

EVOLUTION OF AGGRESSION LEVEL OF ELIT ICE HOKEY PLAYER IN HIGH SCHOOL

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ABSTRACT: The purpose of this study is to analyze aggression levels of ice hockey players and indicate the relation between sports and aggression levels in detail within certain limitations. In the master's thesis named "the study of aggression levels of elite ice hockey players in high school, we studied the aggression levels of 51 high-school students that play ice hockey in Turkish national teams during 2012-2013 academic year in terms of age, status, parental education level and age variables. In the study, we employed personal information form that was developed by the researcher and shows participants' demographic characteristics (branch ages, status, parental education levels and ages) and "aggression scale" that was developed by Tuzgöl (1998) with the aim of collecting data. In the statistical analysis of obtained data, descriptive statistics (mean, standard deviation, minimum-maximum values etc.), unrelated t test and ANOVA statistical techniques and SPSS P were employed. Obtained data can be classified as follows: no significant difference was observed as a result of comparison aggression levels in terms of age. ($p < 0,05$) 15 year old children are more aggressive than other children. A significant difference was observed as a result of comparison aggression levels in terms of schools. ($p < 0,05$) Students in vocational high school are more aggressive than others in sports high school, regular high school. A significant difference was observed as a result of comparison aggression levels in terms of position. ($p < 0,05$) forward players are more aggressive than defense and goal keepers. A significant difference was observed as a result of comparison aggression levels in terms of their fathers' education level. ($p < 0,05$) sportsmen ($x = 3,71 \pm 474$), whose fathers graduated from primary school are much more aggressive than others whose fathers graduated from secondary education ($x = 3,20 \pm 372$) and two-year degree/undergraduate ($x = 3,25 \pm 569$). A significant difference was observed as a result of comparison aggression levels in terms of their mothers' education level. ($p < 0,05$) there seems a significant difference between students whose mothers graduated from primary school and the ones ($p = 0,038$) whose mothers graduated from two-year degree/undergraduate programs. According to this; it is observed that sportsmen ($x = 3,77 \pm 433$), whose mothers graduated from primary school are much less aggressive than others ($x = 3,66 \pm 464$) whose fathers graduated from school and two-year degree/undergraduate.

1. INTRODUCTION

The subject of this study is the evolution of aggression levels of elite ice hockey players at high school level. Sport is a struggle requiring intensive effort continuously because it combines the play with the competition and it has physical skills more and it makes the winners awarded and it requires heavy muscle working or struggle and high-level play. Prevailing his surrounding or nature and briefly to the World is the purpose which is available in his genuine. If this purpose is not channeling to a true way, violence and aggression occur [1].

Aggression is a common seen situation in the sport. This situation may depend on personal feature of the sportsman, tactical understanding a trainer applied, the pressure of supporter or media. Particularly, some terms including aggression in some team sports have settled. For example, aggression defence, aggressive play, are, some of these. The aggression term mentioned here indicates an accepted situation. Whereas, in Daily life aggressive behaviours are limited either by social rules or by laws; function is applied. In this case, whether which behaviours in sport is accepted as aggressive ones should be explained. [2]. Aggressive behaviours are often seen between children and adults too [3].

Following to 25th Winter Universiade in Erzurum in 2011, being more popularized day by day, ice hockey became interest focus of the youth. During this study in the result of literature scanning carried out it is observed that any study about this subject has not been conducted so far in our country.

The aim of this study is to determine the reasons of aggression level and is to offer suggestions in order to prevent this aggression.

2. GENERAL KNOWLEDGE

2.1. Aggression

Aggression

Tiryaki defined aggression as a shape of a behaviour which gives pain, injurious, and snarling in order to prevail others, and manage them, or break down a situation or to come them to naught, and emphasized that aggressive behaviours became the ones orienting to the purpose, and they would be orienting to a person or a group or the society, and so he also emphasized that in those who encountered with these kinds of behaviours, either avoidance or refusing to the similar behaviours could be seen [4].

Aggression is commonly used with the aim of describing the behaviours indicated by means of giving damage to the individual. In this respect, in conceptualism of aggressive behaviours; giving damage, injuring or the components such as purpose or intention are of the function of keyword. As regards better understanding of the subject, some of different definitions are as follows;

Aggression is a behaviour giving financial damage or personal pain, accepted by attacker depending on direct or indirect social reasons [6]. Loebe and Hay defines aggression as a behaviour category causing physical damage to others [8].

