



Motivation for Participation in Sports Based on Athletes in Team and Individual Sports

Authors' contribution:

- A) conception and design of the study
- B) acquisition of data
- C) analysis and interpretation of data
- D) manuscript preparation
- E) obtaining funding

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ABSTRACT

There are many reasons why individuals are motivated to participate in sports. For athletes to participate in and keep up exercise, investigating the participation motivation of athletes is necessary. The aim of this study was to compare sport participation motivation of athletes in team and individual disciplines. The sample consisted of 265 athletes including four teams from football, volleyball, basketball, and handball and two individual disciplines of kung fu and taekwondo which were randomly selected. The 30-item sports participation motivation questionnaire (PMQ) was used. Analysis of data was conducted by the use of independent-samples t-test. The results showed that there is a significant difference between the sports participation motivation of athletes in a team and individual sports as well as between male and female athletes. But, among the components of the sports participation motivation, only the aspect of achievement in a team and individual sports and the aspect of finding friendship in male and female athletes existed, no other significant difference was observed. The results of this study show that sports discipline and the athlete's gender is effective in motivating athletes' continuation and commitment to a physical activity.

KEYWORDS

athletes, motivation, sports participation, team and individual sport disciplines

Introduction

The role of sport and physical activity is very important as a strategy that has the potential to contribute to health, social and economic goals. In fact, during the last decades, the opportunity for individuals to participate in sport activities has increased, which is why researchers seek to determine the importance of sport participation motivation (Cunningham & Kwon, 2003). The motivation to participate in a sport is one of the topics of interest to researchers in the field of sport psychology. Researches has been done on the reasons for individuals taking up a particular field of sport or the reasons for not continuing the activity as well as the degree of variability of motivational priorities with respect to the variables of the individual characteristics such as age, gender, experience, and others (Jones, Mackay, & Peters, 2006). What is important in assessing the motivation for participation in sports, is to understand the priorities and processes of participation motivation in order to carry on and maintain physical activity (Weiss & Petlichkoff, 1989).

Motivations are factors that stimulate the behavior of a person, lead them in a certain direction and bring about coordination because of them. Individuals are not only different in terms of the ability to do a certain job, but in terms of the will to do that job or the motivation that drives them. . It is important to understand the motivation behind the behavior in sport participation motivation, what the catalyst is and what modifies the behavior. In the relevant literature, this topic refers to the participation motivation (Deci & Ryan, 1985). Individuals are motivated to sport because of internal factors (such as enjoyment or skill development and mastery) and external factors (such as rewards, improved health, looking good). Some studies have shown that the most important reasons for sport participation motivation are developing skills, recreation, learning new skills, fighting and physical fitness. Sports psychologists are interested in understanding the initial reasons why people get involved in sports and their commitment to participation (Deci & Ryan, 1985). The study by Frederick & Ryan (1993) in this regard showed that, the motivation of participants in sporting competitions is different from that of participants in routine sport and recreational activities. Vazou, Ntoumanis, & Duda (2007) also state that the enjoyment motivation is a positive and important predictive factor for continuity of the participation and emphasized by coaches and participants.

In past researches, there were several reasons for participating in sports, and several questionnaires have been designed to measure such participation. For example, the 28-item Sport Motivation Scale (SMS; Fortier, Vallerand, Biere, & Provencher, 1995), the 44-item Exercise Motivation Inventory (EMI; Markland & Hardy, 1993) and the original 30-item Participation Motivation Questionnaire (PMQ; Gill, Gross, & Huddleston, 1983), questionnaires have been used in studies. In this study, Gil et al. (1983) Participation Motivation Questionnaire (PMQ) was used and included eight factors for the participation of athletes. These factors include achievement/status, teamwork, fitness, energy release, situational factors, skill development, friendship, and fun (Gill et al., 1983). The results of their research showed that the achievement factor in boys is more important than in girls, but in general the responses were similar in both boys and girls. This questionnaire has been used in many studies (Buonamano, Cei, & Mussino, 1995; Del Pilar Vílchez & De Francisco, 2017; Kondric, Sindik, Furjan-Mandic & Schiefler, 2013; Longhurst & Spink, 1987; Morris & Han, 1991; Morris, Power, & Pappalardo, 1993; Sutherland & Morris, 1997; Zahariadis & Biddle, 2000;). For example, Buonamano, Cei, and Mussino (1995) in their research on Italian youth identified success as the most important participation motivation. Gürbuz, Altyntas, Asci, and Hülya (2007), in examining the participation motivation in teenage football players aged 9-15, concluded that the desire to develop their skills, teamwork, team membership, raising the level of skill and physical fitness contributed to the most motivating factors in this group. Caglar, Asci, and Deliceoglu (2009) compared the participation motivation factors among trained and untrained football players. Their results showed that the tendency to win and develop the level of skill, generated the most motivation in the participants.

