

**Research Paper**

**Modelling Cyber-Aggression of Basketball Spectators  
(DEMATEL Technique)**

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**Abstract**

The purpose of this study was to design a psychological model for cyber aggression among the spectators of the Women's Basketball Premier League. The study sample was equal to population and has an essay in basketball aggression that was 25 experts; 23 out of 26 concepts were analyzed using SPSS and PLS statistical softwares, and then standard questionnaires whose validity and reliability were confirmed, was used. The study's quantitative sample was about 389 spectators of the Women's Basketball Premier League. Findings of the present study showed that personal, family, socio-economic, postural and neurological photographs were the most important indicators of aggression among basketball Premier League spectators. Finally, Dematel test showed the relationship between variables. According to the research findings, it can be understood that the socio-economic status of the family, personal characteristics and neurological characteristics can affect the level of aggression of the basketball Premier League spectators.

**Keywords:** Spectator, Cyber-Aggression, Basketball Matches.

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## Introduction

Nowadays, technology-based communications are considered as an inseparable part of modern society, ideally representing a combination of time and place. The dynamic change of spaces in the information age influences new forms of interpersonal interaction and communication, resulting in empirical changes in social life. The transformation process creates new interpersonal communications in the virtual cyber world. Social relationships, which has been established in the past and are done face-to-face today, are replaced with new relationships created by the virtual world. New types of social relationships created in the virtual world are now done through social networks called social media (Eraslan, 2015). Information and communication technology, internet and mobile phones are a part of adolescents and youth life. Many psychological phenomena find new contexts along with technological advances; this is true of aggression. Aggression, the motivation for sabotage, is an unseparable part of every person, including youth and adolescents. As French psychologist Jean-Luc Obert says: "this is a part of our animal nature" (Obert, 2001). The role of violation in virtual space was discussed in research on the fields of psychology, sociology and education, in which it was proved that adolescents experience more discomfort from cyber threats than traditional harassment, and in a modern way, the aggression at the community level will be reflected in cyberspace in not-too-distant future (Makarova & Makarova, 2019).

Pyżalski (2012) proposes a typology of electronic aggression based on the identity of the targeted individual(s), arguing that the framing of cyberbullying within the school bullying conceptualisation involves the assumption that all aggressive behaviours occur within the peer group. Therefore, Pyżalski's typology includes both peer-directed cyber aggression and electronic aggression targeting celebrities, groups, vulnerable individuals, school staff, and random victims. In a large-scale study of Polish adolescents, Pyżalski (2012) measured electronic aggression (characterised by intention as a traditional bullying criterion), and cyberbullying (also including the characteristics of repetition and power imbalance). In this way, similar to Grigg's approach, an important distinction was made between the traditional bullying criteria and cyber aggression more broadly. However, an important voice which also deserves attention, is that of our research population—children and adolescents. Pyżalski's typology of electronic aggression was in fact based on qualitative interviews with teachers and students. Cyber aggressive behavior is defined as a new form of aggressive behavior based on the development of the internet, which involves the use of internet and mobile phones to harm others intentionally (Grigg, 2010; Jin et al., 2018; Zhao & Gao, 2012). Cyber aggression is a derivative form of traditional aggression. The General Aggression Model (GAM), which is a comprehensive and integrative contemporary psychological theory for understanding aggression (Anderson &

Carnagey, 2004), indicates that individual personality is an important antecedent variable that affects aggression. Some personality variables are considered risk factors that can increase the likelihood of aggression, whereas other personality variables are considered protective factors that can decrease the likelihood of aggression (Allen, Anderson, & Bushman, 2018). Previous studies have found that some dimensions of the “Big Five” personality model (e.g., high agreeableness, high conscientiousness, and low neuroticism) are negatively associated with aggression (Allen et al., 2018; Cavalcanti & Pimentel, 2016; Gilbert & Daffern, 2011). Everything has two sides, and individual personality also has a dark side, such as cynical and strategic machiavellianism, erratic and antisocial psychopathy, and grandiose and entitled narcissism (Paulhus & Williams, 2002). These traits are called the dark triad of personality (Paulhus & Williams, 2002), which share a number of features (e.g., malevolent disposition toward society, emotional coldness, duplicity, and aggressiveness) and can predict a wide range of negative outcomes (Oboyle et al., 2012; Paulhus & Williams, 2002). Many previous studies have found a significantly positive correlation between dark triad personality traits and physical and verbal aggression in real life (Jones & Neria, 2015; Pailing et al., 2014; Van Geel et al., 2017). Studies have indicated that online aggressive behaviors are more likely to occur than face-to-face offline aggressive behaviors (Law, Shapka, Domene, & Gagne, 2012). Previous empirical studies have shown that a significantly positive correlation exists between adolescents’ dark triad personality traits and cyber aggression (Grigg, 2010).

