



# How Different Sports Establish Different Athletic Identity Levels

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## Abstract

**Background:** In order for coaches and sport psychologist help athletes to improve their athletic identity, they need to be aware of athletes' athletic identity with different sporting background. **Objective:** The purpose of this study was to examine different levels of athletic identity among different types of sports and also more specifically, between team and individual sports. **Methodology:** A sample of 107 athletes (57 women and 50 men) who were members of national teams in taekwondo, karate, wushu, basketball, volleyball, and canoe polo were selected. Athletic identity questionnaire was used. To identify athletic identity and its four sub categories differences among six groups and also between team and individual sports One way Manova and independent T-test were used respectively. **Results:** The findings showed that different sports influence athletic identity.  $F(2,350) = 5.41, p < 0.005$ . The highest athletic identity was observed within taekwondo athletes. The second and third highest were in karate and wushu athletes, followed by basketball, volleyball, and canoe polo. Canoe polo was the only team that had significant differences in total athletic identity, and three sub categories: self-identity, social identity, and exclusively compared to other sports. While karate athletes had the highest exclusively, taekwondo athletes had the highest score on self-identity, social identity, and negative affectivity. There was no significant difference on negative affectivity among all six groups, indicating that facing up to a fail or physical injury is very difficult for all athletes. **Conclusion:** The findings suggest coaches and sport psychologists should take these different identity levels and the reasons causing them into account when they work with different athletes within different sports.

**Keywords:** Athletic identity (AI) , self-identity, social identity, negative affectively, exclusively

## 1. Introduction

Athletic identity (AI) is identifiable characteristic of an individual's self-concept and is the degree to which an individual identifies with athletic role (Brewer, Raalte, & Linder, 1993; Martin, Fogarty, & Albion, 2014). The initial factor analyses by Brewer, Shelby, Linder & Petitpas (1999) and Martin, Fogarty, & Albion (2014) support the concept that AIMS (Athletic Identity Measurement Scale) has more than one dimension and it corroborates research done earlier. They established three independent factors (i.e., social identity, exclusivity, and negative affectivity) and a fourth factor (i.e., self-identity) for consideration. Social identity refers to athlete's perception of how they are viewed by the public (Brewer, Van Raalte, Petitpas, 2000). Exclusivity deals with specific identity in which put value solely on athletic performance, and negative affectivity refers to the extent to which athletes are able to cope with negative outcomes in sport (Hale, James & Stambulova, 1999). The factor of self-identity represents the degree how well an individual identify oneself as an athlete (Martin, Adams & Eklund, 1994, Hadiyan, & Azadi, 2012).

Lamont-Mills & Christensen (2006) study concluded that athletic identity increases according to sport participation level and regardless of sport participation level, all athletes experience undesirable sporting outcomes as negative events.

Lamont-Mills & Christensen (2006) strongly believed that an individual athletic ego is a vital to success at elite levels of competition. Also athletic identity is closely associated with performance, and positive and negative performances have corresponding negative and positive effects on AI (Brewer, Shelby, Linder, & Petitpas, 1999; Hadiyan, & Azadi, 2012). Stronger identification with the role of as an athlete increases the individual's desire to train harder and focus on improvement (Horton & Mack, 2000). Intense training and success are not feasible if athletes are not motivated by high athletic identity (Callero, 1985; Danish, 1983). That high athletic identity that leads to a better preparation also can have positive effects on athletic performance (Danish, 1983; Werthner & Orlick, 1986; Grove, Fish, & Eklund, 2004) health, and fitness (Brewer, Van Raalte & Linder, 1993; Verkooijen, van Hove, & Dik, 2012). Athletic identity has been related to involvement and participation in sport and exercise (Anderson, 2004) and to greater experience of positive

psychological consequences of training such as enhanced body image, increased self-confidence, and decreased anxiety. There are a number of external and internal influences associated with social identity, such as family, coaches, trainers, friends, and the media. In essence, athletic identity is influenced by outside world (Brewer, Van Raalte & Linder, 1993). Besides, athletes and environmental interactions describe the self-perception theory. This theory states that behavior is congruent with positive and negative forces effecting behavior (Grove, Fish, & Eklund, 2004; Duda, 1999; Martin, Fogarty, & Albion, 2014).

