

THE PSYCHOLOGY OF STRENGTH: MENTAL TOUGHNESS ACROSS CONFLICT AND PERSONALITY DIMENSIONS

ABSTRACT

Mental toughness (MT) is a multi-faceted concept also known as grit. Grit is an important aspect of mental toughness which involves perseverance and passion towards one's long-term objectives. The present study aimed to examine the relationship between mental toughness, conflict management, and personality traits among athletes, focusing on how these factors influence performance, resilience, and interpersonal dynamics in sports settings. A quantitative survey design was employed, and a sample of 154 athletes (77 males and 77 females) aged 18–25 years was selected. Standardized tools, including the Big Five Inventory (BFI), Thomas-Kilmann Conflict Mode Instrument (TKI), and Mental Toughness Test (MTT) were administered. Data were analyzed using an independent t-test at a significance level of $p < 0.05$. The results showed significant gender differences for extraversion, neuroticism, competing, and control. Males are said to have a tendency to be extraverted and very competitive. On the other hand, females are more neurotic than males, are emotionally sensitive and experience more pressure when under stress. Therefore, we can conclude that certain personality traits and aspects of conflict significantly influence athletes' emotional stability, motivation, and performance.

Key words: Mental toughness, conflict, personality, athletes, males, females

INTRODUCTION

A. Mental toughness

A significant portion of human experience is made up of unpleasant life experiences, crises, difficulties, and stressful circumstances, many of which cannot be avoided. Adversity's effects frequently result in impairments in social, educational, and occupational functioning for many people, having a severe impact on both their physical and mental health. Since some people appear to handle adversity better than others, researchers, decision-makers, and the general public have become interested in understanding the variables and mechanisms that permit some people to persevere when others give up.

Peter Clough defines mental toughness as, "an individual's resilience and an inner drive to succeed - particularly when the going is challenging. It discusses how it is feasible to put two people in the same working setting and discover which one finds it difficult to handle pressure and which one flourishes."

There have been numerous studies on the psychological factors that influence athletes' sporting success and lives, one of which is mental toughness (MT). Initially, researchers attempting to understand what MT is gathered data from participants in a variety of sports disciplines, including football, rugby, cricket, soccer, and basketball, to gain a better understanding of the concept.

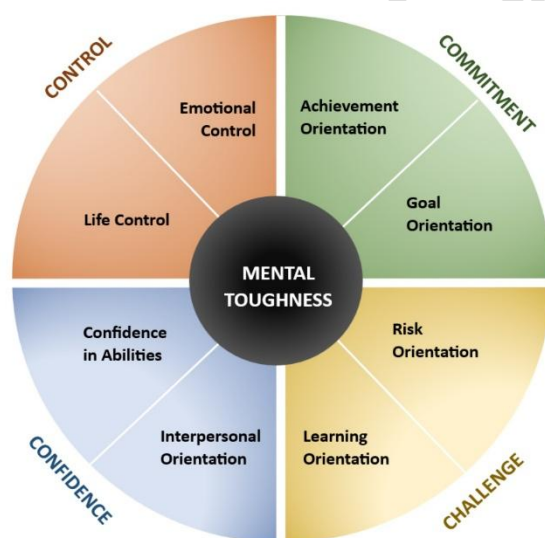
In the field of elite sports, it has lately been suggested that mental wellness and mental toughness are mutually exclusive ideas. The basic argument is that there is a stigma connected with athletes' mental health difficulties in sports, and hence any desire to seek professional help is thwarted by the fear of being labelled "mentally weak." Regardless of whether athletes are more susceptible to mental health issues than the general population, it is critical that athletes who experience mental illness be connected with physicians who can assist, decrease and prevent the symptoms and dysfunctions that come with it (e.g., affect,

41 motivation). With increased support networks for mental health care within sports settings, players must
42 seek out and engage in evidence-based services in reaction to negative mental health symptoms or
43 proactively for prevention.

