THE STUDY OF DECISION MAKING STYLE OF UNIVERSITY STUDENTS WHO DO SPORTS

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Abstract

The purpose of this study is to determine decision-making strategies of hockey players according to some variables. 124 ice hockey players of 68 men and 56 women who have participated in the Inter-University Ice Hockey Tournament participated in the study. Decision Making Strategies Scale developed by Kuzgun (1993) was used to determine the strategies of decision making strategies of the participants. In the analysis of data obtained in SPSS 15.0 for Windows program, Mann Whitney U and Kruskal-Wallis H analysis was used. At the end of the study, it has been found that there is no significant difference on decision-making strategies of hockey players, according to the family income and family structure and gender of the athletes ($p>0.05$). In contrast, it has been determined that decision making strategies vary according to the number of siblings; athletes who have 1-3 siblings compared to the ones who have 4-6 siblings are higher in logical-systematic decision making strategies statistically ($p < 0.05$). Besides, it is also determined that ice hockey players who participated in the research logical - systematic decision making use impulsive decision-making, decision-making dependent on mid-level.

Keywords: Ice hockey, sports, decision making, university

Introduction

Deciding is defined as choosing the appropriate conditions to achieve a particular purpose of the current action. In decision-making process, there are a number of cognitive and behavioural efforts enabling you to choose among different conditions. People constantly in everyday life are forced to decide on certain issues. Decision-making situations in daily life sometimes can be very complicated structures. In such cases, the individual, followed by intense mental processes, chose the one he thought it was the best of interests

of the alternative sites. At this point, the success of the decision, given how accurate that is associated with the decision. (Bayköse et al., 2012; Öneren & Çiftçi, 2013).

Decision-making activity is an element intertwined with human life because sometimes people are not even aware of their decisions. The main reason for this is that decisions are not always routine and simple structure. If decision making is taking under a number of cases uncertainty, the decision-making process may include a high level of risk and complexity. Besides, the more the uncertainty and complexity of decision making increase, the more pressure on person and the importance of decision-makers increase. The level of importance of decision are in proportion with changes that may occur after the decision. Also, if it is not possible to compensate for decisions, the importance of the decision will also increase. (Tekin & Ehtiyar, 2010).

To achieve success in sport and to ensure the continuity of success, and psychological aspects of the physical characteristics of the athletes must be good. Team sports has a great importance in development of some psychological characteristics of athletes. Because athletes in team sports gain the ability to think and act collectively. Besides, precise, accurate and quick decision-making is also evolving as the psychological aspects (İri, Başlamışlı & Göksu, 2003). The success or failure of athletes is shaped not only by right or wrong decision but also by making the decision fast or slowly. Therefore decision-making capability is very important in sporting achievement. The decisions taken towards situations that occur during matches will affect performance of athlete or team success in different ways. The reason why decision making process is so important has led the researchers' coaches and sports scientists study in this area. It is expressed that exercising of activities that improve decision making during trainings is a factor that develops their decision making skills and creativity level. (Egesoy, Eniseler, Çamlıyer, 1999). Besides, decision-making strategies is an important element when it comes to the fact that athletes apply strategic plans and tactics correctly, their mental concentration level, and control themselves against the atmosphere under stressful situations during matches. (Grehaigne, Godbout & Bouthier, 2001).

Because of the fact that decision making and decision making strategy are psychological process, it is not possible systematically to benefit from qualitative information or ideas in order to determine the processes mentioned (Emel, Saraç & Kabak, 2012). In addition, because personality traits of persons are different from each other, decision-making strategies have a property which may vary from person to person (Erözkan, 2011). Level of experience in people's lives is an important factor affecting the decision-making strategies (Certel, Bahadır & Sönmez, 2013). When we

consider that decision-making abilities of the athletes is a factor affecting the results of the competition and the compliance in teams; it had better be known the factors affecting the decision-making strategies. In this research done in that context, it is aimed to investigate decision-making strategies of the ice hockey players vary according to some variables.

METHOD

Study Group

124 ice hockey players from different university teams participated in this study voluntary. Percentage distribution of descriptive information regarding the participants are located in Table 1.

Table 1 Participants belonging to the descriptive statistics

Variables		**f**	**%**
Gender	Female	56	45.2
	Male	68	54.8
Income	750 TL and below	16	12.9
	751-1500 TL	29	23.4
	1501-2250 TL	19	15.3
	2251 and above	60	48.4
Family	small	54	43.5
	Big	59	47.6
	distorted	11	8.9
Sport period	4 hours and below	61	49.2
	5-8 hours	32	25.8
	9-12 hours	20	16.1
	13 hours and above	11	8.9
Siblings number	1-3 siblings	94	75.8
	4-6 siblings	30	24.2

Instruments

Developed by Kuzgun(1993) the Decision Making Styles Inventory (KSO) scale was used to collect data. The scale consists of 40 questions and the four sub-dimensions with a 4-point Likert-type scale. The lowest and highest points, the number of items in the sub-dimensions and the average scores that participants have are shown in the Table 2.

