Investigation of Personal and Social Sports Identities of Elite National Karate Players via Self Identity Chart[*]

İsmail SANBERK[1] [ID], **Cenab TÜRKERİ[2]** [ID] **Burhan PARSAK[2†]** [ID]
[1]Çukurova University, Faculty of Education, Adana.
[2]Çukurova University, Faculty of Sport Sciences, Adana.

Abstract

The aim of this study is to investigate ideal and non-ideal image of six Turkish national players and their cognitive representation of karate players. This study was carried out with six young adult elite karate athletes who were successful in national and international tournaments attending the Department of Physical Education and Sports. The data of this study were collected via repertory grid, a semi-structured interview technique. Self-identity graph of each participant was obtained and analyzed based on repertory grid data. The findings show that all the participants' personal and social sport identities, except one participant, are positive. İn the study, it was found that the participants with high self-esteem defined themselves as karate players with positive personal constructs of ideal self and social self. As a result, this study shows that the self-identity graph will provide functional information in revealing -athletes'- sports-related self esteem, personel and social sports identities. This study has carried out about young adult elit karete players in Turkey suceessed at national and international tournament. With Studies which will do in the future, it may be revealed ameteur, young and junior karete players' personal and social sport identity via self identity graph.

Keywords: Sport identities, Self-identity graph, Personality, Personal construct, Repertory grid, Karate

Elit Milli Karatecilerin Kişisel ve Sosyal Spor Kimliklerinin Öz-Kimlik Grafiği Aracılığıyla İncelenmesi

Öz

Bu çalışmanın amacı, altı Türk milli oyuncunun ideal ve ideal olmayan imajını ve karate sporcularının bilişsel temsillerini araştırmaktır. Bu çalışma, Beden Eğitimi ve Spor Anabilim dalına devam eden ulusal ve uluslararası turnuvalarda başarılı olmuş altı genç yetişkin elit karate sporcusu ile gerçekleştirilmiştir. Bu çalışmanın verileri yarı yapılandırılmış görüşme tekniği olan repertuar ağı ile toplanmıştır. Her katılımcının öz kimlik grafiği elde edilmiş ve repertuar ağı verilerine dayalı olarak analiz edilmiştir. Bulgular, bir katılımcı hariç tüm katılımcıların kişisel ve sosyal spor kimliklerinin olumlu olduğunu göstermektedir. Araştırmada benlik değeri yüksek olan katılımcıların kendilerini, ideal benliği ve sosyal benliği olumlu kişisel kurgularla karate oyuncusu olarak tanımladıkları bulunmuştur. Sonuç olarak bu çalışma sporcuların sporla ilişkili benlik saygıları, kişisel ve sosyal spor kimliklerinin ortaya konmasında öz-kimlik grafiğinin işlevsel bilgi vereceğini göstermektedir. Bu çalışma Türkiye'de ulusal ve uluslararası turnuvalarda başarı göstermiş olan genç yetişkin elit karateciler üzerinde yürütülmüştür; ileride yapılacak araştırmalarla amatör, minik ve junior karatecilerin kişisel ve sosyal spor kimlikleri öz-kimlik grafiği aracılığıyla ortaya konabilir.

Anahtar kelimeler: Spor kimlikleri, Özkimlik grafiği, Kişilik, Kişisel yapı, Repertuar ağı, Karate

---

INTRODUCTION

Athletes who want to improve their sports performance are open to feedback. This feedback can be given from an external perspective such as sports fans, coaches or teammates and more concrete and objective performance measures (such as number of wins, physical power). Another important source of feedback is the athlete's self assessment as an athlete or briefly his personal sports identity. Personal sports identity reflects a person's view of a sport (Hilscher, 2007; Weiβ, 1999). Hilscher (2007) defines his personal sport identity as how athletes see themselves in the role of an athlete and the identity of that role. The athlete's thoughts about how his or her personal sport, as well as how others (coach, other athlete, etc.) perceive themselves as an athlete, constitutes their social sport identity (Hilscher, 2003). The personal and social sport identity of an athlete can be determinant on the sportive preparations and performance. Self-identity graphs, which reveal the identity construction processes of individuals and mediate the acquisition of idiographic information in this direction, were developed on the based on Kelly's (1955) personal construct theory. According to Kelly, an individual is like a scientist who constructs builds his own world, formulates and tests expectations and revises expectations when necessary (Winter, 2012). In terms of personal constructivism, experiences and personal constructs are related to the environment. The personal constructs in individuals define the content and limitations of interpretation on the nature and the environment.

An individual's self consists of cognitive representations of real, social and ideal selves. These three sub-identities, considered as central elements, are evaluated based on internal and external elements (competitors or world champions) in a dynamic comparison. The evaluation of one's self brings the self-identity system of that person to the stage. Self-identity graphs that provide information about self-identity system mediate the visualization of the distance between the elements in the form of the RGT. When the distances between the elements are identified, the correlation of the elements is primarily considered (Slater, 1977); then the distance between the elements is redefined in terms of distance to both central elements (in this study, "I as a karate player" and "the karate player I want to be"). For example, the distance coefficient between "I as a karate player" element and "karate player I want to be" can provide valuable information about the individual's self-esteem related to sport. If this distance coefficient is less than 0.68, [sport-related] self-esteem is high, while self-esteem is moderately higher than 0.68 to 1.07, self-esteem is average, and if it is higher than 1.07, self-esteem is low (Bartholomew, 1993).

Self-identity graph is a graph composed of four quarters of all the elements in the form of RGT, with current I on one axis and ideal I on the other. All elements take place away from these two axes and gain meaning (Bartholomew, 1993). As a matter of fact, in Böker's (1999) study, each quarter has a contextual meaning depending on the clockwise interpretation of the graph starting from the quarter circle on the upper left of the graph.

I. Acceptance Area: Elements located in this quarter, which can also be called symbiotic closeness, bear self and ideal similarity.

II. Idealization Area: Elements located in this quarter resemble ideal self; but it does not resemble actual self.

III. Conflict Area: Elements located in this quarter are neither self nor ideal self.

IV.   Ambivalence Area: Elements located in this quarter resemble self; but it does not resemble ideal self (Böker, 1999, Böker et al., 2000).

RGT refers to a more specific form of psychological diagnostic tools on the basis of self-identity graph; this diagnostic tool appears to be used in many areas such as medicine, eating behaviors and urban planning (Fromm, 2010). It is also emphasized that RGT can also mediate the acquisition of information about sportive performance, behavior and skills that cannot be provided by standard tests (Barker et al., 2011). When the relevant literature in the field of sport sciences was reviewed, study that athlete identities of the athletes are examined through self-identify graph is not founded .The RGT on which self-identity graph is based is also limited in the number of studies used (Christensen, 2009; Feixas et al., 1989; Gucciardi & Gordon, 2008; Vrljic & Mallet, 2008).

