

Research Paper

Modeling the Effect of Personality Traits, Enjoyment, and Sports Commitment on Sports Motivation Mediated by Competitive Anxiety



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ABSTRACT

Background & Aims of the Study: This study aimed to investigate the fit of the model of the effect of personality traits, enjoyment, and sports commitment on sports motivation mediated by competitive anxiety of wrestlers in Mazandaran Province.

Materials and Methods: We selected 405 wrestlers (312 males and 93 females) ranging in age from 16-48 years using the available method and based on the five-factor list of Neo-personality Inventory, Sports Motivation Scale Sports Commitment Questionnaire, Sports Enjoyment, and Competitive Anxiety Questionnaire.

Results: The results showed that the model of the effect of personality traits, enjoyment, and sports commitment on sports motivation mediated by the sport commitment of wrestlers in Mazandaran province has a favorable fit. The results also showed that personality traits and sports enjoyment and commitment could explain competitive anxiety and sports motivation. Among the personality traits, neuroticism (0.337), extraversion (0.738), and conscientiousness (0.529) had a direct effect on wrestlers' sports motivation. Also, sports enjoyment (2.391) and sports commitment (0.582) directly affected wrestlers' sports motivation. The traits of openness had no significant direct effect on athletic motivation. The psychotic traits of neuroticism, extraversion and conscientiousness, sporting enjoyment, and sports commitment mediated by competitive anxiety did not significantly affect wrestlers' sporting motivation.

Conclusion: In general, it can be said that the characteristics of neuroticism, extraversion and conscientiousness, sports enjoyment, and sports commitment increase sports motivation in wrestlers.

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1. Introduction

The role of motivation is fundamental in most sports issues. The evolutionary impact of this factor on sports environments, such as competitive behaviors and the behaviors of athletes and coaches, and psychological variables, such as performance, learning, and perseverance has been revealed [1]. Success in sports activities, especially on the field and at competitive levels, is affected by numerous abilities and talents that are in physical, physiological, and psychological dimensions [2]. In environments where less attention is paid to the psychological dimensions of individuals (such as motivation), athletes may suffer continual failures that cause irreparable damage to the sports team and themselves. Therefore, gaining awareness of athletes' motivational processes, especially at the elite level, is essential to help maintain their participation.

Recent studies have shown that athletes must also be in a good mental state and have regular, severe, and advanced training. Mental health is characterized by several factors, including high self-confidence, self-esteem, vitality, and low anxiety, and it seems to be associated with motivation [3]. Researchers have shown that having low anxiety plays a role in achieving elite [4]. Thus, the challenge is how to moderate these psychological factors. The sports motivation that the athlete perceives in her/himself is a factor that the psychological characteristics of the athlete can significantly modify.

Social personality expresses the correct and natural psychological development of individuals. If physical education in a society is in accordance with the principles of this science, it takes athletes out of individualism and self-centeredness. It improves the growth of natural spirits in the person, which as a result of the flourishing of this talent, the person communicates with other people in the community more easily and lives with them [5]. In general, the definition of general personality traits in everyday life refers to stable traits over time that do not change much from one situation to another and refers to the nature of the individual. In general, our behavior is examined under the influence of precise characteristics [6]. Lazarus and Monat define personality as relatively fixed and fundamental psychological structures and processes that organize human experience and shape one's actions and reactions to the environment. Feist and Feist consider personality as a relatively stable pattern of traits, tendencies, or characteristics that, to some extent, perpetuate people's behavior. Today, personality is the most important variable considered for the desire to par-

ticipate in sports activities and explain the successes and failures in sports competitions. Ingledew et al. [7] found that neuroticism is related to high introjection, extraversion with high identification and intrinsic regulation, openness with low external regulation, and conscientiousness with low external regulation, and high intrinsic regulation. Batia [8] examined the relationship between personality, self-determination, and exercise behaviors and concluded that among the personality traits, extraversion, conscientiousness, and openness are related to self-determination. By examining the relationship between the five-factor model of personality and sports participation, Courneya et al. [9] showed that sports participation is associated with low neuroticism, high levels of extraversion, and conscientiousness. In their research, Courneya et al. [10] concluded that extraversion and conscientiousness were associated with exercise, while neuroticism was positively associated with not exercising. Sheehan et al. [11] examined four mental health outcomes in a hierarchical model of intrinsic motivation of elite team athletes (140 females and 75 males) and showed that athletes use positive motivation patterns. In their study, Hoye et al. [12] examined the motivation and intention of volunteers to remain and continue working in sports clubs. They stated that there is a relationship between motivation and intention to remain, and among the motivational dimensions of volunteers, the altruistic motivational factor has the most relationship with the intention to remain with their club. Studies by Connor and Abraham [13] and Naseri et al. [14] have shown a positive relationship between regular physical activity and the factor of extraversion and conscientiousness, but there is a negative relationship between regular physical activity and neuroticism.

