

# A Research into Evaluation of Basketball Athletes' Risk Perception Level

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## Abstract

The aim of this study is to compare the risk perception levels of Basketball athletes in Turkish League teams according to some variables. In this research the “general screening model”, which is one of the descriptive screening methods, was used. While the population of the study consists of athletes actively engaged in the Turkish basketball league teams, its sampling consists of 229 athletes selected by chance and at random methods, which have been playing in different clubs. The questionnaire of Gok was used as a data tool in the study to perception of risk in sports. The difference between the risk perception levels according to the variables of gender, education level and years of playing basketball of the athletes who participated in the study were statistically significant. However, according to the variables of marital status and age of the athletes, the difference between the levels of risk perception statistically was not significant. Results showed that the average risk of female athletes were higher than the average risk of male athletes. The average risk of the athletes educated at high-school level were lower than the average risk of athletes educated at university and postgraduate level, average risk of athletes who play basketball between 1-5 years was lower than the average risk of athletes who play basketball between 6-10, 11-15, 16-20 and above 21 years. Basketball clubs, in order to be robust, should have professional managers in their club managements. Sports clubs should employ specialized advisors regarding the risks that players may encounter. In sports clubs, satisfaction of the players should be the first goal and expectations from them should be clearly specified. Sports clubs should also ask the players' opinions when preparing strategic plans against the risk factors that may occur.

**Keywords:** risk, risk management, risk perception, physical education, sport, basketball

## 1. Introduction

If there is any living creature, whether it is in action or not, there is always risk or risks. Individuals or organizations consistently face risks in the daily life while performing an activity, taking a decision or interacting with other individuals or organizations (Polat, 2011). The concept of risk; has its place as a dangerous concept in the human mind and represents uncertain events expected to occur in the future. The risk is identified as all kinds of obstacles, the possibility of loss, uncertainty, moving away from the expected results, being different from the expected results that affect the achievement of the preplaced objectives (Ozer & Gulpinar, 2005; Aydin et al., 2013). All branches of sport or recreational activities include a number of risks even if the appropriate measures are being taken and athletes, who are in it, may encounter with many dangers (Nohr, 2009). The risks in the sport are not the same in every sporting event. The risk; beside the sports genre, the features of the athletes, the environment, tools and supplies, many variables such as not having sufficient level of facilities and materials according to the purpose, put the athletes' health at risk (Bagriacik & Acak, 2005; Ergen, 2004; Sezgin, 1999). Risk perception is to identify the risks that may affect the organization's activities and to record their characteristics. The primary objective for risk assessment is to determine and list the events and situations that contain risks (Aydeniz, 2008). The risks may not be assessed or managed without being identified and defined. The purpose of the process of identifying the risk is to determine what the factors that may affect the sports clubs and their teams could be and how they may occur. It is also extremely important to identify the most significant ones of the risks (Gok, 2006; Kucuk, 2003). Risk management is defined as evaluation of potential risks against an organization, personnel and its assets, and minimizing this risk in a rational and clearly evidenced manner (Ozeren, 2000). In other words, risk management is analysis of problems and risks that could arise because of

these problems, and establishment of the administrative system needed to avoid new problems by effectively controlling them. Risk management consists of identification of risk, its accurate description, analysis and measures taken against it (Almassri, 2013). Risk management is sum of processes including description and evaluation of risks, determination of activities to be performed against them, specification of the responsibilities, application and monitoring of the specified activities, and review of the results (Korkmaz et al., 2014). In modern public administration approach, managers are held responsible for performing 'well management'. Risk management is considered as an important and indispensable element of a well management. In this context, the best way to perform the most correct action and to use the opportunities in the best way by minimizing problems that may arise throughout or as a result of processes is to predict problems, hitches or threads before they occur and develop countermeasures. This approach, which represents the risk management approach, provides managers with an important tool in the way of successful management. Therefore, today, institutions or organizations could accomplish their objectives in the best manner, perform their activities in an effective way, and achieve their goals depending on their success in the risk management (Polat, 2011). Risk management avoids potential losses by using measures that cost much lower than the potential magnitude of losses. Also, with transferring the potential threats that could lead to serious losses to the third persons via mechanisms like insurance, it helps reduce the potential costs that may arise (TUSIAD, 2008). Cost of preventing a risk is less than restitution cost. With risk management problems could be prevented before they occur, thus facilitating to achieve the goals specified in performance, cost and working program (Kuyucu, 2008).