In a study using RGT (Vrljic & Mallet, 2008), how football coaches conceptualize their ability to identify elite soccer players was identified. The inductive analysis of the personal constructs shows that the coaches deal with the ability in four dimensions, physical skills, technical, cognitive-perceptual competences and personality traits. Christensen (2009), in a study of the RGT and the personal skills of 8 Danish football coaches regarding skills, revealed that personality traits are more dominant in terms of coaches. Feixas et al. (1989) evaluated the changes that occurred after the intervention of the coaches in Spanish football team by evaluating the comments of the players in the study of personal football (Kelly, 1955), and concluded that the coach and the athletes agree with each other at the end of the research. Gucciardi and Gordon (2008), in their study with 11 Australian football coaches based on Personal Construct Theory (Kelly, 1955) note that the most important feature that should be in elite football is mental endurance. There is no coincidence that RGT is used in individual combat sports such as karate. In addition, the above-mentioned studies have been conducted based on an external perspective. However, how the elite athletes see themselves in terms of skills can be more important and predominant in terms of self-regulation. Therefore, the fact that there was no study that prioritized this methodological approach and also based on the subjective perspectives of elite characters constituted the basic justification for this work.

Personal constructs that someone uses to describe a certain element can be demonstrated by repertory grid technique (RGT). With this technique, the perception or subjective reality of an individual and a particular object can be investigated. The aim of this study is to examine the six Turkish national karate players, and how they represent themselves in the minds of a hypothetical element, ideal and non-ideal karate through self-identity graphs based on the analysis of repertory grid.

Research Questions

The general aim of this study is to examine the personal constructs of six karate players as athletes. For this purpose, the following questions were asked:

1. How far do the elite karate players locate the element I as a karate player and karate player I want to be?
2. How did the elite players position core and other elements on the self-identity graph?
3. What are the personal constructs that the elite karate players most or least associate with the element I as a karate player?

METHOD

Research Design

This study is an examination of the phenomenological character of elite Karate players aiming to reveal their personal constructs as a karate player with a RGT which is a semi-construct interview technique. The Fenomenology design focuses phenemenons which we are actually aware of but we don't have knowledge deeply about (Yıldırım and Şimşek, 2021). In such studies, it is examined perceptions of individuals, experience, tendency and individuals' aspects of event.

Participants

The participants of this study were six elite karate players majoring in Physical Education and Sports at Cukurova University. The table below shows the gender, age, and national / international success. Nicknames have been given in order not to reveal the identity of the athletes and their names have not been mentioned in the championship or tournament.

Table 1. Participants' gender, age and national/international success

Participant	Gender	Age	Important Achievements
P 1 (Melis)	Female	21	International Karate Championship 3.
			International Karate Championship 3.
P 2 (Hakan)	Male	22	International Karate Championship 1.
P 3 (Pelin)	Female	21	International Karate Championship 2.
			International Karate Championship 1.
			National Karate Championship 2.
			International Karate Championship 2.
P 4 (Davut)	Male	25	National Karate Championship 3.
			National Karate Championship 2.
			National Karate Championship 2.
			National Karate Championship 3.
			National Karate Championship 2.
P 5 (Batu)	Male	19	National Karate Championship 3.
			National Karate Championship 3.
P 6 (Bora)	Male	27	National Karate Championship 3.
			International Karate Championship 2.
			National Karate Championship 2.

Ethical Approval

Before begining to this study, Ethics Committee Approval was obtained from T.C. Cukurova University Faculty of Medicine Non-Invasive Clinical Research Ethics Committee with the decision numbered 128 on 02/12/2022.

Data Collection Methods

Personal Information Form: The athletes were asked about their gender, age, the starting age, duration of being a national sporter, questions regarding whether their families supported and were proud of them. In addition to these questions, which member of the family supported or opposed them, whether their family or family members followed their competition and how they would rate their family members' interest in sports, whether any family member was interested in karate and who guided them into karate, whether the coaches were proud of them, what score they would give (1 very bad – 10 very good), what score their coach would give

them (1 very bad – 10 very good), what score their national coach would give them (1 very bad – 10 very good), and what their national and international ratings were the questions asked.

Repertory grid technique (RGT): With the RGT, it is possible to expose people to implicit information about a certain object, person or event. In the RGT, the two basic elements of the element represent an object, a person or an event; personal constructs, the second essential element, are obtained through the comparison of these elements. In this study, the researchers have identified the elements to be included in the RGT. The first elements is related to the player's current perception of himself as a karate player, the second is the construct of karate player he envisions for himself, and the third is social self I as a karate player. While the good and bad karate player elements I know represent real people, the ideal and non-ideal elements of the karate player are hypothetical elements. The elements are as follows:

1. I as a karate player
2. A karate player I want to be
3. I as a karate player for my coach
4. A good karate player I know
5. A bad karate player I know
6. An ideal karate player for me
7. A non-ideal karate player

Procedure

The data were collected based on face-to-face interview with each athlete. In this semi-structured interview, each of the above was turned upside down on a card and 3 were requested by the participant. The participants were asked to compare these three elements. The participants were asked "Which two elements are alike and differ from each other". It is desirable for an elite athlete to express an adjective or characteristic (personal construct) about similar elements. This process was continued until seven personal constructs were reached, and when the number of elements reached seven, the session was completed. In the last stage, each element is graded 1-5 in terms of the individual pairs of constructs obtained (eg, rapid and slow). In this way, the RGT analysis was conducted. This process took approximately 40-45 minutes.

Data Analysis

This study focused on the distance of each element. The Euclidean measurement geometrically reveals the distance of the objects sought in a space (Bortz & Döring, 2006). All elements involved in a RGT do not have equal weight in terms of the individual; For this reason, I, ideal I and social I elements, which are named as core elements, are more significant than the other elements. In this study, elements such as "I as a karate player", "karate player I want to be" and "I as a karate for my coach" are considered as core elements. The Euclidean distance coefficients between the elements were calculated by Idiogrid Version 2.4 (Grice, 2007).

RESULTS

In this part of the research, the results of the analysis of the data obtained and their interpretations have been given.

Participant 1 (Melis)

Melis is a student of Çukurova University School of Physical Education and Sports and is a female karate national sporter. Melis, aged 21, started karate sport at the age of 15 guided by the physical education teacher in high school. For the past five years, she has been into Turkey's Women National Team. Her family has a twin brother also engaged in karate. Melis expresses what she sees from her most supportive siblings in this sports branch. It was seen that her family rarely followed her own competition and that she assessed their involvement in sports as "neither related nor indifferent". However, she still expresses their support that her family is proud of her and that her family does not object to her involvement in sports.

When asked, Melis states that her coach was not proud of her and that her team coach was evaluating her for 3 out of 10 points. She also stated that the national team coach might have a similar evaluation. When Melis was asked to rate herself as a karate player, she said that the rating was 5 out of 10. Below are the findings related to Melis' repertory grid.