Commitment and identity are influenced by the nature of sport (Chen, Snyder, & Maner, 2010); hence it seems that the differences in athletic identity between team and individual sports are due to the type of sport. Also, individual sports have higher rating of the sport value and public demands when compared to a team sport. So it might influence the thoughts and feelings of athletes and lead to a strong self-perception as an athlete (Chen et al., 2010). There is no research exploring the level of athletic identity and its four sub categories between team and individual sports, and also these differences among different sports regarding the athlete's experience.

This study aim to explore the athletic identity with its four sub categorize among different sports and also between team and individual sports. The hypotheses associated with this purpose are Firstly, it was hypothesized that different types of sports influence athletic identity so that athletes within each sport has different levels of identity. Secondly, was also hypothesized that athletes within team sports have lower identity than individual sports.

## 2. Materials and Method

### 2.1 Participants

Participants were 107 elite athletes from six different sports, comprised of three team sports (canoe polo, basketball, volleyball) and three individual sports (karate, taekwondo, wushu). The mean age of participants was 21.25 years ( $SD = .75$ ). The athletes had an average of 12 years involvement in their sport career ( $SD = 2.5$ ) (Lamont-Mills & Christensen, 2006; Grove, Fish, & Eklund, 2004). Procedures were performed in accordance with the Helsinki Declaration for the ethical treatment of human participants. Written informed consent was provided to all participants prior to their participation in the study (Kargarfard, Shariat, Shaw, Shaw, Lam, Kheiri, Eatemadyboroujeni, & Tamrin, 2015). Criteria for participation in this survey was as follow: more than five years' experience in one of the sports mentioned above, being on a national team for at least two years, and have participated in international championships and achieved at least one medal.

### 2.2 Measurement

AI established by measuring Athletic Identity Measurement Scale (AIMS) (Brewer et al., 1993). The AI questionnaire comprises of 10 questions associated with 7-point likert scale that range from 1 (strongly disagree) to 7 (strongly agree). Scores range from 10 to 70. The AIMS is an instrument which measures athletic identity by evaluating the four sub categories of exclusivity, social identity, self-identity, and negative affectivity (Groff & Zabriskie, 2006). Previous test/retest reliability has been reported ranging from .81 to .93 ( $R = .89$ ) over two weeks (Brewer et al., 1993). The next requirement to develop the instrument was translating the items from English into the Persian language. To do it accurately, it required three steps established by Blaschko and Burlingame (2002). The questionnaire was translated from English into Persian, using a professional scholar, fluent both languages. The second scholar translated the questionnaire from Persian into English. The final step was to use the third scholar to evaluate the complete process and verify its validity. All three scholars concurred on the use proper terms in the Persian. Validity obtained through CVR (0.91) and CVI (included: relevance, clarity, simplicity, and ambiguity, 0.98, 1.00, 1.00, 1.00, respectively). Also, internal consistency for the questionnaire was obtained 0.94.

### 2.3 Procedure

To get the best athletes in each sport, each federation was asked to introduce their national athletes. After getting permission from each federation on handing out the questionnaire, the author approached each national team. Athletes were required to complete the questionnaire in regard of their professional experience during the last five years. After collecting the questioner, the author asked each team about their attitudes toward their athletic and social statuses followed by their justifications for those attitudes.

### 2.4 Data analysis

The one-way MANOVA was used to determine whether there are any differences in athletic identity of six groups. The total AIMS as well as its four sub categories were analyzed using one-way MANOVA. In order to examine athletic identity differences between team and individual sports, independent t-test was used for the total AIMS, and four sub categories

## 3. Result

There were statistically significant differences among six teams on total AIMS,  $F(2, 350) = 5.41, P < .0005$ .

As seen in table 1, there were also significant differences on three factors of AIMS (self-identity, social identity, and exclusivity) among six teams. Taekwondo and canoe polo athletes had the highest and lowest scores on total AIMS and its four factors respectively.

