

# Socio-Ecological Determinants and Psychological Factors of Women Participation in Sports

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**Abstract:** We examined which factors that have mostly influenced women participation in sports either: Socio-ecological Determinants or Psychological Factors. We utilized Ecological System and Motivational Theories as underpinning theoretical framework to examine which factors have influenced women athletes most. We used a survey research involving 100 women athletes in Malaysia where all of them have been participated actively in sports, internationally and nationally. A set of modified questionnaire was administered to all of them using purposive sampling technique. Data gathered was descriptively analyzed where it has been found that Psychological Factors are found to be more influenced women athlete rather than Socio-ecological Determinants. Detailed results revealed that the majority of women athletes involved in sport events because of their intrinsic motivations rather than extrinsic motivations. Detailed result on Socio-ecological factors demonstrated that the closer ecological layer into women's daily life i.e. family support and encouragement is found to have more influenced them rather than outer ecological layer of their life i.e. friendship and peer support. This study suggests that psychological elements are supposed to be a priority to motivate women participation in sport. However, it does not mean that other factors should be ignored as results from this study also indicating that all psychological and sociological elements are also contributing towards women participation in sports. Therefore, a comprehensive module that has a combination of these dimensions is vital for enhancing women athletes' participation in sports.

**Keywords:** Determinants, factors, motivation, sport participation, women.

## 1. Introduction

Sport activities is dominated by men rather women, especially in most Asian counties. Malaysia is one of the countries that has more male athletes than women athletes. The National Sports Council of Malaysia (2018) reported that there were only 1,844 female athletes in Malaysia compared to 2,483 male athletes. Statistics also show that the tendency of the Malaysian community towards sports activities is still at a low level. In addition, time allotted for sports activities also varies

according to gender. Adult men was found to allocate 168 minutes a week to do sports activities compared to women who only allocated 128 minutes a week. Realising this situation, The National Sports Council of Malaysia has developed a strategic plan to emphasize the development of women athletes. The Malaysian government has allocated Malaysian Ringgit 10 million budget for women athletes development for 2020. The main objective of the budget allocation is to further enhance the numbers of female athletes, coaches and female administrators. This strategic action is believed will be boosting the motivation of female athletes to involve in sport successfully. There is a need to analyse sport participation by gender as it provides a clear pattern of how gender affected sport selection and involvement rates [1].

## 2. Women Participation in Sports

Massive past studies clearly showed that sports provide many benefits and positive effects in life [2] & [3]. The Past study found that contributing factors to women participation in sports are due to health, beauty, and relationships. Psychological factors are found to be one of the important components in promoting women participation in sports [4]. In fact, involvement in sports activities has been proven to increase a person's level of fitness and self-confidence both spiritually and physically. A study in Australia revealed that the percentage of single women doing sports activities (73.2%) was higher than married women (26.8%). This is because the life of a married woman needs to divide time for herself and at the same time manage household affairs. Insufficient time constraints and rest time are the main reasons why women are less involved in sports. Another studies in Malaysia found that the percentage of women who actively participate in sports is very low (8.3%), while the percentage of men who actively participate in sports is twice as large as 20.3%. Although, there are so many reasons for involvement in sport activities [5], many evidences showed that sport is important for health and well-being [6]. Realizing

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this phenomenon, some scholars [7] suggested that all community members and authority bodies should be given awareness of the importance of sports for human well-being.

In addition, the increasingly challenging economic demands globally have affected women participation in sport as the main priority is to get survived. In Malaysia, the total population of women 15.6 million people, of which 14.7 million people are in the category of active working women. Of these, 54.3 percent are women in the range of 15 to 64 years old who have gone out to work. This shows that the percentage of working women is almost equal to the percentage of working men. Economic pressure would be a reason why women do not have time to participate in sports daily. Therefore, many awareness campaigns for public participation in sport, recreation and physical outdoor activities have been carried out by the government as well as non-government organization.

The past study found that mass media would influence public engagement in sports activities. The mass media is found to have a strong influence to promote sports activities, products and health that are commercialized through various types of mass media [8]. Announcements or promotions about sports activities available in community would be able to attract the interest of the community to get involved. New media and mass media will also contribute to people involvement in sports. Past studies revealed that many women participation in sports because of a reason to maintain beauty. Women tend to take care of their diet in order to gain an ideal weight. Another past study found that modern sports facilities will motivate women participation in sport [9]. The percentage of women participation in sports at various levels was also found to be increasing. Awareness of women in venturing into sports is important to get a better quality of life as well as will reduce the percentage of diseases and obesity.