Table 2 Information of the sub-dimension of the scale:

Information of the sub-dimension of the scale	**Sub-dimensions**			
	Logical- systematic decision making	Impulsive decision making	Dependent decision making	Undecided decision making
Article number	10	10	10	10
The lowest score from sub-dimension	10	10	10	10
The highest score from sub-dimension	40	40	40	40
The average scores from sub-dimension	24,7±3,5	23,8±3,4	24,6±3,8	23,0±4,3

The scores that participants have from sub-dimension of the scale is moderate.

Analysis

SPSS 15.0 for Windows software package was used to analyze the data obtained . Concerning the scale reliability analysis applied to articles and Cronbach's Alpha value was found as 0.75. This value indicates that the scale is reliable enough for analysis. With the help of One Sample Kolmagorov - Smirnov test, it has been measured whether the data is suitable for normal distribution, and it has been found that the data relating to sub-dimensions does not show a normal distribution. Because the data does not suit for the normal distribution, parametric tests such as Kruskal-Wallis H test, Mann -Whitney U test was used as a method of analysis. To analyse the data related to sub-dimensions for the number of siblings and gender, Mann - Whitney U test was used, to compare the data related to sub-dimensions for family, income and sport perdiod/ per week, Kruskal-Wallis H test was used. In determining the average of the scores obtained from the sub-dimensions descriptive statistics were applied; to determine the frequency and percentage distribution of demographics of the participants, frequency analysis was applied.

Results

The comparison of the averages related to sub-dimensions:

Variables	Sub-dimentions	Logical-systematic	Impulsive	Dependent	undecied	Level of sensibility			
						Logical-systematic	Impulsive	dependent	undecied
		X±SS	X±SS	X±SS	X±SS				
Gender	Female (n=56)	24.9±3.8	23.5±3.9	25.0±4.1	22.5±4.6	Z= -.008 P= .994	Z= -1.47 P= .141	X^2= -.46 P= .646	Z= -1.2 P= .229
	Male (n=68)	24.6±3.3	24.1±3.1	24.4±3.7	23.5±4.2				
Family Income	750 TL (n=16)	24.4±2.8	23.8±2.4	25.6±3.8	23.1±4.5	X^2= .531 P= .912	X^2= .982 P= .806	X^2= 1.38 P= .708	X^2= 2.81 P= .422
	751-1500 TL (n=29)	25.2±3.9	23.5±4.1	24.6±4.1	22.6±3.9				
	1501-2250 TL (n=19)	25.1±3.9	24.4±3.9	25.3±4.0	24.6±4.7				
	2251+ TL (n=60)	24.5±3.4	23.8±3.3	24.3±3.8	22.8±4.5				
Family feature	small (n=54)	24.9±3.7	24.6±3.4	24.4±3.9	23.8±4.4	X^2= .666 P= .717	X^2= 4.55 P= .103	X^2= .359 P= .836	X^2= 2.97 P= .226
	big (n=59)	24.7±3.7	23.2±3.6	24.9±4.0	22.5±4.2				
	distorted (n=11)	24.6±1.7	23.4±2.9	25.3±3.3	22.4±5.2				
Period of sports per week	Less than 4 hours (n=61)	25.0±3.5	24.5±3.6	24.5±3.5	23.1±4.5	X^2= 1.18 P= .757	X^2= 4.67 P= .197	X^2= .159 P= .984	X^2= 2.62 P= .453
	5-8 hours(n=32)	24.9±3.9	23.3±3.5	24.9±4.4	23.8±4.2				
	9-12 hours (n=20)	24.2±3.2	23.1±3.0	24.8±4.2	22.5±4.8				
	More than 13 hours (n=11)	24.2±3.2	22.7±3.0	24.8±4.3	21.5±3.7				
Number of siblings	1-3siblings (n=94)	25.2±3.7	23.8±3.6	24.6±3.9	22.8±4.4	Z= -2.4 P= .013	Z= -.28 P= .775	Z= -.45 P= .649	Z= -1.3 P= .185
	4-6 siblings (n=30)	23,3±2,6	24,0±3,2	24,9±3,8	23,9±4,3				

Examining the table, it is observed that female participants' scores are higher than males in logical - systematic decision making, impulsive decision-making and dependent decision-making; indecisive decision points of females are lower; however there is no sensible difference among scores of gender-based decision making. ($p > 0.05$). There are differences between the decision making scores according to the family income of the participants; yet these differences are not statistically significant ($p > 0.05$). Compared to others, logical-systematic decision making impulsive decision-making and unstable decision-making scores of the participants who have

small families are higher; in addition, dependent decision making scores of who are from big families seem to be higher. However, there is no statistically significant difference between the scores according to the family structure dimension ($p > 0.05$). The highest logical-systematic and impulsive decision-making scores belong to the participants who do sports less than 4 hours per week; the highest -dependent decision-making and unstable decision-making scores belong to the participants who do sports for 5-8 hours per week; yet , there is no statistically significant difference between scores related to the period of sports per week ($p>0,05$). The logical-systematical decision making scores of participants with 1-3 siblings' are significantly higher compared to the participants with 4-6 siblings. ($p<0,05$). There is no significant difference in scores by the number of siblings ($p > 0.05$).