Table 1. One way MANOVA for AIMS and four sub categories differences among six different sports

AIMS	Taekwondo		Karate		Wushu		Basketball		Volleyball		canoe polo		MANOVA
	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	M	S.D.	Sig
<b>Self-identity</b>	13.83	0.43	13.53	0.51	12.55	0.43	12.31	0.42	12.55	0.43	10.26	0.42	0.000
<b>Social identity</b>	12.88	0.55	12.53	0.65	12.38	0.55	11.89	0.54	12.38	0.55	8	0.54	0.000
<b>Exclusively</b>	17.16	0.79	19.07	0.93	17.72	0.79	14.84	0.77	17.72	0.79	11.63	0.77	0.000
<b>Negative affectivity</b>	13.05	0.63	12.15	0.74	11.44	0.63	11.57	0.61	11.44	0.63	11.26	0.61	0.364
<b>AIMS total</b>	54.55	1.27	54.23	1.50	51.66	0.27	50.63	1.24	51.66	1.27	41.15	1.24	0.000

\*P < 0.05

As seen in table 2, AIMS and its four sub categories in team sports are significantly lower than individual sports. Individual sports had higher level of negative affectivity; however, this difference between two groups is not significant.

Table 2. Independent T-Test for AIMS and four sub categories differences in team and individual sports

Variable	Individual sports		Team sports		t-test
	M	S.D.	M	S.D.	Sig
<b>Self-identity</b>	13.28	1.24	11.43	2.41	0.000
<b>Social identity</b>	12.59	1.59	10.27	3.28	0.000
<b>Exclusively</b>	17.87	3.01	13.58	3.98	0.000
<b>Negative affectivity</b>	12.22	2.72	11.47	2.60	0.154
<b>AIMS total</b>	53.40	4.18	46.81	7.54	0.000

\*P < 0.05

#### 4. Discussion

The purpose of this study was to investigate total athletic identity and its four sub category differences within a number of sports, and between team and individual sports. The first hypothesis was completely confirmed. The findings on self-identity among six teams revealed that taekwondo athletes have the highest self-identity followed by karate, wushu, basketball, volley ball, and canoe- pol respectively. Moreover, there was a significant difference between self-identity of the canoe polo team and the other teams. The author employed the justifications, which were given by athletes regarding their social and athletic status, as some of relative reasons for the findings in this research.

Perhaps there were several reasons why taekwondo athletes had the highest self-identity; first constant national camps training throughout the last decade, second, employing Korean coaches, and third, attendance at international competitions and Olympic Games, which shows beliefs and feelings of athletes related to taekwondo sport within themselves. On the other hand, In spite of the fact that the advent of canoe polo is approximately the same as other sports, the canoe polo athletes have not qualified for any international events. Consequently, it appears that less exposure and feelings to advanced competitive canoe polo has resulted in a significant difference in self-identity. The results of this study support previous findings (Lamount-Mills & Christensen, 2006; Brewer et al., 1993) that athletic identity increases according to sport participation level.

The findings on social identity were similar to self-identity. Social identity refers to athlete's perception of how they are viewed by the public (Brewer, Van Raalte, Petitpas, 2000). Also, different situations can activate a different identity (Hortn and mack; 2000); hence, it is anticipated that media and the location of sport training places might have implications on social identity. In Iran, Cane polo training centres are at harbour cities, in the North and South of the country, and Azadi Stadium is located far from the Capital city, Tehran. As all of these regions are isolated from other regions having social activities, canoe polo athletes have far less publicity in the community, and as a result are less known. In contrast, other teams not only have training sessions in Azadi stadium but also each sport has a specific sporting venue in Tehran for their training and competitions. Moreover national camp training at any states in the heart of the cities results in getting more publicity and recognition in the community at large. Also, in Iran specific magazines and newspapers have been allocated to Karate, Taekwondo, and wushu, and also these sports are spotlighted in every day's sporting news. These conditions are also true for basketball and volleyball. As of yet, canoe polo does not enjoy the same recognition in the media.

There are a number of external and internal influences associated with social identity, such as family, coaches, trainers, friends, and the media. In essence, athletic identity is influenced by outside world (Brewer, Van Raalte & Linder, 1993). Accordingly, canoe polo team might be less affected by the outside world because of limited exposure leading to significantly the lowest social identity.