Sports' competitive and stressful nature imposes many demands on the athlete [15]. Accordingly, emotional responses to these stressors, especially competitive anxiety, is one of the research areas in sports psychology [16]. In the experience of competitive anxiety, three main dimensions are distinguished: cognitive anxiety, somatic anxiety, and self-confidence. Cognitive anxiety is a psychological component of anxiety and is characterized by negative expectations and cognitive worries about oneself, situations, and possible outcomes (such as the possibility of failure). Somatic anxiety is a physical component of anxiety and reflects a person's perception of physiological responses and negative arousal. Self-confidence refers to a person's belief in mastering a task and the ability to do it successfully [17]. There is a negative relationship between cognitive and somatic anxiety and performance. While self-confidence is associated with positive performance [18], self-confidence

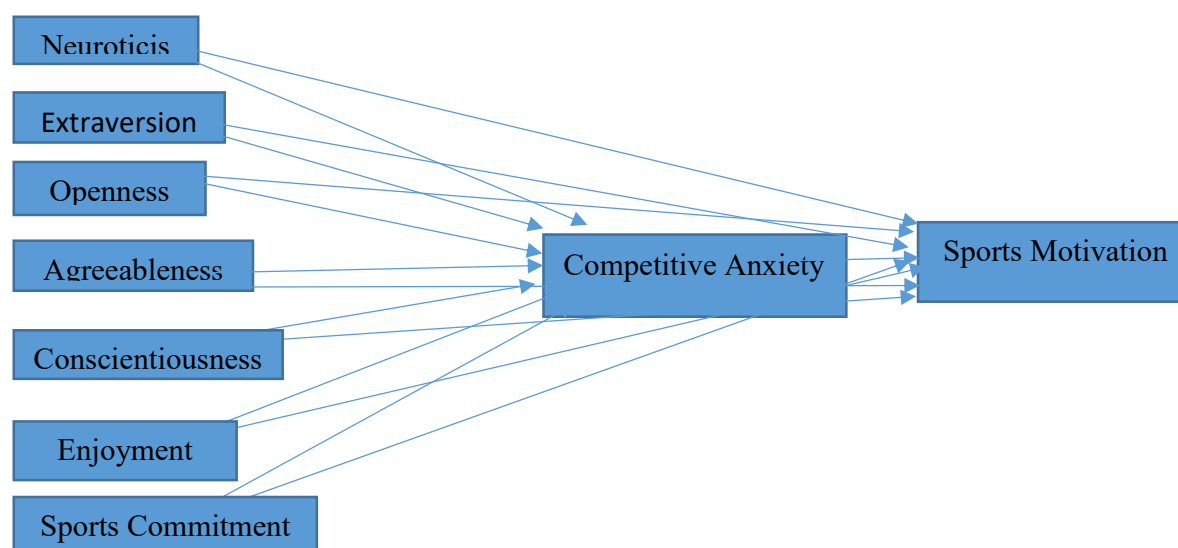


Figure 1. Conceptual model of research

before and during a match determines low competitive anxiety and is often correlated with better performance [19]. Ponseti et al. [20] showed a relationship between self-determining motivation and competitive anxiety in students/athletes. They showed a high probability of extrinsic motivation and mobility, while anxiety/activation was due to concerns about low probability performance. Scanlan et al. [21] defined sports commitment as a psychological structure that reflects the intention and determination to continue participating in sports. In Scanlan et al.'s sports commitment model, enjoyment is defined as an effective positive response to the sporting experience that reflects a sense of satisfaction, love, and entertainment. Pons et al. [22] examined the mediating role of coping between competitive anxiety and sports commitment among adolescent athletes and showed that a partial mediation model, in which cognitive anxiety factors predicted sports commitment was desirable.

Enjoying is an influential factor for people to participate in sports activities. Rowland and Friedson believe that considering sports enjoyable makes participation in sports activities an internal desire and continue [23]. According to Weiss et al., enjoyment is a mediating variable in the sports commitment model. In other words, enjoyment is the strongest predictor of sports commitment [24]. Hosseini et al. [25] concluded a positive and moderate correlation between the two variables of enjoyment and commitment, i.e., athletes' enjoyment of sports atmosphere will increase their commitment and commitment to this sport. Also, enjoyment significantly affects sports commitment.

Briefly, personality traits, neuroticism, extraversion, openness, and conscientiousness lead to increased athletic motivation and success, and many studies in the framework of the theory of autonomy in the field of sports have shown that a high level of autonomy leads to better sports and individual results [26]. Therefore, based on the autonomy theory, the motivational processes affecting sports behaviors can be explained through personality traits, commitment, and sports enjoyment mediated by competitive anxiety. Therefore, the present study investigated the effect of personality traits of sports commitment mediated by competitive anxiety on the sports motivation of wrestlers in Mazandaran province (Figure 1).