The basic approach in risk management is attempt to enhance positive impacts of the uncertainties while minimizing its negative impacts, and anticipates taking the necessary measures against the adverse situations that may be encountered rather than giving planned responses. With such an approach alternative action plans could be selected by preplanning, which will make it possible to achieve the expected goals (Kalyoncu, 2013). Main purpose of risk management is introducing the risk, which is an abstract concept, and making it concrete (or measurable by numbers) to control it. Fundamental objective of risk management is to understand the risk-return framework in the best manner with interpreting it accurately, implementation of the strategic objectives based on these interpretations, and obtaining positive results depending on this. Since high return means high risk, it is much more important to specify the risks and compute them with abstract data (Almassri, 2013). When evaluating the risks, potential impact of the determined risks and magnitude of loss it may induce should be predicted. It is impossible to expect that each risk will occur at regular intervals or they will cause equal losses. Each risk will have a specific effect. At this stage, negative effects that will be created by these risks should be evaluated, and in accordance with the results of this evaluation, priority or orders of importance of the risks should be identified (Ozbek, 2012).

Insufficient lighting of courts where sports organizations are held, irregular cleaning of in-court and off-court places, inadequate warming up of players before the competition, negative attitudes and behaviors of the manager, ignoring health and safety measures, not providing the players with financial support may be considered as risk factors for players. Club administrations should establish risk management departments for sports events in order to identify and offer a solution to such risks. In addition, it is substantial to employ experts in such a department. This department will make significant contributions to both sports clubs and players by examining in detail the risk factors related to health, finance, facilities and social security issues, all of which may occur in sports clubs.

In this study it was intended to identify the risks that the athletes playing the basketball club in Turkey perceived and to compare the level of risk perception of the athletes with some of the demographic variables.

## **2. Tools and Methods**

In this study one of the descriptive screening methods, the "general screening model" was used. The population of the study consists of athletes actively engaged in the Turkish basketball league teams, its sampling consists of 229 athletes selected by chance and at random method, which have been playing in different clubs. The questionnaire to determine the risk in the sports of Gok (2006) was used as a data tool in the study. A study of the validity and the reliability of the questionnaire used in the survey were conducted and the Cronbach alpha value of the questionnaire used was unnecessary expression determined to be 0.71. In the applied survey, the level of significance was accepted as .05 in order to determine whether there was any difference between demographic variables or not. The data were analyzed with the help of statistical packaged software.

## **3. Findings**

The athletes who participated in the survey was investigated to determine the levels of risk perception according to variables such as gender, marital status, age, education levels and years of playing basketball.

Table 1. Risk perception level of athletes according to gender variable

Gender	N	$\bar{x}$	Ss	t	p
Male	123	34.22	3.53	3.128	.002*
Female	106	32.72	3.72		

When the Table 1 is being examined, it is being observed that the level of risk perception of the basketball athletes significantly changes ( $p < 0.05$ ) according to the gender variable. When we look at the arithmetic mean of the level of risk perception according to gender variable of the athletes, we see that the average risk of the female athletes ( $\bar{x} = 32.72$ ) is higher than the average risk ( $\bar{x} = 34.22$ ) of the male athletes.

Table 2. Risk perception level of athletes according to the marital status variable

Gender	N	$\bar{x}$	Ss	t	P
Married	30	33.46	2.76	-.105	.916
Single	199	33.54	3.81		

When the Table 2 is being examined, it is being observed that the level of risk perception of the basketball athletes does not significantly change ( $p > 0.05$ ) according to the marital status variable. When we look at the arithmetic mean of the level of risk perception according to marital status variable of the athletes, we see that the average risk of the single athletes ( $\bar{x} = 33.54$ ) is higher than the average risk ( $\bar{x} = 33.46$ ) of the married athletes. However, it was found out that this difference was not of a significant level.