By occurring many positive and negative events in the field of cyber, many questions proposed about the relationship between human and computer in the modern world. The internet is a massive database, its principles are very multidimensional, it provides a great opportunity for users, but at the same time it offers unlimited space to create information that can damage other people or be dangerous. Information and communication technologies provide people with the tools to transform information into knowledge, help to the socialization process, develop identity and create a space for active social interaction and action, experiment and express yourself and their representations as a whole. On the internet, people can communicate with each other regardless of gender, social identity, external attractiveness or unattractiveness (Cherkasenko, 2015).

The studies on this area at home and abroad include the risk of cyber criminality through social, demographic, psychological, family, educational and technological factors. Most of the results are contradictory, especially in terms of age and gender. Most of the results are contradictory, especially in terms of age and gender. More consistent results are observed on psychological factors (self-esteem and social anxiety are related to the possibility of cyber criminality). As in the case of adolescents and youth, the risk of victimization shows the relationship

between the severity of Internet use and the characteristics of virtual interaction. Adolescents who actively participate in online games are more likely to fall victim to online aggression (Kowalski et al., 2014). Due to the almost endless possibilities of access to users, the victim of internet harassment does not know how many people are involved in the harassment. The target almost audience to receive the messages may be unlimited. This advertising is one of the most important factors related to the experience of distress in adolescents. In sport spaces, on the other hand, the problem of aggression is being transferred from stadiums to the virtual space.

Sport has negative and positive consequences for individuals and groups around the world, and seriously influences people's daily lives, their situation, racial relations, clothing style, language, and moral values. It should be mentioned that, there can exist the deviant behavior in other aspects of social life, we also see an extensive expansion of this phenomenon in sports. Fan's deviant behavior is one of the common problems of society in the world of sports and many deviant behaviors are gradually increasing inside and outside the stadium and also between individuals and groups of spectators, especially today in cyberspace (Dadgaran, 2010). Many types of deviations are seen in sports, such as crime, drug use, toxic substances, and violence and aggression.

It is necessary to mention that fan aggression has been considered as a fundamental element in many sporting events among other deviant behaviors; in the last two decades, it has attracted the attention of social thinkers and sociologists. Studying and explaining the violent events and incidents are related to sports competitions. Aggression is a behavior and action which is done with a previous intention along with a behavior for physical and mental abuse. According to Baron, aggression is an action that includes both forms of physical and psychological harm, it is intentional and is not accidental, it involves only human beings, and does not involve damaging to objects (Shariati, Dastgerdi, & Dabir, 2020). Also, by defining the aggression as intentional damage to another, Berkowitz adds this damage may be mental or physical. Violence is generally distinguished from aggression based on the severity of the injury caused by the aggression and is an action in which the perpetrator is deliberately trying to physically harm another (ibid.). In the definition of aggression and violence, there is also an emphasis on the factor of neglecting the consequences of action, resulting in damage to others or oneself (George, 2005).

Different variables, such as the sensitivity of the game result in terms of scoring and determining the position of favorite teams in the championship rankings, violent and aggressive behaviors of players during the game and the quality of refereeing, mainly influence the verbal aggression of sports fans. The variables of age, degree of family control and supervision, economic and social positions have a negative effect on fans of sports teams, causing the aggressive and violent behaviors (Rahmati, 2009). The variables of history of quarrels, strife and failure

in educational activities, smoking, history of the family tensions, history of criminal behavior, having friends and peers with criminal history, contact with relatives with criminal history, group departure to stadium and the incompatibility of sports expectations and the ways to realize them, have a direct impact on the tendency to commit aggressive and violent sports behaviors by fans of sports team.