2. Materials and Methods

The method of the present study was correlational and structural equation modeling and applied in terms of purpose. The statistical population included all wrestlers of Mazandaran province (about 870 people) and the sample group of 405 people (312 men and 93 women) with an age range of 16-48 years who were selected by available methods. Also, 77% were male and 23% were female, 30.1% were married and 69.9% were single, 54.1% had a diploma and lower education, 31.6% had an associate or bachelor degree, 12.3% had a master's degree, and 2% had a PhD degree, of which 41.2% were in the field of physical education and 58.8% were in the field of non-physical education. In addition, 37.3% had a history of wrestling under five years, 23.7% between 5 and 10 years, 13.6% between 10 and 15 years, 8.9% between 15 and 20 years, and 16.5% had a history of 20 years and above.

Inclusion criteria included the age of 18 to 48 years, Mazandaran Province Wrestling House members, and informed consent to participate in the study. Exclusion criteria also dissatisfaction to answer some questions and incomplete answers to the questionnaires.

A 6-item questionnaire was used to collect participants' personal information to determine age, gender, marital status, educational level, sports history, and sport. To assess personality, the list of five factors of Neo personality [27], to assess sports motivation, the Sports Motivation Scale designed by Pelletier et al. [28], to assess sports commitment, the Sports Commitment Questionnaire by Scanlan et al. [29], to assess sports enjoyment, the Sports Enjoyment Questionnaire by Scanlan et al. [30], and to assess competitive anxiety, the Competitive Anxiety Questionnaire by Martens et al. [31] were used.

Neo's five-factor personality list: Costa and McCrae's [27] personality list contains 60 items. Each of the five personality factors of neuroticism, extraversion, empiricism, agreeableness, and conscientiousness is measured by 12 items. All items on this list are graded on a five-point Likert scale from one (strongly disagree) to five (strongly agree). The higher the responsive score, the greater the intensity of the indicator. Based on Costa and McCrae's research, Cronbach's alpha coefficient was 0.88 on the Neuroticism Scale, 0.85 on the Extraversion Scale, 0.78 on the Empiricism Scale, 0.84 on the Agreeableness scale, and 0.92 on the Conscientiousness Scale. The validity coefficient of this list is also reported to be 0.85. Based on the research of Cheshmeh Sohrabi, et al. (2017), the short form of Neo Personality Inventory has been validated. Criterion validity of this list has also been checked by calculating the correlation of two forms S (for personal reports) and R (for observer ratings) that the highest correlation was observed in the extroversion factor of 0.74 and the lowest correlation was observed in the empiricism factor of 0.47. 32) [32]. The criterion validity of this list has been investigated by calculating the correlation between S (for personal reports) and R (for observer ratings), with the highest correlation being 0.66 and the minimum correlation being 0.45. In this study, the reliability of the whole list was obtained.

Pelletier et al. Sports Motivation Scale: This scale contains 28 items. The items on this scale are graded on a Likert scale of seven values from one (Never) to seven (exactly) and have seven four-item subscales, including intrinsic motivation to know, extrinsic motivation toward accomplishment, intrinsic motivation to experience stimulation, extrinsic motivation to identification is the extrinsic motivation to extraversion, the extrinsic

motivation to external regulation and amotivation. During a study on the validity and reliability of the Sports Motivation Scale, Pelletier et al. [33] acknowledged that the scale showed acceptable validity and reliability and confirmed its use. Besharat, M. A. (2009). Based on the research of Ismaili et al. (2019), the validity and reliability of the sports motivation scale has also been confirmed [34]. be corrected Development and validation of the multidimensional competitive anxiety questionnaire. Unpublished). University of Tehran, Tehran. The validity and reliability of this scale have also been confirmed in a review by Martens and Webber [34] in American student-athletes. In this study, Cronbach's alpha coefficients of sports motivation subscales about intrinsic motivation to know were 0.75, intrinsic motivation toward accomplishment was 0.80, intrinsic motivation to experience stimulation was 0.73, extrinsic motivation to identification was 0.74, extrinsic motivation to extraversion was 0.71, extrinsic motivation to external regulation was 0.77, and amotivation was 0.80.

