

Relationship Between Mental Health, Competitive Aggression and Anger Rumination with Regard to the Role of Mental Health of Martial Arts Athletes in Gilan Province

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Abstract

Due to the phenomenon of championship in sports, athletes are always very thirsty to achieve the championship and go on the podium, and this factor can cause negative behaviors by athletes, one of which is competitive aggression. Therefore, the main purpose of this study is to investigate the relationship between mental health, competitive aggression and anger rumination with regard to the role of mental health of martial artists in Gilan province. This research is quantitative research according to the research approach, applied research according to the purpose and a descriptive research according to the method of data collection. Statistical population of unarmed martial arts athletes in six sports of karate (60 people), Taekwondo (60 people), Judo (50 people), Muay Thai (55 people), Sanda (45 people) and Kickboxing (70 people) in the province There are Gilan who have a history of sports activities in the national and regional championships. The sampling method in this study is stratified. The data collection tool in this study is a questionnaire and to evaluate the validity of the questionnaire, content validity and construct validity and also to evaluate the reliability of the questionnaire, Cronbach's alpha coefficient and combined reliability were used. SPSS software was used at the level of descriptive statistics and Smart PLS software was used for the inferential part. The results of structural equation modeling with partial least squares approach showed that there is a significant relationship between mental health, mental health and anger rumination with competitive aggression. Mental health is a minor mediator in the relationship between mental health, competitive aggression and rumination. According to the obtained results, it is suggested that the coach encourages the athlete to have commitment and team discipline in order to control his aggressive behaviors and prevent dismissal and injury to the team. This commitment athlete is given to the coach. On the other hand, if violence is allowed in sports, it is better to reinforce instrumental violence, not hostile violence, that is, harming the opponent should not be the goal.

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INTRODUCTION

Aggression is one of the most important public and social health problems that may lead to direct physical damage or psychological and behavioral problems. Aggression is used to describe many types of behavior. Aggressive behaviors have a negative relationship with prosocial behavior because they reinforce negative emotions. On the contrary, research have shown that positive emotion has an effect on prosocial behavior and is related to it. Aggression is any verbal or physical behavior