Table 2. Participant 1's euclidean distance coefficient between the elements (Melis)

	I as a Karate player	The Karate player I wantto be	I as a karate player for my coach	A good karate player I know	A bad karate player I know karate player	Ideal karate player	Non-ideal karate player
I as a karate player	0.00						
The karate player I want to be	0.46	0.00					
I as a karate player for my coach	0.52	0.75	0.00				
A good karate player I know	0.52	0.25	0.70	0.00			
A bad karate player I know	1.19	1.43	0.73	1.36	0.00		
Ideal karate player	0.56	0.32	0.67	0.20	1.29	0.00	
Non-ideal karate player	1.44	1.66	1.02	1.56	0.49	1.49	0.00

When we look at Table 2, it is seen that the closest positioned element of "I as a karate player" is "karate player" I want to be (Euclidean distance coefficient 0.46). On the other hand, the most distant element was "non-ideal karate player" element with a distance coefficient of 1.44. What is interesting is that Melis has positioned her elements "better than any other karate player I know" and "an ideal karate player in my opinion" is more distant than "karate player I want to be". This finding means that Melis is a good karate player I know and I think it is less likely to reach an ideal karate player image. However, it can be said that Melis has high self-esteem as a karate athlete (0.46). This finding is supported by self-identity graph of Melis (See Figure 1).
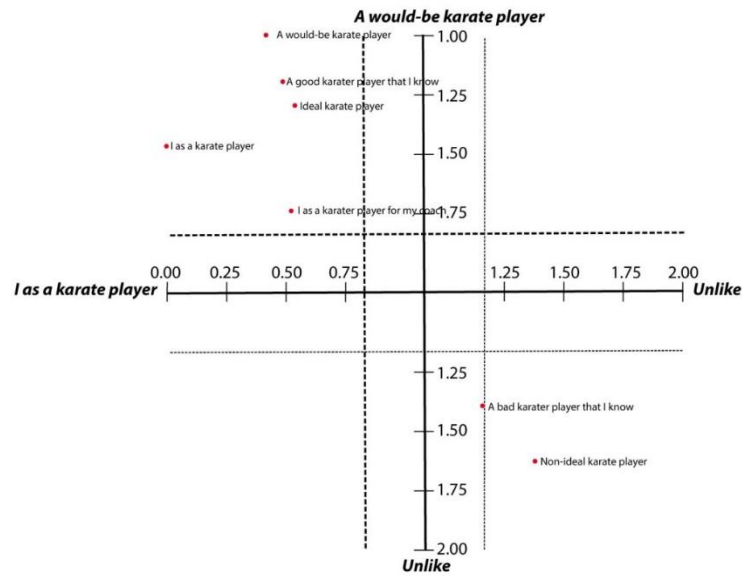
Figure 1. Self-identity graph of participant 1 (Melis)

When Figure 1 is examined, it appears that the elements of "I as a karate player", "an ideal karate player for me", "a good karate player I know", "a karate player I want to be", and "I as a karate player for my coach" are in acceptance area. In fact, this finding suggests that a karate athlete considers himself / herself compatible. In other words, even though there is a difference between the coach's own evaluation and Melis' own evaluation, it seems that there is compatability between the two in the eyes of Melis. On the other hand, the elements of "a bad karate player I know" and "a non-ideal karate player" are clearly positioned further away by Melis.

As a karate athlete, it has been found that the most recent personal perception of Melis is related to which personal constructs, and that these constructs are clear (.90), target (.83), decent (.74) and ambitious (.71). On the other hand, disciplinary (.61), rapid (.55) and especially strong (.33) personal constructs were found to be weakly correlated by Melis as compared to "I as a karate player" element.

Participant 2 (Hakan)
Hakan is a student of Çukurova University School of Physical Education and Sports and is a male karate national sporter. Hakan is 22 years old and started karate at the age of 7 with the guidance of his father. He has been a sporter in the male national team for the last 5 years. There is a brother in his family engaged in karate. Hakan expresses what he sees from his father who is the most supportive in this sports branch. It was seen that his family mostly followed his own competitions and regarded their involvement in sports as "relevant". He expresses his support from his family and his family is proud of himself. However, his family does not object to his involvement in karate.

When asked, Hakan states that his coach is proud of himself and that his club coach's assessment of himself is 7 out of 10 points. On the other hand, the national team head coach's assesment of him may be nearly same. When Hakan was asked to rate him as a karate player, he said that this rating was 10 out of 10 points. Below are the findings related to Hakan's repertory grid.

Table 3. Participant 2's euclidean distance coefficient between the elements (Hakan)

	I as a Karate player	The Karate player I want to be	I as a karate player for my coach	A good karate player I know	A bad karate player I know karate player	Ideal karate player	Non-ideal karate player
I as a karate player	0.00						
The karate player I want to be	0.41	0.00					
I as a karate player for my coach	0.41	0.63	0.00				
A good karate player I know	0.37	0.49	0.54	0.00			
A bad karate player I know	1.41	1.39	1.18	1.39	0.00		
Ideal karate player	0.36	0.54	0.41	0.36	1.36	0.00	
Non-ideal karate player	1.44	1.40	1.14	1.47	0.67	1.37	0.00

When Table 3 is examined, it is seen that the elements which are located most proximal to the element "as a karate player" are "ideal karate player" and "a good karate player I know" (Euclidean distance coefficient 0.36 and 0.37). On the other hand, the most distant element was "non-ideal karate player" element with a distance coefficient of 1.44. It has been found that Hakan locates the elements "I am a karate player" and "I am a karate player as a coach" as a "karate player" (Euclidean distance coefficients 0.41). Hakan has located the element of "karate player" I want to be to be more distant from him than the elements of "a good karate player I know" and "ideal karate player". This finding suggests that the elements of "a good karate player" and "ideal karate player" I know are relatively more accessible than "karate player" I want to be. Hakan's self-esteem as a karate athlete can be said to be high (0.41). These findings are supported by the athletic self-identity graph (See Figure 2).
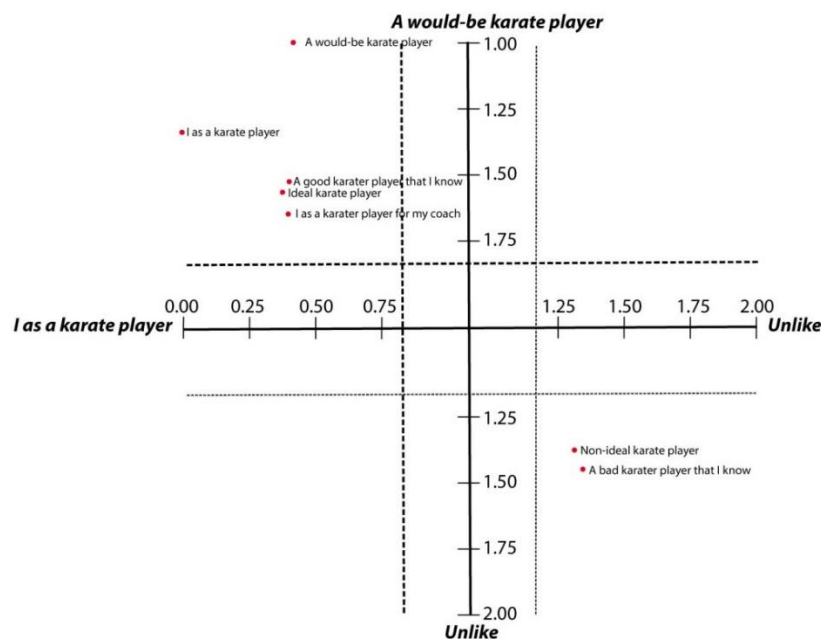

Figure 2. Self-identity graph of participant 2 (Hakan)

When Figure 2 is examined, it appears that the elements of "I am a karate player", "an ideal karate player for me", "a good karate player I know", "a karate player I want to be" and "I as a

karate player for my coach" are in acceptance area. In fact, this finding suggests that a karate athlete considers himself / herself as compatible. On the contrary, it seems that Hakan has located the elements "distant" by a "bad karate player I know" and "a non-ideal karate player".