Sports Commitment Scale: The Sports Commitment Questionnaire [29] designed by Scanlan et al. is a self-assessment scale consisting of 26 items and five components that shows a person's intention and determination to continue participating in sports activities. In this model, in addition to the components that determine the commitment to sports, a component is included as a commitment to sports, which in fact reflects the mental states resulting from a person's commitment to the sport in question. The items are as follows: Sports Commitment (9 items), determinants with the titles Sports Enjoyment (4 items), Alternative Activities (4 items), Personal Investment (3 items), Social Pressure (7 items), and Participation Opportunity (4 items). The items are presented in the form of statements and questions. The answer to each item is scored on a Likert scale from strongly agree (1) to strongly agree (5). This questionnaire has been translated into Persian by Mir Hosseini et al. [35]. In 1993, Scanlan et al. examined the validity and reliability of the sports commitment model using several different samples in terms of gender, race, and age (9-20 years). Cronbach's alpha coefficient with a criterion level of $\alpha=0.75$ was used for the resolution of each scale to evaluate the reliability. The study results with two separate samples showed that the weakest internal consistency is related to the personal investment component ($\alpha=0.5$). In general, the results of separate studies of these researchers showed that the tool used to evaluate the sports commitment model is a valid tool. The results of Mir Hosseini et al. [35] showed that this model has five components that explained 67% of the model's total variance. Cronbach's alpha coefficients were at an acceptable level (0.70) ex-

Table 1. Pearson correlation of personality traits, sport commitment and sport motivation of wrestlers in Mazandaran province

Variables	Competitive Anxiety	Sport Motivation
1. Neuroticism	0.440**	-0.037
2. Extraversion	-0.337**	0.294**
3. Openness	0.109*	0.033
4. Agreeableness	-0.223**	0.028
5. Conscientiousness	-0.300**	0.257**
7. Sports commitment	-0.050	0.427**
8. Sports enjoyment	-0.121*	0.437**
9-Sports motivation	0.006	1

*P<0.05; **P<0.01.

cept for the alternative activities component and participation opportunity. The correlation coefficients obtained from the retest showed that this questionnaire has good time stability. In general, this model has acceptable validity and reliability. In this study, Cronbach's alpha coefficients for the questionnaire were obtained.

Competitive Sports Anxiety Questionnaire: The Sports Competitive Anxiety Questionnaire is a 15-item questionnaire developed by Martens et al. [31] to assess the level of athletes' anxiety about competing in sports. Ten test items are scored, and five items are fake, which means that these five questions do not receive any points in scoring, and their score is not counted in the total scores. These questions are 1, 4, 7, 10, and 13. The answer options for each item are set on a 5-point Likert scale. Cronbach's alpha test results of this questionnaire were reported to be 0.81, and Martens reported the validity and reliability of this questionnaire to be 0.78 [36]. Martens evaluated the validity and reliability of this questionnaire. He used Cronbach's alpha method and retest to evaluate the reliability of this scale and reported Cronbach's alpha coefficient of 0.79. Also, the reliability of this scale in the retest method was 0.98. Based on the

research of Mehr Safar et al. (2016), Cronbach's alpha coefficient of this questionnaire has been reported to be 0.85. In Iran, this questionnaire was used in Besharat's study [37], and a Cronbach's alpha coefficient of 0.89 was reported.

Sports Enjoyment Questionnaire: It is a 3-item Sports Enjoyment Questionnaire by Scanlan et al. The answer options for each item are set on a 5-point Likert scale. Questions 1-4 and 7 measure sports enjoyment. The Cronbach's alpha test results of the questionnaire were reported to be 0.83, and in the study by Hosseini et al. [25], the value of the Cronbach's alpha test for the sports enjoyment questionnaire was reported to be 0.77. Structural equation modeling was used to analyze the data.

3. Results

According to the correlation coefficients seen in Table 1, among the personality factors, the highest correlation was related to sports commitment and sports motivation (0.437), followed by conscientiousness with sports motivation (0.257), extraversion with sports motivation

Table 2. Fitness indices of the proposed model in the research

Interpretation	CMIN	Df	CMIN/df	GFI	AGFI	IFI	TLI	CFI	PCFI	NFI	RMSEA
Acceptable fit	-	-	<5	>0.8	>0.8	>0.8	>0.8	>0.8	>0.5	>0.8	<0.1
Good fit	-	-	<3	>0.9	>0.9	>0.9	>0.9	>0.9	>0.5	>0.9	<0.08
Observed value	0.558	1	0.558	1	0.986	0.995	0.903	0.995	0.028	0.999	0.0001