caused by anger that has a destructive aspect, either intentional or unintentional. Another advantage is that intentional aggression with the intention of harming is called violence, which can be physical, sexual, or psychological. In athletes, we sometimes see aggressive behaviors that can have a negative impact on the individual and team performance of athletes. When an athlete is placed in a competitive situation, due to the conditions governing the competition and the expectation of superiority, he may experience high psychological pressure and act aggressively after that. Jarvis [1] has defined aggression in sports as an unpleasant act against a player or opposing team, which emphasizes intentional harm. In his view, aggression is different from anger; Aggression is a behavior, while anger is an emotion. Such behavior on the part of the athlete can lead to unpleasant consequences for the athletes and create personal or social financial, psychological and professional consequences. Aggression in the field of sports activities is manifested in instrumental and reflexive or verbal and physical form and is done by people present and participating in sports events towards themselves, other players, spectators, coaches, sports officials and the general public. As stated in terms of evolution, anger is a common emotion and a common reaction to failure and misbehavior, however, all people face angry situations throughout their lives, but in all people, behaviors We will not witness aggression. Aggression and violence are considered as the biggest problems of public health that can endanger the structure of societies and the health of society. Statistics and studies show that anger and aggression have increased in the last few decades and the evidence Many experiments have shown the destructive effects of anger in human relationships. Aggression is one of the most important public and social health problems that may result in direct physical damage or psychological and behavioral problems. Aggression is used to describe many types of behavior. Aggressive behaviors have a negative relationship with prosocial behavior because they reinforce negative emotions. On the contrary, research have shown that positive emotion has an effect on prosocial behavior and is related to it. There are many factors that affect competitive aggression, and in this research, mental health, mental health, and rumination of anger are mentioned as more important factors affecting competitive aggression. One of the most important factors that causes anger to flare up is thoughts related to anger, which is called anger rumination, which can make a person aggressive. Rumination of anger can be considered as an independent component in the chain of anger phenomena. The processes of generating and experiencing anger and the processes of mental rumination of anger are completely intertwined, so that the processes of mental rumination of anger can be considered the factor of maintaining and intensifying anger. Anger rumination as a set of unintentional and recurring cognitive processes appears when experiencing an anger event and continues after that. Anger rumination consists of three components: retrieving memories that happened in the past and are related to the current experience, paying attention to the current experience of anger, and untrue conditional thoughts. Retrieving past events and interpreting the current event based on previous experiences that provoked anger causes the excitement of anger. Paying attention to the current event and the inner gossip about it increases its intensity and duration, and the conditional thoughts against reality can increase the desire for revenge. Therefore, after the initial stimulation, what causes the continuation and intensification of anger and vengeful behaviors is the continuous and repeated thinking about the event of anger and the rumination of anger around it. One of the most important cognitive characteristics is anger rumination. However, there is a difference between rumination and anger. Rumination of anger refers to thoughts that tend to be repeated, centered around the topic of anger, and even in the absence of immediate and necessary environmental stimuli, these thoughts still appear involuntarily. In general, if anger is considered as an emotion, Anger rumination can be defined as thinking about the emotion. Anger rumination leads to the fact that the person is cognitively affected and reacts aggressively based on his emotional state; In confirmation of that, Ray et al showed that rumination of anger has a strong and significant relationship with cognitive survival, intense activity of the sympathetic system and the experience of intense anger. There is much debate in psychology regarding how cognitive processes such as anger rumination influence emotional arousal. Mental health is one of the most important components that affect competitive aggression and can affect it. Mental health is one of the topics that psychological researchers have always paid special attention to. Mental health is considered as one of the determinants of people's general health. And its meaning is the feeling of being good and self-efficacy, self-reliance, competitive capacity, inter-generational belonging, and

self-improvement of potential intellectual, emotional, and abilities. Mental health plays an important role in ensuring the dynamism and efficiency of any society and can play a role as one of the most important factors affecting people's health. The World Health Organization defines health as: "complete physical, mental, and social well-being and not merely the absence of disease or infirmity." Based on this, we can enumerate various factors that affect a person's health, including his mental health, all of which can be put under the general title of stress. A person can be considered healthy when he be physically healthy, intellectually flawless, mentally happy, socially active, politically aware, economically productive, and culturally responsible; Because health does not have fruit by itself, but its real value lies in valuable activities that are made possible by its existence. Finally, the last factor affecting competitive aggression is mental health. Mental health is an issue beyond the absence or absence of mental illness. The positive aspect of mental health, which the World Health Organization also relies on, is included in the definition of health: "Health is a state of physical, mental and social well-being, not just the absence of illness or disability." Therefore, mental health is a state of well-being that That person recognizes his abilities and is able to adapt to the normal stresses of life and be useful and productive in terms of work. Most people are aware of the importance of maintaining their physical health and to ensure their health, they use methods such as regular exercise, proper nutrition and medical tests. But few people are aware of the importance of maintaining their mental health. Everyone experiences stress in life, and of course a certain amount of it is useful for motivation, but the levels of stress should be carefully reviewed. Mental pressure can produce physical problems (such as high blood pressure, headache, neck pain, fatigue) and may be the beginning of mental disability in some people. Therefore, the main question of the research has been raised in this way. What is the relationship between mental health, competitive aggression and rumination regarding the role of mental health of martial athletes in Gilan province?

