### **Research Paper**

# Investigating the Relationship Between Perfectionism and Aggression in Football Coaches

## Bahador Azizi<sup>1</sup>, Reza Aminzadeh<sup>2</sup>, Ahmad Mahmoudi<sup>3</sup>, Nafise Mobaraki<sup>4</sup>

1. Ph.D. Candidate, Department of Sport Management and Motor Behavior, Faculty of Sports Sciences, Ferdowsi University, Mashhad, Iran (Corresponding Author)

2. Ph.D. Department of Sports Sciences, Imam Reza International University, Mashhad, Iran

3. Ph.D. Faculty of Sports Sciences, Tehran University, Tehran, Iran

4. MSc, MSc. In Sport Management, Department of Sports Sciences, Imam Reza International University of Mashhad, Mashhad, Iran

Received: 2021/12/20 Accepted: 2022/02/28

### Abstract

The purpose of this study was to investigate the relationship between perfectionism and aggression in football coaches in Iran. The statistical population of this quantitative and descriptive study included all coaches and assistant coaches present in the premier and the first division's leagues of Iran (N=170). Therefore, all these coaches were selected as a statistical sample (N=n). Two standard questionnaires including vandalistic behaviors in football (Gholinejad et al., 2017) and perfectionism questionnaire (Hewitt & Flett, 1991) were used to collect data, and correlative-descriptive statistical methods were used to analyze data. The results showed that there is a positive and significant relationship between perfectionism, self-oriented, other-oriented and socially-prescribed perfectionism with the aggression of coaches (P < 0.01). In addition, the correlation coefficient (0.59) and the coefficient of explanation (0.42) between the scores of the components of perfectionism and aggression show that 42% of the changes in aggression of coaches are related to the components of perfectionism. Finally, the results showed that the structural equation model of the study has a significant fit. As a result, it can be argued that perfectionist football coaches who have a high level of perfectionism may create certain expectations in them, and if they do not achieve the desired results, resort to aggression and violence.

<sup>1.</sup> Email: bahador.azizi@mail.um.ac.ir

<sup>2.</sup> Email: aminzadeh.reza@gmail.com

<sup>3.</sup> Email: ahmad.mahmoudi3536@gmail.com

<sup>4.</sup> Email: nafise.mobaraki@gmail.com

**Keywords:** Abnormality of Concentration, Aggression and Violence, Football Coaches, Perfectionism.

### Introduction

Perfectionism is a common personality tendency characterized by very high standards that are difficult, if not impossible, to meet (Stoeber, 2018). A recent meta-analysis showed that overall levels of perfectionism have been increasing in recent decades, with more people showing higher levels of perfectionism (Curran & Hill, 2019). Because high levels of perfectionism are associated with a range of psychopathological symptoms such as anxiety, depressive symptoms, obsessive-compulsive behaviors, and eating disorders (Limburg et al., 2017), perfectionism may adversely affect people's mental health and well-being. In addition, perfectionism may negatively affect people's social life.

According to the Perfectionism Social Disconnection Model (PSDM; Hewitt et al., 2006), perfectionism positively correlates with various indicators of social disconnection, including antisocial traits and behaviors making it difficult for perfectionists to connect with others such as hostility and aggression (Barnett & Johnston, 2016; Roxborough et al., 2012). Perfectionism, however, is a multidimensional personality trend (Frost et al. 1990; Hewitt & Flett, 1991). In particular, Hewitt and Flett (1991) distinguish three dimensions capturing personal and social aspects of perfectionism: self-oriented, other-oriented, and socially prescribed perfectionism. When examining the defining characteristics (Hewitt & Flett, 1991, 2004), the key beliefs and expectations that distinguish the three can be summarized as follows: Self-oriented perfectionism reflects the belief that the pursuit of perfection is important. People with high self-oriented perfectionism expect to be perfect. Other-oriented perfectionism reflects the belief that the efforts of others are important for perfection. People with other-oriented perfectionisms expect others to be perfect. And People high in socially prescribed perfectionism believe that others expect them to be perfect, and that others will disapprove of them if they are not (Stoeber et al., 2020).