44 For any athlete to be successful in their chosen sport, they must possess the quality of mental toughness. It
45 can be extremely important to one's future success in sports to develop mental toughness at a young age,
46 preferably during adolescence. One cannot succeed in the world of sports without mental toughness.
47 Professional sportsmen with exceptional mental toughness include Tom Brady, Kobe Bryant, and Michael
48 Jordan. This enables them to persevere through difficult times and overcome obstacles. Early mental
49 toughness training offers one an advantage over all of their competitors. Mentally tough athletes can handle
50 the ups and downs of sports. Researchers have discovered a direct link between mental toughness and
51 performance-based outcomes like effort levels, anxiousness, and peak performance.

52 While being mentally tough has advantages for an athlete, mental toughness is becoming more and more
53 valuable in recent years. Children and teenagers who have a high level of mental toughness probably do
54 better in competition, enjoy sports more, and are better prepared for the future as a result of developing this
55 skill. Success and being in a healthy mental health situation can be closely correlated with mental toughness.

56 **The 4C's model of Mental Toughness**



67 The Mental Toughness 4C's framework and assessment is a widely recognised tool for evaluating and
68 understanding an individual's mental toughness. Developed by Dr. Peter Clough and his academic team at
69 the University of Hull in the early 2000s, and subsequently commercialised by Doug Strycharczyk through
70 AQR International, this framework focuses on four key components, known as the 4C's . They are as
71 follows;

72 **Control:** The ability to manage one's emotions and environment, including the capacity to influence
73 external factors. Control encompasses two distinct subscales: *Life Control*, which reflects belief in one's
74 ability to shape their world and maintain a sense of self-worth, and *Emotional Control*, which describes the
75 capacity to regulate emotions and control their display to others. Individuals high in control typically "get on
76 with it" irrespective of how they feel, working through emotionally charged situations without being
77 derailed.

78 **Commitment:** Dedication and motivation towards achieving goals, as well as the persistence and
79 perseverance to see them through. This component breaks down into *Goal Orientation* (the ability to
80 visualise and set targets) and *Achievement Orientation* (dedication to achieving those goals). Mentally Tough
81 individuals with high commitment can be relied upon to set measurable promises and work diligently to
82 deliver on them.

83 **Challenge:** Embracing challenges as opportunities for growth and development, viewing obstacles as
84 steppingstones rather than barriers. Challenge comprises *Risk Orientation* (willingness to push boundaries
85 and embrace change) and *Learning Orientation* (viewing setbacks as learning opportunities). Those scoring
86 high on challenge typically enjoy innovation, new experiences, and quickly become bored by routine.

87 **Confidence:** Self-belief and self-efficacy, encompassing aspects of self-esteem, self-worth, and confidence
88 in one's abilities. This dimension includes *Confidence in Abilities* (belief that one is worthwhile and less
89 dependent on external validation) and *Interpersonal Confidence* (assertiveness in social settings and ability
90 to engage with others).

92 **B. Personality**

93 Personality is one of the most studied concepts in psychology. It plays an important role in shaping a
94 person's thoughts, feelings, and actions in different situations.

95 **Sigmund Freud (1923)** defines "Personality is the outcome of the conflict between the id, ego, and
96 superego."

97 In sports, personality is a key factor affecting athletic performance, motivation, coping methods,
98 relationships, and reactions to stress and competition. Researchers have pointed out that stable personality
99 traits interact with specific situational demands. This interaction determines how athletes view challenges
100 and manage their behaviour under pressure.

101 Personality refers to the lasting patterns of traits, tendencies, and characteristics that distinguish one person
102 from another. These patterns influence how athletes react to training demands, competitive stress, success,
103 failure, and the dynamics within teams and coaching settings. According to Eysenck (1967), personality
104 traits like extraversion, neuroticism, and psychoticism have biological roots. They affect emotional stability
105 and performance under stress, which is especially relevant in competitive sports.

106 In sports psychology, researchers have extensively studied personality using trait-based models, particularly
107 the Five-Factor Model (FFM). This model includes openness to experience, conscientiousness, extraversion,
108 agreeableness, and neuroticism (*McCrae & Costa, 1990*). Research shows that high conscientiousness and
109 emotional stability are linked to better performance consistency, self-discipline, and effective coping
110 strategies in athletes. On the other hand, high levels of neuroticism are associated with anxiety, emotional
111 instability, and poor responses to competitive pressure.