LITERATURE REVIEW AND RESEARCH BACKGROUND

Aggression in sports is defined as: any intentional behavior towards opponents, officials, teammates or spectators, which is not considered legal in the official rules of the competition and the person is encouraged to avoid such behavior. On the other hand, anger is defined as a type of mental evaluation that endangers a person's physical and mental health by increasing physiological arousal. Research has shown that aggression does not facilitate athlete performance. Anger refers to excitement, hostility refers to attitude, and aggression refers to behavior. Anger is an emotional state that can underlie aggression and hostility. Hostility is defined as a pervasive aggressive attitude that leads a person to aggressive behavior, and finally, aggression is defined as visible behavior with the intention of harming. Due to the existence of problems in measuring aggression in sports, sports psychologists have developed methods They showed a desire to identify aggression and anger in athletes, in order to thereby take a step in reducing aggression and psychological tension and increasing fair play.

Dehghan [2] conducted a research entitled "Effectiveness of anger control training on aggression and self-confidence of parents of autistic children". The results showed that anger control skill training has a significant effect on self-confidence and anger control skill training has a significant effect on aggression. Mokhtari (2018) conducted a research entitled "Investigation of the relationship between personality traits, mental health and aggression in patients who refer to Maroodasht Police Station" did. The results showed that among the personality traits, extroversion has the highest mean and neuroticism has the lowest mean, and there is no significant relationship between personality traits (neuroticism, flexibility, extroversion, responsibility, and openness) with mental health.

Ahmadi Akhormeh [3] conducted a research titled "Effectiveness of Anger Management Training on Aggression and Social Adaptation of Female Students of the Second Year of High School in Darudzen Region". The findings showed that the aggression and subscales (physical aggression, verbal aggression, anger, hostility) of the experimental group increased compared to the control group, and social adjustment and its subscales (emotional, educational and social) increased. Therefore, anger management training can be used as one of the effective methods to reduce aggression and increase people's social adaptation.

Klaus Jana, et al. [4] conducted a study entitled “Effective Factors on Competitive Aggression”. For anger processing (18 studies), the results showed significant clusters in the bilateral posterior cerebellum, consistent with results from previous meta-analyses on emotion processing, and also indicating functional connectivity to focal cognitive, limbic and Social is in the cerebral cortex. In contrast, active aggression expression (10 studies) overlapped with significant clusters in more anterior regions of the cerebellum and overlapped with sensory and motor regions of the cerebellum, suggesting functional connectivity with the motor network and default mode. This study not only reinforces the notion that the cerebellum is involved in emotion processing, but also provides the first quantitative evidence for functional cerebellar activation patterns related to anger and aggression.

In their study, Peters et al. [5] examined the moderating role of anger rumination in the relationship between self-compassion and anger and aggression. This research determined that anger predicts extreme identification and aggression and can influence it.

In 2017, Sago et al investigated the relationship between mental health and high-risk behaviors in young adults. This work was conducted among Norwegian adolescent gamblers and three categories of gambling behavior were identified using latent class analysis. Our findings clarify the mutual relationship between mental health and gambling behavior in the transition from adolescence to emerging adulthood and the importance of knowing these factors in designing targeted interventions.

In other research, the following can be mentioned: Tarverdizadeh et al. [6] studied Predicting students' academic achievement based on emotional intelligence, personality and demographic characteristics, attitudes toward education and career prospects through the mediation of academic resilience. Scientific Journal of Education Research. Amini Harouni et al. [7] studied Effectiveness of Self-control and Aggression Reduction Skill Training of Male Juvenile Delinquents Correction and Rehabilitation Center (Including Case-Study). Khodakhah Jeddi et al. [8] studied The Analysis of Effect Colour Psychology on Environmental Graphic in Children Ward at Medical Centers. Taghipour et al. [9] studied “Analysing the Effects of Physical Conditions of the Workplace on Employee’s Productivity (Including Case Study)”. Taghipour et al. [10] studied “Evaluation of the Relationship between Occupational Accidents and Usage of Personal Protective Equipment in an Auto Making Unit”. Taghipour et al. [11] studied the impact of ICT on knowledge sharing obstacles in knowledge management process (including case-study). Mohammadi et al. [12] studied Investigating the role and impact of using ICT tools on evaluating the performance of service organizations. Nezamivand et al. [13] studied Compare Effectiveness of Teaching Rational Emotive Therapy on Flexibility and Mental Health Women with Sexual High risk and Substance Abuse Behaviours (Including Case-Study). Baghipour sarami et al. [14] studied Modeling of nurses’ shift work schedules according to ergonomics: A case study in Imam Sajjad (As) Hospital of Ramsar. Rafiee et al. [15] studied Analyzing the concept of family-centered care in ICU: Rodgers Evolutionary Approach. Nazari & Taghipour et al. [16] studied The Role of Emotion Regulation Strategies and Self-Compassion in Predicting Test Anxiety (Including Case Study). Rahimpour et al. [17] studied Resilience Based on Social Anxiety Among Women Heads of Households and Violence Against Women.