When aggressive behaviour came to realize in sport, two different aggression types are coined. One of them is aggression with the tool and the other is aggression including hatred. In the sport branches performed mutually, the necessities requiring being understanding and profitable for the team and existing from special situation indicate aggression with the tool whereas those which made effort the intention of the violation of the rules or giving damage to the Rival (deliberately kick or etc.) indicate aggression including hatred [4].

In the result of their studies, Kepenkci and Cinkir determined that verbal bullying became 33.5% and physical bullying became 35.5% and emotional bullying became 28.3% and last sexual bullying became 15% [9].

In the frame of the rules belonging the sport branch, a certain obstacle is available and this is expected mutually by the players. In the case of giving damage to the rival by overlooking the rules, aggressive behaviour is mentioned.[10].

2.1.2. Types of Aggression

The researchers have divided aggression under various sub-types, and examined. And in the result of the studies, it is seen that aggression is of a lot of types.[7].

Aggression with the tool

In the type of this aggression, the individual behaves pre-planingly and deliberately in order to achieve his or her goal. According to Leonard, aggression with tool doesn't have an emotional basis, but it is orienting to the duty your goal exactly [12].

In this type of aggression, the aim is to move in order to stop rival team. Here, the goal isn't giving damage to the rival, but is the prevention of the rival sportively. For instance, in an ice hockey match, the obstructing of a player going to rival field to make a score can be given as an example of this type of aggression.

Aggression with the aim of social prize and acceptance

As in every job branches, the players also want to promote in their Works and having career earning much more Money, being famous and strengthening of their places. If the sporter with the aggression during the match contributes to the success of the team, even if he or she is punished by the referee, managers of the team and supporters have supported him. Aggressive behaviour of the player who wins the admiration of the managers and supporters with this method become emphasized [2].

When his or her team becomes lack, or when he or she encounters with lack-attack particularly when he or she has to make defence in face-to face positions, an ice hockey player may prevent the player who has caught the opportunity of score by means of out-law aggression. Here, the aim is to win his or her own spectators admiration or the approval of the managers as a social role, aggression is that young or child or small players follow experienced sporters who obtained success in their careers and to imitate them. In this respect, if a player indicates aggressive

behaviours in the field and become successful in the end, the young players who invite him are likely to perform aggressive behaviour [5].

In ice hockey branch, particularly young or the younger players may imitate the fights of the players in National Ice Hockey League (NHL) and on the behalf of being famous and staying in daily events, they may perform similar behaviours.

Aggression under the order

Most of the teams and sporters comment the success as winning. In this direction, the players who were channelized for winning at all cost by their teams or players indicate many kinds of aggression in order to be successful. The fact that trainer said that their players should certainly win and at the end of this, the fact that the players behaved aggressively against the rival indicate that the behaviours indicated by persons under the order became limitless [5].

Aggression including enmity

In the type of this kind of aggression, the individual behaviours exactly with the intention of giving damage. The aggression including enmity is a type of aggression resulting from the intention of giving damage or the hatred or dislike of the goal [11].

Aggression including enmity in the players is due to the competition which is countered and lost in the past. Even if the hostile behaviour of the player isn't accepted as good, it is admired by both supporters and managers when the team reached at the success [5]. According to Peter and Beyer, this kind of aggression is a kind of reaction belonging to warning with hatred quality or his satisfaction [13].

2.1.4. Psychologic Reasons of Aggression

Aggressive behaviour is also behaviour model existing in human psychology. The questions such as, the reason of this behaviour, how occurred, which events or situations prepare the ground for this, when and where it is seen often, are those which should be answered constantly. But there is a known reality that aggressive persons are full of angry and rage. They come out the enmity in their inside by means of rage crises and violent attacks [19].

The relation between aggression and sport

Aggressiveness in the sport can be defined physical or oral activities realized by the aim of reaching at a goal or giving damage to the others, by violating the rules determined by means of being affected psychological, biologic or social factors or the components belonging to the competitions such as sportsmen, trainers or spectators.