113 **Big-Five Factor Model**

114 The big 5 personality traits are the broad dimensions/traits that make up human personality. This five-factor
115 model, often referred to as the "big 5" theory, identifies these five traits as: openness, conscientiousness,
116 extraversion, agreeableness, and neuroticism.

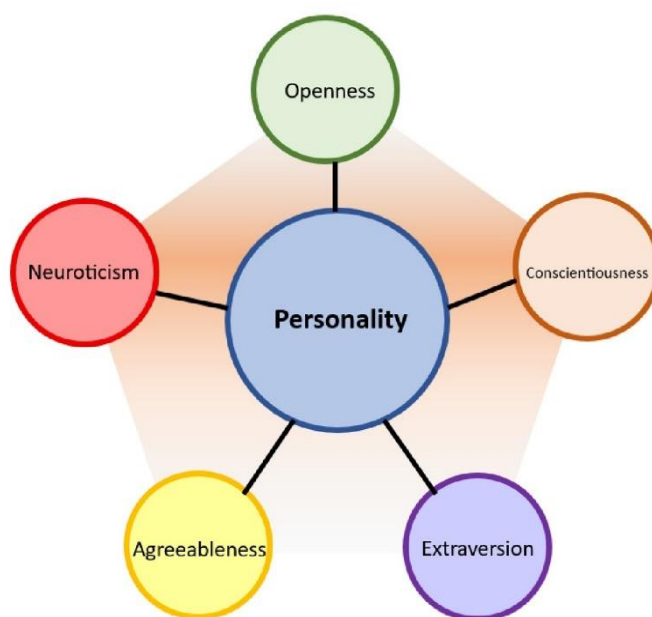
117 **Openness** (also referred to as openness to experience) emphasizes imagination and insight more than any of
118 the other five personality traits

119 **Conscientiousness** is defined by high levels of thoughtfulness, good impulse control, and goal-directed
120 behaviours.

121 **Extraversion** (or extroversion) is a personality trait characterized by excitability, sociability, talkativeness,
122 assertiveness, and high amounts of emotional expressiveness.

123 **Agreeableness** includes attributes such as trust, altruism, kindness, affection, and other prosocial behaviours.

124 **Neuroticism** is a personality trait characterized by sadness, moodiness, and emotional instability. This trait is
125 generally defined as a negative personality trait that can have detrimental effects on a person's life and well-
126 being.



138 C. Conflict

139 Conflict is a natural part of human interaction and is especially common in competitive settings like sports,
140 where individuals and teams work hard to reach their personal and shared goals.

141 **Kurt Lewin (1935)** defines “Conflict is a situation in which opposing forces of approximately equal
142 strength act upon an individual, creating tension and indecision.”

143 In athletic environments, conflict can emerge from differences in goals, values, communication styles,
144 expectations of roles, competition for selection, coaching choices, and pressure to perform. Researchers note
145 that conflict can have both positive and negative effects based on how people perceive and handle it.

146 Conflict is generally understood as a situation where one party feels that another party has harmed or is
147 about to harm something important to them (*Robbins, 2005*). In sports, this conflict can happen between
148 athletes, coaches, teammates, or support staff. It can take the form of interpersonal conflict, intrapersonal
149 conflict, or task-related conflict. These conflicts can affect emotional states, motivation, team unity, and
150 overall performance.

151 If conflict is not handled well, it can lead to frustration, anxiety, reduced confidence, and burnout. On the
152 other hand, managing conflict effectively can improve problem-solving skills, resilience, and psychological
153 growth (*Weinberg & Gould, 2019*). Research shows that athletes with strong emotional regulation and
154 coping skills are more likely to deal with conflict in positive ways.

Mentally tough athletes are more likely to stay calm, keep their focus, and see conflict as a challenge instead of a threat (Jones, Hanton & Connaughton, 2007). They usually show greater emotional control, persistence, and confidence when dealing with interpersonal or situational stressors.

