The Turkish Adaptation of the Prosocial and Antisocial Behavior in Sport Scale (PABSS)

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Abstract

The Prosocial and Antisocial Behavior in Sport Scale" is a five-likert scale that contains 20 items with 4 subdimensions. Sub-dimensions are "prosocial behaviors towards teammates ", "prosocial behaviors towards opponents", "antisocial behaviors towards teammates" and "antisocial behaviors towards opponents". However, there is not a scale which aims to investigate prosocial and antisocial behaviors in sport contexts in Turkey. The aim of this study is to test the validity and reliability of Turkish version of The Prosocial and Antisocial Behavior in Sport Scale (PABSS), developed by Kavussanu and Boardley (2009). The scale was translated using a backtranslation technique, which includes the use of a panel of experts and interpreters to translate the items from the source language to the target language and then back-translate them to the source language. Items were administered to 222 elites from various fields namely football, basketball, handball and field hockey in the city of Ankara, Turkey. The group consists of 77 females (34.7%) and 145 males (65.3%). Their ages range from 17-37 (M: 22.57). Principal Component Analysis-PCA was used in order to test construct-validity of PABSS. As for the reliability of the scale, cronbach alpha was employed. As a result of factor analyses, the Turkish version of PABSS, consisting of 20 items with four sub-dimensions, seemed to work fine. Cronbach alpha values were as follows: 0, 70 for Factor 1 (prosocial behaviors towards teammates), 0, 72 for Factor 2 (prosocial behaviors towards opponents, 0, 72 for Factor 3 (antisocial behaviors towards teammates) and finally 0, 75 for factor 4 (antisocial behaviors towards opponents). The values obtained were considered to be "relatively reliable". The findings reveal that the Turkish version of PABSS can be used to measure prosocial and antisocial behaviors of the athletes with both sexes and in different team sports.

Key words: Prosocial behavior, antisocial behavior, reliability and validity

1. Introduction

Today studies focusing on moral perspective in sports arouse interest. Studies in the field of ethics of sports are increasing and diversifying each day. One of these studies is the research done by Kavussanu and Boardley (2009) on prosocial and antisocial behaviors of the athletes in different team sports. Prosocial behavior is defined as "voluntary behavior intended to help or benefit another individual" (Eisenberg, Fabes and Spinrad, 2006, p. 646). It can be argued that if we want to promote sport as a vehicle for character development, we need to determine whether prosocial behaviors occur in the athletic context (Kavussanu, 2005). Prosocial behaviors in sports include the behaviors such as "encouraging the teammate", "helping an injured opponent". On the other hand, the term "antisocial behavior" is used to refer to behaviors intended to harm or disadvantage another individual; and these behaviors have negative consequences for others and essentially reflect unfair play (Kavussanu, 2005). Antisocial behaviors in sports consist of such behaviors "verbally abusing a teammate" and "trying to wind up an opponent" (Kavussanu & Boardley, 2009).

Kavussanu and Boardley (2009) took the social cognitive theory of moral thought and action (Bandura, 1991), which focuses on overt behavior, as a starting point when developing the instrument. In line with the social cognitive theory of moral thought and action, different types of rules are employed to determine whether behavior is reprehensible. In other words, the consequences of the action, the perceived personal motivators for the conduct, and whether it is directed at other people are considered. Kavussanu and Boardley (2009) believe that as far as moral dilemmas are concerned, individuals are expected to relate the moral actions in the most relevant situations where behaviors are reprehensible, only then can we reach a consensus that moral actions are essential aspects of character development.

The components mentioned above specifically the one "the consequences of the act for others" should be one of the most important considerations in judging behavior. Presumed intent (i.e., one's motives) also plays a critical role in the social labeling of behavior, but "intention is never used as the decisive definer of conduct" (Bandura, 1991, p. 68). Some years later, Bandura (1999) mentioned the dual aspects of morality: proactive and inhibitive. Proactive morality, by definition, is the power to behave humanely, whereas inhibitive morality is expressed in the power to refrain from behaving inhumanely. In terms of morality, "people do good things as well as refrain from doing bad things" (Bandura, 1999, p. 194). Therefore, the higher the morality levels, the more often individuals are involved in positive social behaviors avoiding negative social acts.