In young teams, performing or indicating aggressive behaviour against rival behaviour is seen more common than that of adult player. These aggression is getting used to the orienting to the goal. Depending on this knowledge, putting forward the behaviour of each player indicates itself as the duty of the trainer. Special rules or norms in the sport are compared with the experiences belonging to the daily life. Thus, it is aimed that wrongly-commented of the attack should be prevented before [10].

In a way, aggression can be accepted as an attempt of intimidating or afraid or obtaining the success rather than a reaction of preventing.

2.2. Ice Hockey and Aggression

It is seen that aggression tendencies sometimes couldn't be controlled in their rules in a specially team sports. As a result of this, some displeased movements have been observed. Even, some of these aggression and violence events have been resulted in death. In 1992, in an ice hockey match a player lost his life as a result of a stroke he took from outside [23].

In all of the sport branches, the players indicate aggressive behaviours by spending physical effort in certain frame of the rules. So, the level of aggression in every sport branch isn't accepted as the same. It is said that some sport branch such as American soccer, ice hockey, boxing and wrestling include more aggression than others. [21]

The studies conducted for ice hockey and aggression indicate that even the color of uniform had a great effect on the level of aggression. According to a research, when the teams of ice hockey and football were black

uniform they performed more aggressive play and they encountered more yellow card or they had to make more punishment kick [24]. When it was evaluated as regards gender, it was observed that the men preferred more aggressive sport such as ice hockey, American soccer or boxing than women [25].

2.2.1. Aggression According to Ice Hockey Rules

It is emphasized that violent punishment is due to preventing aggression in the ice hockey [26]. The rules of ice hockey the International Ice Hockey Federation (IIHF) doesn't give permission for aggression and it has given the punishment with real play-time according to the type of aggression. According to these punishments the teams had to continue the play with lack of player and of course this affected the score of the match. In a study conducted by Gee at all in on International Ice hockey league in 2007, it was detected that the curtailments of legal wages applied in the result of aggression lowered aggression. Gee at all said that use of high punishment against aggressive behaviours became an agent in the reduction of aggressive behaviours.

In the following, some punishments according to minute by International Ice Hockey Federation are given. [27].

The punishments are divided into categories and the punishment durations are indicated as minutes as follows:

- Minor Penalty (2 min.)
- Major Penalty (5 min.)
- Misconduct (10 min.)
- Game Misconduct
- Match Penalty
- Penalty Shoot-out

3. MATERIAL and METHOD

3.1. The Method of Research

The study was conducted with the aim of determining aggression level of elite ice hockey players at the level of high school. Turkey National ice hockey team players the men under 20 and 18 years of age, were included in the study voluntarily. The research consists of two stages, theoretic and practice. In the first stage native and foreign literature about the subject was scanned and in the second stage, by means of scale as regards the ages of the subjects participating in the research, levels of education of their parents, branch ages, their statues and types of their schools, the levels of their aggression was tried to be determined.

3.2. Study Content and Sampling

The content of the study consists of ice hockey players at the level of high school. The sampling consists of 51 men players playing under 20 or 18 years of age Turkey National Ice Hockey team in ice hockey under 20 and 18 years of age World Championships and also consists of 4112 licenced man Ice Hockey players participating in 2012-2013 Ice hockey Under 20 and 18 of age World Championships.

3.3. The Tools of Collecting Data

Aggression Scale: The scale developed by Tuzgol in 1998 for high school students consists of a scale including 45 articulated Likert type and giving total point. In a study carried out by Tuzgol in 1998 for measuring the reliability of the scale, she found Cronbach alpha coefficient as 0.71 and value of r as 0.85. In another study she carried out for reliability, the scale was described as aggressive by at least three teachers, and it wasn't defined as aggressive by 45 students, and it was applied to 45 students, she determined t -value between two groups as 3.25 [28].

On the other hand, in the evaluation of the scale, due to determination of score averages responding to the answer given by participants for the articles; score limits being equivalent to 5 Likert type of the scale as follows: 1.00-1.79 "Definitely I don't agree", 1.8-2.59 "I don't agree", 2.6-3.39 "I am indecisive" 3.4-4.19 "I agree" 4.2-5 "I certainly agree". Score values stated in the parenthesis are given to the options individual marked. The scoring of aggression is articles on the scale were done conversely. The converted numbers and the total of the others consisted of aggression scores. The score over arithmetic distribution indicated high-aggressiveness level and those which are under it indicated low-aggressiveness level.