The process of aggression in sports fields and stadiums can be decreased by educational activities from the family, education, media and press. The aggressive behavior of spectators can be reduced by providing welfare and recreational services in stadiums and the necessary facilities in these places, identifying offenders with a history of fights and sabotage by the police and even preventing these people from entering stadiums and gyms, improving the technical, psychological and managerial information of the referees. Reviewing the aggressive and violent behaviors of spectators around the world represents that there is the same pattern of behavior for them (Rahmati, 2004). Evidence indicates that the majority of violent and aggressive behavior of spectators are influenced by social currents, and considering the different origins of violent and aggressive social currents in different societies, the roots of football fans' violence is different in various countries with each other.

In European countries such as England, Italy and Scotland, class and religious conflicts such as conflict between Catholicism and Protestantism lead to violence in a sport such as live football. In Africa, long-standing ethnic and tribal animosities play an important role in the occurrence of violent behaviors, but the following factors play a key role in all over the world. Hooliganism can easily created due to the low class origins and the existance of unemployment, the low level of education and being young the spectators. By gradual expansion of the culture of advocacy and spectatorship in sports, its aggressive problems have attracted the attention of scholars and researchers in recent years (Anbari, 2002). New dimensions and different dynamics for discussions are created by the social effects of social media on human behavior, industrial organizations, and as a result on the academic literature in this field. Many disciplines have achieved different definitions on the concept of social media. The main emphasis of all definitions is on interactive communication. Moreover, all definitions generally emphasized the fact that the communication process is created using interfaces and used for different purposes. Social media is the internet platform which people communicate with, and share ideas, views, and experiences by messages or images. Borger, Van Hoof, Costera Meijer, and Sanders (2013) define social media as an interactive, virtual environment in which people communicate and share their ideas. Palmer and Koenig-Lewis (2009) consider the personality of social media as a new media platform for easy collaboration and interaction, sharing the content and information, and an internet-based virtual platform in

which increases actively the number of online information and applications. Atadokht et al. (2020) conducted a research entitled "Investigating the structural relations model of cyber-aggression based on perceived stress with the mediating role of virtual network dependency in students of Mohagheh Ardabili University: a descriptive study", that they acknowledged that the use of virtual networks has become a modern natural behavior, but the harmful forms of its use have also received much attention in the last two decades. The results indicated that cyber-aggression has a positive relationship with perceived stress and virtual networks dependency. Mehdizadeh et al. (2018) conducted a research entitled "The relationship between parenting styles (of parents) with the level of aggression in children" that they acknowledged that parenting styles are the methods that parents use for child raising. These styles are influenced by many variables, including parents' personality type, living environment, lifestyle, mental health, culture and race. Andam and Salimi (2017) investigated the effective factors on creating abnormalities in the behavior of handball Premier League's fans and they considered five factors to be effective in the occurrence of these anomalies, including environmental, psychological, security, supportive and managerial factors. Kargar et al. (2017), by presenting the model of effective factors on the security of sports events in Iran, reported that the presence of numerous media events in the scope of sports and ensuring the security of these competitions are effective to strengthen public trust. They divided the five areas as effective factors on the security of sports events, including infrastructure, technology, media and advertising, human resources and cultural activities. The process of managing the security of sports events includes the steps of managing and planning matches, disciplinary policies and measures, the stadium management system, estimates, traffic control, interactions and inter-organizational participation. Nowruzi (2017) in an article in Javan newspaper entitled "From stabbing in football to profanity in volleyball and basketball" reported the conflict between Naft Abadan-Petroshimi fans and problems in the gym of Shaherdari Gorgan team as the issues facing Iranian basketball. Atashi (2017) examined the presence of spectators on the team efficiency of Basketball Super League's teams; and by studying all basketball teams including Esteghlal Zarrin Qeshm, Islamic Azad University, Foolad Mahan Isfahan, Mahram Tehran, petrochimi Bandar Imam, Afra Khalikh Fars Tehran, Takmash Qazvin, Zob Ahan Esfahan, Niroye Zamini Artesh and Hamyari Zanjan, which there were a total of 12 teams and about 144 players, indicated that the presence of spectators had an effect on the effort, unity, readiness, ability and team efficiency of basketball players and only had not had a significant effect on the team stability of basketball players. Omid, Boroujeni and Eskandari (2018) investigated and compared the aggression among football and basketball spectators in the Iranian Premier League and by studying 1900 spectators suggested that basketball fans are less aggressive.