The findings on 'exclusively' demonstrated that karate athletes had the highest exclusively followed by wushu, taekwondo, volley ball, basketball and canoe polo. The differences in this subscale were significant between karate and three other teams (volleyball, basketball, and canoe polo). Besides, there was a significant difference between canoe polo and the five other teams. The differences between the martial arts were not significant on exclusively. Perhaps it can be attributed to complex skills in martial arts such as 'kata' in karate, 'poomse' in taekwondo, and 'talo' in wushu. This result is consistent with Chen, Snyder, & Maner' 2010 study which concluded that individual sports have a higher rating of sport value and social expectations, when compared to team sports.

Athletes in these sports demonstrated more self-worth solely on self-reliance on their skills compared to volleyball, basketball, and canoe polo. Similarity, it is assumed that kata in karate is more complex compared to poomse and talo, as a result athletes in karate sport revealed the highest exclusively. The interesting finding in this survey was the on negative affectivity factor. Taekwondo athletes rated the highest in negative affectivity followed by karate, wushu, volleyball, basketball, and canoe polo; however, there was no significant difference among the six teams on this factor. Apparently for all skilled athletes experiencing undesirable outcomes in the sport domain is hard, and perhaps because of this, there was no significant difference among six groups in negative affectivity. This result appears to be consistent with the view that regardless of sport participation level, athletes experience undesirable sport outcomes as negative events (Lamont-Mills & Christensen, 2006).

The initial factor analyses by Brewer, Shelby, Linder & Petitpas (1999) and Martin, Fogarty, & Albion (2014) support the concept that AIMS (Athletic Identity Measurement Scale) has more than one dimension and it corroborates research done earlier. They established three independent factors (i.e., social identity, exclusivity, and negative affectivity) and a fourth factor (i.e., self-identity) for consideration; accordingly, the differences on total AIMS among six teams could be attributed to the variations in the each individual factor. According to findings on the four subscales, it is clear that taekwondo was the highest in each individual category, and subsequently total AI is higher and that is probably as a result of participating at the Olympic Games. This finding was supported by prior findings stating that athletic identity is closely associated with performance, and positive and negative performances have corresponding negative and positive effects on AI (Brewer, Shelby, Linder, & Petitpas, 1999; Hadiyan, & Azadi, 2012).

Overall, it can be deduced that each sport establishes different athletic identity levels. While the first hypothesis was completely confirmed, the second hypothesis was verified, as well. Findings demonstrated that individual sports significantly displayed more self-identity and social identity than team sports. Perhaps it is because individual sports have higher rating of sport value and public demands when compared to team sport (Chen, Snyder, & Maner, 2010). So it may influence thoughts and feelings of athletes and lead to a strong sense of self as an athlete (Chen et al., 2010). Additionally, in individual sports, athletes form their self and social identity based on their performances and achievements. Meanwhile, in team sports, acquiring achievements needs coordination of all athletes in the team. As a result, in team sports athletes allocate less self and social identity to themselves compared to their peers in individual sports.

Moreover, athletes in individual sports can undergo various types of training without needing a training partner; therefore the extent to which an athlete put value solely on athletic performance will be more in individual sports (Hale, James & Stambulova, 1999).

Other findings showed that there was no significant difference between team and individual sports on negative affectivity. Maybe the types of sports (team and individual) have no significant influence on negative affectivity, and experiencing undesirable outcomes is the same for any athlete independent of the sport. By taking all four subscales between team and individual sports into account, it is clear that AIMS in individual sports is higher than team sports.

By and large, Commitment and identity are influenced by the nature of sport (Chen, Snyder, & Maner, 2010); hence it seems that the differences in athletic identity between team and individual sports are due to the nature of these sports. It is assumed that in individual sports, every athlete is responsible for their performance, so the whole role of athlete is allocated to that athlete, while in team sports, all athletes forming a team are responsible for team's performance and outcome; therefore, athletic identity shares among all athletes in the team.

## 5. Conclusion

Because athletic identity is shared among all athletes on a team, sport psychologists should take this into account when they deal with different athletes, and they need to work with those athletes who have less identity in the team. Through counseling with athletes, the reasons for lack of identity can be pinpointed and these reasons can help coaches and sports federations take steps toward improvement of national camp trainings. Moreover, sports federations should take employing foreign professional coaches and sending athletes to international competition into account as vital factors for development and enhancement of self-identity and performance. Also media support and sport training locations should not be overlooked.

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