3.4. Statistical Analysis

In order to find general aggression averages of the participants in the study, and in order to determine the distinctions between groups such as father's education level, mother's education level, age of branch, position, type of school, age or descriptive statistics, one way-variance analysis and Tukey analysis were applied for understanding which groups the distinction comes from.

4. FINDINGS

In this section, the general aim of the study, the results reached at in the result of given statistical analysis obtained from data collecting tool applied to the players in the direction of this aim.

Table 4.1. Frequency table of demographic features of the participants

Age	N	%
15	9	21,6
16	22	29,4
17	12	13,7
18	3	35,3
Type of School	N	%
High School	10	21,6
Vocational High School	4	5,9
Sport High School	24	49,0
Normal High School	13	23,5
Position	N	%
Goalkeeper	9	17,6
Defence	27	52,9
Forward	15	29,4
Father Education Level	N	%
Primary School	3	5,8
Secondary School	28	54,9
Under Graduate / Licence	17	33,3
Post Graduate	5	9,8
Mother Education Level	N	%
Primary School	13	25,4
Secondary School	31	60,7
Under Graduate / Licence	9	17,6
City	N	%
Ankara	5	9,8
Kocaeli	26	51,0
Erzurum	4	7,8
İstanbul	9	17,6
İzmir	7	13,7

When the distribution about participant ages was examined it was observed that 29,4% of them was 16 years of age, and that 13,7% of them were 17 years old. When the distribution of participants according to their school types was examined, it was seen that 5,9% of them was the student of vocational high school, and that 41% of them became the students of sport high school. When the distribution of the participants according to their positions was examined, it was observed that 17,6% of them were goalkeeper, and that 52,9% them became the players of the defense, and that 29,4% of them became forward player. When the distributions of the participants according to father education level it was seen that 5,8% of them became primary school, and that 54,9% of them became secondary school. When the distributions of the participants according to mother educational level was examined, it was seen that 60,7% of them were in secondary school education, and that 17,6% of them were in undergraduate / license and when the distribution of the participants according to the cities, it was also seen that 51% of them played in Kocaeli, and that 7,8% of them played in Erzurum.

Table 4.2. The Comparison of aggression levels according to participant's ages

Age	N	Averages	Standard Deviation	F	P(sig.)
15	9	2,97	,272		
16	22	3,70	,306	8,925	,000*
17	12	3,87	,658		
18	3	3,53	,000		

*($p < 0,05$)

When looking at the table 4.2, it has been seen that there was a significant distinction in the result of comparison of aggressiveness levels according to the age of the participants ($p < 0,05$) The results of multiple research realized are given in Table 4.3

Table 4.3. Multiple Comparison results of distinctions at the level of aggressiveness according to the ages of the participants

Post Hoc (Tukey Test)			
Comparison (Age)	Average		
	Distinction between	Significance	
	two		
15	16	-,729	,000*
	17	-,900	,000*
	18	-,561	,199
16	17	-,170	,670
	18	,168	,913
17	18	,338	,596

According to multiple comparison scores; there were significant differences between 15 and 16 years of age ($p = ,000$), and 15 and 17 years of age ($p = ,000$) According to this, it was found out that the players at the age of 15 years ($\bar{X} = 2,97 \pm ,272$) became less aggressive than sporters of 16 years of age ($\bar{X} = 3,70 \pm ,306$) and 17 years of age ($\bar{X} = 3,87 \pm ,658$)

Table 4.4. The Comparison of aggression levels of participants according to types of school

Type of School	N	Average	Standard Deviation	F	P(sig.)
High School	10	3,22	,403		
Vocational High School	4	4,13	,000	,573	,000*
Sport High School	24	3,83	,360		
Normal High School	13	3,59	,525		

*($p < 0,05$)

According to the data in the table 4.4, in the result of the comparison of the participants aggressive levels as regards type of school, we couldn't find significant distinction ($p < 0,05$) and the results of multiple comparison carried out are given in table 4.5