Personality traits influence how people handle conflict. For example, athletes who are very agreeable may prefer to work together to solve problems. In contrast, those who score high in neuroticism may experience more emotional distress during conflicts. This link between personality, conflict, and mental toughness highlights the importance of examining these factors together in sports psychology research.

AIMS & OBJECTIVES

To examine the relationship between mental toughness, personality traits, and conflict management among athletes.

The objectives of the study:

1. To assess the level of mental toughness among athletes.
2. To evaluate personality traits using the Big Five model.
3. To examine conflict management styles among athletes.
4. To analyse the relationship between mental toughness, personality traits, and conflict management.
5. To compare these variables based on gender differences.

HYPOTHESIS:

- *Alt hypothesis*: There will be a significant difference between personality, conflict and mental toughness in male and female athletes.
- *Null hypothesis*: There will be no significant difference between personality, conflict and mental toughness in male and female athletes.

METHODOLOGY: -

STUDY DESIGN

This study is a cross-sectional study which adopts a survey method.

STUDY POPULATION

There were 154 sample size for athletes of Guru Nanak Dev University. The overall samples consisted of athletes ranging in age from 18 to 25 years of age of male and female athletes.

STUDY SETTING

MYAS-GNDU Department of Sports Sciences and Medicine, Guru Nanak Dev University, Amritsar.

STUDY DURATION

190 The duration of the study, including the time for data collection, data analysis and reporting, was from
191 August, 2025 to February, 2026.

192 **SAMPLE SIZE**

193 G Power version 3.1.9.7 software was used to estimate the sample size for this study. The power and the
194 level of significance set for this study are as follows:

195 **Power of study:** 0.95

196 **Level of Significance:** 0.05

197 **Effect Size:** 0.5

199 **ETHICAL CLEARANCE**

200 The study was approved by the Institutional Ethics Committee (Number 3953/HG, dated: 18.06.2025) of
201 Guru Nanak Dev University, Amritsar, Punjab.

203 **SELECTION CRITERIA**

204 **Inclusion Criteria**

- 205 • Participants should be between 18-25 years of age.
- 206 • Participants must be an athlete.
- 207 • They should have a minimum of one year of experience in the sport.
- 208 • Participants must be from Guru Nanak Dev University.

209 **Exclusion Criteria**

- 210 • Injured players.
- 211 • Team game players.
- 212 • Participants not satisfying the mentioned age group.
- 213 • Participants with less than one year of experience in the game.

215 **MEASUREMENT TOOLS**

- 216 • Big-Five Personality test (Paul T. Costa Jr. and Robert R. McCrae; 1985)
- 217 • Thomas-Kilmann Conflict Mode Instrument (Kenneth W. Thomas and Ralph H. Kilmann; 1974)
- 218 • Mental Toughness Test (Alan Heary; 2013); the more the score, the lower the mental toughness.

220 **VARIABLES**

221 **Independent Variable:** Conflict and Personality

222 **Dependent Variable:** Mental Toughness

224 **PROCEDURE**

- Permission to conduct the survey was taken from the respective coaches as well as consent from athletes.
- After the criteria were met and athletes were selected, information about the research and survey questionnaires were given.
- A consent form and assessment form were given to the athletes to be filled out, and after that the BFI, TKI and MTT were given to be filled.
- Any questions or doubts related to the questionnaire were cleared.

RESULTS

Data analysis: -

Table 1: Mean, Standard Deviation and t-test values of male and female athletes (N=77)

