
The Effect of Socio-Economic Status on the Sports Barriers' Perception among Participants and Non-Sports Participants in Higher Education in the UAE

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Abstract: The socio-economic status of the family affects the offspring's participation in physical activities and sports in school or outside the school. The current study aimed to assess the effect of socio-economic status determined by family income, parental education and parental occupation on the sports participations and the perception about participation barriers among sports and non-sports participants in higher education in the UAE. The study demonstrated a higher prevalence of female students among non-participants and a trend of lower participation among students from low income, parents' education and occupation. The socioeconomic status components showed influences on the students' perception on barriers of sports participation. Low parents' education was related to more significant perception of peer pressure barrier among participants. Similarly, low income and parents' education were related to considering sociocultural barrier as an important barrier among non-participants. Unexpectedly, high income and parents' education were related consider low priority and lack of interest as significant barriers among participants. The study re-emphasizes the effect of the socioeconomic status on sports participation and the university students' perception for participation.

Keywords: university students, sports, higher education, socio-economic, physical activity.

INTRODUCTION

Socio-economic status (SES) is "an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation" [1]. The SES make-up of a family will be reflected on the family members' habits and hobbies. It can be reflected on the person's opportunities to advance in studies and qualifications. One of the main aspects of life that can be affected by the SES is the level of physical activities and sports participation. Several researches have been conducted to study the effect of the SES on sports persons, team sport versus individual sport [2, 3]. Studies reported that teens from low SES families were less physically active compared to their counterparts from high socio-economic levels [4]. The SES affects also the sports options of an individual, as demonstrated by Lee *et al* study where university level students of low SES opted for less expensive sports and students of high SES opted for expensive sports [5]. Studies revealed also that the SES make-up of an individual

influences the daily habits and life achievements including physical activity and sports performance [6]. Our previous study has shown that the different aspects of the SES affects the sports participation and the level of physical activity among university students in the medical group [7]. In general, it was found that people from high levels of SES score the highest rates of sports participation and sports events attendance and follow-up [8]. Concerning economic indicators, several general tendencies can be observed. First of all, income plays a significant role with regards to sport participation, meaning that individuals with higher income are more likely to participate in sports [9]. However, Lera-López and Rapún-Gárate find that the income level has no influence on sport participation [10].

In addition to the tight schedule and huge academic burden on university level students, several barriers have been identified to explain the students' willingness or reluctance to participate in sports. The extent to which the SES can influence the students' perception to these barriers and correlate that to their

participation level has not been studied. The current study was undertaken to assess the effect of socio-economic status on the sports barriers' perception among participants and non-sports participants in higher education institutions in the UAE.

METHODS

A paper-based questionnaire study was conducted on students in the higher education level in the UAE from the period of October 2017 to January 2018. After obtaining the ethical approval from the University Research and Ethics Committee, the questionnaire was distributed to (participants and non-sports participants students, separate questionnaires to each group). The total number of the questionnaire forms distributed was 700 to 12 different universities and colleges in the UAE. A total of 584 forms were completed (432 from sports participants and 152 form from non-sports participants). The study aimed to include participants and non-sports participants from both genders. The questionnaire was divided into three parts. The first one included demographic information asking about name (optional), gender and nationality. The second part included sociological aspects (SES) asking about family income, father education, mother education, father occupation and mother occupation. The last part was about the barriers of participation in physical activities and sports. The barriers indicators for the sports participants were [Yes and No] and the barriers indicators for the non-sports participants were rated on a 5-point Likert Scale as follows: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1). According to the level of income in UAE, the income responses were classified into two

categories as "low to moderate income" which is located between (5,000 to 15,000 AED) or less and the "high income" was located between (15,001 to 45,000 AED) or more. Parental education was classified into two categories; "low level of education" which included primary school certificate to Intermediate or post high school diploma. The "high education level" was Graduate or post graduate and Profession or honors. Regarding occupation status, it was classified into two categories; "professional" which included profession and semi-profession, and "un-professional" category which included (clerical, shop-owner, farmer, skilled worker, semi-skilled worker and unemployed). The data were collected in a worksheet and analyzed statistically using the SPSS Software (IBM SPSS version 20).