Table 4.5. The results of multiple comparison of the distinctions at aggressiveness levels according to school types of the participants

Post Hoc (Tukey Test)			
Comparison (School Type)		Average Distinction	Significant
High school	Vocational High school	-,912	,000*
	Sport High school	-,616	,000*
	Normal High school	-,370	,001*
Vocational High school	Sport High school	,295	,178
	Normal High school	,541	,002*
Sport High school	Normal High school	,246	,012*

According to multiple comparison results: There are some significant distinction between high school and vocational high school, and sport high school ($p = 0,000$), In addition between high school and normal high school ($p = 0,001$), According to this, it was observed that high school's students ($\bar{X} = 3,22 \pm 0,403$) became less aggressive than those of vocational high schools ($\bar{X} = 4,13 \pm 0,000$) and those of sport high school's ($\bar{X} = 3,83 \pm 0,360$) and those of normal high school's ($\bar{X} = 3,59 \pm 0,525$) On the other hand, according to the results; they were significant distinctions between vocational high school and sport high school students with ($p = 0,002$), the students of normal high school ($p = 0,012$), According to this; it was seen that the players of vocational high school ($\bar{X} = 4,13 \pm 0,000$), became more aggressive than those of sport high school ($\bar{X} = 3,83 \pm 0,360$) and those of normal high schools ($\bar{X} = 3,59 \pm 0,525$)

Table 4.6. The comparison of participant's aggression levels according to their positions

Position	N	Average	Standard Average	F	P(sig.)
Goalkeeper	9	3,32	,285		
Defense	21	3,49	,643	4,456	,017*
Forward	16	3,86	,259		

*($p < 0,05$)

When looking at table 4.6, we see that there was significant distinction in the result of the comparison of aggression levels of the participant's. ($p < 0,05$) The results are given in table 4.7

Table 4.7. The results of comparison of aggression levels of the participants according to their positions

Post Hoc (Tukey Test)		
Comparison (Position)	Average Distinction	Significance
Goalkeeper Defense	-,169	,652
Goalkeeper Forward	-,543	,025*
Defense Forward	,373	,061

According to multiple comparison results: there was significant distinction in their aggression averages between forwards and goalkeepers ($p = ,025$) According to this, it was seen that goalkeepers ($\bar{X} = 3,32 \pm ,285$) had less aggressiveness levels than forwards ($\bar{X} = 3,86 \pm ,259$)

Table 4.8. The comparison of aggressiveness levels of the participants according to their father's education level

Father's Education Level	N	Average	Standard Deviation	F	P(sig.)
Primary School	3	3,71	,474	3,414	,019*
Secondary School	28	3,20	,372		
Undergraduate / License	17	3,25	,569		
Post Graduate	5	3,54	,643		

*($p < 0,05$)

According to the data given in table 4.8, in the result of comparison of aggressiveness levels of the participant as regards their father's education level, there was no significant distinction. ($p < 0,05$) The result of multiple comparison carried out are given in table 4.9

Table 4.9. The result of multiple comparison of the participant's as regards their father's education level.

Post Hoc (Tukey Testi)		
Comparison (Father's Education Level.)	Average Distinction	Significant
Primary School Secondary School	,510	,011*
Primary School Undergraduate/License	,460	,040*
Primary School Post Graduate	,174	,256
Secondary School Undergraduate/License	-,050	,895
Secondary School Post Graduate	-,340	,716
Undergraduate/License Post Graduate	,290	,933

According to multiple comparison results: There were significant distinctions between father's education level primary school – secondary school ($p=.011$), and primary school Undergraduate/License groups ($p=.040$) According to this, it was seen that the players whose fathers education level became primary school ($\bar{X}=3,71\pm,474$), were more aggressive than those whose fathers education level became secondary school ($\bar{X}=3,20\pm,372$) or Undergraduate/License ($\bar{X}=3,25\pm,569$)

Table 4.10. The compassion of aggressiveness levels of the participants as regards their mother's education level

Mother's Education Level	N	Average	Standard Deviation	F	P(sig.)
Primary School	13	3,77	,433		
Secondary School	31	3,66	,464	3,074	,049*
Undergraduate/License	9	3,47	,585		

*($p<0,05$)