<u>Variables</u>	<u>Gender</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>	<u>Std. Error</u>	<u>T-test</u>	<u>Sig (2-tailed)</u>	<u>Result</u>
EXTRA.	Male	77	26.987	5.038	0.5741	-2.001	0.047	Significant
	Female	77	25.403	4.7828	0.5451			
OPEN.	Male	77	36.013	5.7845	0.6592	0.572	0.568	Not Significant
	Female	77	36.494	4.5613	0.5198			
CONS.	Male	77	30.675	6.9726	0.7946	0.727	0.469	Not Significant
	Female	77	31.39	5.0761	0.5785			
NEURO.	Male	77	22.429	6.3855	0.7277	4.564	0	Significant
	Female	77	27.013	6.0752	0.6923			
AGREE.	Male	77	33.779	5.8751	0.6695	-0.044	0.965	Not Significant
	Female	77	33.74	5.0482	0.5753			
COMPETE.	Male	77	6.935	2.4886	0.2836	-2.07	0.04	Significant
	Female	77	6.117	2.4169	0.2754			
COLLAB.	Male	77	5.675	1.9429	0.2214	-0.042	0.966	Not Significant
	Female	77	5.662	1.861	0.2121			
COMPRO.	Male	77	5.156	2.0395	0.2324	1.373	0.172	Not Significant
	Female	77	5.623	2.1827	0.2487			
AVOID.	Male	77	6.416	2.0219	0.2304	1.726	0.086	Not Significant
	Female	77	6.974	1.9932	0.2272			
ACCOMO.	Male	77	5.818	2.2637	0.258	-0.559	0.577	Not Significant
	Female	77	5.623	2.0586	0.2346			
CONF.	Male	77	2.532	1.5268	0.174	1.847	0.067	Not Significant
	Female	77	3	1.6141	0.1839			
COMM.	Male	77	2.299	1.3579	0.1547	0.49	0.625	Not Significant
	Female	77	2.403	1.2697	0.1447			
CONCEN.	Male	77	2.299	1.3771	0.1569	-0.123	0.902	Not Significant
	Female	77	2.273	1.2316	0.1403			
CONT.	Male	77	2.766	1.716	0.1956	2.274	0.024	Significant
	Female	77	3.403	1.7566	0.2002			

Table 1: Mean, Standard Deviation and t-test values of male and female athletes (N=77)

241 Table 1 shows statistically significant differences that were obtained through independent samples t-test
 242 between genders regarding some selected personality traits and psychological variables. A significant
 243 difference was obtained for the Extraversion trait, whereby males obtained a significantly higher mean score
 244 (M = 26.99, SD = 5.04) than that of females (M = 25.40, SD = 4.78).

245 Another highly significant difference was obtained for Neuroticism. Female participants were found to obtain
 246 significantly higher scores (M = 27.01, SD = 6.08) compared to male participants (M = 22.43, SD = 6.39).

247 Regarding conflict management styles, significant differences were obtained where males scored
 248 significantly higher in Competing (M = 6.94, SD = 2.49) compared to females who had lower scores (M =
 249 6.12, SD = 2.42).

250 Finally, in Control variable, female participants had significantly higher scores (M = 3.40, SD = 1.76) than
 251 those of males (M = 2.77, SD = 1.72) implementing lower emotional control.

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255 **Table 2: Intercorrelation of all the measured variables of male athletes (N=77)**