Table 3. Risk perception level of athletes according to the age variable

	Age	N	$\bar{x}$	Ss	F	P
Level of Risk perception	14-17	69	32.91	3.88	6.286	.179
	18-21	48	33.14	3.04		
	22-25	51	34.43	4.14		
	26-29	29	33.89	2.78		
	30 age and over	32	33.68	3.97		

When the Table 3 is being examined, it is being observed that the level of risk perception of the basketball athletes does not significantly change ( $p > 0.05$ ) according to the age variable. When we look at the arithmetic mean of the level of risk perception according to age variable of the athletes, we see that the average risk of the athletes between the ages of 22-25 ( $\bar{x} = 34.43$ ) is higher than the average risk of the athletes of other age groups. However, it was found out that this difference was not of a significant level.

Table 4. Risk perception level of athletes according to the educational status variable

	Educational Status	N	$\bar{x}$	Ss	F	p	Lsd
Risk perception Level	High School	96	32.82	3.61	4.161	.017	1 < 3
	University	122	33.90	3.64			
	Post Graduate	11	35.54	3.80			

Lsd = Least Significant Difference.

When the Table 4 is being examined, it is being observed that the level of risk perception of the basketball athletes significantly change ( $p < 0.05$ ) according to the educational status variable. It was found this difference to be between the athletes having a university degree level and the athletes having a high school level and the

athletes having a postgraduate degree level and the athletes having a high school level. When we look at the arithmetic mean of the level of risk perception according to the educational status variable of the athletes, we see that the average risk of the athletes having a high school level ( $\bar{x}=32.82$ ) is lower than the average risk of the athletes having a university and postgraduate degree level.

Table 5. Risk perception level of athletes according to years of playing basketball

	Years of Playing Basketball	N	$\bar{x}$	Ss	F	P	Lsd
Risk perception Level	1-5 (1)	35	31.34	2.74			
	6-10 (2)	97	33.85	3.76			2<1
	11-15 (3)	58	34.22	3.46			3<1
	16-20 (4)	24	32.87	3.61	4.808	.001	5<1
	21 age and over (5)	15	34.93	4.07			

Lsd = Least Significant Difference.

When the Table 5 is being examined, it is being observed that the level of risk perception of the basketball athletes significantly change ( $p<0.05$ ) according to the variable of years of basketball playing. It was found this difference to be between the athletes playing basketball between 6-10 years and the athletes playing basketball between 1-5 years, between athletes playing basketball between 11 to 15 years and the athletes playing basketball between 1-5 years, between athletes playing basketball for 21 years and over and the athletes playing basketball between 1-5 years. When we look at the arithmetic mean of the level of risk perception according to the variable of years of basketball playing, we see that the average risk of the athletes playing basketball between 1-.5 years ( $\bar{x}=31.34$ ), is lower than the average risk of the athletes playing basketball between 6-10, 11-15, 16-20 and 21 years and above.

#### 4. Discussion and Conclusion

When Table 1 is being examined, it is being observed that the levels of risk perception of the basketball athletes significantly change ( $p < 0.05$ ) according to gender variable. When we look at the arithmetic mean of the level of risk perception according to the variable of gender of the athletes, we see that the average risk of the female athletes ( $\bar{x}=32.72$ ), is higher than the average risk of the male athletes ( $\bar{x}=34.22$ ). Oktem (2011) has detected a significant difference between the risk perception levels of the athletes dealing with archery and the gender variable. Gustafson (1998), Bouyer et al.,(2001) Chauvin et al., (2007); Altunoglu (2010), in their studies, have found out that women assess the dangers too risky compared to men or tended to make judgments in this direction; whereas Beyhun et al., (2007) have found out that women perceive risks in a more advanced level compared to men. These results seem to support our findings.