When looking at table 4.10 we see that in the result of comparison of their aggression levels as regards their mother's education level, there was a significant distinction ($p<0,05$) The results of multiple comparison conducted are given in Table 4.11

Table 4.11. The results of multiple comparisons of the participants according to their mother's education level

Post Hoc (Tukey Test)			
Comparison (Mother's Education Level.)		Average Distinction	Significance
Primary School	Secondary School	-,109	,449
	Undergraduate/License	-,295	,038*
Secondary School	Undergraduate/License	,186	,181

According to multiple comparison results: There was significant distinction in the aggressiveness levels of between the players whose their mothers education level became primary school and those whose mothers education levels become undergraduate and license. ($p=.038$) According to this, it was seen that the players whose mothers became primary school ($\bar{X}=3,77\pm,433$) were less aggressive than those whose mother education levels became undergraduate or license ($\bar{X}=3,66\pm,464$)

5. DISCUSSION

This study was conducted with the aim of determining aggression levels of elit ice hockey players at the level of high school as regards parameters such as position, parent's education level, age of sport, type of school and age. In addition under the light of analyses taking the place in the findings section, the results were commented and discussed.

In the comparison of aggression levels of the participants as regards their age we couldn't find any significant distinction ($p<0,05$) According to multiple comparison results, there was significant distinction between 15 years of age and 16 years of age ($p=.000$), and 15 years of age and 17 years of age ($p=.000$) According to these, it was seen that the players at the age of 15 ($\bar{X}=2,97\pm,272$), became less aggressive than the players of 16 years of

age ($\bar{X}=3,70\pm,306$) and 17 years of age ($\bar{X}=3,87\pm,658$) These results are accordance with the study of Smith [17]. Smith reported that a group of 54% between 12 and 13 years of age hockey players perceived their team-friends as the violence in Hockey. This rate has increased to 78% between 18-20 years of age. When he aggressiveness level as regards their classes were examined, the aggression level of high school first class students became lower than those of high school second class or third classes. Aggression levels of high school third class students are very high in terms of others. (Efiliti, 2006) In the direction of these findings, aggression levels of 16 and 17 years of age students have been higher. Among their reasons the fact that participants wanted to indicate themselves and international match experiments and excessive motivation and age category at the national team level can be indicated [29].

In the result of comparison of aggression levels according to the types of the schools, it is indicated that vocational school students ($\bar{X}=4,13\pm,000$) had more aggression averages than those of sport high school ($\bar{X}=3,83\pm,360$) And those of open high school ($\bar{X}=3,59\pm,525$) It can be said that education based on physical force stimulated aggression in vocational high school. According to country conditions, the anxieties of finding a job of vocational high school students and the fact that there wasn't body training enough in their lesson curriculums support the literature according to the data.

In the result of comparison of aggression levels of the participants according to their positions, there was significant distinction between goalkeepers and forwards ($p=,025$) According to this it was seen that the goalkeepers ($\bar{X}=3,32\pm,285$) became less aggressive than forwards ($\bar{X}=3,86\pm,259$) In a study conducted by Bishop he watched 84 games of 14 and 15 years of age players, and he reported that forward players took more penalty due to their aggressive behaviour than those of defence players. [30] These results are accordance with our results. This can be explained with the fact that of forwards players showed weaker aggression defence level than those of defense players. On the other hand, it is possible that offence players aimed to frighten rival defense with their aggressive behaviours. In the direction of this results, the trainings orienting to the defense should be to make not defence players but offence players.

When aggressive levels of the participants, according to ice hockey branch age, were examined, it was found out that the highest aggression level became in the participants which is group 1-5 years ($\bar{X}=4,14\pm,211$) while the lowest one became the group which has ice hockey players who have been played for 6-10 years ($\bar{X}=3,48\pm,531$) These values can be explained with the Ice Hockey branch may be perceived as fight in the first years, but it may be perceived as aggression play and so it affected the score negatively. At the same time, the fact that new players of ice hockey's skills such as basic skating, defence and taking position become low made the rival becoming aggressive or stop him or her.