RESULTS

The total number of responses was 584 (response rate 83%), with 377 male students (65%) and 207 females (35%) (Table-1). There were 432 responses collected from sports participants' students and 152 from non-sports participants' students (Table-1). The nationality distribution reflects the population structure of the UAE, where the majority are 406 Asian (70%) followed by 95 Middle East (16%) then African 66 from countries (11%) and European and American was (3%) respectively. The UAE is home of more than 200 nationalities [11]. Also, UAE is considered as one of countries with the highest percentage of expatriates in the world [12]. Indians and Pakistanis are the largest number of expatriates in the country [13]. The nationality distribution did not differ between participants and non-participants (data not shown).

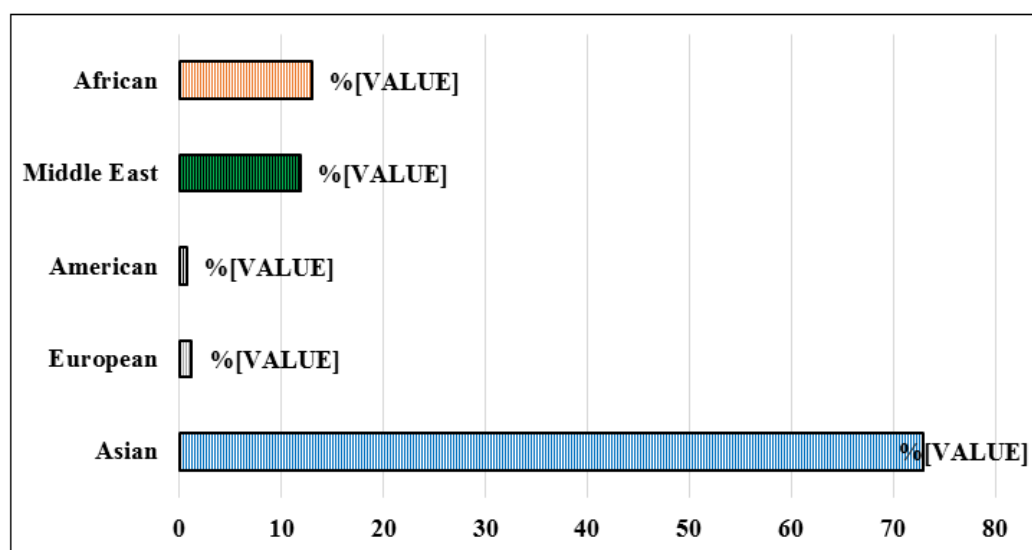


Fig-1: Percentage of nationalities among the respondents

Table-1: Demographics and socio-economic data for the participants and non-sports participants

	Total	Participants	Non-participants	p-value
Responses	584	432(74%)	152(26%)	
Gender*				<0.001
Male	377 (65%)	310 (71%)	67 (44.1%)	
Females	207 (35%)	122 (28%)	85 (55.9%)	
Income level				0.052
Low	208 (36%)	144 (33.1%)	64 (42.1%)	
High	376 (64%)	288 (66.7%)	88 (57.9%)	
Father education				0.082
Low	186 (32%)	129 (29.9%)	57 (37.5%)	
High	398 (68%)	303 (70.1%)	95 (62.5%)	
Mother education				0.055
Low	227 (39%)	158 (36.6%)	69 (45.4%)	
High	357 (61%)	274 (63.4%)	83 (54.6%)	
Father occupation*				0.010
Professional	441 (75.5%)	338(78.2%)	103 (67.8%)	
Non-professional	143(24.5%)	94(21.8%)	49(32.2%)	
Mother occupation				0.232
Professional	341 (58%)	246(56.9%)	95(62.5%)	
Non-professional	243 (42%)	186(43.1%)	57(37.5%)	

Data are represented as number (% of total, participants or non-participants),
 *significant differences p value for significant difference by chi-square test between participants and non-participants groups.

The gender distribution among participants and non-participants shows that female students' participation is significantly lower than male students and they were significantly higher among non-participants (Table-1). The family income showed a trend to be different between participants and non-participants as the difference was close to be significant having more participant students in the high family income level which conforms with previous findings that income level influences the sports participation. More students from low family income level were seen in the non-participants group versus participants (42% vs 33.1%). Father and mother education levels seem to be another aspect in the SES that might influence sports participation. High parents' education level was significantly higher in the general cohort of the study participants (both above 60%), however, the differences between participants and non-participants groups did not reach significant differences (yet the p values for the differences were less than 0.1, showing a trend of difference). Low education levels of parents were higher among non-participants. (Table 1) Father occupation showed significant difference between participants and non-participants where the percentage of professional fathers was higher among participants compared to non-participants. However, mother occupation did not show differences between the two groups (Table-1).

