

Sport, exercise, and recreation participation in Malaysia 2023: The engagement pattern according to demographics, participant characteristics and social groups

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Abstract— Malaysian Sports Culture Index 2023 (MSCI'23) measures Malaysians' participation level in sports, exercise and recreation activities based on two domains, namely the participation domain and the sporting spirit domain. There is one indicator under the participation domain: activeness, and four indicators under the sporting spirit domain: volunteering, dedication, expenditure, and contribution. This study uses quantitative methods through a self-designed questionnaire. Quantitative data was collected among 7,015 people aged 13 and above through a face-to-face approach. A multi-cluster random sampling selection across Malaysia was facilitated by employing the block calculation (BP) and residence area (TK) methods, aided by the iGREAT Survey Management System (IYRES) for online recording of respondent feedback. Descriptive analyses were conducted on quantitative data. The analysis shows that 52% of Malaysians engage in sports, exercise, and recreational activities at least once a month. A total of 48% are not involved in any sports-related activities. The level of activity among the people involved shows that 11.8% are at an active level, 68.8% are moderately active and 19.4% are less active (WHO, 2020). Involvement in sports and exercise are the two main choices of Malaysians over recreational activities. The sporting spirit is measured based on indicators of volunteering, dedication, spending and contributions. Voluntary activities are a catalyst for sporting spirit and the main indirect contributor to the MSCI'23 score compared to the other three indicators. The findings of this study also show that gender, ethnicity, marital status, and age influence the index. In terms of age for example, the younger the more active they are. While urban and rural locations do not show a real difference. This study identified and outlined five main themes that influence the participation of Malaysians in sports, namely, individual intrinsic motivation, proper and holistic education, facility condition and management, individual goal priorities and dynamic creative media use. These themes could help stakeholders to determine the types of programs to cultivate sports in Malaysia. Many positive signs show Malaysia's sports culture will continue to improve in the coming years. The completion of the sports program is recommended to focus equally on the domains of participation and sporting spirit.

Index Terms—Malaysian Sports Culture Index, Sports, Exercise and Recreation, Sporting Culture, Sport Engagement Pattern.

I. INTRODUCTION

In 2023, the Malaysian Youth Development Research Institute (IYRES), Ministry of Youth and Sport Malaysia has conducted Malaysian Sports Culture Index (MSCI'23) study and has issued a report on involvement in sports, exercise, and recreation among Malaysians. Overall, the level of sport participation in Malaysia is still at a moderate level since year 2018, although there has been an increase in the level of involvement in some types of sports and exercise. This means that, while there is engagement in sports and physical activities, it is not yet widespread or deeply ingrained in the daily lives of many Malaysians. The study highlights that there is varied

involvement in different types of sports and exercises. This diversity in participation shows that Malaysians are exploring and engaging in a wide range of physical activities, from traditional sports to modern fitness trends. For stakeholders such as sports organizations, community groups, and policymakers, the findings of MSCl'23 are crucial. This will provide insights into current participation trends and areas that need improvement. This information can guide the development of targeted programs and initiatives to promote greater involvement in sports and physical activities across different demographics.

The MSCl'23 study will underscore the importance of continuous monitoring and analysis of sports participation data. By understanding the current state of sports culture in Malaysia, stakeholders can make informed decisions and implement effective strategies to enhance the nation's engagement in sports, exercise, and recreation, ultimately fostering a healthier and more active society towards a sporting nation. This study aims to monitor the development of sports culture in the country, providing valuable data to stakeholders for strategists and encourage more active participation in sports based on sport participation by category: sport, exercise, and recreation. Analyze the characteristic of sports, exercise, and recreation participation in Malaysia and evaluate the engagement pattern of different social groups in sport, exercise, and recreation by demographic in Malaysia.

Background of study

A. Malaysian Sport Culture Index, 2023

The Malaysian Sports Culture Index 2023 (MSCl'23) is a research project carried out by the Malaysian Youth Development Research Institute (IYRES), Ministry of Youth and Sports Malaysia. The MSCl'23 measures the level of participation of Malaysians in sports-related activities based on two domains, namely, participation domain and sporting spirit domain. There is one indicator under participation domain: activeness, and there are four indicators under sporting spirit domain: volunteering, dedication, expenditure, and contribution. IBSM'23 is a continuation of IBSM 2018-2022 which is implemented with the aim of measuring trends of sports culture among Malaysians. This effort is expected to meet the aspirations and goals of the National Sports Vision 2030.