Terzian and Fraser emphasized that the communication of teacher and parent should be arranged and that teacher should direct the group positively in order to remove the behaviours which include anger and aggression [31]. When aggression levels and education levels of the participants were examined, it was observed that the players whose father education level are primary school ($\bar{X}=3,71\pm,474$) become aggressive than those of the players whose father are secondary school ($\bar{X}=3,20\pm,372$) and undergraduate or licence ($\bar{X}=3,25\pm,569$) In the same way, it was also observed that the players whose mother's education levels become primary school ($\bar{X}=3,77\pm,433$) are less aggressive than those of the players whose mothers education level become license or undergraduate ($\bar{X}=3,66\pm,464$) Parents should tell their children which behavior is acceptable or not. So, the prevention and solution of the problems occurring in mother, father-child relationship will be realized with more real ways [32]. The fact that parents who don't support aggressive behaviors became on tribune during the match may enable the children remote from these behaviours. The fact that individuals education level increased supported him to perform more civilized behaviours the family which is accepted as first place where the education started is of significant role in children's behaviours. In this respect, it is possible to say that education level of parents become effective on aggressive behaviours performed by the players.

6. CONCLUSION

This study was carried out with the aim of determining the factors occurring aggression and prevention it, and to detect aggression levels of the elit ice hockey players at high school level in Turkey.

Aggression is the first agent affecting the score in ice hockey. To reduce aggression to the minimum removing the cause of aggression will bring success a long with itself. In the direction of this aim, to inform the players, trainers and managers about the effects of aggression provides them to shape against negative effect of aggression and to avoid from aggressive behaviours.

This study was carried on elit 51 male ice hockey players at the level of high school. The study can be applied to the grounds which have various age, ability and similar variables with the aim of determining aggressive behaviours level in different groups.

The fact that body training and sport lessons were increased and the fact that negative ways of the behaviours which include violence and aggression transferred will provide the growing of healthier players. Due to the educational system, a number of players don't have body training and sport courses, and they have taken all behaviours they learned for the sport from clubs or national teams. In these cases, individual experience problems about the wrong and true perception

The groups consisted of by school age children have taken examples the groups which are bigger than themselves. Among these examples are unfortunately bad habits and aggressive behaviours. The study carried out by Russel (1978) for high school ice hockey players who took penalty for playing hard and taking serious penalty is accordance with the results of our study.

In conclusion, this study in which we examined the relationship between sport age, position, parents education level and type of school and aggression levels off elit ice hockey players at the level of high school will contribute to the reliability of the results obtained from the studies carried out for aggression behaviour and sport. We suggest that this study can be applied to the same age group of women and men players in national teams.

REFERENCES

1. Pulur A. (2001). Sporda Şiddet ve Saldırganlık. *Türkiye Üniversite Sporları Dergisi*, 1: 75-103.
2. Doğan, O. (2005). *Spor psikolojisi* (2. Baskı). Adana: Nobel Kitabevi, 70.
3. McWhirter, J.J., McWhirter, B. T., McWhirter, E. H., ve McWhirter, R. J. (2004). *At-risk youth*. Belmont: Thomson Brooks Cole.
4. Tiryaki, Ş. (2000). *Spor psikolojisi*. Ankara: Eylül Kitap ve Yayınevi.
5. Tiryaki, Ş. (1997). Spor yapan bireylerin saldırganlık düzeylerinin belirlenmesi: Takım ve bireysel sporlar açısından bir inceleme. *Uluslararası spor psikolojisi sempozyumu*, Mersin,(10-12 Ekim).
6. Şahin HM. (2003). *Sporda şiddet ve saldırganlık*. 1. Baskı. Ankara: Nobel Yayın Dağıtım, p.49-68-72. 80-5.
7. Çobanoğlu, M. G. (1993). *Sporda saldırganlık olgusu ve bu olgunun sportif performans üzerine etkisi*. Dokuz Eylül Üniversitesi, Sağlık Bilimleri Enstitüsü Beden Eğitimi ve Spor Anabilim Dalı (Doktora Tezi) İzmir: Dokuz Eylül Üniversitesi.