The main goal of this study was to compare the sport participation motivation in team and individual athletes. Few studies have been conducted to compare the sports participation motivation for athletes in team and individual disciplines. Bener and Loghmani (2014) compared sport participation motivation and goal-orientation of young athletes. Their results showed that individual athletes had more motivation for status than team athletes and they were more ego-orientated. Jakobsen (2014) showed that athletes in team sport have higher scores on interest/enjoyment than those in individual sport, but they could not find any differences in sport participation motivation in team and individual sports. Also, Howard, Vella & Cliff (2018) indicated that children taking part in individual sports demonstrated significantly higher self-regulation. Moreover, children with poor self-regulation were less likely to participate in sports.

Another purpose of this study was to compare the sports participation motivation in male and female athletes. There have been many studies in this field (Bland, Melton, & Czech, 2011; Egli, Soares, Antunnes, & Van Den Tillaar, 2013; Jakobsen & Evjen, 2018; Knisel, Opitz, Wossmann & Keteihuf, 2009; Prusak & Darst, 2002; Kondric et al. 2013). Sirard, Pfeiffer, & Pate (2006) examined the motivational factors related to the students'

physical participation. The findings showed that there was no significant relationship between motivational factors of sport participation and physical activity level in girls. However, these differences were significant in boys. Konderic et al. (2013) found six factors (sport activity with a friend, popularity, fitness and health, social status, sports events, relaxation through sports) for taking part in sport. They also found significant gender differences in respect to motivation to participate in sport activities in all sports students. Tsai, Lo, Yang, Keller & Lyu (2015) in a study concluded that the factors influencing enjoyment of recreational sports participation differ between men and women. Jakobsen & Evjen (2018) showed that the intrinsic motivations for participation in sports in Norwegian girls are greater than boys and they mostly participate in organized sports.

Investigating research literature shows that few studies have been conducted on the comparison of team and individual athletes. Hence, comparison of the components of the sports participation motivation and understanding these variables in team and individual athletes, can be a useful guide in the search for better ways to further attract them to sports activity and its' continuity. Also, there are contradictions in the comparison of male and female athletes in previous studies. Therefore, one of the goals of this study was to compare the sports participation motivation in Iranian male and female athletes. Another purpose of this study was to identify key differences between motivation to participate in sports based on athletes in team and individual discipline.

Method

Participants included 265 athletes (mean \pm SD: 22.13 \pm 6.53 years) who participated in the study by stratified sampling method. The participants in this study consisted of athletes in the four team disciplines of football, volleyball, basketball, and handball (n=203) and two individual disciplines of kung fu and taekwondo (n=62). The Committee for Ethical Considerations in Human Experimentation of Arak University assessed and approved the research.

In this research, the Persian version of Gill, Gross, & Huddleston (1983) questionnaire on the sport participation motivation was used which evaluated motivational factors affecting sport participation based on eight factors of achievement/status, teamwork, fitness, energy release, situational factors, skill development, friendship, and fun through a three-level scale (very important=3, somewhat important=2, and not important=1). The reliability of this questionnaire was reported by Zahariadis and Biddle (2000), and Gregory et al (2004), and Franchignoni et al (2015) using Cronbach's alpha coefficient as 0.80, 0.88 and 0.89 respectively. Also in this study, using the Cronbach's alpha, the total internal consistency (reliability) of the sport participation motivation questionnaire was estimated as 0.89. Cronbach's alpha for the dimensions of achievement/status, teamwork, fitness, energy release, situational factors, skill development, friendship, and fun was .88, .77, .92, .69, .74, .78, .82 and .86 respectively. Data were collected before the beginning of the training. The questionnaire was distributed among the participants and was collected after 15 minutes.