Table 3. Standard regression coefficients of model paths

Row	Model Paths	Non-standard Coefficient	Standard Error	Critical Value (t)	Standard Coefficient	P	Coefficient of Determination
1	Neuroticism → Competitive anxiety	0.234	0.034	6.912	0.383	0.0001	0.146
2	Extraversion → Competitive anxiety	0.009	0.039	0.227	0.011	0.821	0.0001
3	Agreeableness → Competitive anxiety	-0.022	0.040	0.545	0.106	0.017	0.0007
4	Conscientiousness → Competitive anxiety	0.070	0.036	-1.923	0.109	0.054	0.0118
5	Sporting enjoyment → Competitive anxiety	0.054	0.111	0.481	0.027	0.630	0.0007
6	Sports Commitment → Competitive anxiety	0.020	0.018	-1.083	0.057	0.279	0.003
7	Neuroticism → Sports motivation	0.316	0.197	1.601	0.089	0.109	0.007
8	Extraversion → Sports motivation	0.752	0.213	3.523	0.168	0.0001	0.0282
9	Empiricism → Sports motivation	0.0001	0.235	-0.002	0.0001	0.999	0.0001
10	Agreeableness → Sports motivation	0.080	0.219	-0.364	0.018	0.716	0.0003.0
11	Competitive anxiety → Sports motivation	0.434	0.273	1.586	0.074	0.113	0.0054
12	Conscientiousness → Sports motivation	0.579	0.201	2.660	0.143	0.008	0.0204
13	Sports commitment → Sports motivation	0.579	0.102	5.681	0.283	0.0001	0.0795
14	Sports enjoyment → Sports motivation	2.389	0.612	3.901	0.207	0.0001	0.0428

(0.294), extraversion with sports commitment (0.215), and sports commitment with conscientiousness (0.127).

A combination of fitness indicators was used to determine the adequacy of fitness of the proposed model, which the proposed model did not have a direct and indirect relationship with sports motivation and the model did not fit; therefore, the model was modified, and the results of the modified model are presented in Table 2.

According to the results in Table 2, in the proposed research model for the whole sample of subjects, the ratio of Chi-square to degree of freedom (CMIN/df) is equal to 0.558 (acceptable value less than 5), Goodness-of-Fit Index (GFI) was 1 (optimal value above 0.90), Adjusted Fit Goodness Index (AGFI) was 0.986 (good value above 0.90), Incremental Fitness Index (IFI) was 0.995 (optimal value above 0.90); Tucker–Lewis Index (TLI) was 0.903 (optimal value above 0.80), Comparative Fit Index (CFI) was 0.995 (optimal value above 0.90), Parsimony Comparative Fit Index (PCFI) was 0.028 (optimal value

above 0.50), Normalized Fitness Index (NFI) was 0.999 (optimal value above 0.90), and the Root Mean Square Error of Approximation (RMSEA) was 0.0001 (acceptable value less than 0.08). These findings indicate a good fit of the proposed model, and the model of the effect of personality traits, sports commitment, and sports enjoyment mediated by competitive anxiety on sports motivation of wrestlers in Mazandaran province has a good fit.

As shown in Table 3, neuroticism ($P < 0.0001$, $\beta = 0.234$) had a significant direct effect on wrestlers' competitive anxiety and explained 14.6% of the variance of this variable. Extraversion ($P < 0.821$, $\beta = 0.009$) did not have a significant direct effect on wrestlers' competitive anxiety and could not explain the variance of this variable. Also, agreeableness ($P < 0.017$, $\beta = 0.022$) had a significant direct effect on wrestlers' competitive anxiety and explained the variance of this variable. Conscientiousness ($P < 0.05$, $\beta = 0.070$) did not have a significant direct effect on wrestlers' competitive anxiety and could not explain the variance of this variable. Sports enjoyment ($P < 0.030$,