There are many research in other countries concentrated on this topic; Eraslan et al. (2019) conducted a study entitled "Social relationships in the virtual world and aggression in social networks", who acknowledged in their research that living in an age of continuous technological developments changed the pattern of social communication and social relationships to virtual environments. The results represented those reciprocal statements about participants' values have an important effect on participants' showing aggressive tendencies. Mihret (2019) conducted a study entitled "Parenting style as a motivation for adolescents' academic achievement motivation in Betah High School, Haramaya, Ethiopia". This study aimed to review the relationship between academic achievement motivation and adolescents' parenting styles. Findings indicated that authoritarian parenting style is the most common parenting style in the families of respondents among the other three parenting styles (authoritarian, permissive and neglectful). There is a statistically significant relationship between valid parenting style and students' academic achievement motivation. Also, there is a significant relationship between authoritarian parenting style and students' academic achievement motivation. There is a strong and negative relationship between neglectful parenting style and students' academic achievement motivation. Garcia et al. (2018) conducted a study entitled "Individual, family, and community predictors on cyber-aggression in adolescents", which aimed to analyze the predictive capacity of some individual, family, and social variables regarding the probability of a adolescents' behavior in aggressive behaviors toward others by mobile phone or internet. Multivariate regression analysis highlights the predictive capacity of motivation, aggression in school and cyber criminality as risk factors for cyber-aggression. Kosterelioglu (2018) conducted a study entitled "The effects of parenting practices on student achievement orientation: A study on high school students", which aimed to examine the effects of parenting practices on high school students' goals orientation. It was found that democratic and excessive conservative parenting styles have the greatest and most important effect on the learning approach orientation, while excessive parenting styles and punishment have the greatest effect on the avoidance learning orientation. It was found that parental style has a positive relationship with performance approach and performance avoidance tendency. The analysis shows that authoritarian and overprotective parenting styles had the greatest effect in both directions. Shalom et al. (2019) investigated the relationship between the media activities of basketball fans in Israel and players' aggression on the field; by studying the messages of basketball teams' fans 24 hours before the match on social networks, they found that there is a significant relationship between the type of fans' activities on social networks and the violent behavior of athletes on the field. Yin et al. (2019) reviews, in her thesis, the experiences of verbal violence against female basketball players; according to her view, the degree of understanding the

verbal violence of female athletes is much higher than that of male basketball players and has a great effect on their performance. Nowadays, violent behavior has become an element of the dominant culture in the areas of sports activities, that it can be seen among spectators, fans and sometimes athletes in football and basketball. Considering the extent and prevalence of football and its wider arena, which attracts a large number of spectators during the competitions, this sport has encountered more violent behavior by fans and spectators among various sports activities, such a way that it can be seen specific and almost organized type of violence in Western countries. Therefore, professional sport, which can be a stage for transforming organized social competitions into non-violent struggles, occasionally undergoes to extensive violence and conflicts. The data from a study represents that the major part of spectators take action the cyber-aggression, and also about 15% of them are committed the violence. Based on experience and various research, ignoring this problem can have adverse effects in the long-term according to the expansion of the application of information technology, especially young people who are in critical ages. So, this study will first seek to answer the question of what are the effective factors on the aggression in stadiums and what will be the optimal pattern of this issue?

