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## DESIGN FACTORS OF PARK FACILITIES FOR MUSLIM FEMALE PARTICIPATION IN EXTREME SPORTS

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### ABSTRACT

Extreme sports, such as water sports, airborne sports, and mountain sports, become the sensational alternative among youth as they involve in various indoor and outdoor sports' activities. It enhances the individual's endurance, physical fitness, and helps to control and eliminate stress, thus promote healthy lifestyle. Extreme sport activity is one of the greatest challenges for people who prefer it rather than the organised sports. The number of participation in Malaysia is less from women, especially the Muslim women. A pilot survey indicates that discomfort on existing extreme sport facilities is the main reason of less participation among women. This research aims to identify the design factors that contribute towards lack of participation and dissatisfaction among Muslim women on the existing facilities of extreme parks. Thus, the best design and spatial planning of the facilities that meet women's need and comfort as a space to practice and participate in extreme sports can be discovered. The methodologies applied are as follows: survey on user's satisfaction, observation on physical factors and physical planning (access audit), interview with the management officers, and case studies on women sport complex design that apply *Sharia*-compliant features. A total of 80 survey respondents were randomly drawn from a cluster sample of Muslim women in Klang Valley area to record their perceptions, satisfaction and preferences. Observation and interview were conducted at four (4) selected extreme parks in Klang Valley, which are Enerz Indoor Extreme Park, Putrajaya Challenge Park, District 21 and Shah Alam Extreme Park. The result obtained from the research will contribute to the ideal guidelines, design and spatial planning of extreme park that give freedom, comfort and satisfaction to individuals, especially to the Muslim women in practicing and participating in extreme sports activities. The guidelines will also be an educational references for the future.

**Keywords:** *Muslim women, satisfaction, participation, extreme sports, extreme park*

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### INTRODUCTION

Extreme sports have gained popularity among youth and women in recent years, offering a thrilling and unconventional alternative to traditional sports. These activities go beyond what is usually considered ordinary or traditional and often involve exceeding security boundaries and pushing physical limits. Extreme sports can be categorised into several streams, including water sports, airborne sports, and mountain sports. Examples of popular extreme sports include scuba diving, paragliding, motorised surfing, snowboarding, and mountain cycling.

According to Cohen et al. (2018), extreme sports represent a shift towards activities that surpass moderation boundaries, creating new disciplines and pushing the boundaries of what is deemed reasonable. Many extreme sports combine the methods and physical abilities of two or more sports, resulting in unique and exciting challenges for participants (Henley, 2018).

The growing popularity of extreme sports has been fueled by the desire for a sense of adventure, freedom, and self-expression. Women, in particular, have increasingly embraced extreme sports as a way to challenge gender stereotypes and push themselves beyond perceived limitations (Jones and Gratton, 2018).

According to Ceylan et.al (2016), extreme sports have significant distinctive features from other types of sports. These features include high risk perception, high excitement, high concentration, adventure, a tendency to freedom, and different lifestyles. However, the most basic and well-known feature that sets extreme sports apart from traditional sports is the death risk. Extreme sports participants are often willing to put themselves in dangerous situations that can potentially lead to injury or death. Despite this risk, extreme sports participants are motivated by a variety of factors, including a high level of stimulation, adrenaline, aggression, excitement, struggle, uniqueness, psychological situation, physical or mental comfort, and achievement. These factors contribute to the appeal of extreme sports and help to explain why they have become increasingly popular in recent years (Ceylan et al., 2016).

### OBJECTIVES

The study is carried out to achieve the objectives which are to identify what are the barriers and factors that contribute to declination of women participation in extreme sports and to determine the ideal design aspects for extreme park facilities that meet the women's needs and comfort.

### METHODOLOGY

This study employed both quantitative and qualitative research methods to obtain precise and structured outcomes. The research methods used include questionnaire survey, observation, interview, and case study to achieve the objectives of the study. The questionnaire survey consisted of two sets of questions: the first set was designed to evaluate the subjects' demographic features, such as age, marital status, and occupation, while the second set of questions was intended to evaluate the views and satisfaction of the respondents on the quality of the space factors. A total of 80 Muslim women respondents aged between 18-35 years old residing in the Klang Valley area were involved in this study.