As the importance of moral values in sports increase, prosocial and antisocial behaviors need to be investigated in the field. However, there was not a reliable and valid instrument that measures a wide range of prosocial and antisocial behaviors in team sports. According to Kavussanu and Boardley (2009), the development of PABSS, without a doubt, is expected to enable researchers to examine the social-moral conduct taking place in sports from a holistic perspective because prosocial and antisocial behaviors toward teammates and opponents could be investigated. It has been clearly seen that PABSS has been extensively used in a lot of research in different fields (Kavussanu, 2006; Kavussanu, Seal, & Phillips, 2006; Sage, Kavussanu, & Duda, 2006; Kavussanu, Stamp, Slade, & Ring, 2009; Boardley & Kavussanu, 2009; Hodge & Lonsdale, 2011; Boardley & Kavussanu, 2010). In Turkish context, however, there is not a scale which aims to investigate prosocial and antisocial behaviors in sport contexts in Turkey or scales which aim to assess fair play are specific to one field, football. To this end, this study was carried out to test the validity and reliability of Turkish version of The Prosocial and Antisocial Behavior in Sport Scale (PABSS).

2. Methodology

Instrument and Translation Process

The prosocial and antisocial behavior in sport scale (PABSS) developed by Kavussanu and Boardley (2009) is a five-point likert scale consisting of 20 items and 4 subdimensions. The subdimensions of the original PABSS are; Antisocial Opponent (e.g.: Tried to injure an opponent.), Antisocial Teammate (e.g.:Verbally abused a teammate.), Prosocial teammate (e.g.: Encouraged the teammate), and Prosocial opponent (e.g.:Helped an injured opponent.). To translate PABSS into Turkish, Back-Translation technique was applied. Firstly, the scale was translated into Turkish by two researchers; one of them is from English Language Teaching Department and the other is from Physical Education and Sports Department. Then, the scale was translated into Turkish by the researcher. Obtained translated into English again by another expert from the field of English Language Teaching. Comparing the original version with the version translated into English again, the researcher took the most representative items.

Subjects

After the translation was completed, validity and reliability study of obtained items were carried out with 222 volunteer athletes who play in various sports clubs in Ankara from 4 different fields and team sports namely football (53.6%), basketball (10.8%), handball (13.1%) and field hockey (22.5%). The group consists of 77 females (34.7%), 145 males (65.3%) athletes. Their ages vary from 17 to 37 and average of age is 22.57 (SD=4.31). The level of competition range from club to national and had played their main sport competitively for an average of 6.30 years (SD= 4.33). The KMO test value of this study is 0.817 (very good) and the Barlett test is significant.

3. Findings

Assessing the Construct Validity

Principal Component Analysis-PCA which is widely used to obtain factors is implemented to test construct validity of the Prosocial and Antisocial Behavior in Sport Scale. According to Büyüköztürk (2006) factor analysis is described as "a statistical method that aims to gather and measure variables with same structure and quality and to explain them with fewer factors". With this method, the first factor which explains the maximum variance between variables is calculated. To explain the remainder maximum variance second factor is calculated and this continues like this. The important point is that there should be a correlation between the factors that are attained from the analysis (Kalaycı, 2008).

The first step of the factor analysis is to determine whether the variables are appropriate for the factor analysis or not. Barlett Test and KMO (Kaiser-Meyer-Olkin) Test are used to determine this. Barlett-test tests the probability of high correlation between the variables, or at least some of the variables, from the correlation matrix (Zinbarg, Revelle, Yovel, and Li, 2005). On the other hand, KMO test is an index that compares the magnitude of coefficient of correlation and magnitude of coefficient of part correlation. KMO rate should be more than 0.5. It can be said that the higher rate means that the variables are appropriate for the factor analysis (Kalaycı, 2008). The KMO test value of this study is 0.817 (very good) and the Barlett test is significant. Like the original version, the Turkish version of the prosocial and antisocial behavior in sport scale has four factor construction and 20 items.