### **Methodology**

This study was applied in terms of purpose and was field research in terms of data collection method. According to the main objective, the Q method was the method of the present study, which was a mixed method of sequential expletory type (first qualitative method and then quantitative method). At first, the Q method was used (using the studying the articles, documents and interview tools) to build the conceptual model of the research. These interviews progressed to the point of theoretical saturation (qualitative stage); ultimately, a list was extracted about cyber-aggression concepts of basketball spectators. Then, the final model was extracted using the obtained concepts. The population of study consisted of all experts of abnormal behaviors and cyber-aggression in gyms. For sampling 25 professionals in the qualitative section and included 389 spectators of Premier League, First Division League and Iranian Women's League in the quantitative section were elected. After librarian studies, interview and semi-open questions, which were performed simultaneously for those who were both interviewed and completed the questionnaire. Finally, research hypotheses were tested using structural equation modeling in order to evaluate the conceptual model of the research, as well as to ensure the existence or non-existence of a causal relationship between the research variables and to review the proportion of the observed data with the conceptual model.

### **Results**

The study sample in qualitative section included 25 experts of sport psychologist and sport managers (17 as faculty members and 8 as managers); in quantitative section 389 of spectators were elected as study sample; their demographic features in table 1:

**Table 1- Demographic Feature of study sample**

Row	Demographic Features	Options	Frequency	Percent
1	Sexuality	Male	13	3.3
		Female	376	96.6
2	Degree	Elementary School	27	6.9
		High School	103	26.4
		Diploma	95	24.4
		Bachlor	108	27.7
		Master	51	13.1
		PhD	5	1.2
3	Marital Situation	Single	312	80.2
		Married	77	19.7
4	Age	Under 10	20	5.1
		10-20	141	36.2
		20-30	116	29.8
		30-40	81	20.8
		40-50	23	5.9
		>50	8	2.0

As we proved in the previous section, the correlation of variables has been tested by SmartPLS software. Path analysis method has been used to review the causal relationship between independent and dependent variables and to confirm the whole model. In this study, path analysis was performed using SmartPLS software. The test results are indicated in following figuers:

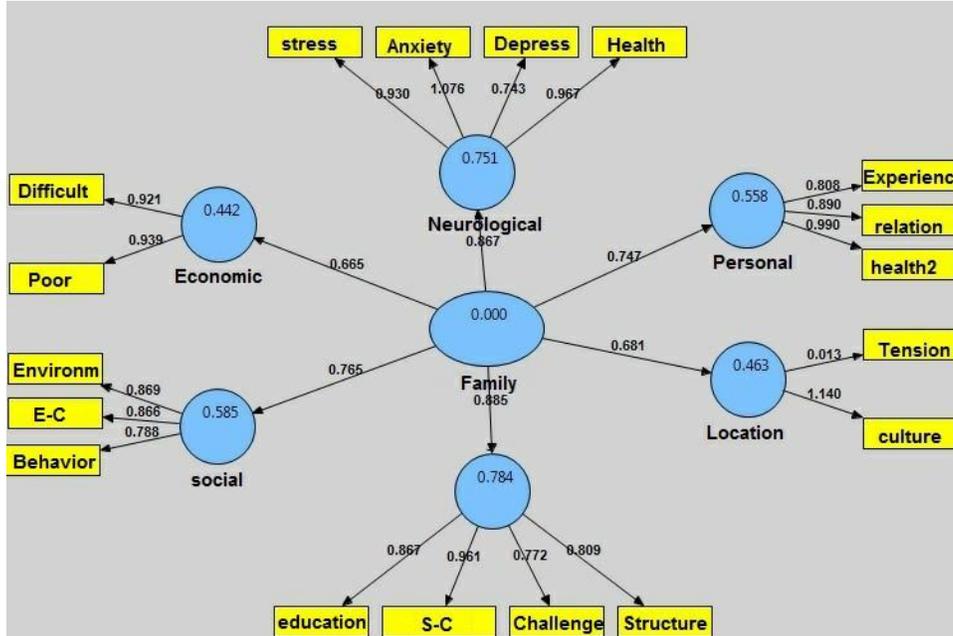


Fig 1- Measuring the general model and hypotheses' results in a standard state

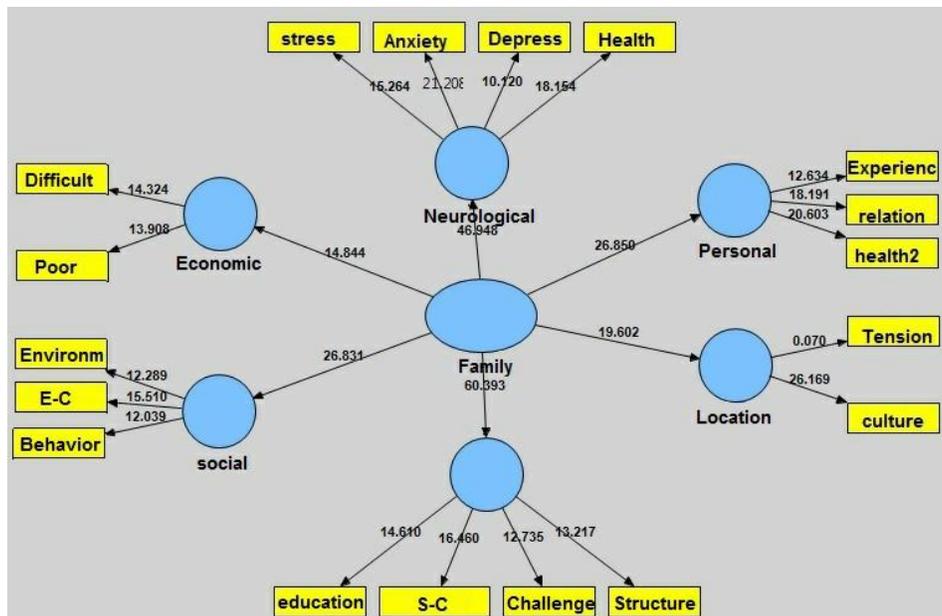


Fig 2- Measuring the general model and hypotheses' results in a significant state

The validity, reliability and fit of the model are provided in the table below:

**Tab 1- The result of validity, reliability, and fit of model**

Factors	AVE	Composite Reliability	R Square	Cronbachs Alpha
Economic	0.864852	0.927523	0.442000	0.748987
Family	0.731533	0.915422	0.783525	0.729248
Personal	0.808141	0.926197	0.558496	0.754694
Neurological	0.877771	0.965817	0.750881	0.756191
social	0.708519	0.879194	0.585087	0.719730
Situational	0.649956	0.654953	0.463400	0.786042
Cyber-Aggression	0.487091	0.937388		0.881595

According to the table above, all indicators are in good condition, representing the approval of the model. The following table summarizes the significance coefficient and the results of the proposed hypotheses.

**Tab 2- The results of hypotheses**

Hypotheses	Std.	Sig.	Result
Neurological factors have a positive and significant effect on cyber-aggression.	0.186	0.000	Confirmed
Social factors have a positive and significant effect on cyber-aggression.	0.176	0.000	Confirmed
Economic factors have a positive and significant effect on cyber-aggression.	0.166	0.000	Confirmed
Personal factors have a positive and significant effect on cyber-aggression.	0.174	0.000	Confirmed
Family factors have a positive and significant effect on cyber-aggression.	0.188	0.000	Confirmed
Situational factors have a positive and significant effect on cyber-aggression.	0.168	0.000	Confirmed

Final step: creating the causal relationships: causal diagram

The sum of the elements of each row (D) for each factor represents the degree of influence of a factor on system's other factors. (the degree of influence of variables). The sum of the elements of the column (R) for each factor represents the degree of effectiveness of a factor from system's other factors. (the degree of effectiveness of variables); Then, the horizontal vector (D + R) is the amount of influence and effectiveness of the desired factor in the system. In other words, the higher the D + R of a factor, the more it interacts with system's other factors.

The vertical vector (D - R) represents the degree of influence of each factor. In general, if D - R is positive, the variable is considered as a causal variable, and if it is negative, it is considered as an effect. Finally, a Cartesian coordinate system is drawn. In this system, the longitudinal axis is D + R values and the transverse axis is based on D - R. The position of each factor is determined by a point to coordinates (D + R, D - R) in the system. Accordingly, a graphic diagram will be obtained.