An empirical study in the United Kingdom found that 65% of female students are interested in sports, 21% are less interested in sports and 14% are not interested in sports [10]. Another past study found that the majority of female students were not interested in sports [11]. A study of low-income mothers in the Midlands found that the majority of women were also less interested in sports [12]. Another study carried out by Cassidy (1999) argues that health factors are the main motivation of female students to engage in sports. Active involvement in sports will improve a person's level of health [13]. The health benefits attract older women to play sports. Sports will be able to reduce the effects of aging. Another past study [14] found that many people including women are interested in participating in sports due to factors wanting to lose weight, improve physical ability, improve self-discipline and avoid dangerous diseases. Another study conducted [15] found that the main factor for young women enjoying in sports is due to the social pressure that women should be slimmed and beauty. Most women are also more concerned with academics than sports activities [16]. Past study revealed that the main reasons for non-involvement of female university students were they had limited time to engage in sport activities, transportation issues, some sport club membership were too expensive and poor sport facilities. The students indicated that

safe access to sporting facilities and the poor state of university sporting facilities were deterrents to participation. This highlights the importance of university management to provide better sport facilities to promote greater participation. Another past study reported that women began to venture into sports because of fun, interaction with friends and even strong encouragement from their parents and coaches [18]. Motivational factors are very important, especially the encouragement from parents, coaches and friends to make them more motivated to do sports activities. In addition to the encouragement from the closest person, the factor that can attract women to sports is the facilities and sports equipment that is easily available. When they have complete facilities and equipment, of course they will be more eager to undergo sports activities. In addition to encouragement from parents, coaches and friends, complete sports facilities and equipment are also important for women to perform sports activities. If women get accurate information about the benefits of sports such as sport as a therapy, then they will be positive to participate in the sport [19]. The previous research revealed that women will be less interested in sports when they grow up. They seemed to be more interested in non-sport activities during leisure.

### 3. Purpose of the Study

The current study examines which factors associated with women participation in sports either socio-ecological determinants or psychological factors. Two theoretical foundations that are underpinning the current study are Ecological System Theory [20] as well as intrinsic-extrinsic motivations theory [21]. Socio-ecological determinants in this study is mainly referred to socio-ecological elements in Ecological System Theory where it posits that there are six layers of ecological systems namely microsystem, mesosystem, exosystem, macrosystem, chronosystem and chronosystem. In this study, we focused on the closest layer to human life environment i.e. microsystem. According to this theory, Microsystem is a layer that most immediately and directly impact the human's life development including social-interactions with family members, school communities, neighborhood, and peers. Psychological factors in this study refers to intrinsic and extrinsic motivations theory. This theory posits that both intrinsic and extrinsic are powerful forces in shaping who we are and how we behave. Intrinsic is an internal drive for someone to do something, whereas extrinsic motivations is reward-driven behavior such as getting a good pay for doing something nicely.

### 4. Methodology

This study uses a survey research design using an adapted and modified (close ended response using Five points Likert-scale). This questionnaire has been reviewed by experts and verified face validation to ensure its usability to obtain accurate data. A pilot study was conducted where the Alpha Chronbach analysis showed that there is a high reliability score, thus enabling it to be used in actual studies. This study involved 100 female athletes as participants who had been selected using a

purposive sampling technique. This purposeful sampling was used because the current study is only examined women participation in various types of sports at the international, national and local levels. We have made a screening to make sure all respondents are athletes. Data collected was analyzed descriptively. Interpretation of the mean score is based on the following fractions: Cumulative mean score value between 0.01 and 1.00 = not at all influential, between 1.10 and 2.00 = slightly influential, between 2.01 and 3.00 = somewhat influential, between 3.10 and 4.00 = moderately influential, and between 4.01 -5.00 = extremely influential.

## 5. Results and Discussion

This study involved 100 respondents consisting of female athletes. Of these, 77 respondents aged 21-25 years old; 16 respondents aged 15-20 years old, 7 respondents aged 26 years old. A total number of 38 athletes (respondents in this study) involved in court-based sports, 35 athletes in cycling and triathlon activities, 13 athletes in field sports and race sports, and one water sports athlete. In terms of the level of sports involvement, 41 respondents of this study have been involved at the international sports level, 22 respondents has participated at the national level, 18 involved at the state level, and 19 respondents at the district level. The majority of respondents stated that they actively represent various other sports apart from the main sports played that is as much.

The findings of the study showed that Psychological Factors (M = 4.294, SD = 0.905766) involving intrinsic and extrinsic

motivations have higher mean scores compared to socio-ecological determinants (M = 3.653, SD = 1.145069). Detailed analyses of the psychological factors for women participation in sports activities found that Intrinsic Motivation factor (mean score = 4.516) has higher mean scores than Extrinsic motivation (mean score = 4.072). Table 2 shows detailed findings of this study.

Table 2 shows that intrinsic motivation is a major driving factor for women's involvement in sports. The findings of the study show that 77% of women involved in sports because of their interest (mean score 4.6800, standard deviation = 0.69457). To increase women's interest in sports, there is a need for the government to provide many sports facilities and sufficient equipment that women can use easily. The findings of this study are in line with the past study that the majority of female students are interested in sports if they had sufficient modern sport infrastructure and suitable facilities [22]. However, the findings of this study contradicts with the past study carried who found that the majority of female students are not interested to engage sports due to many reasons including socio-economic factors, puberty, hardship life [23] and also poor health condition [24].