As a karate athlete, it is observed that the current perception of Hakan related to which personal constructs are most related to fit (.93), persistent (.92), determined (.84), disciplined and regular (.82). Despite not showing a low relationship, Hakan has associated himself with his quick and respectful personalities (0.78) as a karate player.

Participant 3 (Pelin)

Pelin is a student of Çukurova University School of Physical Education and Sports and is a female karate national sporter. Pelin is 21 years old and started karate sport at the age of 11 with the guidance of her mother. She has been a sporter in the women's national team for the past four years. There is no one in her family involved in karate sports. Pelin states that she does not receive support from her family in this sports branch. It has been seen that her family never followed her own competition and that she assessed their involvement in sports "neither related nor irrelevant". However, she still says her family is proud of her. However, only her father objected to her involvement in karate.

When asked, Pelin states that her coach is not proud of herself and that his club coach's assessment of herself is 5 out of 10 points. However, she said that the national team head coach's assesment of her may be nearly same. When Pelin was asked to rate herself as a karate player, she said it was 7 out of 10. Below are the findings related to Pelin's repertory grid.

Table 4. Participant 3's euclidean distance coefficient between the elements (Pelin)

	I as a Karate player	The Karate player I want to be	I as a karate player for my coach	A good karate player I know	A bad karate player I know karate player	Ideal karate player	Non-ideal karate player
I as a karate player	0.00						
The karate player I want to be	0.46	0.00					
I as a karate player for my coach	0.49	0.71	0.00				
A good karate player I know	0.54	0.30	0.70	0.00			
A bad karate player I know	0.98	1.26	0.99	1.31	0.00		
Ideal karate player	0.56	0.39	0.68	0.28	1.13	0.00	
Non-ideal karate player	1.31	1.63	1.29	1.71	0.50	1.55	0.00

When Table 4 is examined, it is seen that the closest positioned element of "I as a karate player" is "karate player" I want to be (Euclidean distance coefficient 0.46). On the other hand, the most distant element was "non-ideal karate player" element with a distance coefficient of 1.31. Pelin located "ideal karate player" and "a good karate player I know" elements more distant than "karate player" I want to be. These findings indicate that Pelin sees the element of "karate player" which she wishes to be a more important target than the elements of "ideal karate player" and "a good karate player I know". Pelin's self-esteem as a karate athlete can be said to be high (0.46). This finding is supported by Pelin's self-identity graph (See Figure 3).
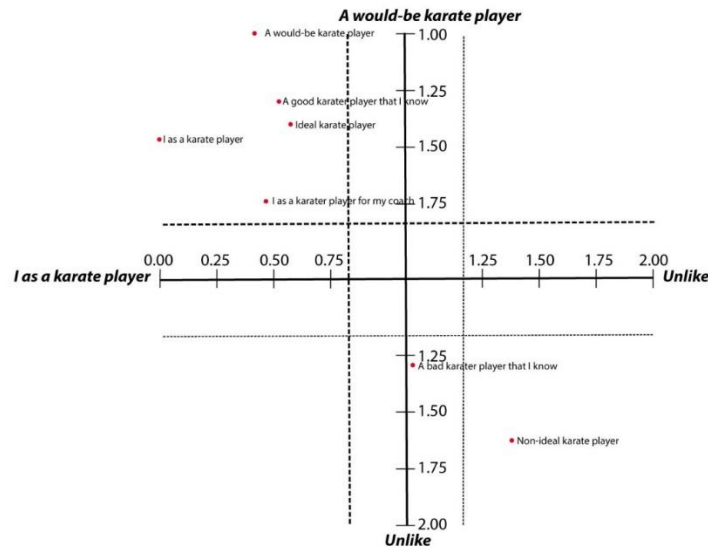
Figure 3. Self-identity graph of participant 3 (Pelin)

When Figure 3 is examined, it appears that the elements of "I as a karate player", "an ideal karate player for me", "a good karate player I know", "a karate player I want to be" and a "I as a karate player for my coach" are acceptance area. Each of the elements of Pelin (the current self, the ideal self, and the social self) are positioned so that they are compatible with each other in the self-identity chart. This finding indicates that Pelin is pleased with herself as a karate player. Pelin located the elements of a "bad karate player I know" and "a non-ideal karate player" in the conflict field. Nevertheless, Pelin located the element of "a bad karate player I know" closer to herself than the previous two.

As a karate athlete, it has been found that this construct is shareholder (.86) when the current perception of Pelin herself is related to which personal constructs are most related. On the contrary, personal constructs of self-development (.63), non-traditional (.55), new experience (.48), continuity (0.40), self-adaptation (0.39) self-element personal structures were correlated relatively weak with element of "I as a karete plyer" by Pelin.

Participants 4 (Davut)
Davut is a student of Çukurova University School of Physical Education and Sports and is a male karate national sporter. Davut is 25 years old and started to play karate at the age of 5 when his father guided him. He has been a sportman in the male karate national team for the last four years. Her family has a mother and father engaged in karate. Davut expresses that he sees his father as the most supportive in this sport branch. It was seen that his family always followed his own competitions and considered their involvement in karate as "relevant". He expresses his support from his family and his family is proud of himself.

In a question, Davut states that his coach is not proud of himself and that the club coach has 5 out of 10 points in Davut' own evaluation. On the other hand, it was seen that the national team coach expressed 3 points out of 10 points when evaluating himself. When Davut was asked to rate himself as a karate player, he said that it was 6 out of 10. Below are the findings of Davut's repertory grid.

Table 5. Participant 4's euclidean distance coefficient between the elements (Davut)

	I as a Karate player	The Karate player I want to be	I as a karate player for my coach	A good karate player I know	A bad karate player I know karate player	Ideal karate player	Non-ideal karate player
I as a karate player	0.00						
The karate player I want to be	1.07	0.00					
I as a karate player for my coach	0.41	1.19	0.00				
A good karate player I know	0.77	0.41	0.92	0.00			
A bad karate player I know	1.09	1.84	0.88	1.55	0.00		
Ideal karate player	0.60	0.59	0.70	0.34	1.35	0.00	
Non-ideal karate player	0.55	1.40	0.59	1.11	1.00	0.99	0.00