**Tab 3-The degree of influence and effectiveness on each other**

Factors	R	C	R+C	R-C
Neurological	-1.55	0.02	-0.49	0.54
Social	-0.73	0.02	-0.41	0.45
Economic	1.12	2.99	3.35	2.62
Personal	8.14	-1.94	0.15	-4.02
Family	5.22	1.65	-0.73	-0.97
Situational	4.40	0.18	4.30	1.05

The results of fuzzy network analysis process for the study's main factors; The criteria are obtained by considering the dependence through combining the results and applying the relation of  $W_e = B * W$ .

**Table 4- Result of Fuzzy Network Analysis**

Factos	1	2	3	4	5	6	W	Finally Weight	Rank
Neurological	0.17953	0.18052	0.18001	0.17987	0.18213	0.15799	0.17	0.2325	1
social	0.16968	0.17066	0.16894	0.16884	0.14777	0.16562	0.15	0.1933	4
Economic	0.17220	0.17385	0.17400	0.15160	0.17408	0.17578	0.20	0.0053	3
Personal	0.15456	0.14887	0.13358	0.15268	0.14848	0.14998	0.15	0.1893	6
Family	0.16817	0.14774	0.16428	0.16691	0.16930	0.17095	0.07	0.1710	5
Situational	0.15585	0.17835	0.17919	0.18010	0.17826	0.17968	0.11	0.2083	2

The above table represents the total weight of the indicators, which is calculated based on the above-mentioned relationships and the final processes and weights.

### **Conclusion and Suggestions**

Every person in sport, in every role, has the right to participate in an environment that is fun, safe and healthy, and to be treated with respect, dignity and fairness. Perhaps the definition of aggression which states that aggression is "...any behavior intended to harm another person that the target person wants to avoid" could be adapted for the purposes of cyber aggression. Therefore, also considering Langos' suggestion regarding appraisal of intent and Pyżalski's inclusion of intent (but not repetition or power imbalance) when measuring electronic aggression, the following definition is proposed— "Cyber aggression refers to any behaviour enacted through the use of information and communication technologies that is intended to harm another person(s) that the target person(s) wants to avoid.

Discharging emotion is the reason of these behaviors, which of course occurs based on the conditions and atmosphere of the stadiums. In this regard, it has been found that increasing the quantity and quality of recreation centers, sports complexes and energy discharge facilities for adolescents and youth can be effective in reducing spectators' aggression in stadiums. When a large group of people gather in a sports stadium, they form an amorphous mass and feel a common identity with their club, and so consider themselves to be a partner in the victory and defeat of the team; the phrases "we won" or "we were good" and vice versa originate from this common sense of identity.

Research studies and field observations indicate that from the point of view of spectators; some factors are related to the aggressive behaviors and reactions by spectators and fans, including excessive prejudice, creating atmosphere on the platforms by fans, creating atmosphere by club leaders, inappropriate reactions of match and club officials, misconduct of some players, biased refereeing, creating atmosphere by sports newspapers, inappropriate stadium environment, humiliation of fans, ignoring their human dignity and the sense of revenge caused by environmental and social conditions. Some sports, which have more physical impacts and have a gladiatorial aspect in the term, can also transfer the sensitivities and contexts of verbal and behavioral conflicts from the competition field to the platforms by applying action-reaction effect. That is, such high-impact sports have a hidden violence that can be inducted and spread to those around them. This nature and feature is not limited to team sports such as basketball, but also individual sports such as wrestling, judo and boxing, etc. have such features that sometimes, the match becomes a one-on-one combat.

The two most useful theories scrutinizing the social and cultural interface between the media and sport are Lawrence Wenner's MediaSport (1998) and David