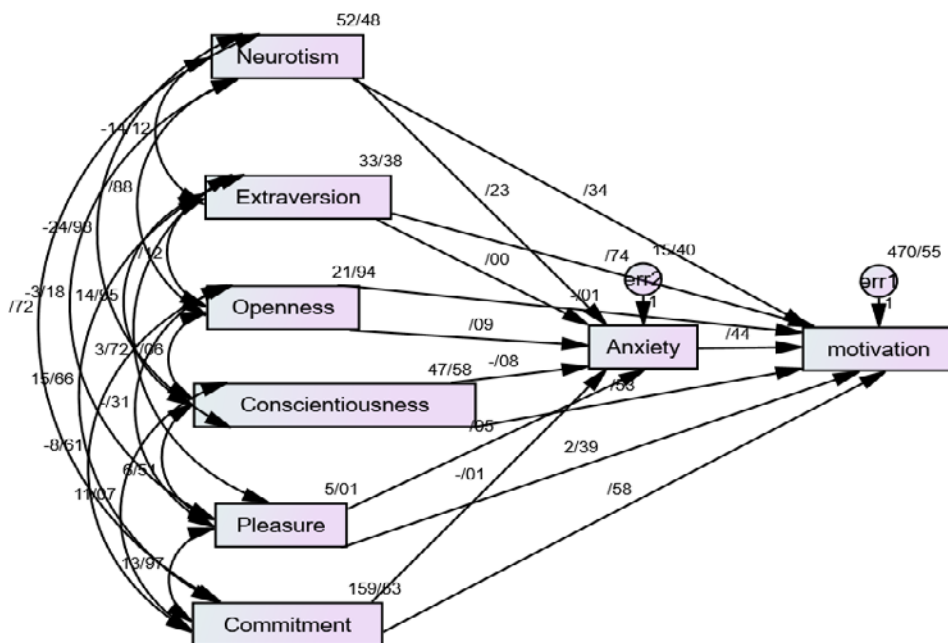


Figure 2. Structural model of the effect of personality traits, enjoyment, and sports commitment

$\beta=0.054$) had no significant direct effect on wrestlers' competitive anxiety and could not explain the variance of this variable. Finally, sports commitment ($P<0.279$, $\beta=0.020$) had no significant direct effect on wrestlers' competitive anxiety and could not explain the variance of this variable.

Neuroticism ($P<0.109$, $\beta=0.316$) had no significant direct effect on wrestlers' sports motivation and could not explain the variance of this variable. Extraversion ($P<0.0001$, $\beta=0.752$) had a significant direct effect on wrestlers' sports motivation and could explain 2.82% of the variance of this variable. Openness ($P<0.999$, $\beta=0.001$) did not have a significant direct effect on wrestlers' sports motivation and could not explain the variance of this variable. Agreeableness ($P<0.109$, $\beta=0.316$) had no significant direct effect on wrestlers' sports motivation and could not explain the variance of this variable.

Competitive anxiety ($P<0.1133$, $\beta=0.434$) had no significant direct effect on wrestlers' sports motivation and could not explain the variance of this variable. Conscientiousness ($P<0.0001$, $\beta=0.579.5$) had a significant direct effect on wrestlers' sports motivation and explained 2.04% of the variance of this variable. Sports commitment ($P<0.0001$, $\beta=0.579$) had a significant direct effect on wrestlers' sports motivation and could explain 2.04% of the variance of this variable. Sports enjoyment ($P<0.0001$, $\beta=2.389$) had a significant direct effect

on wrestlers' sports motivation and was able to explain 4.28% of the variance of this variable.

Now, the effects of direct, indirect, and the whole model of the effect of personality traits mediated by sports commitment on sports motivation of wrestlers in Mazandaran province are investigated. It should be noted that direct effect means the effect of exogenous variables on the endogenous variable (sport motivation), and indirect effect means the effect of exogenous variables with the role of mediator variable (sport commitment) on the endogenous variable (sport motivation) and the total effect is the sum of direct and indirect effects. The bootstrap method was used to assess indirect relationships, with 5000 re-sampling times with a confidence interval of 95 by Amos software v. 24 (Figure 2).

As can be seen in the Table 4, neuroticism ($P<0.0001$, $\beta=0.337$) had a significant direct effect on sports motivation, but indirect effect of neuroticism ($P<0.0001$, $\beta=0.103$) on sports motivation mediated by competitive anxiety is not significant. The total effect of neuroticism ($P<0.0001$, $\beta=0.440$) on sports motivation is significant. Extraversion ($P<0.0001$, $\beta=0.738$) had a significant direct effect on sports motivation, but the indirect effect of extraversion ($P<0.0001$, $\beta=0.001$) on sports motivation mediated by competitive anxiety is not significant. The effect of total extraversion ($P<0.0001$, $\beta=0.739$) on sports motivation is significant. Openness ($P<0.001$, $\beta=0.008$) had no significant direct effect on sports motivation.

Table 4. The effects of direct, indirect, and the whole model

Model Paths	Indicator	Effect			Explained Variance
		Direct	Indirect	Total	
Neuroticism →Competitive anxiety →Sports motivation	Non-standard coefficients	0.337	0.103	0.440	5.29%
	Significant value	0.0001	0.093	0.013	
	Standard coefficients	0.095	0.029	0.123	
	Significant value	0.069	0.099	0.014	
Extraversion →Competitive anxiety →Sports motivation	Non-standard coefficients	0.738	0.001	0.739	
	Significant value	0.001	0.835	0.001	
	Standard coefficients	0.165	0.0001	0.165	
	Significant value	0.001	0.807	0.001	
Openness →Competitive anxiety →Sports motivation	Non-standard coefficients	-0.008	0.041	0.033	
	Significant value	0.995	0.075	0.884	
	Standard coefficients	-0.001	0.007	0.006	
	Significant value	0.995	0.076	0.885	
Conscientiousness →Competitive anxiety →Sports motivation	Non-standard coefficients	0.529	-0.033	0.496	
	Significant value	0.011	0.073	0.018	
	Standard coefficients	0.141	-0.009	0.133	
	Significant value	0.012	0.071	0.017	
Sporting enjoyment →Competitive anxiety →Sporting motivation	Non-standard coefficients	2.391	0.020	2.411	
	Significant value	0.0001	0.440	0.0001	
	Standard coefficients	0.207	0.002	0.209	
	Significant value	0.0001	0.441	0.0001	
Sports commitment →Competitive anxiety →Sports motivation	Non-standard coefficients	0.582	-0.006	0.576	
	Significant value	0.0001	0.286	0.0001	
	Standard coefficients	0.282	-00.03	0.282	
	Significant value	0.0001	0.288	0.0001	