When Table 5 is examined, it is seen that the element which is located most proximal to the element "I as a karate player" is "I as a karate player for my coach" (Euclidean distance coefficient 0.41). On the contrary, the most distant element was the elements of "karate player" and "bad karate player" (Euclidean distance coefficients 1.07 - 1.09 respectively). This finding suggests that Davut saw himself at about equal distance to both elements as a karate player. Likewise, ideal and non-ideal elements of the karate are located at about equal distance to Davut. It can be said that his self-esteem is low owing to Davut's positioning of karate player as I as "karate player" and "the karate player" which I want to be "distant" (the Euclidean distance coefficient between both elements is 1.07). This finding is supported by Davut's self-identity graph (See Figure 4).
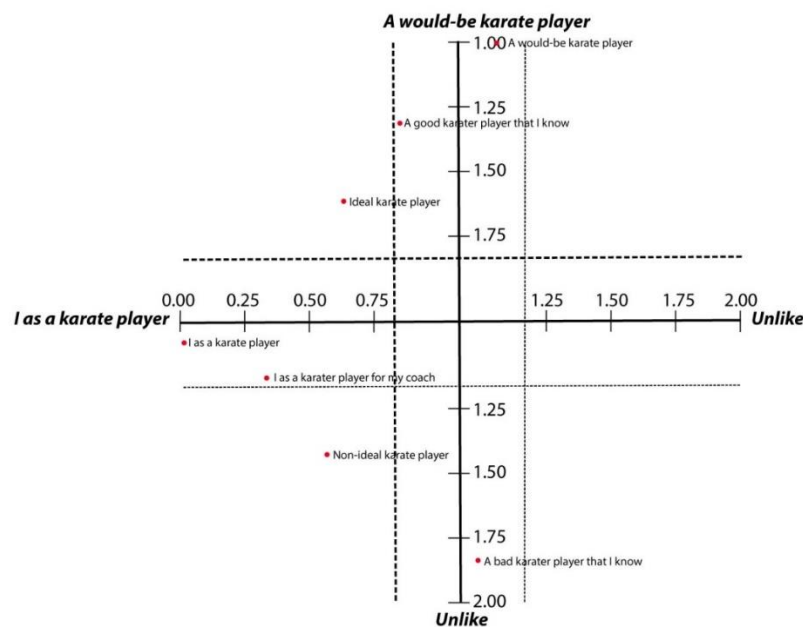

Figure 4. Self-identity graph of participant 4 (Davut)

When Figure 4 is examined, it is seen that the elements of "I as a karate player", "I as a karate player according to the coach" and "non-ideal karate player" are located in the ambivalent space. This finding suggests that Davut applies both positive and negative personal constructs

to these three elements. In fact, it can be said that Davut's ideas about a single ideal and non-ideal karate are clear. All other elements are located in the area of indifference, representing 0.80-1.20. If any element is as long as this distance coefficient expressed to the current and / or ideal elements of I, then that element is positioned in the field of difference (the hyphenated field) on the self-identity graph. It is advisable not to make a clear comment on the elements located in the field of indifference.

As a karate athlete, when looking at which personal constructs Davut's most recent perception of himself is related to, these constructs are classified as awareness (-.78), motivation and dedication (-.45), labor (-41), general dominance 27), modest (0.11), versatile (-0.10) and struggle (-0.01). Unlike the other athletes, Davut seems to associate all these personal things negatively with him (except for being modest). As a matter of fact, Davut 's self - esteem as a karate player is obviously lower than the other participants of this study.

Participants 5 (Batu)

Batu is a student of Çukurova University School of Physical Education and Sports and is a male karate national sporter. Batu is 19 years old and started to play karate at the age of 11 when his teacher of physical education of sport guided him. He has been a sportman in the male karate national team for the last five years. In his family, he has an older sister who is engaged in karate sports. Batu states that he received the most support from his brothers in this sport branch. It was observed that his family mostly followed his own competitions and evaluated their interest in sports as "neither related nor unrelated". However, he states that he received support from his family and that he was proud of him. He states that relatives oppose karate.

When Batu was asked a question, he states that his coach is proud of himself and that his club coach's assessment of himself is 7 out of 10 points. On the other hand, the national team head coach's assesment of himself may be nearly same. When asked about Batu's assessment of himself as a karate athlete, he stated that this assessment was 9 out of 10. Below are the findings of Batu's repertory grid.

Table 6. Participant 5's Euclidean Distance Coefficient between the elements (Batu)

	I as a Karate player	The Karate player I want to be	I as a karate player for my coach	A good karate player I know	A bad karate player I know karateplayer	Ideal karate player	Non-ideal karate player
I as a karate player	0.00						
The karate player I want to be	0.39	0.00					
I as a karate player for my coach	0.15	0.41	0.00				
A good karate player I know	0.39	0.00	0.41	0.00			
A bad karate player I know	1.29	1.52	1.23	1.52	0.00		
Ideal karate player	0.52	0.61	0.50	0.61	0.97	0.00	
Non-ideal karate player	1.42	1.63	1.36	1.63	0.22	1.07	0.00

When Table 6 is examined, it is seen that the element which is located most proximal to "I as a karate player" is "I as a karate player" (Euclidean distance coefficient 0.15). On the other hand, the most distant element was "non-ideal karate player" element with a distance

coefficient of 1.42. It is observed that Batu places the elements of "karate player" and "karate player" which I want to be "close to" I as a "karate player" and these elements overlap. He placed the element of "ideal karate player" more distant than the elements of "karate player" I want to be and "a good karate player I know". As a result of this finding, Batu sees being a "karate player" and "a good karate player he wants to be" as a more important target than "ideal karate player". Batu's self-esteem as a karate athlete can be said to be high (0.39). These findings are supported by Batu's self-identity graph (See Figure 5).
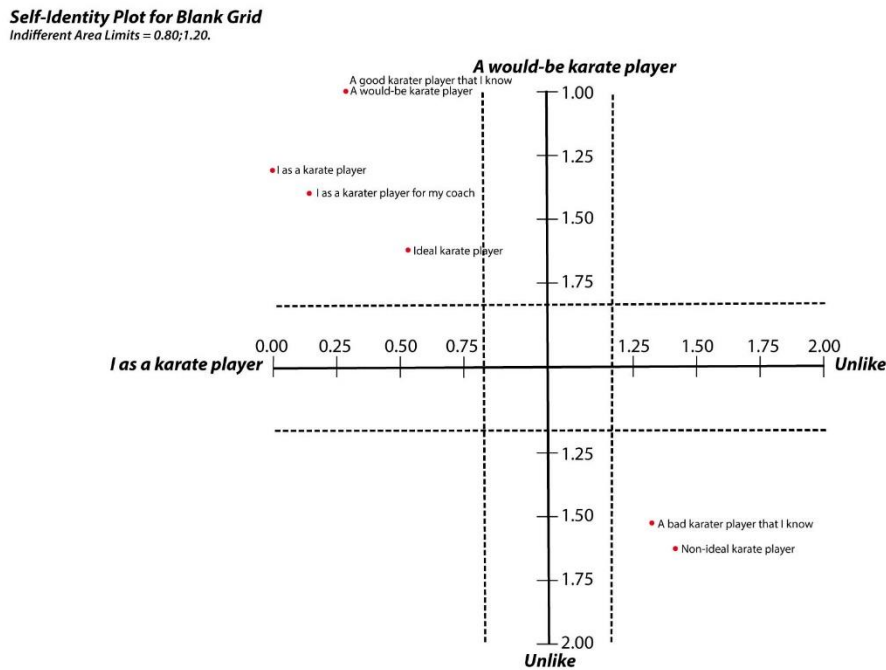

Figure 5. Self-Identity Graph of Participant 5 (Batu)

When Figure 5 is examined, it appears that the elements of "I am a karate player", "an ideal karate player for me", "a good karate player I know", "a karate player I want to be" and "I as a karate player for my coach" are acceptance area. In fact, this finding suggests that a karate athlete considers himself / herself as compatible. Batu matches well with the karate player he likes to be, the good karate player he knows (0.00). According to this, it can be said that Batu wants to be like a good karate player he knows well. On the contrary, it appears that Batu has placed the elements "a bad karate player I know" and "a non-ideal karate player" quite distant.