RESEARCH METHODOLOGY

According to the research philosophy, the current research is a quantitative research type, according to the purpose of the applied research type, and in terms of the data collection method, it is considered a descriptive research type. The statistical population of the research of martial arts athletes without weapons in six sports fields of Karate (60 people), Taekwondo (60 people), Judo (50 people), Muay Thai (55 people), Sanda (45 people) and Kickboxing (70 people) in the province There are Gilans who have a history of sports activities in the national and regional championships. The sampling method in this research is stratified. One of the statistical tests that are used to determine the sample size in new researches is the use of covariance-based structural equation modeling. That is, when the researcher intends to use Emus, Lisrel, Mplus and SmartPLS software to test his hypotheses, he should specify the

Table 1. How to determine the number of samples

Items	Number of athletes	Percentage of each class	Questionnaires distributed in each floor	Returned questionnaires
Karate	60	0.176	35	32
Taekwondo	60	0.176	35	31
Judo	50	0.147	29	28
Muay thai	55	0.161	32	27
Sanda	45	0.135	27	26
Kickboxing	70	0.205	40	33
Total	340	100	198	177

minimum sample size with a calculator based on a modern formula. The minimum number of samples in this research is 175 people. To prevent some of the questionnaires from not being returned, the researcher distributed 198 questionnaires, of which 177 questionnaires were returned to the researcher, which is the basis for the decision as shown in Table 1.

In the current research, a questionnaire was used to collect data. To check the validity of the questionnaire, content validity and construct validity were used, as well as to check the reliability of the questionnaire, Cronbach's alpha coefficient and composite reliability were used.

MEASURING TOOL

To analyze the research data at the level of descriptive statistics, SPSS software version 22 was used and for inferential analysis Smart PLS software version 3 was used. It should be noted that Sobel test was used to test mediation hypotheses. As mentioned, content validity was first used to check the validity, and in this section, the opinions of the respected instructor and some subject experts were obtained, and amendments were Made to the questionnaire. In the following, the researcher examined the validity of the construct, and in this part, convergent validity was used. In the convergent validity section, the extracted average variance index was examined. The appropriate value of this index should be greater than 0.5, and since this index is greater than 0.5 for all research variables, convergent validity is confirmed. The results obtained to check the convergent validity are presented in Table 2.

Table 2. Convergent validity check results.

Variable	Mean variance extracted	Dimensions	Mean variance extracted
Mental Health	0/55	Psychological	0/563
		Physical	0/541
Rumination of anger	0/521	So thoughts of anger	0/529
		Thoughts of revenge	0/569
		Memories of anger	0/524
		Knowing the causes	0/558
Mental health	0/553	Physical signs	0/502
		Anxiety	0/585
		Insomnia	0/520
		Depression	0/554
Competitive aggression variable mental health	0/548	Annoying	0/523
		Self-harming	0/590
		Passive aggressive	0/526
		Carnal	0/586

Table 3. Reliability check results.