Also, the indirect effect of openness ($P < 0.0001$, $\beta = 0.041$) on sports motivation mediated by competitive anxiety is not significant. Therefore, the total effect of openness ($P < 0.0001$, $\beta = 0.033$) on sports motivation is not significant. Conscientiousness ($P < 0.0001$, $\beta = 0.529$) had a significant direct effect on sports motivation, but the indirect effect of conscientiousness ($P < 0.0001$, $\beta = -0.033$)

on sports motivation mediated by competitive anxiety is not significant. The total effect of conscientiousness ($P < 0.0001$, $\beta = 0.496$) on sports motivation is significant. Sports enjoyment ($p < 0.0001$, $\beta = 2.391$) had a significant direct effect on sports motivation, but the indirect effect on sports enjoyment ($P < 0.0001$, $\beta = 0.020$) on sports motivation mediated by competitive anxiety is not significant.

The total effect on sports enjoyment ($P < 0.0001$, $\beta = 2.411$) on sports motivation is significant. Sports commitment ($P < 0.0001$, $\beta = 0.582$) had a significant direct effect on sports motivation, but the indirect effect of sports commitment ($P < 0.0001$, $\beta = -0.006$) on sports motivation mediated by competitive anxiety is not significant. The total effect of sports commitment ($P < 0.0001$, $\beta = 0.576$) on sports motivation is significant. Also, this model was able to explain 21.4% of the variance of competitive anxiety variable and 29.5% of the variance of sports motivation variable. Therefore, according to these results, the mediating role of competitive anxiety between neuroticism, extraversion, openness and conscientiousness with sports motivation was not confirmed.

4. Discussion

This study aimed to investigate the model's fit of the effect of personality traits, enjoyment, and sports commitment mediated by competitive anxiety on sports motivation of wrestlers in Mazandaran province. The present study results showed that the model of the effect of personality traits, enjoyment, and sports commitment mediated by competitive anxiety on sports motivation of wrestlers in Mazandaran province has a favorable fit. The results showed that the highest correlations were related to neuroticism and competitive anxiety (0.440), sports enjoyment and sports motivation (0.437), sports commitment and sports motivation (0.427), extraversion and competitive anxiety (-0.337), conscientiousness and competitive anxiety (-0.300), extraversion and achievement motivation (0.294), conscientiousness and sports motivation (0.294), conscientiousness with sports motivation (0.257), sports enjoyment with competitive anxiety (-0.121), and openness with competitive anxiety (0.109), respectively. The results showed that neuroticism, agreeableness, openness, and competitive anxiety had no significant relationship with wrestlers' sports motivation. Also, competitive anxiety had no significant relationship with sports motivation.

Another finding of the present study was the direct effect of neuroticism on wrestlers' sports motivation. Neuroticism refers to the tendency to experience anxiety, stress, hostility, fretfulness, shyness, irrational thinking, depression, and low self-esteem [38]. People's amotivation is not aroused either intrinsic or extrinsic. People with high levels of neuroticism have less ability to be motivated to plan and follow up sports behaviors due to emotional instability. Also, neuroticism has a negative effect on the flow of identification, and low extraversion is inconsistent with neuroticism and low level of identification. Finally, sports commitment had a significant

direct effect on wrestlers' sports motivation, but the direct effect of conscientiousness on wrestlers' sporting commitment was not significant. The present study results are consistent with the findings of Batia [8] and Nikbakhsh et al. [39].

Another finding of the present study was the direct effect of extraversion on wrestlers' sports motivation. Extraversion is characterized by tendencies toward positivity, assertiveness, warmth, activity, and sociability [40]. Based on the stated characteristic, it can be inferred that extraversion, due to having more relatedness with different people, and the tendencies toward positivity, especially sociability, can enhance group identification and be influential among the members of a group with sport commitment and sport motivation. In addition, extraversion can regulate behaviors by understanding the value of regulation through identification. This issue means that extroverts have a sports commitment and sports motivation because wrestling can satisfy their autonomy and relatedness. The results of the present study are in line with the findings of previous research [8, 39, 41], which show that athletes score high on extraversion personality traits.