As a karate athlete, when looking at which personal constructs Batu's current perception of himself is related to which personal constructs, these constructs are classified as fast and equilibrium (.94), controlled (.92), good technique (.88), explosive (.84) (.80). On the other hand, the focus (.61) has shown that the personal construct is weakly correlated with Batu's element as "I as a karate player".

Participant 6 (Bora)

Bora is a student of Çukurova University School of Physical Education and Sports and is a male karate national sporter. Bora is 27 years old and he was started karete by supporting his family, when he was 4 years old. He has been a sportman in the male karate national team for the last ten years. There is a brother in his family involved in sports. Bora expresses what you see from the most supportive parents, siblings and brothers in this sport branch. It was seen that

his family always followed his own competitions and considered their interest in sport as "relevant". He expresses his support from his family and his family is proud of himself. However, his family does not object to his involvement in karate.

When asked, Bora says that his coach is proud of himself, and his club coach may estimate him 9 out of 10 points. However, he said that the national team head coach may estimate similarly. When Bora was asked to rate himself as a karate player, he said that it was 9 out of 10. Below are the findings related to Bora's repertory grid.

Table 7. Participant 6's Euclidean Distance Coefficient between the elements (Bora)

	I as a Karate player	The Karate player I wantto be	I as a karate player for my coach	A good karate player I know	A bad karate player I know karateplayer	Ideal karate player	Non-ideal karate player
I as a karate player	0.00						
The karate player I want to be	0.21	0.00					
I as a karate player for my coach	0.25	0.39	0.00				
A good karate player I know	0.21	0.00	0.39	0.00			
A bad karate player I know	1.40	1.50	1.25	1.50	0.00		
Ideal karate player	0.21	0.00	0.39	0.00	1.50	0.00	
Non-ideal karate player	1.38	1.48	1.23	1.48	0.26	1.48	0.00

When Table 7 is examined, it can be seen that the element "I as a karate player" It is observed that these three elements are located closest to the "karate player" I want to be, "a good karate player I know" and "ideal karate player" elements (the Euclidean distance coefficient is 0.21). On the other hand, the most distant element was " a bad karate player" I know a distance coefficient of 1.40. As a karate athlete, I can say that Bora's self-esteem is high (the distance coefficient between the elements of the karate I want to be with the element as a karate player is 0.21). This construct is supported by Bora's self-identity graph (See Figure 6).
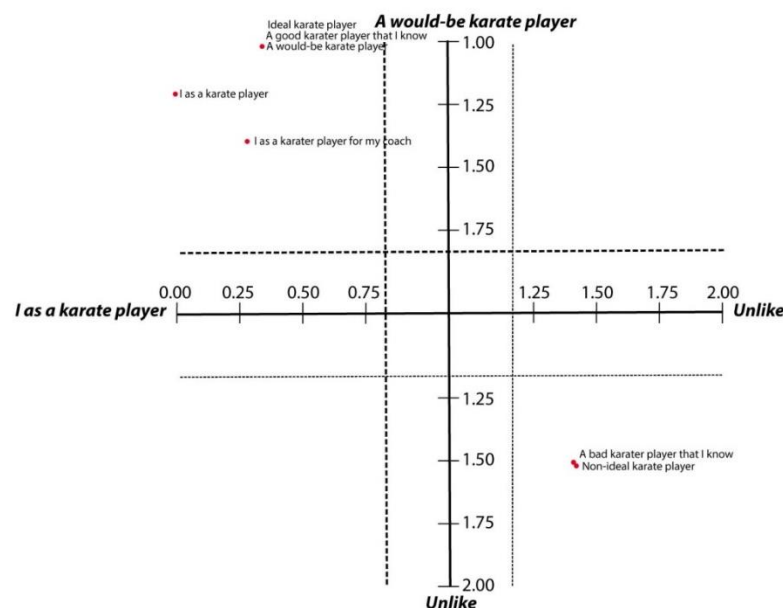

Figure 6. Self-identity graph of participant 6 (Bora)

When Figure 6 is examined, it appears that the elements of "I am a karate player", "an ideal karate player for me", "a good karate player I know", "a karate player I want to be" and "I as a karate player for my coach" are acceptance area. In fact, this finding suggests that a karate athlete considers himself / herself as compatible. Bora matched one of the best karate players he knows, the ideal and the desired karate player elements (0.00). Accordingly, the good karate player he knows about Bora is probably a role model for him. On the contrary, the elements of "a bad karate player I know" and "a non-ideal karate player" are located distant.

As a karate athlete, it was observed that these constructs had the highest level of technical difficulty (.97), self-confidence (.95), gentleman (.94), good performance (.91) and technique (0.87), respectively. The fact that all these personal constructs have a high positive relationship with me as a karate player indicates that this athlete is quite satisfied with himself. As a matter of fact, Bora has a very high self-esteem as a karate player.

DISCUSSION

In this study, the personal and social identities of the six elite national karate players were examined through self-identity graphs. The first finding was that participants were concerned about their self-esteem as a karate player. Expectations were high for elite athletes and having a degree in national / international competitions; self-esteem would be high. As a matter of fact, when examining karate personality, all karate players except one karate player karate player had high self-esteem. Therefore, studies which has done carried out that elit athletes' self-esteem is high (Ludlam et al. 2016; Ouyang et al. 2020). In this study, the self-esteem of the athletes was obtained by calculating the distance between the elements of "I as a karate player" and "karate player" I want to be. Accordingly, the lower the distance coefficient between these two elements, the higher the self-esteem. While the coefficient and the distance between the two elements were the lowest, this was followed by Batu, Hakan and Melis and Pelin with the same distance coefficients. On the other hand, as a karate player, Davut, who sees the elements of the karate player I want to be with the element with a distance coefficient of 1.07, is different from the other athletes and has a low self-esteem as a karate player.

According to Kelly (1955; 1991), who put forward the theory of personal construction, human behavior is based on reality. Although Kelly has rejected radical phenomenology, realism is only what people perceive. The theory of personal construct predicts that people will investigate their own personality within their own world (Feist, 2009). In this study, although Davut was successful, the calculation of the self-esteem associated with sport reveals how individual reality is different from objective reality. Yet, the other participants' self-esteem associated with the sport coincides with the sports achievement they have obtained. The low self-respect of Davut may be related to his self-sufficiency. According to Mills (2001), self-efficacy is a concept associated with one's ability to manage his or her own abilities and the ability to manage the direction of one's actions. Concepts such as behavioral selection, performance, effort against defeat, strategic choice, and objective choice are also expressed under the concept of self-efficacy (Mills, 2001). The personal constructs that Davut uses about himself as a karate player (such as general domination of karate sport, labor, dedication,

motivation and awareness) offer clues about his self-sufficiency. The fact that this athlete negatively associates himself with these personal constructs may have influenced the low self-esteem as a karate player.