Table-2 illustrates the differences in the perception of sports barriers in the participants group with regard to the SES criteria as defined in the methods section. Barriers that are related to facilities and sports training (lack of facilities, transportation, training competition and trainers) do not seem to be significantly affected by the differences in the SES criteria except for the influence of parents' education on lack of facilities. However, parents' occupation as professionals makes the students consider the limited training competitions an important barrier against participation. Study load and lack of time affects students equally and hence no differences in these barriers' perception were seen between different levels of SES criteria. Barriers related to health (obesity, disabilities and sickness) did not show significant or a special trend according to SES criteria. Students who have mothers with higher education and non-professional occupations gave more significance to social barrier and lack of confidence barrier. Interestingly, peer pressure showed significant influence on the perception of this barrier among students with low parents' education which might reflect the role of parents' education in the constitution of the student's personality that protect him or her from significant peer effect or pressure in deciding daily activities. Unexpectedly, higher family income and parents' education was more related to lack of interest in sports and considering sports as a lower priority among participants.

Table 2: The differences in the perception of sports barriers in relation to SES criteria among the sports participants group

Barriers	Family income	Father education	Mother education	Father occupation	Mother occupation
Lack of facilities	ND	Low education	High education	ND	ND
Lack of Transportation	ND	ND	ND	ND	Non-prof.
Limited training competition	ND	ND	ND	Professional	Professional
Shortage of qualified trainers	ND	ND	ND	ND	ND
Overload of study work	ND	ND	ND	ND	ND
Lack of time	ND	ND	ND	ND	Non-prof.
Obesity	Low to moderate	ND	ND	Professional	ND
Disease disabilities	ND	ND	ND	ND	ND
Frequent Sickness	ND	ND	High education	ND	Non-prof.
Social cultural barriers	ND	ND	ND	ND	Non-prof.
Lack of self confidence	ND	ND	High education	ND	Non-prof.
Peer pressure	ND	Low education	Low education	ND	ND
Lack of interest	High	High education	High education	ND	Non-prof.
Lower priority	High	High education	High education	Professional	ND
ND indicates no difference; only significant differences were reported ($p < 0.05$) Chi-square test between the reported SES criteria categories (low vs high, professional vs non-professional in the participants group. The reported categories indicate the category that gave significantly more importance (% of “yes” responses) to the particular barrier					

On the other hand, the differences in barriers' perception in the non-participants showed different trends from those in the participants group. Facilities and training, almost similar to the participants' responses, did not show huge differences in relation to SES criteria variability, except for training competitions which was given more importance in student of low to moderate family income. Study overload was not also a factor related to SES differences, but lack of time was more important for students from low income families. In general, barriers related to health did not show differences as well. The most relevant finding in relation to our study is the perception of the sociocultural barriers which was related to all SES criteria and more significance was given for this barrier from students from low income, parents' education and non-professional parents. Peer pressure again showed significance with low father education in the non-participants group. Finally, non-participants did not show similar trend in the lack of interest or priority barrier as seen for the participants, except for the father high education.

DISCUSSION

To date, very few studies have attempted to identify socio-economic differences in perceived

barriers to physical activity and potential personal, social and environmental determinants of these differences. Socio-economic status is an individual's or group's position within a hierarchical social structure^[14]. SES affects the psychological wellbeing of the individual and this reflects on one's attitudes and motives towards physical activities and sports performance [15, 16].

The current study showed that SES is indeed related to the students' participation in the sports activities and further influences their perception of the barriers of sports participation. In addition to gender, SES criteria such as family income and parents' education and occupation showed important trends in relation to students' participation in sports and PE activities. Low parents' education significantly influenced the perception of peer pressure as a barrier against participation. In contrary, higher income and high education level of parents significantly influenced the perception of priority and interest in sports among participants. On the other hand, non-sports participants perception of sociocultural barriers was more obvious especially for students who came from low income and lower parents' education and occupation.