			Factor	Loadin	igs
Items While playing sport this season, I	Common Factor Variance	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1: Prosocial team-mate					
Gave positive feedback to a team-mate	.437	.492			
Encouraged a team-mate	.306	.427			
Gave constructive feedback to a team-mate	.413	.739			
Congratulated a team-mate for good play	.401	.687			
Factor 2: Prosocial opponent					
Helped an opponent off the floor	.543		.797		
Asked to stop play when an opponent was	.415		.742		
injured					
Helped an injured opponent	.401		.624		
Factor 3: Antisocial team-mate					
Argued with a team-mate	.603			.678	
Verbally abused a team-mate	.644			.651	
Criticised a team-mate	.654			.682	
Swore at a team-mate	.596			.571	
Showed frustration at a team-mate's poor play	.531			.371	
Factor 4: Antisocial opponent					
Criticised an opponent	.515				.457
Deliberately fouled an opponent	.567				.436
Retaliated after a bad foul	.608				.528
Tried to wind up an opponent	.544				.629
Tried to injure an opponent	.662				.398
Intentionally distracted an opponent	.637				.617
Intentionally broke the rules of the game	.589				.574
Physically intimidated an opponent	.534				.735

Table 1: Findings of Factor	Analysis of Prosocial and	Antisocial Behavior in Sport Scale
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 Total Variance Explained
 Factor 1: %13.828
 Factor 2: %13.230

 Factor 3: %12.503
 Factor 4: %11.965

Total: %51.532

Reliability Analysis

Reliability relates to whether a scale consistently reflects the construct it is intended to measure (Field, 2005). In SPSS, Cronbach's Alpha was utilized to find out whether the scale in the context of research was reliable or not. In other words, reliability of the points obtained with applying the scale was tested with Cronbach Alpha reliability coefficient. The detailed analysis for reliability issue is given in Table 2. When we examine the reliability data for the inventory, the values vary from 0.70 to 0.75, which indicates that the inventory displays high alpha scores.

Factors	Cronbach Alpha		
Factor 1: Prosocial team-mate	0.70		
Factor 2: Prosocial opponent	0.72		
Factor 3: Antisocial team-mate	0.72		
Factor 4: Antisocial opponent	0.75		

Table 2: Findings of Reliability Analysis

According to Table 2, Cronbach Alpha values of sub- factors are; Factor 1 (Prosocial team-mate) 0.70; Factor 2 (Prosocial opponent) 0.72; Factor 3 (Antisocial team-mate) 0.72; Factor 4 (Antisocial opponent) 0.75. The degree of these results is considered "reliable"

4. Discussion and Conclusion

The aim of this study is to test the reliability and validity of the Turkish version of Prosocial and Antisocial Behavior in Sport Scale (PABSS). Conducting this research study permitted the validation and reliability of the Prosocial and Antisocial Behavior in Sport Scale (PABSS). In Turkish contexts, there are scales that are used to evaluate fair-play behaviors (Sezen, 2003) and they are only related to one specific field, football. Furthermore, there are few scales that assess sportspersonship and fair play levels of athletes (Yıldıran & Sezen, 2006; Sezen, 2010). However, since there is not a scale in Turkey to evaluate antisocial and prosocial behaviors encountered in sports, the aim of this study is to translate prosocial and antisocial behavior in sport scale into Turkish.

Prosocial and Antisocial Behavior in Sport Scale is a five point likert scale that is composed of 20 items and 4 sub- dimensions. The sub-dimensions of the original PABSS are; Prosocial team-mate (e.g. Encouraged a teammate.), Prosocial opponent (e.g. Helped an opponent off the floor.), Antisocial team-mate (e.g. Argued with a team-mate), Antisocial opponent (e.g. Deliberately fouled an opponent.) According to the results of the factor analysis, Turkish version of PABSS has 4 sub-factors and 20 items. According to Fabrigar, Wegener, MacCallum, and Strahan (1999), factor analysis is used to propose a theory as it offers unlimited insights into data. As the result of the factor analysis, this 4 factor structure shows that the Turkish version of Prosocial and Antisocial Behavior in Sport Scale (PABSS) is valid to be used in educational research.

