (2019), interviews were conducted with students to understand what motivates them to participate in sports and physical activities. The results of the interviews indicated that students were motivated to do sports activities for different reasons such as fitness, physical health, mental health and developing athletic skills. However, without solid, prepared sports programs for students, where they can choose appropriate sports that suit their skills and needs, it will be difficult for them to enhance their sports activity habits and skills. Therefore, this suggests that to increase the participation level of male students at the universities, the integration of some sports activity programs within students' academic schedules will give students a lot of time where they can be involved in different types of sports activities and competitions such as football tournaments, basketball and swimming. Moreover, specific attention should be given to the type and nature of the programs delivered to male students because their needs differ from those of female students (Al-Sobayel et al., 2015). In addition, time span is another important consideration when developing sports activity programs for male students. In general, male students spend more time in sports activities than female students (Al-Sobavel et al., 2015), which suggests that longer duration sports activity types may be more preferable for male students.

#### Conclusion

Findings in the present study have shown that the availability of sport facilities and programs have enormous effects on the sports participation among the undergraduate students in KSA. It is therefore imperative to stress that the universities should provide suitable and innovative sports facilities and programs that suit students' needs. In addition, the lack of adequate sports facilities requires considerable attention by all stakeholders in education and sports sectors in the country. This will help to promote adequate participations among the populace.

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