Results in this study demonstrated that 65% of the respondents stated that they participated in this sport for fun (mean score 4.5500, standard deviation 0.74366) as well as to develop better self-discipline (62%). Findings from this study support the past study that women are usually starting to venture into sports due to the fun factor through social interaction with friends [25]. The findings of this study also support the past study by who found that the involvement of women in sports due to self-discipline especially to lose weight, increase physical ability and have a beautiful body shape [26]. Results in this study also revealed that extrinsic motivation is also a motivating factor for women participation in sports (mean score = 4.072). The highest mean score recorded for extrinsic motivation factors are regarding the respondents' motivation to generate income via sport activities (mean score = 3.4400), to be a successful athlete (mean score = 4.2700) and for future career (mean score = 4.2000). The findings of this study explain that the involvement of women in sports has a close relationship with their future planning [27]. Apart from the psychological factors as described above, socio-ecological determinants also play an important role in determining women's involvement in sports.

Table 3 shows that both factors for microsystem layers i.e. family support and peer influence are found to have moderately influenced women participation in sports. Result indicated that family support has more influenced for women participation in sport (mean score = 3.982) compared to peer influence (mean score 3.324). The findings of this study support a previous study [28] who found that parental support will promote positive attitudes towards healthy life-style. Indeed, many past studies revealed that parental support has a positive association with positive behaviour enhancement [29].

Detailed results shows that the highest of mean score for socio-ecological determinants are family encouragement (mean score = 4.6300), family support in sport events (mean score =

Table 1

The Most Influential Factors for Women Participation in Sport

Factors	Mean	Standard Deviation	Interpretation
Psychological Factors	4.294	0.905766	Extremely influential
Socio-ecological Determinants	3.653	1.145069	Moderately influential

Table 2

Psychological Factors for Women Participation in Sports

Factors	Why involve in sports?	Mean	SD	Status	Mean score
Intrinsic Motivation	Own Interest	4.6800	0.69457	Extremely influential	4.516
	Enjoyment	4.5500	0.74366	Extremely influential	
	Self-discipline	4.5100	0.70345	Extremely influential	
	Self-aims	4.1300	0.88369	Extremely influential	
	Own target to get better sport achievement	4.7100	0.53739	Extremely influential	
Extrinsic motivation	To generate income	3.4400	1.43773	Moderately influential	4.072
	To be a successful athlete	4.2700	1.07172	Extremely influential	
	For future career	4.2000	1.07309	Extremely influential	
	Believe in sport for the future	4.1300	0.97084	Extremely influential	
	To be an icon	4.3200	0.94152	Extremely influential	

Table 3  
Socio-ecological Determinants for Women Participation in Sports

Factors	Why involve in sports?	Mean	SD	Status	Mean score
Family support and encourage-ment	Family encouragement	4.6300	0.67652	Extremely influential	3.982
	Family assistance in sports training	3.1200	1.43745	Moderately influential	
	Family support in sport events	4.4600	.84591	Extremely influential	
	Financial support by family	3.5400	1.49356	Moderately influential	
	Inspired by family members	4.1600	1.09839	Extremely influential	
Peer Influence and Pressure	Peer influence	2.8400	1.45449	Somewhat influential	3.324
	Social gathering with friends	3.7900	1.16597	Moderately influential	
	Peer pressure	1.7100	1.25766	Slightly influential	
	Peer assistance	4.0600	1.12654	Extremely influential	
	Positive feedback by friends	4.3200	0.94152	Extremely influential	

4.4600), inspired by family members (mean score = 4.1600), peer assistance (means score = 4.0600) and positive feedback by friends (mean score = 4.2200). The findings of this study show that the microsystem environment also plays a role in influencing women to get involved in sports. Overall findings of this study support the Ecological Systems theory posits that parental encouragement is part of the determining factor to individual behavior.

## 6. Conclusion

Overall findings from this study confirmed that psychological and socio-ecological factors motivate and encourage women participation in sports activities. Psychological factors especially the element of intrinsic motivation is the main factor determining women's involvement sports. However, it should be noted that intrinsic factors do not appear naturally because they are formed from the various socio-environment interactions. Indeed, their intrinsic motivations are formed from the family encouragement, sport coaches' support and peer assistance. In fact, women are venturing into sports because they place high hopes on making sports a career for their future. In addition, women are also participated in sports because they want to have a slimmer body shape, more beautiful and also as a strategy to maintain health. Overall, the findings of this study have identified the psychological and sociological factors are the two main factors that contribute to the serious involvement of female athletes in sports. Therefore, any form of effort to encourage women's participation in sports should take into account these two theoretical dimensions.

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