B. Sport, exercise, and recreation

Sports are activities played cooperatively or competitively in the form of games (Mull, 1997). According to MSCl'23 sports activities include sports, exercise, and recreation as many elements of exercise and recreation exist in sports. Sports, such as badminton, netball, football, volleyball, etc. encompass elements of play, games, physicality, rules, skills, and environmental challenges [6]. Exercise and sports are interdependent. Exercise is an activity involving the systematic movements of the body. It includes aerobics, walking, jogging, weight training, etc. Exercise is a warm-up and recovery activity for most sports. Meanwhile, recreation is a free time activity which is fun and constructive. Non-constructive activities such as hanging out for a long time are not considered recreation [1]. In this paper, recreation refers to physical recreation such as motorsports, cycling, jungle trekking, hiking, etc.

C. Sport culture

Sports and culture are intertwined. Sports are part of Malaysian culture, past and present. Culture reflects values, norms, and practices in society and plays an important role in shaping the environment and lifestyle of individuals [10]. MSCl'23 defines and elaborates sport culture in four steps. One is acculturation of sports – efforts have been made to foster and intensify the practice of an active lifestyle through sports, exercise, and recreation activities. Second is sporting culture – sports, exercise and recreational activities have become self-initiated practices and routines towards a lifestyle that is active, fit, and competitive. Third is sports culture – sport, exercise and recreational activities have become a lifestyle together with the creation of a sport culture ecosystem. Fourth is sporting nation – Malaysia becomes a sporting nation where society is practicing sports culture in line with the availability of its ecosystem. The whole spectrum of activities, ranging from sports, exercise and recreation is the main reference guide in realizing the aspiration to make Malaysia a sporting nation.

II. METHODOLOGY

This research employs a quantitative approach. A quantitative data collection involved administering surveys to 7,015 adolescents aged 13 years and above through IYRES Community Enumerators (ICE). A multi-cluster random sampling selection across Malaysia was facilitated by employing the block calculation (BP) and residence area (TK) methods, aided by the iGREAT Survey Management System (IYRES) for online recording of respondent feedback. The respondents consist of 7,015 people categorized by ethnic, gender, age group and locality. The researchers make sure that the numbers of respondents fulfill the requirements of generalization Malaysian populations. The approval of ethical committee obtained to conduct this research (500/1/55/IBSM2023) before the process of data collections. The ICE trained by the researchers to collect the data according to rules and procedures provided. The data collected face to face by ICE to reduce the data collections and sampling errors. The

electronic version questionnaires validated by 15 field experts using Fuzzy Delphi method and the reliability tested among 200 respondents. The validity ($r = .85$) and the reliability ($r = .95$).

III. FINDINGS

The results of the sports, exercise, and recreation participation in Malaysia according to MSCI'23 are obtained from the domain of sports participation which is based on physical elements only. This domain has one indicator which is activeness. The findings of the study shows that 52.0% of Malaysians are participated in sports, exercise, and recreational activities. Out of the 52.0%, only 11.8% were active, 68.8% moderately active and 19.4% less active. Another 48.0% of Malaysians are not involved in sport activities or only do physical activities occasionally.

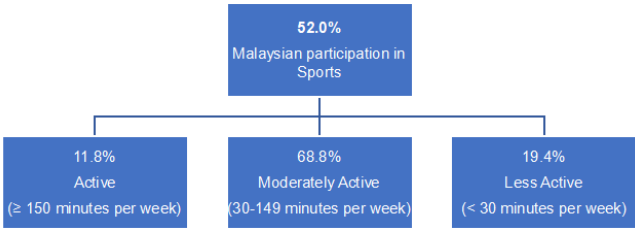


Fig. 1 Malaysian Participation in Sports, MSCI'23

Those who are involved in sports (52%) practice the activity moderately actively. Moderately active here means doing sports, exercise, and recreational activities for 30 to 149 minutes per week. World Health Organization 2020 (WHO, 2020) and Ministry of Health Malaysia (MHM) define active in sport as doing exercise at least 150 minutes a week (active), 30 - 149 minutes, moderately active and not more than 30 minutes, less active. This study sets indicators for sport activity based on WHO 2020 and MHM recommendations. This at least shows that almost 70% of those involved in sports have a positive attitude in prioritizing sports as an important lifestyle. (Fig. 1).

A. Participation by sports category

In 2023, the level of involvement of Malaysians in sports (40.1%) and exercise (41.3%) was found to be approximately the same, compared to recreational activities which had a lower level of 18.6% (Table I).

Table I Participation by sport categories

Sports category	Percentage (%)
Sports	40.1
Exercise	41.3
Recreational	18.6

Table II below shows, badminton, football, and futsal seem to be the most popular sports while jogging, walking and aerobic exercise are the three main choice exercise activities, and cycling, hiking and motorsports become three popular recreational activities. The data shows that the involvement in jogging is the highest (63.3%) compared to other activities. Jogging as well as walking have become a dominant exercise choice due to its accessibility, in which anyone can do it for example around a housing estate, without needing specific time and specific facilities. In terms of recreational activities, cycling and hiking are becoming popular in Malaysia. Cycling in groups is increasingly held in the form of recreational club programs in the afternoons and weekends. While climbing has become the preferred activity of urban and suburban communities. For example, Bukit Broga in Semenyih, Selangor and Bukit Melati in Nilai, Negeri Sembilan become the focus of climbers from various groups, old and young, men and women, various races, almost in every weekend.