Independent-samples t-test was used to compare the sports participation motivation among athletes in team and individual disciplines. For ranking the dimensions of the questionnaire in male and female athletes, Friedman test was used. Data were analyzed using SPSS software version 22. Statistical significance was set at $p < .05$

Results

Table 1 shows that in general, an average amount of sport participation motivation in individual athletes is higher than the team athletes. Also, there is a significant difference between the dimensions of the sport participation motivation (except for the achievement factor) of individual athletes and team athletes.

Table 1. Compare the mean of total and components of sport participation motivation of athletes in individual and team disciplines

Variables	Field Type	Mean	SD	T Value	DF	Sig
participation (total)	team	75.67	9.38	-3.22	263	.001
	individual	80.50	8.40			
achievement	team	15.03	2.71	-1.66	263	.097
	individual	15.72	3.03			
teamwork	team	8.11	1.21	2.36	263	.019
	individual	7.68	1.23			
energy release	team	11.88	2.05	-3.13	263	.002
	individual	12.85	2.07			
fitness	team	7.79	1.27	-4.001	263	.001
	individual	8.40	0.94			
situational factors	team	7.48	1.44	-5.07	263	.001
	individual	8.33	0.98			
skill development	team	7.94	1.28	-2.84	263	.005
	individual	8.42	1.07			
friendship	team	9.57	1.78	-3.71	263	.001
	individual	10.50	1.51			
fun	team	7.74	1.20	-2.56	263	.011
	individual	8.18	1.04			

Source: own study.

Table 2 shows that the average of sport participation motivation in female athletes is higher than the male athletes. Also, there is a significant difference between the dimensions of the sport participation motivation (except for the friendship factor) of male and female athletes.

Table 2. Compare the mean of components of sport participation motivation of male and female athletes

Variables	gender	Mean	SD	Value T	DF	Sig
participation (total)	Female	82.32	6.59	6.68	263	.001
	Male	74.74	9.61			
achievement	Female	16.51	1.94	5.64	263	.001
	Male	14.76	2.89			
teamwork	Female	8.05	1.05	2.31	263	.022
	Male	7.69	1.27			
energy release	Female	13.21	1.50	3.05	263	.001
	Male	7.13	2.13			
fitness	Female	8.36	1.01	3.71	263	.001
	Male	7.78	1.27			
situational factors	Female	8.35	0.89	5.89	263	.001
	Male	7.45	1.46			
skill development	Female	82.32	6.59	4.82	263	.001
	Male	74.70	9.61			
friendship	Female	16.50	1.94	1.78	263	.076
	Male	14.71	2.89			
fun	Female	8.05	1.05	4.01	263	.001
	Male	7.69	1.27			

Source: own study.

According to Table 3, from the perspective of male athletes, the components of sport participation motivation are situational factors, fun, teamwork, fitness, skill development, friendship, energy release, and achievement respectively.

Table 3. Descriptive and Friedman test results components of sport participation motivation of male athletes

Variable	N	Mean	SD	Ranking Mean	Sig	Rank
situational factors	197	11.36	23.58	3.01	.001	First
fun	197	10.13	15.16	3.11	.001	Second
teamwork	197	12.62	23.46	3.33	.001	Third
fitness	197	10.73	16.70	3.38	.001	Fourth
skill development	197	10.81	16.63	3.43	.001	Fifth
friendship	197	11.11	11.75	5.38	.001	Sixth
energy release	197	16.63	21.37	6.75	.001	Seventh
achievement	197	17.19	15.41	7.6	.001	Eighth

Source: own study.

According to Table 4, from the perspective of male athletes, the components of sport participation motivation are teamwork, fun, fitness, situational factors, skill development, friendship, energy release, and achievement respectively.

Table 4. Descriptive and Friedman test results components of sport participation motivation of female athletes

Variable	N	Mean	SD	Ranking Mean	Sig	Rank
teamwork	68	9.48	11.80	2.67	.001	First
fun	68	11.14	16.31	3.19	.001	Second
fitness	68	11.16	16.22	3.24	.001	Third
Situational Factors	68	13.97	22.63	3.29	.001	Fourth
Skill Development	68	11.41	16.43	3.61	.001	Fifth
friendship	68	10.11	1.73	5.25	.001	Sixth
Energy Release	68	17.42	19.78	6.89	.001	Seventh
achievement	68	27.76	35.13	7.86	.001	Eighth

Source: own study.