Table-3: The differences in the perception of sports barriers in relation to SES criteria among the non-sports participants group

Barriers	Family income	Father education	Mother education	Father Occupation	Mother Occupation
Lack of facilities	ND	ND	ND	ND	ND
Lack of Transportation	ND	ND	ND	ND	ND
Limited training competition	Low to moderate	ND	ND	ND	ND
Shortage of qualified trainers	ND	ND	ND	ND	ND
Overload of study work	ND	ND	ND	ND	ND
Lack of time	Low to moderate	ND	ND	ND	ND
Obesity	ND	ND	ND	ND	ND
Disease disabilities	ND	ND	ND	ND	ND
Frequent Sickness	ND	High education	ND	Professional	ND
Social cultural barriers	Low to moderate	Low education	Low education	Non-professional	Non-professional
Lack of self confidence	ND	ND	ND	Professional	ND
Peer pressure	ND	Low education	ND	ND	ND
Lack of interest	ND	High education	ND	ND	ND
Lower priority	ND	ND	ND	ND	ND
ND indicates no difference; only significant differences were reported ($p < 0.05$) independent t-test between the reported SES criteria categories (low vs high, professional vs non-professional in the non-participants group and the average score given to each barrier. The reported categories indicate the category that gave significantly higher score to the particular barrier.					

The gender distribution difference should be highlighted first. The results of our study showed that females are less among participants and more among non-participants. Our previous study showed similar finding that female students in university level (medical colleges) showed lower levels of physical activity when compared to their male colleagues [17]. Female students also gave more importance to the sociocultural barrier for sports participation in the same cohort of this study [18]. Despite the persistent encouragement by sports and health authorities in the UAE for female participation in physical activities, the levels are below the expectations.

The majority of our cohort comes from families with high income and parents holding high level of educational degree, fathers was (68 %), and mothers was (61%). As demonstrated in previous studies higher levels of education are associated with better economic and psychological outcomes (i.e. more income, more control, and greater social support and networking) [19]. Regarding the research in sport science, there are only few studies which deal systematically with the effects of demographic and economic changes on physical activity [20]. Family income and the sports expenditure was reported in a study that showed that 51% of two-parent households with children spent money on sports and athletic equipment in an average of \$579 during the year which

also includes the expenses of facility rentals, transportation to sports events, club memberships and competition entry fees [21]. Costs of sports participation which can be huge for certain sports, made the involvement of sports in the daily activities a privilege for family with high income [22].

Regarding socio-cultural factors, several authors indicate that the social influences on physical activity include parents, siblings, peers and physical education teachers [23]. Several studies have investigated those influences on physical activity habits, but the results are so varied that they prevent drawing sufficient clear conclusions about the extent and the direction of these relations [24]. In our study, the sociocultural barriers played more effect in the perception of non-sports participants while this barrier was not influenced by the SES criteria of participants except for the mother occupation. Lower income and low level of education and occupation for parents were significantly related to the perception of this barrier. This draws our attention and adds more evidence to the speculated effect of SES factors on the psychological and perception of the students towards sports. Peers can influence the sports participation of individual as mentioned earlier [25], and this was clearly visible in the current study not only as a barrier but also in relation to SES of the students. Low education level of parents was an important influencer of the perception of

peer pressure barrier in both participants and non-participants groups. Parents education level defines the level of instructions, orientation and personality constitution of children and compromising this aspect makes students who come from poorly oriented families more susceptible to peer effect.

Lack of interest and lower priority barriers were unexpectedly perceived more important by sports participants students who come from families with high income and high parents' education. This can create a sort of contradiction to previous findings and hypotheses which indicate that families with high income and high education level give more attention to sports and physical activities. It might reflect a shift in the interest of these families pushing their offspring towards more scientific achievements and academic merits to catch up with their parents' high level of education.

CONCLUSION

It is well established that socio-economic status (SES) is one of the critical factors that influence participation in sports and physical activity. This study demonstrated the effect of socio-economic status on the sports barriers' perception of a cohort of participants and non-sports participants in higher education in UAE which is poorly addressed in literature. The gender effect and SES criteria on sports participation was reiterated in this study. Family income, parents' education level and occupation were found also to affect the perception to sports participation barriers. Low SES was strongly related to the sociocultural barriers against the student participation in sports which need to be considered and awareness about sports importance need to be emphasized in this group of the community. Sports facilities and physical activity programmes in university should take into consideration the SES effect and make sports activities available for all students by providing feasible facilities with minimal costs.

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