When the Table 2 is being examined, it is being observed that the level of risk perception of the basketball athletes does not significantly change ( $p>0.05$ ) according to the marital status variable. When we look at the arithmetic mean of the level of risk perception according to marital status variable of the athletes, we see that the average risk of the single athletes ( $\bar{x}=33.54$ ) is higher than the average risk ( $\bar{x}=33.46$ ) of the married athletes. However, it was concluded that this difference was not of a significant level. Karatas (2012) and Aras (2013), as the result of the studies they have conducted, have attained the conclusion that the variable of marital status did not affect the perception of risk perception. And the reason why the risk average of the single athletes was higher than the risk average of the married athletes, according to Sarac and Kahyaoglu (2011), could be explained with the opinion that single people had fewer responsibilities, therefore they can take more risks.

When the Table 3 is being examined, it is being observed that the level of risk perception of the basketball athletes does not significantly change ( $p>0.05$ ) according to the age variable. When we look at the arithmetic mean of the level of risk perception according to age variable of the athletes, we see that the average risk of the athletes between the ages of 22-25 ( $\bar{x}=34.43$ ) is higher than the average risk of the athletes of other age groups. However, it was concluded that this difference was not of a significant level. Gok (2006) has determined that there was no any significant difference between the levels of risk perception of the volleyball athletes in terms of age groups. And Karatas (2012) has also determined that there was no any significant difference between the levels of risk perception of the handball athletes and the age variable. According to the results of our study, it was considered that the age variable wasn't a factor in risk perception.

It can be observed in Table 4 that basketball athletes' risk assessment levels do differentiate significantly ( $p < 0.05$ ) depending on the variable of educational status. It's been ascertained that this difference is between undergraduates and high school graduates and also between postgraduates and high school graduates.

When looked at the arithmetic average of risk assessment levels of athletes according to their educational status, it can be observed that risk average of high school graduate athletes' ( $\bar{x} = 32.82$ ) is below undergraduate and postgraduate athletes. In reference to the studies, Gursoy et al. (2008) found out that risk perception increases for some dangers as the educational status escalates, according to Ceyhan (2008), educational status of a person increases his/her risk assessment capacity and thus, positively effects the will of risk perception, as for Sjoberg (2000) and Lazo et al. (2000), they have stated that there is a positive correlation between risk perception levels and education. These outcomes are parallel with our findings.

When the Table 5 is being examined, it is being observed that the level of risk perception of the basketball athletes significantly change ( $p < 0.05$ ) according to the variable of years of basketball playing. It was found this difference to be between the athletes playing basketball between 6-10 years and the athletes playing basketball between 1-5 years, between athletes playing basketball between 11 to 15 years and the athletes playing basketball between 1-5 years, between athletes playing basketball for 21 years and over and the athletes playing basketball between 1-5 years. When we look at the arithmetic mean of the level of risk perception according to the variable of years of basketball playing, we see that the average risk of the athletes playing basketball between 1-5 years ( $\bar{x} = 31.34$ ), is lower than the average risk of the athletes playing basketball between 6-10, 11-15, 16-20 and 21 years and above. Alexander et al., (1990), having the opinion that the young athletes cannot assume the risk as adults do, so, as the results of our study it is being considered that the young athletes are not ready to assume risks, when the athletes grow older, there is an increase in their perception of risk factors as well, and that due to the experiences of the athletes, this causes that the high levels of anxiety, stress and risk brought about by the competition environment of the basketball, be perceived in a higher level compared to the young athletes and thus results in high levels of risk perception.

Basketball clubs, in order to be robust, should have professional managers in their club managements. Sports clubs should employ specialized advisors regarding the risks players may encounter. Sports clubs should give in-service training to the players for prevention of the risks related with health, facilities, finance and management of social security issues. Sports federations should ensure minimization of experienced failures by providing relevant coordination and cooperation between sports clubs and players. In order to achieve success following identification of the risks players, as well as managers, should fulfil their responsibilities. In sports clubs, satisfaction of the players should be the first goal and expectations from them should be clearly specified. Sports clubs should also ask the players' opinions when preparing strategic plans against the risk factors that may occur. Federations and sports clubs should prepare an emergency action plan against specific risk situations players may encounter, and within the scope of this emergency plan management mission of each club and each individual should be defined in writing and solution to the problem should be performed in the most effective manner in case of emergency risk situations. Sports clubs should be restored to a condition such that they will be able to respond the risk factors that players identify.

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