Observation was conducted to focus on the physical factor and spatial planning of the selected extreme parks, which reflected the subjects' behaviour on-site. Four extreme parks were selected in the Klang Valley area, namely Putrajaya Challenge Park, EnerZ Indoor Extreme Park, District 21, and Shah Alam Extreme Park. The selection of these parks was based on two categories, commercialised and public extreme parks, as well as indoor and outdoor extreme parks. Interviews were conducted with the owners, operators, and officers of these extreme parks to gather information about how they conduct and promote activities at the parks, as well as the problems they face when conducting these activities, especially those related to women.

The case study was conducted by focusing on specific characteristics of the selected buildings in terms of their physical factor and spatial planning that applied Sharia-compliant features and the best design for women's activity spaces. Two sport facility complexes were selected: the Female Sports Complex of International Islamic University Malaysia and the Ladies Sports Centre Doha. These complexes were specially designed for women, providing the best accommodation and facilities that matched Sharia compliance.

## FINDINGS AND DISCUSSION

### 1. Muslim Women Participation in Extreme Sports

The results of the study showed a majority of Muslim women respondents, specifically 83.8%, were interested in extreme sports, while only 16.2% of them were not interested. However, despite the high level of interest, only 70% of the respondents had ever participated in extreme sports, and among those who did, only a small percentage practised the sports frequently. A few respondents practised the sport once a week, while some others practised it once or twice a month. Surprisingly, the majority of the respondents (62.5%) only practised extreme sports twice a year at the most, even though they were interested in these activities. On the other hand, a significant percentage of 26.2% did not practice extreme sports at all.

It is also important to note that the majority of respondents who participated in extreme sports did so without the intention of competing with others. Only a small percentage (6.2%) of them joined the sport for competition purposes, while 20% did not want to get involved in extreme sports at all.

### 2. Barriers and factors that contribute to the decline of women's participation in extreme sport

The study concluded that most sports facilities in Malaysia do not prioritise the comfort and needs of women, especially Muslim women, for their sports activities. While space and facilities for sports are available in most states, they are often not enjoyable for the majority of Muslim women and fail to comply with the sharia laws, features, and guidelines of Islam. It is important to create settings that increase accessibility and provide a welcoming and Muslim women-friendly environment.

The study identified four major barriers that contribute to the low participation of Muslim women in extreme sports: (1) lack of privacy and inadequate space planning between genders, (2) lack of proper facilities provided for Muslim women, (3) shortage of female trainers at the extreme parks, and (4)

limited types of games provided. Addressing these barriers is crucial to encourage more Muslim women to participate in extreme sports and enjoy the benefits of physical activity. Providing better facilities and creating a more inclusive and supportive environment can improve the overall participation and enjoyment of Muslim women in sports.

#### i. Less privacy and mixing space planning between genders

The study found that 62.5% of Muslim women surveyed did not feel comfortable practising sports at existing extreme parks due to the mixing of space between genders and the lack of privacy. This does not align with Islamic teachings that allow women to participate in sports while observing their *awrah*. Case studies and interviews at four selected extreme parks revealed that most spaces prioritise compact layouts and flexible spaces for all genders and age groups to maximise profits. However, the study recommends that space planning should separate areas for men and women to ensure privacy and comfort for Muslim women. Providing an attractive space and design is important, but space planning is the most crucial design factor for an extreme park that caters to Muslim women.

#### ii. No proper facilities

Survey and interviews analyses found that the extreme parks have inadequate facilities such as changing rooms and *musolla*. The survey also revealed that women demanded facilities such as musolla, changing rooms, and washrooms with showers. These demands align with the barrier identified earlier, which is the lack of proper facilities in the existing extreme parks. Therefore, it is recommended that extreme parks should provide these facilities to ensure Muslim women are comfortable and able to observe their religious practices while participating in sports activities.

#### iii. Lack of female trainers provided at the extreme parks

Based on the study, the gender of trainers is an important factor that affects women's participation in extreme sports. The lack of female trainers and the potential for sexual harassment by male trainers can discourage women from participating in such activities. However, the interviews conducted did not reveal any reported cases of sexual harassment at the selected extreme parks. It is recommended that more female trainers be hired to provide a safe and comfortable environment for women to participate in extreme sports.

#### iv. Types of games provided

Based on the interview conducted, it was found that indoor games are more preferable for women's participation in extreme sports as they offer shelter from Malaysia's weather conditions. The availability and condition of outdoor equipment also affect participation, as broken equipment that is not properly maintained can lead to decreased participation.