When the reliability of the scale is tested, Cronbach Alpha values are Factor 1 (Prosocial team-mate) 0.70; Factor 2 (Prosocial opponent) 0.72; Factor 3 (Antisocial team-mate) 0.72; Factor 4 (Antisocial opponent) 0.75. Cronbach Alfa values of the original scale are 0.83 for prosocial team-mate, 0.79 for prosocial opponent, 0.83 for antisocial team-mate, and finally 0.84 for antisocial opponent (Kavussanu et al., 2013). These values are considered to be "reliable" in educational paradigma (Zinbarg et. al., 2005).

A body of literature using the PABSS has started to emerge and reveals potential antecedents of prosocial and antisocial sport behaviors underscoring the importance of this instrument and the need to provide further evidence for its psychometric properties (Kavussanu et al., 2013). To date, the PABSS has been used in studies with athletes from England (Boardley & Kavussanu, 2009, 2010), North America (Bolter & Weiss, 2013), Australia (Boardley & Jackson, 2011), and New Zealand (Hodge & Lonsdale, 2011). Those studies have revealed a variety of findings (Kavussanu, Stanger & Boardley, 2013). Very recently, Kavussanu et al. (2013) have done another study on PABSS to provide further evidence for the construct validity of the scale. In light of the study that we carried out in Turkish context, we can easily come to a consensus that the Turkish version of Prosocial and Antisocial Behavior in Sport Scale (PABSS) is valid and reliable to measure the antisocial and prosocial behaviors of the athletes with both sexes and in different team sports.

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Appendix: (Turkish version of the PABBS)

Sporda Prososyal ve Antisosyal Davranış Ölçeği

Aşağıda bir yarışma esnasında karşılaşılması muhtemel davranışlar yer almaktadır. Lütfen, bu sezonda yer aldığınız spor karşılaşmalarını dikkate alarak bu davranışları ne sıklıkla yaşadığınızı size en uygun rakamı yuvarlak içine alarak işaretleyiniz. Cevaplarınızın samimiliği için teşekkür ederim.

Bu sezonda yarışmalar esnasında, Ben	Hiç	Nadiren	Bazen	Sıklıkla	Oldukça Sık
Takım arkadaşıma olumlu geribildirim verdim (güzel pas!, iyi hareket! gibi).	1	2	3	4	5
Rakibimi eleştirdim.	1	2	3	4	5
Takım arkadaşımla tartıştım.	1	2	3	4	5
Yere düşen rakibime yardım ettim.	1	2	3	4	5
Rakibime kasten faul yaptım.	1	2	3	4	5
Rakibim sakatlandığında oyunun durmasını istedim.	1	2	3	4	5
Takım arkadaşıma kötü söz söyledim.	1	2	3	4	5
Takım arkadaşımı cesaretlendirdim.	1	2	3	4	5
Bana yapılan faulün intikamını aldım.	1	2	3	4	5
Sakatlanan rakibime yardım ettim.	1	2	3	4	5
Takım arkadaşımı eleştirdim.	1	2	3	4	5
Takım arkadaşıma yapıcı geribildirim verdim (daha ileride durmalısın! gibi).	1	2	3	4	5
Rakibimi öfkelendirmeye çalıştım.	1	2	3	4	5
Takım arkadaşıma küfür ettim.	1	2	3	4	5
Takım arkadaşımı iyi oynadığı için tebrik ettim.	1	2	3	4	5
Rakibimi sakatlamaya çalıştım.	1	2	3	4	5
Bilerek rakibimin dikkatini dağıttım.	1	2	3	4	5
Takım arkadaşıma kötü performansından dolayı tepki gösterdim.	1	2	3	4	5
Oyun kurallarına aykırı davrandım.	1	2	3	4	5
Agresif hareketlerimle rakibimin gözünü korkuttum.	1	2	3	4	5