Discussion

The purpose of this study was to compare the sport participation motivation among team and individual athletes. The results indicated that there is a significant difference between the sports participation motivation of athletes in team and individual disciplines. The results also showed that there is a significant difference between the sports participation motivation of male and female athletes. In addition, the prioritization of the components of sports participation motivation is also different from the perspective of male and female athletes.

The most important finding of this study was that there is a significant difference between the components of sports participation motivation between the athletes of the team and individual disciplines. However, there was no significant difference between the aspect of achievement in team and individual disciplines. Comparison of mean dimensions shows that in all components except teamwork component, individual athletes have a higher average than team athletes. In explaining these results, it can be said that individual athletes might have more intrinsic motivation than team athletes. These results are consistent with previous studies (Benar & Loghmani, 2012; Howard et al., 2018). Benar and Lughmani (2012) also show that individual athletes are more motivated to progress than individual athletes and are more ego-oriented. They attributed the difference to the nature and the type of individual sports. Howard et al (2018) also showed that there is more self-regulation in individual athletes than athletes in team disciplines. On the other hand, Jacobson (2014) did not find any difference between the motivation of team and individual athletes. In his research, only the enjoyment component in team athletes was higher than individual athletes. Probably one of the reasons for the lack of difference in the Jacobson (2014) research, was the different sport disciplines and the low number of participants. These cases probably affected the difference in results. In analyzing our results, there was no significant difference for the achievement

component between team and individual athletes. This result shows that for athletes in team and individual sports, achievement and progress in sports play an important role. .

Also, the differences between the components of sports participation motivation of male and female athletes were examined and the results showed that there is a significant difference between male and female athletes (except for the friendship factor). Also, the results showed that total sport participation motivation in female athletes is higher than in the male athletes. Ranking of motivations for male athletes showed that situational factor, fun and teamwork were more important for them. However, ranking of motivations for female athletes showed that teamwork, fun and fitness were more important. These results are consistent with previous studies (Egli et al., 2011; Jakobsen & Evjen, 2018; Konderic et al., 2013; Pfeiffer & Pate, 2006; Tsai et al, 2015). Egli et al. (2011) concluded that there was a significant difference between the sports participation motivation of male and female athletes, with male athletes' motivation being competition and skill development, while female athletes considered fitness as the most important reason. Also, Soares et al (2013) showed that, the fun factor is similar in girls and boys for participation in sport. However, boys tend to prefer the activities at a competitive level and the girls tend to pursue sports because of their health, fitness and friendship goals. Cerar, Kondrič, Ochiana and Sindik (2017) found statistically significant gender differences in sport participation motives. For male students, enjoyment, challenge, social recognition, affiliation, competition, strength and endurance were dominant participation motives, while, for female students, dominant participation motives included stress and weight management, revitalization, avoiding ill-health, positive health, appearance and nimbleness. The results of this study also showed that the motivation for sport participation differs from the perspective of male and female athletes. Therefore, considering that motivation plays an important role in the onset and continuation of exercise, understanding the most important motivations from the perspective of male and female athletes is very important.

Despite the valuable results obtained, the present study also had some limitations. The data were collected from a limited area in Iran, a limited number of sports disciplines and sample sizes were different between genders. Also, the number of participants in team disciplines was also higher than individual disciplines. In this study, Gill et al. (1983) questionnaire was used. Therefore, it may not cover all the motivations of athletes. It is suggested that these limitations be considered in future studies.

Conclusion

In general, the results showed that there is a significant difference between the components of sports participation motivation between the athletes of a team as opposed to individual disciplines as well as in men and women athletes. Female athletes primarily participated in sport for teamwork, fun and fitness, while male athletes generally took part for the situational factor, fun and teamwork respectively. Based on these results, it is suggested that coaches and sports managers take these factors into account for maximization of participation and continuity of exercise. Also, it is recommended that a research be conducted to investigate the factors affecting the sport participation motivation of athletes in other sports disciplines as well as athletic competitions.

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