Variable	Final Cronbach's alpha	Composite reliability coefficient	Dimensions	Final Cronbach's alpha	Composite reliability coefficient
Mental Health	0/716	0/778	Psychological	0/770	0/894
			Physical	0/742	0/830
Rumination of anger	0/721	0/769	So thoughts of anger	0/718	0/795
			Thoughts of revenge	0/704	0/727
			Memories of anger	0/754	0/854
			Knowing the causes	0/722	0/824
Mental health	0/846	0/875	Physical signs	0/702	0/739
			Anxiety	0/729	0/794
			Insomnia	0/796	0/807
			Depression	0/788	0/881
Competitive aggression	0/716	0/749	Annoying	0/712	0/748
			Self-harming	0/797	0/810
			Passive aggressive	0/733	0/853
			Carnal	0/782	0/865

To check reliability, Cronbach's alpha coefficient and composite reliability coefficient were obtained, and the acceptable value for both indices is higher than 0.7. Therefore, considering that the values obtained through these methods are higher than 0.7, reliability is also confirmed as shown in Table 3.

RESEARCH FINDINGS AND RESULTS

Demographic findings: According to the demographic questions of 177 respondents, 70.6% of the respondents are male and 29.4% of the respondents are female. Of these, about 80% are single and 20% are married. Other results of examining demographic questions are presented in Table 4.

INFERENCE FINDINGS

In the following, the research hypotheses will be tested. In this research, SmartPLS software has been used to test research hypotheses. In this approach, two models are used, i.e. the model in the standard estimation mode and the model in the meaningful mode to test the research hypotheses. The value of the estimation coefficient is between zero to positive one and zero to negative one, which if the estimation coefficient is in the positive range, the variables have a positive, direct and significant effect on each other, and if it is in the negative range, the variables have a negative, inverse effect on the integrator. And it is meaningful. In this research, considering that in addition to direct hypotheses, mediation hypotheses also existed, Sobel's test was used to test mediation hypotheses, which can be used to analyze the role of mediation online. In the hypotheses related to the mediation role, the output of the Sobel test was obtained from the Sobel online site in the form of an image file, and in the corresponding hypotheses, the relevant outputs are presented. On the other hand, the VAF test was used to investigate the partial or complete mediation. In table 4, the research model is shown in standard

Table 4. The results of examining demographic questions.

Age	Abundance	degree of education	Abundance	History	Abundance
Under 20 years	11	Diploma and sub-diploma	27	Under 3 years	7
20–25 years	42	Associate degree	45	3–6 years	19
25–30 years	69	Masters	81	6–9 years	81
30–35 years	46	Senior	24	9–12 years	62
Above 35 years	9	Doctorate	–	Above 12 years	8
Total	177	Total	177	Total	177

estimation mode. The standard estimation mode of the coefficients is homogenized, that is, their scale is unified and it is possible to compare them. In the case that this value is considered between latent and manifest variables, they are equal to the same correlation coefficients or factor loadings. in confirmatory factor analysis), and if they are considered between two latent variables, they are the same path coefficients or standardized regression betas. The factor loadings of the model in the standard estimation mode show the impact of each variable or item in explaining the variance of the variable or main factor scores. In standard estimation, it is possible to compare the observed variables that explain the hidden variables. The results of the confirmatory factor analysis of the variables showed that the variable measurement model is appropriate, and all the numbers and parameters of the model are significant. According to table 4, the standard estimation coefficients of each of the research variables and subscales can be seen. The value of the standard estimation coefficient is a number between zero and positive one and zero and negative one, and the closer it is to one, the greater the amount of variance explanation.