While the PSDM initially focused only on socially prescribed perfectionism, it has recently expanded to self-oriented and other-oriented perfectionism (Sherry et al., 2016). Based on the extended PSDM, all three dimensions of perfectionism are positively related to indicators of social disconnection (Hewitt et al., 2017). While studies have shown that this includes the dimension of self-oriented perfectionism (Smith et al., 2020), all three dimensions of perfectionism may not be positively associated with hostility and aggression. This has been suggested by a number of studies showing that only other-oriented and socially prescribed perfectionism consistently shows positive relationships with hostility and aggression, but not self -oriented perfectionism. Indeed, when the overlap between the three dimensions of perfectionism is statistically controlled, self-oriented perfectionism may even show negative relationships with antisocial traits

such as hostility and aggression (Stoeber, 2014, 2015; Stoeber et al., 2017). This is especially true of aggression. Stober et al. (2017) examined different aspects of aggression and found that any positive relationship of self-oriented perfectionism with aggression disappeared when the overlap with the other two forms of perfectionism was statistically controlled. Furthermore, self-oriented perfectionism even showed a significant negative relationship with physical aggression. In contrast, both other-oriented and socially prescribed perfectionism maintained their significant positive relationships.

These findings are relevant to our understanding of perfectionism and social disconnection; because aggression is a strong indicator of hostility (People can be hostile without being aggressive, but aggression against others always implies hostility). However, while there are numerous studies on perfectionism and aggression, no study has examined the relationship between perfectionism and aggression in football coaches. In addition, the vast majority of studies on perfectionism and aggression (e.g., Vicent et al., 2017). However, so far no study has examined perfectionism and aggression in situations with different degrees of provocation (Tremblay & Belchevski, 2004).

In this regard, several studies have examined the relationship between perfectionism and aggression in sports and sports communities. Muñoz-Villena et al. (2020), by examining perfectionism profiles and anger responses in athletes of professional quarries, stated that predictive analysis showed that low personal standards and high levels of organization (indicators of adaptive perfectionism) acted as predictors of state anger, while those showing high personal standards predicted high anger management in athletes with high self-esteem. High personal standards predicted lower indicators of trait anger in athletes with low self-esteem. Besides, Kharkan et al. (2013), by examining the relationship between normal and abnormal perfectionism and aggression in volleyball and karate athletes, found that there is a negative and significant relationship between normal perfectionism and sports aggression and a positive and significant relationship between abnormal perfectionism and sports aggression. Byrd (2011), also, by examining the relationship between perfectionism, anger, anxiety and sport aggression, found that levels of reported state-anger, anxiety, and perfectionism significantly predicted levels of reactive aggression. Andam et al. (2013), by examining the relationship between perfectionism and aggression among student-athletes, stated that perfectionism had a positive and significant relationship with studentathletes' sports aggression; moreover, among the subscales of perfectionism, only a significant relationship was not observed between the subscales of parental pressure perception and sports aggression. Regarding the results of regression analysis, the subscale of excessive worry about mistakes was recognized as the best predictor of hostile aggression. Hill et al. (2020), by studying perfectionism

in sport, expressed that in most other areas of life, perfection is ambiguous, elusive, and irrational. In sport, though, perfection can be more tangible, objective, and, for athletes at the very highest levels, attainable. These factors may explain why so many athletes identify themselves as perfectionists, and why some researchers and practitioners have come to view perfectionism as a hallmark characteristic of elite performers. Also, Salimian et al. (2016), by examining the effect of perfectionism, team norms and moral atmosphere on aggressive behaviors in basketball players, concluded that there is a negative and significant relationship between perfectionism and aggressive behaviors, between team norms and aggressive behaviors, and between moral atmosphere and aggressive behaviors. Further, the results of regression analysis show that perfectionism and moral atmosphere are predictors of aggression. Ivanović et al. (2015), by examining perfectionism, anxiety in sport, and sport achievement, found that maladaptive perfectionist athletes had more pronounced sport anxiety (as a state) from clusters of adaptive perfectionists and non-perfectionists. The results of Pearson's correlation coefficients showed that the values of variables of maladaptive perfectionism have statistically significant positive correlation with sport anxiety (as a state, and as a dimension of personality), and also with adaptive perfectionism and self-confidence, whereas the variable of sport anxiety (as a dimension of personality) shows a substantially negative interaction with sport achievement. Nasiri and Nasiri (2014), by predicting aggression based on perfectionism in athletes, found that there is a positive and significant relationship between the subscales of skepticism about activities, parental expectations and parental criticism with aggression. Additionally, in sports psychology, the question of how perfectionism affects performance has always been controversial. Namwar (2021), by studying relationship between perfectionism and narcissism with psychosocial adaptation in elite and non-elite athletes, found that in elite athletes group, there was a positive correlation between positive perfectionism (organizational and personal criteria) and psychological social adjustment, and between negative perfectionism (doubts about actions, perceived pressure of parents and perceived pressure of instructor) and narcissism with negative psychological social adjustment and both positive and negative perfectionism and narcissism variables could significantly predict social adjustment in elite athletes (P < 0.05). In non-elite group, between positive components of perfectionism, only the organizational component has a negative correlation with psychological social adjustment and the correlation between negative and narcissistic perfectionism components with positive social adjustment is positive. Among the components of perfectionism, the only negative components (too much importance by mistake, parental perception and perceived stress of the mentor) and the narcissistic variable have been able positively to predict psychosocial compatibility (P < 0.05).