The distance coefficients between the elements reveal that both female karate players (Melis and Pelin) see themselves closer to the element of karate player I want to be, a good karate player I know and an ideal karate player element. This finding suggests that a good karate player and an ideal karate player element of their acquaintances are beyond their dreams in terms of both athletes. Disciplined, speed and power that Melis regards as relatively inadequate; Pelin, on the other hand, needs to perceive herself more positively in terms of personal experiences such as new experience, continuity, adaptation and feeling. From the point of view of personal and social sports identities, it is seen that the identities of both female karate are compatible. In other words, the perception of these athletes as a karate
player is largely in line with their perception of their coaches.

Bora, who has a higher self-esteem, perceives himself positively in terms of all personal constructs. As a matter of fact, Bora has matched a good karate player, an ideal karate player, and the karate player elements I wanted to be, and located these three elements closer to him. In the same way Batu sees himself positively in terms of all personal constructs except focusing. He is also a good karate player I know and I have matched the elements of the karate I want to be, and located him close to himself. But Batu, unlike Bora, idealizes the ideal image of the karate, and according to Batu, no one around him reflects his ideal karate player profile in his mind.

Batu and Bora's perceptions of themselves and their coaches' perceptions about them from their perspective are largely compatible. As a matter of fact, as a karate player, we calculated the Euclidean distance coefficient between the elements I and I as a karate player by coaching as 0.15 for Batu and 0.25 for Bora. A low value of the distance coefficient between these two elements means that only the personal and social sports identity overlap. However, it cannot be interpreted on the positive or negative nature of self and social outcome by going beyond this value. For such an interpretation to be made, the athlete must associate himself or herself with the personal constructs s/he poses, either positively or negatively. As a matter of fact, both Batu and Bora have positively associated "I as a karate player" and "I as a karate player for my coach". Accordingly, both athletes represent their personal and social sports identity predominantly by positive constructions. The finding of that the athletes who feel emotional trust and gratitude to their trainer have higher self-esteem and the finding is suported by Chen and Huei Wu (2014). That these athletes' sport identities are strong and self- efficacy high has shown paralellisim with findings Cabrita et al. (2014) athletes who have strong their identitiy of sports have higher self-efficacy.

On the contrary, Davut, who is the lowest among the athletes in terms of self-esteem as a karate player, has negatively associated himself with more personal constructs. Davut does not only perceive himself negatively; according to his view, his coach perceives im in this way. For this reason, the distance coefficient between the elements "I as a karate player" and "I as a karate player with coach" showed a value as low as 0.41. This finding suggests that Davut's personal and social sports identity is negative but compatible.

Like other sporter, Hakan's personal and social sports identities are compatible. What is interesting is that this athlete has located himself more distant from the element of "karate player that I would like to be", than the elements of "a good karate player I know" and "an ideal karate player". According to Hakan, this means that element of "The karate player I want to be" is more different from and less achiavable element of "Ideal karate player". Hakan has relativized his personal constructs of speed and respect to himself relatively less. The development of these features of Hakan will bring him closer to the good karate player and the ideal karate player elements he knows. In this study, it was observed that five of the six karate charts on which self-identity was drawn were placed in the "I am a karate player, a good karate player and an ideal karate player" acceptance area as a karate player. On the other hand, the elements of the "bad karate player and non-ideal karate player" that we have identified are located in the area of conflict. In particular the core elements (I as a karate player, I as a karate player for my coach) are located relatively close to each other by these athletes. These findings indicate that although these five athletes are thought to be necessary to develop, they are greatly satisfied with themselves. The findings also reveal that the karate players' personal sports identities and social sports identities have a positive meaning. In other words, self-impressions of these athletes are in line with the impressions of others (coaches) on them cyclically. In the study which has done by Weis et al. (1990) has revealed that individuals who have also high self-esteem have high social self and the finding of this study supports this research that shows elite karete players' personal and social identity are high. Moreover, in the research which has been conducted with professional Rugby players has determined that athletes who have high social identitiy have also high self-efficacy and these athletes contribute much more to success of team. This outcome matchs up with finding of this study (Evans et al. 2023).

As an athlete, the fact that these five highly regarded karate players place themselves in the same quarter (acceptance area) as a good karate player and an ideal karate player central element means that they use similar personalities for these elements. On the other hand, a bad karate player I know and a non-ideal karate player are located away from the core elements (in the area of conflict). The reason for this is that the personal constructs used by these five karats are negatively associated with these two elements. As a result, the self-identity graph of these five karate players is compatible with the achievements they have obtained so far and is therefore an expected result. Below is a discussion of Davut's self-identity graph, which is unique and does not reflect his success so far.

Davut has positioned I as a karate player, I as a karate player for my coach, and non-ideal karate player elements in the ambivalence area. Davut's assessment of these elements is both positive and negative. In fact, it can be said that the head of the case for these elements is quite complicated. In the self-identity chart, Davut positioned only the ideal karate player and the good karate player elements I know in the field of acceptance. On the other hand, I was positioned in the field of conflict by a bad karate player phenomenon I know. In Davut's self-identity chart, care should be taken to explain and interpret of all elements outside of the ideal and non-idealized karate. That is why all the other elements except these two elements are located in the field called difference (the area indicated by the hyphenated area on the self-identity graph).

If an element has a distance of 0.8 to 1.2, which is the core element, self or the ideal essence, the element is located in the area of difference (Bartholomew, 1993; Böker at al., 2000). As a matter of fact, Davut saw a bad element of the karate player, which I recognize with core elements (I am a karate player, I am a karate player, according to a coach). If an element is in the field of indifference in the self-identity graph, it means that this element does not resemble or resemble the self-elements (Bartholomew, 1993; Böker at al., 2000); When Davut was five years old, he was started karete sport with supporting his father. Unlike other athletes, both parents of these athletes are karate players. Because his family speak about karete sports during his childhood, he might arouse interest karate sport. There may be a lot of anticipations from Davut, who are followed by their parents in every competition.

CONCLUSIONS AND RECOMMENDATIONS

This study aimed to evaluate the personal and social sports identities of the six elites and the national karate player through the self-identity graph. Analysis of the players' self-identity graph indicates that the personal and social sports identities of all the karate players outside the karate are positive. It has seen that as a karate player, a sporter describes himself as a karate player, ideal self, and as a karate player his social self with positive personal constructs. Moreover, these three core elements were found to be compatible with each other by the athletes. In addition, all of the elite and national karate players except for a karate player have high self-esteem related to sports. In conclusion, this study shows that sports self-esteem related to self-identity graphs will provide functional information in the identification of sports self-esteem, personal and social sports identities.

This study was carried out on young adult karate elites who have demonstrated success in national and international tournaments in Turkey; personal and social sports identities of amateurs and junior karate players can be understood through self-identity graphs. In addition, the development of a karate player over time can be assessed longitudinally through self-identity graphs. Given the functional and practical information that the self-identity graph can provide, it is thought to be benefical to use this method more widely and in a larger number of studies.