DISCUSSION AND CONCLUSION

According to the results obtained from the inferential analysis, the results of the research hypotheses are as follows:

1. *The first hypothesis:* mental health has an effect on the mental health of martial arts athletes in Gilan province. According to the study of the model in the mode of significant coefficients, we observe that the value of the significant number for the effect of mental health on the mental health of martial arts athletes in Gilan province is equal to 25.751 ($t = 25.751$). The coefficient of the standard effect is also equal to 0.769, so it can be said that for an increase of one unit of mental health, the level of mental health of martial arts athletes in Gilan province increases by 0.769. Since the obtained significant number is outside the range of +1.96 and -1.96, therefore it can be said that mental health has a positive, direct and significant effect on the mental health of martial arts athletes in Gilan province.
2. *The second hypothesis:* mental health has an effect on the competitive aggression of martial arts athletes in Gilan province. According to the study of the model in the mode of significant coefficients, we observe that the value of the significant number for the effect of mental health on the competitive aggression of martial arts athletes in Gilan province is equal to 22.316 ($t = 22.316$). The coefficient of the standard effect is also equal to -0.712, so it can be said that for an increase of one unit of mental health, the competitive aggression of martial arts athletes in Gilan province decreases by 0.712. Since the obtained significant number is outside the range of +1.96 and -1.96, it can be said that mental health has a negative, inverse and significant effect on the competitive aggression of martial arts athletes in Gilan province.
3. *The third hypothesis:* anger rumination has an effect on the mental health of martial arts athletes in Gilan province. According to the study of the model in the mode of significant coefficients, we observe that the value of the significant number for the effect of anger rumination on the mental health of martial arts athletes in Gilan province is equal to 18.319 ($t = 18.319$). The coefficient of the standard effect is also equal to -0.681, so it can be said that for an increase of one unit of rumination, anger on the mental health of martial arts athletes in Gilan province decreases by 0.681. Since the obtained significant number is outside the range of +1.96 and -1.96, therefore it can be said: rumination of anger has a negative, inverse and significant effect on the mental health of martial arts athletes in Gilan province.
4. *The fourth hypothesis:* Rumination of anger has an effect on the competitive aggression of martial arts athletes in Gilan province. According to the study of the model in the mode of significant coefficients, we observe that the value of the significant number for the effect of anger rumination on the competitive aggression of martial arts athletes in Gilan province is equal to 29.003 ($t = -8.90$). The coefficient of the standard effect is also equal to 0.785, so it can be said that for an increase of one unit of rumination, the competitive aggression of martial arts athletes in Gilan province increases by 0.785. Since the obtained significant number is outside the range of +1.96 and -1.96, therefore it can be said that anger rumination has a positive, direct and significant effect on the competitive aggression of martial arts athletes in Gilan province.