#### Journal of Exercise and Health Science, Vol. 01, No. 04, Fall 2021

While some studies see perfectionism as a characteristic of elite athletes that facilitates athletic performance, others have viewed perfectionism as an abnormal characteristic that is more performance-damaging than helpful. For example, research on the positive and negative aspects of perfectionism has shown that normal perfectionism has motivational characteristics that enhance one's efforts to achieve success and will lead to positive results (Anshel & Mansouri, 2005). In contrast, Hewitt et al. (2006) by comparing positive and negative perfectionism and its effect on mental disorders, showed that negative perfectionism, by creating an extreme tendency in the individual to set high standards and irrational thinking to achieve them, exposed the person to all kinds of stress, which if he cannot achieve the desired goals, he always blames himself, so the feeling of fatigue, depression and mental exhaustion will be undeniable. Given these two contradictory views, how perfectionism affects performance is still controversial. Sport, on the other hand, as a social process, involves dynamic forces that, in interaction with each other, can reinforce or reshape elements of cultural and social structures. Sport has significant examples of social processes, such as social exchange, resource allocation, cooperation, adaptation, sociability, status relationships, group relationships, perversion, competition, control, conflict and violence, and aggression (Rahmati & Mohseni Tabrizi, 2004). Among the various sports, football, more than any other sport, reflects the mentioned social processes, and this popular sport has gradually become an industry, business, science, and most importantly culture, which is scattered with certain patterns around the world (Mesbahipour Iranian, 2002).

Therefore, according to the literature and studies conducted in this field, it is clear that having high levels of perfectionism can lead to aggression on the part of individuals, as well as sports on athletes, spectators, and students-athletes have been surveyed. Now in this study, an attempt is made to investigate the relationship between perfectionism and aggression in Iranian football coaches and to determine the relationship between the three dimensions of perfectionism and aggression according to Hewitt et al. (2006).

### **Research Methodology**

In this quantitative and correlative-descriptive study, the data were collected through survey and field studies. The statistical population consisted all coaches and assistant coaches of the premier and the first division's leagues of Iran (N=170) (according to the website of Iran's Football Federation). After distributing the questionnaires among these people and collecting them, incomplete questionnaires were removed and finally, 120 completed questionnaires were selected and analyzed (n=120).

In order to collect data in this study, two standard questionnaires were used: First, the standard questionnaire of vandalistic behaviors in football (Gholinejad et al.,

2017) which has 27 items and 5 components of anomie or abnormalities (items 1 to 5), cohesion of family relationships (items 6 to 13), the importance of leisure time (items 14 to 20) the role of social control (items 21 to 23) and socializing with friends (items 24 to 27). Items 6, 22 and 25 are inverted. The reliability for this tool in research by Ghasemi et al. (2010) was found to be 0.70. And second, the perfectionism questionnaire (Hewitt & Flett, 1991), which has 30 items and 3 components of self-oriented perfectionism (items 1 to 10), other-oriented perfectionism (items 11 to 20), and socially-prescribed perfectionism (items 21 to 30), which in a study by Buyukbayraktar and Ure (2014), the Cronbach's alpha internal consistency coefficient of the scale was found to be 0.91 for the self-oriented perfectionism. Both questionnaires were designed based on the Likert five-value range (strongly disagree 1, disagree 2, have no opinion 3, agree 4, strongly agree 5).