Correlations															
VARIABLES		EXTRA.	OPEN.	CONS.	NEURO.	AGREE.	COMPETE	COLLAB.	COMPRO.	AVOID.	ACCOMO.	CONFL.	COMM.	CONCEN.	CONT.
EXTRA.	Pearson Correlation	1													
	Sig. (2-tailed)														
OPEN.	Pearson Correlation	.391**	1												
	Sig. (2-tailed)	0													
CONS.	Pearson Correlation	0.051	0.089	1											
	Sig. (2-tailed)	0.661	0.444												
NEURO.	Pearson Correlation	0.194	.277*	-.459**	1										
	Sig. (2-tailed)	0.091	0.015	0											
AGREE.	Pearson Correlation	.227*	.350**	.470**	-.094	1									
	Sig. (2-tailed)	0.047	0.002	0	0.417										
COMPETE	Pearson Correlation	-0.002	0.031	0.183	0.101	-0.132	1								
	Sig. (2-tailed)	0.985	0.788	0.111	0.381	0.251									
COLLAB.	Pearson Correlation	0.121	-.01	-.004	0.123	0.036	-0.081	1							
	Sig. (2-tailed)	0.296	0.385	0.972	0.288	0.754	0.486								
COMPRO.	Pearson Correlation	0.033	-.131	-.102	-.112	-0.131	-.392**	-.286*	1						
	Sig. (2-tailed)	0.772	0.257	0.378	0.331	0.256	0	0.012							
AVOID.	Pearson Correlation	-0.007	-0.012	-0.15	-.270*	-0.009	-.507**	-.267*	0.137	1					
	Sig. (2-tailed)	0.95	0.919	0.193	0.018	0.94	0	0.019	0.234						
ACCOMO.	Pearson Correlation	-0.125	0.18	0.028	0.126	-.240*	-0.224	-.274*	-.347**	-.231*	1				
	Sig. (2-tailed)	0.279	0.117	0.81	0.276	0.035	0.05	0.016	0.002	0.044					
CONFL.	Pearson Correlation	-0.071	-0.189	-0.079	.338**	-0.18	0.058	0.139	0.003	-.277*	0.063	1			
	Sig. (2-tailed)	0.54	0.101	0.496	0.003	0.117	0.618	0.228	0.982	0.015	0.588				
COMM.	Pearson Correlation	-0.099	-.225*	-0.168	.314**	-.378**	0.029	0.172	0.03	-0.223	-0.008	.697**	1		
	Sig. (2-tailed)	0.39	0.049	0.145	0.005	0.001	0.801	0.135	0.792	0.051	0.946	0			
CONCEN.	Pearson Correlation	-0.043	-0.114	-0.22	.400**	-.273*	0.113	0.12	-0.153	-0.196	0.085	.505**	.641**	1	
	Sig. (2-tailed)	0.71	0.322	0.055	0	0.016	0.327	0.297	0.185	0.087	0.461	0	0		
CONT.	Pearson Correlation	-0.029	0.007	-0.138	.407**	-.228*	0.08	0.001	-0.046	-.226*	0.155	.520**	.612**	.642**	1
	Sig. (2-tailed)	0.8	0.952	0.23	0	0.046	0.491	0.996	0.692	0.048	0.179	0	0	0	

*. Correlation is significant at the 0.05 level (2-tailed).

**.. Correlation is significant at the 0.01 level (2-tailed).

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Table 2: Correlation of male athletes

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258 Table 2 indicates a significant positive correlation between extraversion and openness and agreeableness,
259 suggesting that extrovert males would be open to different experiences and also be able to interact well with
260 other people. Besides, openness and neuroticism and agreeableness indicate significant positive correlations,
261 since an open person tends to experience deeper feelings and are able to understand others hence cooperate
262 and feel emotionally. Also, conscientiousness exhibits significant positive correlation with agreeableness,
263 meaning organized people usually relate well with others.

264 Also, neuroticism exhibits significant positive correlation with control, concentration, confidence, and
265 commitment, meaning low mental stability resulting in lower confidence, persistence, ability to concentrate
266 and low emotional control. In addition, agreeableness is positively correlated with accommodating,
267 meaning cooperative individuals tend to avoid conflict and maintain harmony in difficult situations.

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Table 3: Intercorrelation of all the measured variables of female athletes (N=77)