5. *The fifth hypothesis:* mental health has an effect on the competitive aggression of martial arts athletes in Gilan province. According to the study of the model in the mode of significant coefficients, we observe that the value of the significant number for the effect of mental health on the competitive aggression of martial arts athletes in Gilan province is equal to 10.907 ($t = 10.907$). The coefficient of the standard effect is also equal to -0.487, so it can be said that for an increase of one unit of mental health, the competitive aggression of martial arts athletes in Gilan province decreases by 0.487. Since the obtained significant number is outside the range of +1.96 and -1.96, it can be said that mental health has a negative, inverse and significant effect on the competitive aggression of martial arts athletes in Gilan province.
6. *Sixth hypothesis:* mental health through mental health has an effect on the competitive aggression of martial arts athletes in Gilan province. To test this hypothesis, an online usability test was used to check the VAF index. The results of examining this hypothesis through the Sobel test are presented in Figure (4). Since the Sobel test statistic is greater than 1.96, it can be said at the 95% confidence level that mental health through mental health has a significant effect on the competitive aggression of martial arts athletes in Gilan province. To check partial and full mediation, VAF index has been used and its value is equal to 0.346, since the value of this test is between 0.2 and 0.8, mental health plays a mediating role in this hypothesis.
7. *Seventh hypothesis:* Rumination of anger through mental health has an effect on competitive aggression of martial arts athletes in Gilan province. To test this hypothesis, an online usability test was used to check the VAF index. The results of examining this hypothesis through the Sobel test are presented in Figure (5). Since the Sobel test statistic is greater than 1.96, it can be said at the 95% confidence level that anger rumination through mental health has a significant effect on the competitive aggression of martial arts athletes in Gilan province. To check partial and full mediation, VAF index has been used, and its value is equal to 0.296, since the value of this test is between 0.2 and 0.8, mental health has a mediating role in this hypothesis. In the following, the researchers of this work presented suggestions on a case-by-case basis:
 - i. According to the examination of the first hypothesis and its structures, it is suggested that the coaches of combat teams encourage and encourage the athlete to have team commitment and discipline, so that he controls his aggressive behavior and avoids being fired and harming the team. This obligation is given to the coach by the athlete. On the other hand, if violence is allowed in sports, it is better to strengthen instrumental violence, not hostile violence, that is, harming the competitor should not be the goal.
 - ii. According to the examination of the second hypothesis and its structures, it is suggested that the coaches of combat teams can help reduce the violence of the athlete through strategies such as confronting the athlete with models who achieve success without violence and aggression and using skill. Do
 - iii. According to the examination of the third hypothesis and its structures, it is suggested that the coaches of combat teams help to reduce violence and aggression by strengthening players who control their anger and do not show hostile behavior when they are under pressure.
 - iv. According to the examination of the fourth hypothesis and its structures, it is suggested that the coaches of the combat teams should control and evaluate the physical readiness of the athletes correctly, because it reduces aggression and violence in them. The preparation programs of the players should be such that they are ready to perform sports skills at the optimal level.
 - v. According to the examination of the fifth hypothesis and its structures, it is suggested that the officials of the combat teams, for more effectiveness, the contract should include the rules and regulations of the athletes' behavior and the conditions of punishment and reward. If the athlete repeatedly shows his aggressive behavior, the need It helps to manage your anger. Anger management group is a type of group therapy in which anger is identified and group members learn strategies to deal with anger.
 - vi. According to the examination of the sixth hypothesis and its structures, it is suggested that the trainers of combat teams pay attention to emotional discharge as one of the appropriate

solutions. Exercise refines the nervous system of athletes and reduces the aggression of athletes. Hard and long exercises reduce physical tension and anger; But this effect is temporary, and its effect is less than the factor that caused anger during competitions in the athlete.

- vii. According to the examination of the seventh hypothesis and its structures, it is suggested that the trainers of combat teams pay more attention to balanced control and step-by-step aggression. Also, aggression will never reach zero, because aggression is a part of human nature. However, it can be controlled and aggressive conditions can be created in practice; For example, the referees stress the athletes' nervous system with the warnings they show, and the player becomes more nervous when he is nervously stressed; Therefore, these cases can be simulated in exercises.

In the end, we will present limitations and suggestions for future research. In this research, the focus was on combat sports, and since combat sports are in the group of individual sports, therefore, the results of the research may not be generalized to group sports, in this regard, it is suggested that the variable of the type of sport as A moderating variable should be added to the research model. Also, there are other factors such as athlete's stress and anxiety that can cause an increase in aggression in athletes, and these components were not present in the research model, so it is suggested to add these components to the model in future research. Another limitation of the research is that this research is in the category of experimental research, and it was carried out in a correlational way, therefore it is suggested to use semi-experimental methods in future researches to consider the control and test groups and the athletes under Emotional intelligence and mindfulness training should be used to control anger so that more accurate results can be obtained from interfering factors.

Author contributions

Conceptualization, MM and MT; methodology, MM and MT; software, MM and MT; validation, MM and MT; formal analysis, MM and MT; investigation, MM and MT; resources, MM and MT; data curation, MM and MT; writing—original draft preparation, MM and MT; writing—review and editing, MM and MT; visualization, MM and MT; supervision, MM and MT; project administration, MM and MT. All authors have read and agreed to the published version of the manuscript.

Conflict of Interest

The authors declare no conflict of interest.

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