In addition, in order to confirm the face validity of the questionnaires, experts and researchers (15 professors of sports psychology and professors who have an experience of conducting research in the field of sports psychology) were asked to point out the possible problems of the questionnaire in front of each item. In order to confirm the reliability of the instrument, Cronbach's alpha test was used. The reliability coefficients were 0.83 for the aggression questionnaire and 0.91 for the perfectionism questionnaire.

Correlative-descriptive statistical methods were applied to analyze the data (in inferential statistics part, Skewness and Kurtosis tests, Pearson correlation test, regression test and finally structural equation modeling were used), and the results were reported in the form of tables of mean, frequency, and percentage. For statistical analysis, SPSS 23 and Lisrel 8.80 were used.

### Results

First, using skewness and kurtosis tests, the normality of data distribution was investigated and the results showed that the data have a normal distribution and parametric tests can be used to measure research hypotheses.

Then, using Pearson correlation test, the relationship between perfectionism and its components with aggression was investigated and as can be seen, there is a positive and significant relationship between perfectionism and its components with aggression (P <0.05), so that the correlation between them was reported to be optimal (Table 1).

Variables	Correlation coefficient	P-value
Self-oriented perfectionism and aggression	0.27	0.001
Other-oriented perfectionism and aggression	0.34	0.001
Socially-prescribed perfectionism and aggression	0.21	0.001
Perfectionism and aggression	0.38	0.001

Table 1 - Test of correlation between perfectionism and its components with aggression

Then, using regression test, the prediction of aggression by the components of perfectionism was examined to determine its effect on the incidence of aggression. According to the results, the statistic value of Durbin Watson, which should be a number between 1.5 and 2.5, was 1.71. Meanwhile, since the correlation coefficient is equal to 0.59 and the coefficient of explanation is equal to 0.42, it can be said that 42% of the changes in aggression are related to the components of perfectionism. (Table 2).

 Table 2 – Regression test results

R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Durbin Watson	P-value	
0.59	0.44	0.42	0.32369	1.71	0.03	

Then, as shown in Table 3, the Fisher test is equal to 21.356 and the error level is equal to 0.001, so the effect of perfectionism components on aggression is confirmed.

 Table 3 - Analysis of regression variance related to the effect of perfectionism components on aggression

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.789	10	1.371	21.356	0.001
Residual	19.803	189	0.064		
Total	20.592	199			

Table 4, is used to estimate the regression equation formula. According to this table, the formula for calculating sports aggression is as follows:

Aggression= 2.547 + 0.453 \* (self-oriented perfectionism) + 0.327 \* (otheroriented perfectionism) + 0.351 \* (socially-prescribed perfectionism)

Table 4- Model coefficients					
	Unstandardized Coefficients		Standardized Coefficients	_	
Model	В	Std. Error	Beta	t	Sig.
Constant	2.547	0.655		3.891	0.001
Self-oriented perfectionism	-0.025	0.549	0.453	1.393	0.001
Other-oriented perfectionism	-0.028	0.345	0.327	1.506	0.002
Socially-prescribed perfectionism	-0.046	0.223	0.351	1.708	0.001

Finally, using structural equation modeling, the relationships between research variables were investigated.



Figure 1- Structural equation model of the relationship between perfectionism and aggression in the standard state

Figure 1, shows the model of the general relationship between perfectionism and aggression. As can be seen, all factor loads (standardized regression coefficients), the relationship between research variables and their components, have acceptable values. These indicators show that the observed variables are well reflective of the hidden variables (Perfectionism and Aggression). Also, the results showed that perfectionism and its components can have a positive and significant effect equal to the path coefficient of 0.66 on the aggression of football coaches (Sig = 0.001).