Another finding of this study was the direct effect of conscientiousness on wrestlers' sports motivation. Conscientious people tend to be organized, efficient, reliable, restrained, progressive, rational, and contemplative [27]. On the other hand, wrestlers who wrestle for enjoyment and progress and compete with competitors have a significant intrinsic motivation towards their wrestling. As Deci and Ryan [42] have acknowledged, intrinsic motivation stems from innate psychological needs, such as competence and autonomy. However, through intrinsic motivation, some activities allow people to experience a sense of competence and autonomy. From the definition provided, it can be inferred that progressivism causes people to strive to achieve a goal and success. It is also possible that conscientiousness plays an influential and prominent role in motivating people. Conscientious people are also less likely to regulate their behavior based on external pressures (external regulation) and more likely to regulate their behavior based on their perception of the pleasure of wrestling (intrinsic regulation). This issue means that conscientious people meet their need for competence by wrestling and achieving autonomy because more conscientious people have also shown higher autonomy. The present study results are consistent with the findings of Batia [8] and Nikbakhsh et al. [39].

Another finding of this study was the direct effect of sports enjoyment on wrestlers' sports motivation. The present study results are consistent with the findings of

Parsamehr [23]. Regarding this finding, by creating the necessary conditions for continued participation in sports activities, especially wrestling, sports should be offered to people in a fun way at a young age so that they can enjoy it again in the future. Providing sports to people in an enjoyable way causes participation in sports activities to become an inner desire and people's participation in it to continue continuously [23]. Therefore, the enjoyment of wrestling increases the intrinsic motivation to exercise.

Another finding of this study was the direct effect of sports commitment on wrestlers' sports motivation. Sports commitment is an important factor in explaining the sports motivation of wrestlers. Because sports commitment makes wrestlers feel responsible for their battlefields and their coaches, they do not consider underemployment, negligence, or even leaving the field the right thing to do. By accepting the goals and values of wrestling, wrestlers show their intention to participate in sporting events, which increases sports motivation and improves performance in competitions. This finding is consistent with the results of studies by Han [43], McLean and Hamm [44], Hoyle et al. [45], and Chen and Mary [46].

Another finding of this study was the direct effect of competitive anxiety on wrestlers' sports motivation. The present study results are consistent with the findings of Garcia-Mas [47] and Pulido et al. [48]. Sports motivation will increase if athletes' competitive anxiety is reduced. Competitive anxiety acts as a modulator of sports motivation [47]. Therefore, the relationship between motivation and anxiety in competitive sports can be reduced. Moderate anxiety also acts as a protector for psychological variables, such as sports motivation. It is also possible that low anxiety is associated with external regulation and amotivation. This result is consistent with previous findings showing that elite athletes interpret their anxiety symptoms more facilitative than their non-elite counterparts [49].

It should be noted that competitive anxiety has three components, which have the most significant impact on performance [48]. Both intrinsic and external, competitive anxiety must be low, i.e., zero, to maximize motivation. Therefore, there is a severe conflict between guilt and anxiety due to performance anxiety in the minds of athletes. Wrestlers start with high levels of self-motivation and low anxiety and competition, which shows anxiety caused by concerns about performance and external regulation as the main background and somatic anxiety as the low variables. Somatic anxiety is of little importance for destructive performance, but anxiety, of the worrying type, gets the most attention from sports professionals, including psychologists.

In general, it can be said that one of the strengths of the present study is the design of a model with personality variables and sports variables that can explain part of sports motivation, and such research has not been done in the Iranian sports community. Therefore, part of sports motivation can be explained by personality traits, sports enjoyment, and commitment. Different personality traits are effective in sports motivation for sports activities. However, the research and methodological limitations of the present study were the lack of a sample with respect to gender, age, education, and sports background characteristics and even the level of sports competition, which can strongly affect the variance of the model, which can be overcome with more specific examples. Due to the limited sample of wrestlers, caution should be exercised in generalizing the results to other athletes and individuals in the community who are at different levels of competition. Sports psychologists, wrestling coaches, and wrestlers can enhance people's motivation to participate in sports by emphasizing motivating personality traits. Also, further research on samples that are at different levels of competition will pave the way for generalizing the research results to all athletes. In addition, the study of the mediating role of other sports variables will play an important role in the development of existing knowledge in this field.

5. Conclusion

In general, it can be said that the characteristics of neuroticism, extraversion and conscientiousness, sports enjoyment, and sports commitment increase sports motivation in wrestlers. Therefore, coaches and professionals should pay attention to these features when developing training programs.

Ethical Considerations

Compliance with ethical guidelines

There were no ethical considerations to be considered in this research.

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Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

There were no conflict of interests in this study.

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