In this study, the subjective perspectives of the karate players were examined; the evaluations of the trainers towards these karate players could also be examined in the same way. Thus, the perceptions of the karate people and their perceptions of others can be examined within the framework of reciprocity. Findings obtained in this study have high internal validity and weak external validity. Findings are therefore limited only to the participants of this study. The research patterns that can be used to make generalizations and the research questions in this study can be answered with future research. Karate player's self-identity graphs are derived from the analysis of repertory grid data, whereas repertory grid data can also be analyzed by hierarchical clustering analysis and basic component analysis. However, since this study is not focused on this, the data obtained are not resolved in terms of these analysis options. In future research, the elements or individual constructs of the karate can be tested by a hierarchical clustering analysis of similarities or groupings. In addition, it can be shown by the basic component analysis that which personal constructs have a greater weight in terms of the karate

players. Finally, the individual constructs obtained within the scope of this study are not classified, content analysis can be classified under the headings such as physical competence, cognitive competence, personality traits.

Declaration of Conflict Interest
The authors have no conflicts of interest to declare.

Researchers' Contribution Rate Statement: Research Design-İS; CT, Data Collection-BP; CT, Statistical Analysis- İS; BP: Preparation of the Article, İS; CT; BP.

Ethical Approval
Board Name: T.C. Cukurova University Faculty of Medicine Non-Invasive Clinical Research Ethics Committee
Date: 02.12.2022
Issue Number: 128

Sanberk, İ., Türkeri, C., & Parsak, B. (2023). Investigation of personal and social sports identities of elite national karate players via self identity chart. *Journal of Sport Sciences Research, 8*(3), 550-570.

REFERENCES

Barker, J., McCarthy, P., Jones, M., & Moran, A. (2011). *Single case research methods in sport and exercise*. Routledge.

Bartholomew, U. (1993). Die Selbst-identitäts-graphik [The self-identity graphic]. *Einführung in die Repertory Grid-Technik, 2*, 30-37.

Böker, H. (1999). Methodische Zugangswege zur Erfassung der Selbstbilder und der Objektbeziehungen. In *Selbstbild und Objektbeziehungen bei Depressionen* (pp. 41-86). Steinkopff.

Böker, H., Hell, D., Budischewski, K., Eppel, A., Härtling, F., Rinnert, J., Schmeling v., C., Will, H., Schoeneich, F., & Northoff, G. (2000). Personality and object relations in patients with affective disorders: Idiografic reseach by means of repertory grid technique. *J. Affect. Disord., 60,* 53-60. https://doi.org/10.1016/S0165-0327(99)00161-5

Bortz J., & Döring N. (2006). *Forschungsmethoden und Evaluation für Human- und Sozialwissenschaftler.* Springer.

Cabrita, T. M., Rosado, A. B., Leite, T. O., Serpa, S. O., & Sousa, P. M. (2014). The relationship between athletic identity and career decisions in athletes. *Journal of Applied Sport Psychology, 26*(4), 471-481. https://doi.org/10.1080/10413200.2014.931312

Chen, L. H., & Wu, C. H. (2014). Gratitude enhances change in athletes' self-esteem: The moderating role of trust in coach. *Journal of Applied Sport Psychology, 26*(3), 349-362. https://doi.org/10.1080/10413200.2014.889255

Christensen, M. K. (2009). "An eye for talent": Talent identification and the "practical sense" of top-level soccer coaches. *Sociology of Sport Journal*, *26*, 365–382. https://doi.org/10.1123/ssj.26.3.365

Evans, A. L., Coffee, P., & Barker, J. B. (2023). The effects of social identity and social identity content on cohesion, efficacy, and performance across a competitive rugby league season. *International Journal of Sport and Exercise Psychology*, 1-19. https://doi.org/10.1080/1612197X.2023.2229349

Feist, J., & Feist, G. J. (2008). *Theories of personality*. McGraw-Hill.

Feixas, G., Marti, J., & Villegas, M. (1989). Personal construct assessment of sport teams. *Journal of Constructivist Psychology*, *2*, 1, 49 - 54.

Fromm, M. (2010). Grid-methodik. In G. Mey (Hrsg.), *Handbuch qualitative forschung in der psychologie* (1.Aufl., S. 524–537). VS Verlag für Sozialwissenschaften.

Gucciardi, G.F., & Gordon, S. (2008). Personal construct research interview: Mental toughness in sport. *Personal Construct Theory & Practice, 5,* 119-130.

Hilscher, P. (2003). *Sportidentität und Motivation österreichischer Spitzen-, Amateur- und Nachwuchssportler/innen – Eine empirische Studie*. Am Institut für Sportwissenschaft der Universität Wien.

Hilscher, P. (2007). Sportidentität und -motivation. Zur Bedeutung des Sports im Leben österreichischer Athleten. In P. Hilscher, G. Norden, M. Russo & O. Weiß (Hrsg.), *Entwicklungstendenzen im Sport* (S. 79-100). Lit.

Kelly, G. A. (1991). *The psychology of personal constructs. Volume 1: A theory of personality.* WW Norton and Company.

Kelly, G. A. (1955). *The psychology of personal constructs. Volume 1: A theory of personality.* WW Norton and Company.

Ludlam, K. E., Butt, J., Bawden, M., Lindsay, P., & Maynard, I. W. (2016). A strengths-based consultancy approach in elite sport: Exploring super-strengths. *Journal of Applied Sport Psychology, 28*(2), 216-233. https://doi.org/10.1080/10413200.2015.1105881

Sanberk, İ., Türkeri, C., & Parsak, B. (2023). Investigation of personal and social sports identities of elite national karate players via self identity chart. *Journal of Sport Sciences Research, 8*(3), 550-570.

Mills, K. D., Munroe, K. J., & Hall, C. R. (2000). The relationship between imagery and self-efficacy in competitive athletes. *Imagination, Cognition and Personality*, *20*(1), 33-39. https://doi.org/10.2190/FC65-AP4T-E94J-5W7P

Ouyang, Y., Wang, K., Zhang, T., Peng, L., Song, G., & Luo, J. (2020). The influence of sports participation on body image, self-efficacy, and self-esteem in college students. *Frontiers in Psychology, 10,* 3039. https://doi.org/10.3389/fpsyg.2019.03039

Slater, P. (1977). *The measurement of intrapersonal space by grid technique: Vol. 2. Dimensions of intrapersonal space*. Wiley

Vrljic, K., & Mallet, C. J. (2008). Coaching knowledge in identifying football talent. *International Journal of Coaching Science*, *2*(1), 63–81.

Weiß, O. (1999). *Einführung in die Sportsoziologie*. WUV-Universitätsverlag.

Winter, D. A. (2013). Still radical after all these years: George Kelly's the psychology of personal constructs. *Clinical Child Psychology and Psychiatry*, *18*(2), 276-283. https://doi.org/10.1177/1359104512454264

Yıldırım, A., ve Şimşek, H. (2021). *Sosyal bilimlerde nitel araştırma yöntemleri*. Seçkin.