Additionally, the results of model fit indices in Table 5 show that the fit indices have an acceptable value and the indices (GFI, NFI, AGFI) are at the desired level and higher than 0.9. Therefore, the research model based on the effect of perfectionism on aggression is confirmed.

	aggression	
Fit Indicators	Value	Acceptable Value
Chi square	265.88	
df	89	
χ2/df	2.98	Between 1 to 3
RMSEA	0.076	Less than 0.1
AGFI	0.91	More than 0.9
GFI	0.98	More than 0.9
NFI	0.96	More than 0.9

 Table 5 - Fit indicators of the model of the relationship between perfectionism and aggression

### **Discussion and Conclusion**

The results showed that there is a positive and significant relationship between perfectionism and its components with aggression (P <0.05), so that the correlation between them was reported to be optimal which is consistent with the findings of Kharkan et al. (2013), Andam et al. (2013), Hill et al. (2020), Ivanović et al. (2015), Nasiri and Nasiri (2014) and Namwar (2021), and is inconsistent with the findings of Kharkan et al. (2013) and Salimian et al. (2016).

In this regard, Kharkan et al. (2013) stated that there is a positive and significant relationship between abnormal perfectionism and sports aggression, Andam et al. (2013) found that perfectionism had a positive and significant relationship with sports aggression of student-athletes. Hill et al. (2020) concluded that in sport, perfection can be more tangible, objective, and, for athletes at the very highest levels, attainable. These factors may explain why so many athletes identify themselves as perfectionists. Also, Ivanović et al. (2015) found that maladaptive perfectionist athletes had more pronounced sport anxiety (as a state) from clusters of adaptive perfectionists and non-perfectionists. Nasiri and Nasiri (2014) stated that there is a positive and significant relationship between the subscales of perfectionism (skepticism about activities, parental expectations and parental criticism) with aggression. Namwar (2021) found that there was a positive correlation between positive perfectionism (organizational and personal criteria) with psychological social adjustment.

Therefore, according to the research findings, it is clear that among the components of perfectionism, other-oriented perfectionism has the highest correlation with the level of aggression in Iranian football coaches, which seems normal considering the jobs of these people that they expect a lot from others (their players). That means these coaches have stated that they expect their players

to be perfect, expect them to play perfectly, compared to the players who do not try to improve themselves, they are indifferent, they cannot tolerate the mistakes of their players, they are rarely satisfied with the performance of their players. They expect that their players are always accurate and regular, expect their players to pursue great goals and aspirations. They think that their players can meet their expectations and do not feel good about players who do not try hard enough. Therefore, when the players do not show the expected performance on the field, the greatest amount of aggression occurs from these coaches.

In addition, the relationship between self-oriented perfectionism and aggression in Iranian football coaches is in second rank based on the correlation between them, which means that these coaches cannot tolerate even one mistake in their work. They are not satisfied to something less than convincing and ideal. No matter how well they have done their job, they are not still satisfied with their performance. They feel that they should always be successful in their job, even if they achieve their goals, they are still dissatisfied. They have great goals and aspirations, whatever they have done the right thing, they still feel that it was not so. Even if a mistake is made in their work, they are upset and confused. They are skeptical about even the smallest things, and they feel that they are very perfectionist. Therefore, because the level of perfectionism of these people is very high, when they cannot perform well and meet their own expectations, they become aggressive and apply this aggression on their players.

In this regard, the relationship between socially-prescribed perfectionism and the level of aggression of Iranian football coaches is in third rank based on the degree of correlation. This means that their family expects them to be perfect and ideal, those around them expect them to always succeed, when they do something, they feel that others are judging them critically, no matter how perfect they are, others expect them to be perfect. They feel that others are perfect, they expect too much from them, as a child whenever they did not do something right, they were blamed and punished. Their parents never ignored their mistakes, their parents always expected them to be the best at everything. They thought that they can never meet the expectations of their family, and if they make a mistake in their job, others will look down on them. Therefore, people who have a high level of this type of perfectionism, are always worried about the views, opinions and expectations of their family and friends towards themselves. So this puts a lot of pressure on them, which ultimately leads to aggression in these people.

Furthermore, the correlation coefficient between components of perfectionism and aggression is equal to 0.59 and the coefficient of explanation is equal to 0.42. It can be said that 42% of the changes in aggression are related to the components of perfectionism, which this finding is in line with findings of Muñoz-Villena et al. (2020), Byrd (2011), Andam et al (2013) and Salimian et al. (2016).