Rowe's (2004) 'media sports cultural complex'. The strength of the mediasport concept is its accessibility, signifying a shift in cultural and historical sensibilities which has resulted in a seemingly natural relationship existing between the media and sports industries. Basketball as a sample study of this study is a suitable field for aggression due to the contact nature. The findings indicated that several factors play an important role in the occurrence of aggression among the fans, including cultural-social factors such as betting sites, welfare-health services, welfare-economic level of spectators, hall's heating and cooling, game analysis by experts, pre-game interviews by players and technical staff and ultimately, how to cover the match news. In the second factor, which is human factor, the team's performance, the history of fights between the fans and the players of the two teams, the behavior of the leaders, the game sensitivity, the behavior of the coaches and players on the field and the degree of fans' prejudice had the highest human contribution to occur the spectator aggression, respectively; in the third factor, the four concepts were the most important concepts of aggression in spectators, including spectator transportation condition to the hall, being systematic, the status of ticket sales and numbering for seat, respectively; in the fourth factor, security factors, the security system, entrance and exit of the hall, the strong presence of the police, the Closed-Circuit Television camera (CCTV camera) and finally the training of the sports police were among the most important factors in the occurrence of aggression among the basketball spectators. Antecedent factors include cultural and social context dimensions, teams' attitudes and interactions, the conflict between teams, and media atmosphere and interventions. Also, management factors include managing and hosting matches, managing population and traffic, security system and atmosphere, and quality of welfare facilities and services, game atmosphere and related events, refereeing performance, actions of players, coaches and technical staff, as well as teams' relative supervision and performance. The resultant of these factors causes dimensions of aggression (i.e., ethnic conflict, crossing the mechanisms, changing values, increased incuriosity, deculturalization, psychological imbalance, norm-breaking, undermining-trust, violence and hooliganism, invasion of privacy, strengthening extravagance, insult and provocation, justifying the negative attitude, criminal technology). According to this, individuals with different mental beliefs are controlled by environmental norms, have access to phenomena and perceive them; Perception and acquisition of knowledge result in creating the behavioral attitude and intention. In the case of irritation, individuals become more aroused than the environment and experience action and reaction towards the environment; the happened learning leads to the occurrence of behavior depending on the extent and way of the psychological effect.

On the other hand, conducted research in this area represent that the intensification of dawdle between fans by the media and virtual space and the actions of match-related factors such as referee, player, coach (on the field) as stimuli of aggression

and violence of the fans (on the platform) are other factors creating the unfortunate events in sports spaces. These incidents are usually appear in the form of verbal and behavioral abnormalities such as profanity, group swearing, throwing objects at each other and on the field, breaking seats and throwing them on the grass field, destructive and riotous behaviors, hooliganism, destruction of public property including the hall facilities, places, vehicles and physical conflicts between the spectators and the players of the two teams can be seen. Such incidents result in the feeling of insecurity in the sports environment and society, feeling of discomfort and distrust in the sports environment, preventing families from letting their children go to such spaces, disrupting the public security of the city, damaging the psychological security of citizens, reducing the participation of different people in sports programs and activities, deprivation of hosting important international competitions and damaging to the cultural aspect of the country in the eyes of international communities and assemblies.

Research findings on the demographic composition of Iranian spectators indicate that aggressors are in the middle and lower middle class in terms of socio-economic indicate. Studies indicate that most spectators of Iranian basketball matches are single, their average age is under 25 years and more than half of them have a diploma and less. Whatever the reason for the aggression of these spectators, it arises from a mental emotion in the final form that results in destruction in the form of anger, aggression, social rebellion and show off. According to the age, individual and social position and adversities of everyday life, negative emotions are reduced and a part of it is directed and discharged.

However, the problem of violence in basketball is global due to the popularity, and more audiences and media coverage of basketball and the frequency of relevant matches. Preventive and control-based procedures in the occurrence of aggression are expressed based on scientific sources and police monitoring and control systems in the environment of sports events. Based on advanced knowledge and technology, on the one hand, the control system and on the other hand, the culture-building system must be active in the area of fighting aggression. Therefore, there are two general approaches that must be performed complementary and simultaneous, including monitoring and control, and culture-building. In general, the control system and managerial and security measures have the perspectives of legal action, executive structure, monitoring system, control operation, cover access, security behavior and control goal.

Based on collected sources and expert analysis, the security system should emphasize non-criminal, formal, managerial, electronic, tangible, positive and persuasive procedures in order to control the spectators' aggression in Iran. In general, in the culture-building system, cultural management programs and actions have the landscapes of modeling, internalization, identification, behavior building, content creation, normativeization, and coverage. Based on collected

sources and expert analysis, in the cultural management system to build a culture of spectators in Iran, there should be emphasized the procedures of generational education, ethical consolidation, intellectual orientation, socialization, proportion and homogeneity, self-control and informing.

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