8. Loeber R, & Hay D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology*. Sayı 48.
9. Kepençi, Y. & Çınkır, Ş. (2005). Bullying among turkish high school students. *Child Abuse & Neglect*.
10. Baumann, S. (1994). *Uygulamalı spor psikolojisi*. (Çev. C. İkizler, A.O. Özcan). İstanbul: Alfa Basım Yayım Dağıtım.
11. Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. Mcgraw-Hill Book Company. P. 56-58.
12. Leonard, W. M. (1988). *A sociological perspective of sport*. New York: Macmillan.
13. Beyer, E., Peter, G. (1997). Saldırganlık. (Çev. Z. Kılıç). *Spor Ekin Dergisi*, Ankara, 1 (2): 36 – 37.
14. Sanson, A., Hemphill, S. A., Smart, D. (2002). Temperament and social development. (Eds. Smith, P. K. & Hart, C. H.). *Blackwell handbook of childhood social development*. Oxford: Blackwell
15. Feldman, R. S. (1997). *Essentials of understanding psychology*. New York: McGraw-Hill Company.
16. Venter, M., Poggenpoel, M., & Myburgh, C. P. H. (2006). The phenomenon of aggressive behavior of learners in the school situation. *Education*, 126(2), 312-315.
17. Smith M.D.. (1979a). Social determinants of violence in hockey: A Rewiev. *Canadian Journal of Applied Sports Sciences*, 4 (1): 76 – 87
18. Weinberg, R. S., & Gould, D. (2011). *Foundations of sport and exercise psychology*. Human Kinetics.
19. Morgan, C. T., Karakaş, S., & Eski, R. (2009). *Psikolojiye giriş*. Eğitim Kitabevi yayımları.
20. Dervent, F. (2007). *Lise öğrencilerinin saldırganlık düzeyleri ve sportif aktivitelere katılımı ilişkisi*. Yüksek Lisans Tezi.
21. Eripek, S. (1993). *Spor psikolojisi*. Eskişehir Anadolu Üniversitesi Yayınları, 2(1), 9-15.
22. Alvies, C. How Can Athletes Be Helped in Order to Keep Violence Of The Court. [online] 1999. Available from :URL: www.shpm.com/articles/sports/violance.html. 12 Mart 2014'te alınmıştır.
23. Ramazanoğlu, F., Canikli, A., & Saygın, Ö. (2002). Futbolcular ile taekwondocuların saldırganlık düzeylerinin karşılaştırılması. *AÜ BESYO, Beden Eğitimi ve Spor Bilimleri Dergisi*, 4(2).
24. Frank, M. G., & Gilovich, T. (1988). The dark side of self-and social perception: black uniforms and aggression in professional sports. *Journal of personality and social psychology*, 54(1), 74.

25. Morris, C. G. (2002). *Psikolojiyi anlamak*. editör: H. Belgin Ayvaşık ve Melike Sayıl), Türk Psikologlar Derneği, Ankara.
26. Gee, C. J., & Potwarka, L. (2007). The impact of introducing legal punishment on the frequency of aggressive behaviour in professional ice hockey: Using the Todd Bertuzzi incident as an ecological case study. *Athletic Insight*, 9(3), 5-5.
27. Buz Hokeyi Oyun Kuralları [online]
Avaliablefrom:URL:
<http://www.turkbuzhokeyi.com/rules.php> 5 Aralık 2013'te alınmıştır.
28. Tuzgöl, M. (1998). *Anne-baba tutumları farklı lise öğrencilerinin saldırganlık düzeylerinin çeşitli değişkenler açısından incelenmesi*. Ankara: Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Yayınlanmamış Yüksek Lisans Tezi.
29. Efilti, E. (2006). *Orta öğretim kurumlarında okuyan öğrencilerin saldırganlık, denetim odağı ve kişilik özelliklerinin karşılaştırmalı olarak incelenmesi*. Yayınlanmamış Doktora Tezi, Selçuk Üniversitesi, Konya.
30. Bishop, P. J. (1989). *Safety in ice hockey* (Vol. 1). C. R. Castaldi, & E. F. Hoerner (Eds.). ASTM International.
31. Terzian, M. A., & Fraser, M. W. (2005). Preventing aggressive behavior and drug use in elementary school: Six family-oriented programs. *Aggression and violent behavior*, 10(4), 407-435.
32. Öğülmüş, S. (2001). *Kişilerarası sorun çözme becerisi eğitimi*. Ankara: Nobel.