Table II Participation by type of activities

Category	Types of activities	Percentage (%)
Sports	Badminton	40.1
	Football	24.3
	Futsal	24.3
	Netball	9.8

	Volleyball	8.3
	Sepak Takraw	7.2
	Bowling	7.0
	Athletics	6.1
	Table tennis	2.7
Exercise	Jogging	63.3
	Walking	48.2
	Aerobic exercise	11.6
	Gym	7.4
	Yoga	3.0
Recreation	Cycling	22.8
	Hiking	18.3
	Motorsports	10.3
	Jungle trekking	8.6

B. Characteristics sport, exercise, and recreation participation in Malaysia

There are three characteristics to be discussed: the time, with whom and location to do sport activities. The time for sport activities is divided into four; morning, afternoon, evening, and night. With whom to do sport activities split up into three categories; friends, family and alone. For the location of doing sports activities refers to the use of various sports facilities including public facilities, recreational park, multipurpose hall, etc.

C. The time for sport activities

Table III below shows the pattern of Malaysians' time use for sports, exercise, and recreation. A total of 54.9% chose the evening, 24.4% in the morning, 20.2% in the evening and only 0.5% in the afternoon. Time, in the context of Malaysia, refers to the typical weather conditions in each day, as well as the influence of working hours, travel and household affairs. It seems that Malaysians are more inclined to exercise in the evening and almost not in the afternoon.

Table III The Time for Sport Activities

Time	Percentage (%)
Evening	54.9
Morning	24.4
Night	20.2
Afternoon	0.5

D. With whom to do sport activities

Table IV below shows with whom Malaysians engage in sports. A total of 78.0% chose friends to be with, 37.3% chose family members and 39.5% preferred to do activities alone. In the context of sports culture as well as sports policies and programs, the above information is very important as it explains that the influence of friends can play an important role in influencing a person to decide to engage in sports. Friends at school, university and in the community are a big influence in the practice of sports culture.

Table IV With Whom to Do Sport Activities

With Whom to Do Sport Activities	Percentage (%)
Friends	78.0
Family	37.3
Alone	39.5

E. Location to do sport activities

To clarify the location of Malaysians engaging in sports, Table V provides information on the use of sports facilities in Malaysia. There are various locations and facilities to do sports activities in Malaysia. Multipurpose

halls (61.7%), public facilities (50.1%), recreational parks (34.3%), neighborhood (23.2%), home (21.4%) and sport complex (19.8%) are the top six choices for sports engagement. The fact is, for walking, running, and cycling for example, we do not need specific facilities, but it can be done around residential areas and along public roads and in open spaces. Apparently, most Malaysians do not prefer sport-specific facilities of which many are provided at workplaces (10.1%) and educational institution (8.5%). It seems to show that the culture of work does not mix with the culture of sports. The workplace is for work, not for play, they do not mix the two. They also preferred nature-based facilities like recreational parks and neighborhoods areas.

Table V The use of sport facilities in Malaysia

Location for Activities	Sports	Percent (%)
Multipurpose hall		61.7
Public facilities		50.1
Recreational Park		34.3
Neighborhoods		23.2
Home		21.4
Sports complex		19.8
Private futsal court		14.1
Sports and recreational club		11.2
Workplace facility		10.1
Educational institution facility		8.5
Friend's house		6.9
Private gymnasium		6.0
Outdoor gymnasium		4.4
Extreme Park		4.2
Public gymnasium		3.7
Shopping complex		2.9

F. The engagement pattern of different social groups in sport, exercise, and recreation by demographic

Table VI shows the engagement pattern of different social groups in sport, exercise, and recreation by demographic in Malaysia. According to gender, the participation rate of men (62.9%) is higher than that of women (46.1%). By the age category, it was found that young people, namely pre-youth (67.2%) and youth (65.1%) are much more active than the older ones, namely post-youth (48.3%) and the elderly (29.8%). Based on locality, urban residents (55.9%) are not significantly different compared to the involvement of rural residents (52.6%). The comparison according to ethnicity shows that there is no significant difference between the ethnicity of which the Malays (56.1%) are the highest and others (46.5%) are the lowest. Lastly, according to marital status, it was found that those who are single (65.2%) are higher than those who are married (47.3%) and widows / widowers (34.1%).

The above analysis showed that men are more active in sports than women. Youngsters actively involved in sports compared to elderly people. There is no significant difference in the level of involvement in sports among urban and rural communities and by ethnicity. Those who are single are more interested in sports compared to those who are married and widows or widowers.