		Correlations													
		EXTRA.	OPEN.	CONS.	NEURO.	AGREE.	COMPETE.	COLLAB.	COMPRO.	AVOID.	ACCOMO.	CONFL.	COMM.	CONCEN.	CONT.
EXTRA.	Pearson Correlation	1													
	Sig. (2-tailed)														
OPEN.	Pearson Correlation	0.149	1												
	Sig. (2-tailed)	0.195													
CONS.	Pearson Correlation	-0.222	.387**	1											
	Sig. (2-tailed)	0.052	0.001												
NEURO.	Pearson Correlation	-0.212	0.137	-0.024	1										
	Sig. (2-tailed)	0.064	0.236	0.838											
AGREE.	Pearson Correlation	-.234*	.324**	.458**	0.092	1									
	Sig. (2-tailed)	0.04	0.004	0	0.424										
COMPETE.	Pearson Correlation	0.097	-0.151	-0.021	-0.084	-0.144	1								
	Sig. (2-tailed)	0.4	0.19	0.857	0.466	0.211									
COLLAB.	Pearson Correlation	0.11	0.048	-0.108	0.073	-0.018	-0.105	1							
	Sig. (2-tailed)	0.341	0.68	0.348	0.531	0.877	0.363								
COMPRO.	Pearson Correlation	0.049	0.201	0.183	-0.153	-0.112	-.500**	-0.08	1						
	Sig. (2-tailed)	0.674	0.079	0.111	0.183	0.334	0	0.488							
AVOID.	Pearson Correlation	-0.158	-0.085	-0.052	-0.054	0.069	-0.188	-.357**	-.284*	1					
	Sig. (2-tailed)	0.171	0.46	0.651	0.639	0.553	0.102	0.001	0.012						
ACCOMO.	Pearson Correlation	-0.113	0.003	-0.021	.249*	.237*	-.367**	-.350**	-0.126	-0.124	1				
	Sig. (2-tailed)	0.329	0.978	0.856	0.029	0.038	0.001	0.002	0.276	0.282					
CONFL.	Pearson Correlation	-0.063	0.132	-0.039	.433**	-0.008	0.037	-0.188	-0.09	-0.086	.305**	1			
	Sig. (2-tailed)	0.586	0.252	0.739	0	0.944	0.749	0.101	0.438	0.458	0.007				
COMM.	Pearson Correlation	-0.023	0.015	-0.033	.327**	-0.055	0.036	-0.098	-0.049	-0.188	.280*	.565**	1		
	Sig. (2-tailed)	0.845	0.895	0.777	0.004	0.633	0.756	0.398	0.672	0.101	0.014	0			
CONCEN.	Pearson Correlation	-0.086	0.034	-0.122	.429**	-0.001	0.148	0.058	-0.059	-0.222	0.051	.351**	.560**	1	
	Sig. (2-tailed)	0.458	0.767	0.289	0	0.992	0.198	0.617	0.609	0.052	0.657	0.002	0		
CONT.	Pearson Correlation	-0.063	-0.028	-0.069	.514**	0.091	0.048	0.074	-0.197	-0.162	.243*	.589**	.451**	.508**	1
	Sig. (2-tailed)	0.584	0.806	0.548	0	0.433	0.681	0.521	0.086	0.158	0.034	0	0	0	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

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Table 3: Correlation of female athletes

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Table 3 indicates that there exists a significant positive relationship between openness and conscientiousness and agreeableness which means that females who are open tend to be both responsible, organized and cooperative. Besides, the positive correlation between conscientiousness and agreeableness means that disciplined females tend to be friendly and supportive. Neuroticism tends to be positively correlated with accommodating, confidence, commitment, concentration, and control. This indicates that emotionally unstable females tend to adopt an accommodating style in conflict resolution while having a lack of mental toughness.

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Similarly, agreeableness tends to be positively correlated with accommodating, which implies that females who tend to maintain harmonious relationships with other people prefer this style of conflict management. Moreover, accommodating style tends to be positively correlated with confidence, commitment, and control. Females with accommodative conflict management styles tend to lack mental toughness. Confidence is positively correlated with commitment, concentration & Control which indicates lower self-belief in females. Commitment tends to be positively correlated to concentration & control which indicates that reduced persistence in females is connected to poorer focus. Lastly, concentration shows a positive correlation with control which indicates that difficulty in keeping attention among females is linked to poorer emotional control.

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290 **DISCUSSIONS: -**

291 Mental toughness (MT) is an appealing concept. The construct is repeatedly linked to success and the ability
 292 to conquer big challenges while exhibiting tenacious perseverance in the face of adversity (*Gucciardi,*
 293 *Gordon & Dimmock, 2008; Jones, Hanton & Connaughton, 2002*).

294 The present study has been conducted to explore the relationship between Mental Toughness to Personality
 295 and Conflict.

296 The findings fully supported the hypothesis, indicating that the personality traits and conflict modes were
 297 significantly related to mental toughness.