### 3. The ideal architectural design of an extreme park for Muslim women

An ideal extreme park that caters to women, especially Muslim women, should provide a special space and regulations for women only. It should also offer women-friendly facilities and spaces in terms of design, layout, materials, colors, accessibility, and user safety. Based on the literature review, survey findings, and case studies discussed, the design factors and approaches of a conducive extreme park for Muslim women should be responsive to space planning, privacy, facilities, types of sports, accessibility, and safety measures.

#### a) SPACE PLANNING

##### i. Extreme Park for Muslim Women Only

The design of extreme parks should prioritise a conducive space planning that accommodates the needs of Muslim women. Designers should consider separating the spaces between each type of sport or game according to gender and provide a closed space exclusively for Muslim women. Muslim women prefer such a space for privacy and also require certain facilities, such as changing rooms, warm-up areas, and prayer rooms (Figure 1). However, observations suggest that many extreme parks neglect these facilities and private spaces for women only, resulting in negative perceptions and low participation among Muslim women in extreme sports, despite their interest in these activities. Therefore, extreme parks must incorporate features demanded by Muslim women to encourage their participation in extreme sports.

##### ii. Extreme Parks to Integrate with Society and Family

While extreme sports are gaining popularity among women in Malaysia, their participation is still relatively low compared to the overall population. Therefore, it is not guaranteed that an extreme park exclusively for women will attract more Muslim women. It is recommended that future extreme parks provide two separate spaces, i.e. (1) that are open to all genders and ages and (2) that are exclusively for women. Each space will need special regulations and facilities that cater to their needs.

In addition to providing extreme sports facilities, the park should also offer social activities and support areas such as a social club, nursery, games area, and TV rooms to attract families that will serve as social meeting points. By creating a space that is safe and comfortable for women to engage in extreme sports and other activities, the park can generate a return on investment as a popular social space for women and families.

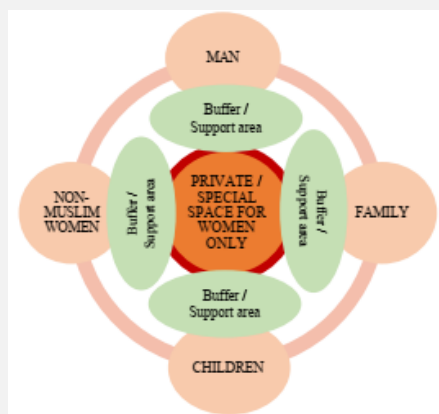


Figure 1: Shared public extreme park layout with a special area and facilities for Muslim women

#### b) PRIVACY

##### i. Separations and Buffer Areas

Privacy is recognised as one of the main contributors that contribute to women's participation in extreme sports at existing extreme parks. Based on the survey conducted, results show that women prefer a private space for them in order to feel comfortable while doing extreme sports activities. To ensure women's comfort while doing sports activities, extreme parks should provide a designated area for women that is comfortable, safe and protected from men and outsiders, such as providing an appropriate buffer zone or barrier (Figures 2 & 3).

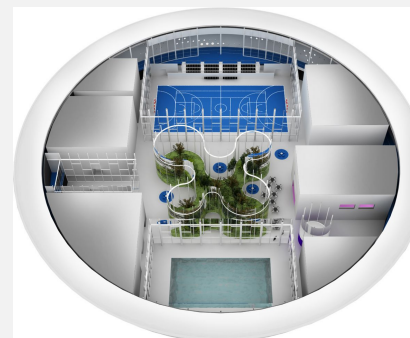


Figure 2: Landscape as the buffer zone and separation in Ladies Sports Centre Doha



Figure 3: High solid wall as the barrier for the female swimming pool area at Female Sport Complex, IIUM Gombak.

##### ii. External Protective Wall Around the Internal Activities and Support Area

Another way to emphasise privacy in designing a building is to provide an external wall. The external wall is meant to protect the internal area, including the support area, from being seen by outsiders. It is also to separate between indoor activities and outdoor activities. Furthermore, the external wall can guarantee privacy and gives comfort to Muslim women in doing activities inside the building.