Table V Engagement pattern in sports, exercise, and recreation by demographic in MSCI'23

Demographic	Score
Gender	
Male	62.9
Female	46.1
Age Category	
Pre-youth (13-14 years old)	67.2
Youth (15-30 years old)	65.1
Post-youth (31-59 years old)	48.3
Senior Citizen (60 years and above)	29.8

Locality	
Urban area	55.9
Rural area	52.6
Ethnicity	
Malay	56.1
Bumiputera Sabah	53.1
Bumiputera Sarawak	53.1
Indian	50.2
Chinese	49.8
Bumiputera Orang Asli	49.7
Others	46.5
Marital Status	
Single	65.2
Married	47.3
Widows/ Widower	34.1

IV. DISCUSSION AND RECOMMENDATIONS

This paper is about sports, exercise and recreation participation in Malaysia based on MSCIT23 study aims to present the level of participation in sports among Malaysians and analyze in more detail the pattern of engagement according to demographics, participant characteristics and social groups. The data analysis, discussion and implications of this study are expected to be used as a guide by policy makers and organizers of sports, exercise, and recreation programs, as well as to support the country's implementation group in expanding the practice of sports culture among Malaysians. Malaysian populations participation in sports activities still at the moderate level and need some drastic strategies to enhancing sports, exercise, and recreation participation by creating an environment that encourages and supports people to engage in. Whether at an individual, community, or organizational level, it is vital to increase awareness about the benefits of sports participation, such as physical fitness, mental health improvement, social interaction, and skill development [8].

The data shows that the percentage of men's participation in sports is higher than that of women and this has different implications according to gender. The high level of involvement for men gives the impression that the programs and existing factors that determine the trend of sports culture among men are positive. The implication is that sports, exercise, and recreational programs based on strengthening and enriching can be prioritized and programs that are rehabilitative can be reduced. On the other hand, the low level of female involvement reflects that programs and factors that influence the trend of sports culture among women are negative. The implication is that sports, exercise, and recreation programs that are rehabilitative and strengthening should be given priority instead of enrichment programs. Tiedemann et.al (2022), found that more than a quarter of adults globally are insufficiently physically active. Across most countries, women are less active than men (global average of 31.7% for inactive women vs 23.4% for inactive men). Policies that tackle the gender gap in physical activity could therefore have a substantial impact on overall population [5].

Data regarding the relationship between age groups and sport participation shows that young people are more active in sports than older people. It is undeniable that the nature of sport, exercise and recreation participation is the notion of life in which according to the age spectrum. During young age, a person's involvement is more based on physical element than emotional, social, and spiritual [4]. As they get older, the emotional, social, and spiritual elements begin to dominate over the physical. The nature of young people, including children, teenagers and youths, is generally active and energetic, they move and run as if they do not get tired. As a person gets older, physical strength decreases. They tend to choose activities that are not too physical. The purpose of their involvement in sport, exercise and recreation is more to calm the mind, socialize and give encouragement to each other [10].

Findings related to the types of activities show that jogging and walking are the most important choices compared to all types of activities based on sports, exercise, and recreation. Whether on treadmill workouts or exercising outdoors, walking and jogging can both be fantastic, accessible forms of exercise [6]. With a good pair of running shoes, we can walk or jog to better fitness, health, and well-being. Of course, the health purpose is a clear reason why this finding arises. Both walking and jogging strengthen the heart and lungs, decrease the risk of cardiovascular disease and mortality, boost aerobic capacity or VO2 max, decrease blood pressure, improve blood sugar regulation, strengthen the muscles in the legs, reduce stress, boost mood, and support a healthy weight [9]. As we walk, our quadriceps, hamstrings, calves and even our abdominal, biceps, and shoulders are all using oxygen to

contract. But sometime walking is not getting our heart rate up high enough for long enough. Thus, jogging is a great way to increase the intensity of our workout gradually, so we can minimize the risk of injury. Although walking and jogging share many similarities such as both being forms of self-propelled, aerobic exercise there are also plenty of differences [1]. Walking and jogging are both considered forms of aerobic exercise, so there is a lot of overlap in the health and fitness benefits of each.

V. CONCLUSION

Factors related to demographics, the character of participants and social groups are not an obstacle to the acculturation of sports, exercise, and recreation in Malaysia. This study also proves that the difference in living in the city or the countryside and the difference in ethnicity do not determine the difference in the level of involvement in sports. The development pattern of involvement in sports above opens a wider space for the process of sports culture to be planned and implemented through government and private bodies, educational institutions, and various communities. Efforts to encourage the involvement of Malaysians in sports, exercise and recreation can no longer be seen as a spending, but as an investment. Investment in sport, exercise and recreation programs is profitable in the long term for our country to have a well-being people and prosperous society.

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