298 **Independent T-test between Male and Female Athletes for all the measured Variables**

299 Independent samples t-tests revealed significant gender differences for extraversion, neuroticism, competing,
 300 and controlling variables. Male athletes proved to be more outgoing and socially active than female athletes
 301 as they are expected to be more assertive due to socio-cultural norms. While females might also be socially
 302 engaged, they tend to express it in a more composed manner, thus, aligning the study results of Keith
 303 Goddard et al. (2019).

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 305 Another important finding has revealed that women are more emotionally unstable than men because they
 306 have a greater tendency to experience stress and negative emotions. They often feel emotions more intensely
 307 in challenging situations, which was supported by R. Lynn and T. Martin (1997).

308 It is also revealed that men have a tendency to adapt the competing conflict styles, as men are more
 309 ambitious than women. Thus, they concentrate more on winning or taking control when a conflict arises,
 310 which was in alignment with the research by Brewer, Mitchell, and Weber (2002).

311 Additionally, the results also confirmed that females are less mentally tough than males. They experience
 312 more anxiety and find it harder to manage their emotions in stressful situations. This was found to be in
 313 alignment with the research by Matud (2004).

314

315 **Intercorrelation of all the measured variables of male athletes**

316

317 Extraversion is positively correlated with openness and agreeableness due to the fact that people who are
 318 extraverted tend to love to explore new things and also socialize with other people, supporting the study by
 319 McCrae & Costa (1987). Similarly, openness and neuroticism are positively correlated with agreeableness
 320 because people who are open tend to have deep feelings and are able to understand and cooperate very well
 321 with other people, aligning the results from Li Tsingan and Zhang (2013).

322 Conscientiousness is positively correlated with agreeableness because responsible and organized people are
 323 usually very cooperative, and this supports the findings by Graziano et al. (1997). Also, confidence is
 324 positively related to commitment, concentration, and control since confident individuals maintain focus,
 325 persistence, and emotional stability supporting the findings of Gucciardi et al. (2015).

326 **Intercorrelation of all the measured variables of female athletes**

327 Openness to new experience was positively correlated with conscientiousness and agreeableness since an
 328 open-minded female is often more organized, responsible, and agreeable. The results of this study are
 329 consistent with the results obtained by Moore et al. (2022). Conscientiousness was positively correlated with
 330 agreeableness since a disciplined female is likely to be more friendly and build better relationships, which is
 331 consistent with the findings of Mayungbo (2017).

332 Conversely, females who have an accommodating personality are positively correlated to confidence,
 333 commitment, and control since accommodation suggests less mental toughness resulting in lower levels of

334 self-confidence, commitment, and emotional regulation, as suggested by Gucciardi and Gordon (2009).
335 Lastly, confidence is positively related to commitment, concentration, and control since confident individuals
336 maintain focus, persistence, and emotional stability supporting the findings of Gucciardi et al. (2015).

337 CONCLUSION

338 The current study explored the link between personality traits and conflict-management styles with mental
339 toughness, focusing on differences between genders. The findings revealed that extraversion, neuroticism,
340 competing style, and control were important factors. As a result, the study undertook three variables that are
341 Personality, Conflict and Mental Toughness among Male and Female athletes to evaluate the relationship for
342 154 sample size (77 each for male and female athletes).

343 In this particular study, significant gender differences were found for extraversion, neuroticism, competing
344 styles and control among others. Extraversion is a personality factor which affects the way individuals
345 approach interpersonal settings. Males have been shown to be more extraverted than females (Costa et al.,
346 2001). Neuroticism reflects the traits associated with emotional instability and anxiety, affecting individual
347 responses to stress and pressure. People who score highly on neuroticism will be likely to experience
348 negative emotions, and in general, females scored higher on this dimension than men (Costa et al., 2001).

349 Competing conflict style signifies those people who are ready to face challenges. This will affect the way
350 people interact with each other and make decisions, and generally, it has been demonstrated that men are
351 more likely to adopt this conflict style than women (Wood & Bell, 2008). Moreover, it was found that males
352 show better emotional control in response to stress than women (Matud, 2004).

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