#### Journal of Exercise and Health Science, Vol. 01, No. 04, Fall 2021

In this regard, Muñoz-Villena et al. (2020), stated that low personal standards and high levels of organization (indicators of adaptive perfectionism) acted as predictors of state anger, while those showing high personal standards predicted high anger management in athletes with high self-esteem. High personal standards predicted lower indicators of trait anger in athletes with low self-esteem. Byrd (2011) found that levels of reported state-anger, anxiety, and perfectionism significantly predicted levels of reactive aggression, Andam et al. (2013) realized that the subscale of excessive worry about mistakes was recognized as the best predictor of hostile aggression, Also, Salimian et al. (2016) concluded that perfectionism and moral atmosphere are predictors of aggression.

According to the findings of this study and other studies, it is clear that in most sports, societies, perfectionism and its components are positive predictors of aggression, the levels of which vary depending on the sample. In this study, it was found that perfectionism to a high extent (42%) predicts the occurrence of aggression among Iranian football coaches, which is a significant amount and it is necessary to take the necessary measures by team leaders and using sports psychologists.

Finally, it was found that the structural equation model of the relationship between perfectionism and aggression of football coaches had a significant fit, which means that perfectionism by 0.66, self-oriented perfectionism by 0.97, otheroriented perfectionism by 0.84 and socially-prescribed perfectionism by 0.76 have an effect on aggression and its components, which indicates its high rate. This confirms the main hypothesis of the research that there is a relationship between perfectionism and aggression.

Therefore, it can be concluded that Iranian football coaches have a significant degree of perfectionism, which, of course, given the prevailing conditions of Iranian football and its many managerial problems, can make it more difficult for these people because in most cases, things are not going well as they would like, and especially the economic problems in the country have prevented Iranian football teams from recruiting quality players. According to the study, it was found that other-oriented perfectionism was most correlated with the occurrence of aggression in coaches, this is justifiable and therefore appropriate conditions should be provided to solve such problems. At the same time, like foreign top teams, sports psychologists should be used in the country's football teams.

### References

 Andam, R., Kharkan, M., & Mahdizadeh, R. (2013). The relationship between perfectionism and aggression among student-athletes. Sports Psychology Studies, No. 5, 67-84. (In Persian).

- Anshel, M.H., & Mansouri, H. (2005). Influences of perfectionism on motor performance, affect, and causal attributions in response to critical information feedback. Journal of Sport Behavior, 28, 99\_124.
- Barnett, M. D., & Johnson, D. M. (2016). The perfectionism social disconnection model: The mediating role of communication styles. Personality and Individual Differences, 94, 200–205.
- 4. Byrd, M. (2011). Perfectionism Hurts: Examining the relationship between perfectionism, anger, anxiety and sport aggression. Thesis for Master of Science, Department of Kinesiology and Health, Faculty of Miami University.
- Curran, T., & Hill, A. P. (2019). Perfectionism is increasing over time: A metaanalysis of birth cohort differences from 1989 to 2016. Psychological Bulletin, 145, 410–429.
- 6. Frost, R.O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. Cognitive Therapy and Research. 14(3), 449-468.
- 7. Gholinejad, O. (2017). Investigating vandalistic behavior in youth leisure time among football spectators (Case study: Azadi stadium). Master Thesis in Youth Studies, Faculty of Tourism Sciences, University of Science and Culture. (In Persian).
- 8. Hewitt, P, L., & Flett, G, L. (1991). Perfectionism in the self and social context: conceptualization, assessment and association with psychopathology. Personality and Social Psychology, 60,456- 470.
- 9. Hewitt, P. L., & Flett, G. L. (2004). Multidimensional perfectionism scale (MPS): Technical manual. Toronto: Multi-Health Systems.
- Hewitt, P, L., Flett, G, L., Sherry, S, B., & Caelian, C, F. (2006). Trait perfectionism dimensions and suicide behavior. Cognition and suicide: Theory, research, and practice Chapter: Trait perfectionism dimensions and suicide behavior. Publisher: American Psychological Association Editors: T. E. Ellis.
- 11. Hewitt, P. L., Flett, G. L., & Mikail, S. F. (2017). Perfectionism: A relational approach to conceptualization, assessment, and treatment. New York: Guilford.
- Hill, A. P., Madigan, D. J., Smith, M. M., Mallinson-Howard, S. H., Donachie, T. C. (2020). Perfectionism. 1-9.
- Ivanović, I., Milosavljević, S., & Ivanović, U. (2015). Perfectionism, anxiety in sport, and sport achievement in adolescence. Sport Science, 8 (1), 35-42.
- Kharkan, M., Andam, R., & Mahdizadeh, R. (2013). The relationship between normal and abnormal perfectionism and aggression in volleyball and karate athletes. National Conference on New Scientific Achievements in Physical Education and Sports Science, 1-4. (In Persian).
- Limburg, K., Watson, H. J., Hagger, M. S., & Egan, S. J. (2017). The relationship between perfectionism and psychopathology: A met-analysis. Journal of Clinical Psychology, 73, 1301–1326.
- Muñoz-Villena, A. J., Gómez-López, M., & González-Hernández, J. (2020). Perfectionism profiles and anger responses: The relevant role of self-Esteem in athletes of professional quarries. International Journal of Environmental Research and Public Health, 17, 1-9.