#### c) FACILITIES

##### i. Female Friendly Facilities

Facilities and surrounding areas of extreme park should offer a female friendly and inviting community spaces. The spaces should prioritise women's safety (Crime Prevention Through Environmental Design – CEPTED), clean and easily accessible facilities, with adequate lighting in and around the facilities. Female Friendly Change Rooms @ Sporting Facilities (2017) has set a guideline handbook for a female friendly changing room and toilet.



## ii. Muslim Friendly Facilities

According to Zakiah and Noorsalwati (2014), a Sharia-compliant facility is an interesting development which illustrates several important features of demand and supply within an Islamic country. Some Muslim writers describe the basic characteristics of Sharia-compliance Hotel as mentioned in the followings:

- Halal foods and no alcohol are to be served on the premises or in hotels.
- Having the Holy Book Quran, prayer mat and arrow that indicates the direction of the *qiblat*.
- Toilets positioned not to face the *qiblat*.
- Prayer room is available in the premises.
- No inappropriate entertainment.
- Predominantly Muslim staff with a proper Islamic code of dressing.
- Separate salon, recreational facilities and swimming pool for men and women.
- Tourists and non-Muslim dressing code.
- No gambling and alcoholic drinks or prohibited foods in the cafeteria or restaurant.

## iii. Shared Facilities between Muslim and Non-Muslim Women

As Muslim women have to preserve their *awrah* from non-Muslim women, facilities such as changing rooms and toilets should have a provision for convenient separation between Muslim women and non-Muslim women (Figure 4).

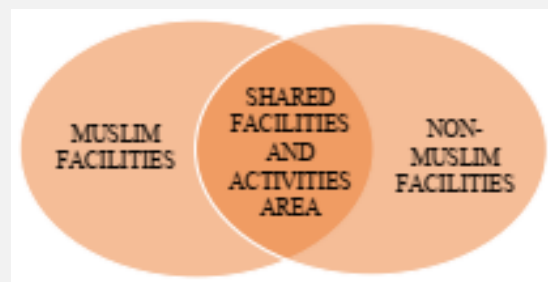


Figure 4: Privacy consideration between Muslim women and Non-Muslim women

## d) TYPE OF SPORTS

Extreme parks should provide various types of interesting extreme sports. The sports provided should be suitable for many users, such as children, teenagers, and adults. The selection of sports should consider the safety of users while practising. For example, wall climbing is a suitable sport for users because it has different difficulty levels and challenges. So, children or beginners can also practice this sport starting from the easiest level.



Figure 5: Example indoor extreme sports

## e) ACCESSIBILITY

Extreme parks should strive to be inclusive spaces where women of all backgrounds and ages can participate safely. It is important that the design of these parks promotes safety and security through good lighting, clear visibility, and with easy access to facilities. In addition, the location, parking, and surrounding area should be accessible, safe, and affordable for all users, especially women. By prioritising the needs of women and ensuring that the park is designed with their safety and comfort in mind, extreme parks can encourage greater participation among this demography and provide a welcoming environment for all.

## f) SAFETY MEASURE

### i. Walkway, Corridors and Activities area

Lighting in the surrounding area, proximity to parking and pedestrian activity are also factors which contribute to safety for sports participants. While not strictly part of change room facilities, these factors should be considered in the design and construction of precincts and facilities.

### ii. Female Trainer, Instructor and Musher

It is also recommended that the future extreme parks provide training area for beginner and trainer or “musher” who is from the same gender with the participants. It is to avoid problems such as discomfort, sexual harassment, and others.

## CONCLUSION

In conclusion, the study reveals that women, particularly Muslim women, face several challenges when participating in extreme sports. The facilities provided in existing extreme parks are not entirely satisfactory, which discourages Muslim women from exploring and engaging in extreme sports activities. Extreme sports can provide numerous benefits to women, including improving their internal spirits, discipline, and physical health, thus reducing the number of health problems and obesity among women. The ideal design and spatial planning of extreme sports facilities should offer women, especially Muslim women, appropriate entertainment and choices of sports to attract them to participate in extreme sports activities. Therefore, extreme parks with good space planning addressing privacy and accessibility with games that cater to women's needs and comfort are necessary.

In summary, extreme parks should be a place where all layers of the community could participate and engage. To achieve inclusivity, the spaces provided should be suitable for everyone. The research concludes that an ideal design and spatial planning of extreme sports facilities will be able to attract women to join and participate in extreme sports, which will promote a healthier lifestyle that reduces health issues of chronic disease and obesity among women in Malaysia.

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