Discussion and conclusion

It is determined that the ice hockey players who participated in the study use their logical - systematic, impulsive and dependent decision-making styles moderately. In the study conducted by Kelecek and his colleagues (2012), it is concluded that athletes who do different sports use wary decision making strategies. In a survey conducted by Bayköse his colleagues (2012), it is found that students who deal with different sections of sports use different decision making strategy. In another survey on tennis players conducted by Koçak and Uzbek (2010), it has been identified that the styles of decision making of tennis players vary related to some variables. In another study on football players the diversity of training program does not have a significant importance in decision making (Fontana, 2007). When we evaluate research findings in the literature, it is seen that the styles of decision making of athletes vary according to the sports they deal with. When considered from this perspective, it might be the main reason of the level of decision making of participants that because of the fact that our study group- the participants deal with the same sports branch.

It has been determined in this study; conducted on ice-hockey players the decision making strategies of the participants do not show difference according to income levels of their families. A variety of psychological and emotional decision making strategies, affecting property (Koksal & Gazioglu, 2007), besides income level is known to be effective in a number of psychological properties (Carıkçı, 2000; Işcan & Timuroglu, 2010). As a result of a number of psychological processes in decision-making strategies for income level of decision making styles which the positive or negative impacts can be expected. In contrast, the lack of large differences between the income levels of ice-hockey players' families, can be the main reason of having similar characteristics for the decision-making.

It has been found out that the characteristics of the decision-making strategies of ice-hockey players, participating in this study do not show significant differences according to genders of athletes. In the study, made by Kelecek and his friends (2012), the decision making strategies of the of athletes, competing in various branches do not show difference according to gender.

In many other studies in the literature, it has been determined that the gender is not a significant factor, effecting the decision making strategy (Koçak & Özbek, 2010; Köksal & Gazioğlu, 2007; Alver, 2004; Tekin & Ehtiyar, 2010; Certel et al., 2013b). In contrast to thit fact, the data is also avaliable that gender affects the decision making strategy (Çetin et al., 2011; Certel et al., 2013a; Bayköse et al., 2012). Therefore, viewing the relationship between gender and decision-making strategies, research results are contradictory. It can be thought that the basic reason for this is originated from many internal (psychological and cognitive properties etc.) and external (social, environmental, educational, etc.) variables, effecting the decision making strategies.

It has been determined that the rational decision making styles of ice-hockey players, participated in this study, do not show significant difference according to the number of sister and brother of the athletes. It has been found out that the rational and systematic decision making strategies of the athletes of whose brother and sister number varying from 1 to 3, are significantly higher when compared to the athletes of whose brother and sister number varying from 4 to 6. The rational decision making is analyzing the option during the decision making process, gathering information about the options and evaluation of an option from both positive and negative ends, and making it definite (Köksal & Gazioğlu, 2007). The athletes being able to make rational decisions in both sports and social lives of theirs is a significant condition for their success in both sports and social lives.

The first basic life training environment for an individual is family circle. Having less brother and sister number can help the parents to show more interest to kids and to prepare better for life. In this context, having less sisters or brothers can contribute to the children to be prepared better to life and manage to give rational decisions in the latter years.

It has been found out that there is no significant difference according to the structure of the family for ice hockey players ' decision making strategies has been found to show the difference. It has been seen that the decision making strategies of the athletes, whose parents are fragmented , are similar to the other athletes who have core family structure. The results of the studies, determining that mum and dad attitudes are also effecting the future decision making strategies of children, are available. In the studies, available in the literature, it has been determined that the parents´

democratic, authoritarian, uninterested or inconsistent manners are affecting the rational, independent decision making levels or indecisiveness of the children in the future (Erözkan, 2011).

It can be thought that in the basis of the structure of the family not effecting the decision making styles, is the parents of the participants generally have similar child-rearing styles or growing similar social environment.

As a result, it has been determined that ice-hockey players use the rational-systematic decision making styles, instinctive and dependent decision making styles at the medium levels and their decision making strategies do not display difference according to gender and the income level of the family. In contrast to this, it has been determined that the number of sisters and brothers of the ice-hockey players is a significant factor, effecting and increasing the decision making styles of the athletes.

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