- 17. Namvar, M. H. (2021). Relationship between perfectionism and narcissism with psychosocial adaptation in elite and non-elite athletes. Humanistic Approach to Sport and Exercise Studies (HASES), 1(1), 50-62.
- 18. Nasiri, S., & Nasiri, F. (2014). Predicting aggression based on perfectionism in athletes. Motor Behavior, 15, 173-182. (In Persian).
- 19. Rahmati, M, M., & Mohseni Tabrizi, A, R. (2004). Investigating the sociological factors of violence and aggression of football spectators: A case study: Tehran. Olympic Journal, 24, 77-92. (In Persian).
- Roxborough, H.M., Hewitt, P. L., Kaldas, J., Flett, G. L., Caelian, C.M., Sherry, S. B., & Sherry, D. L. (2012). Perfectionistic self-presentation, socially prescribed perfectionism, and suicide in youth: A test of the perfectionism social disconnection model. Suicide and Life-Threatening Behavior, 42, 217–233.
- Salimian, Z., Mahdizadegan, I., & Namazizadeh, M. (2016). The effect of perfectionism, team norms and moral atmosphere on aggressive behaviors in basketball players. Journal of Sport Management and Motor Behavior, 12, (23), 145-156. (In Persian).
- Sherry, S. B., Mackinnon, S. P., & Gautreau, C.M. (2016). Perfectionists don't play nicely with others: Expanding the social disconnection model. In F. M. Sirois & D. S. Molnar (Eds.), Perfectionism, health, and well-being (pp. 225–243). New York: Springer.
- Smith, M. M., Sherry, S. B., Vidovic, V., Hewitt, P. L., & Flett, G. L. (2020). Why does perfectionism confer risk for depressive symptoms? A meta-analytic test of the mediating role of stress and social disconnection. Journal of Research in Personality, 86, 103954.
- 24. Stoeber, J. (2014). How other-oriented perfectionism differs from self-oriented and socially prescribed perfectionism. Journal of Psychopathology and Behavioral Assessment, 36, 329–338.
- 25. Stoeber, J. (2018). The psychology of perfectionism: An introduction. In J. Stoeber (Ed.), The psychology of perfectionism: Theory, research, applications (pp. 3–16). London: Routledge.
- Stoeber, J., Lalova, A. V., & Lumley, E. J. (2020). Perfectionism, (self-compassion), and subjective well-being: A mediation model. Personality and Individual Differences, 154, 109708.
- Stoeber, J., Noland, A. B., Mawenu, T.W. N., Henderson, T.M., & Kent, D. N. P. (2017). Perfectionism, social disconnection, and interpersonal hostility: Not all perfectionists don't play nicely with others. Personality and Individual Differences, 119, 112–117.
- 28. Stoeber, J. (2015). How other-oriented perfectionism differs from self-oriented and socially prescribed perfectionism: Further findings. Journal of Psychopathology and Behavioral Assessment, 37, 611–623.
- 29. Tremblay, P. F., & Belchevski, M. (2004). Did the instigator intend to provoke? A key moderator in the relation between trait aggression and aggressive behavior. Aggressive Behavior, 30, 409–424.

 Vicent, M., Inglés, C. J., Sanmartín, R., Gonzálvez, C., & García-Fernández, J. M. (2017). Perfectionism and aggression: Identifying risk profiles in children. Personality and Individual Differences, 112, 106–112.