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A COMPARATIVE STUDY OF MENTAL SKILLS ON NATIONAL LEVEL MALE AND FEMALE BOXERS

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ABSTRACT

The main purpose of this research was to compare mental skills of male and female Boxers by Ottawa (OMSAT-3) Questionnaire. The research study was a descriptiveapplied one. The data collection instrument was a questionnaire based on Ottawa questionnaire that measured some mental skills factors. The subject was 50 male and 50 female National Level Boxing players. T independent test was applied in order to analyze the related data to compare the results at p<0.05 level. The results indicated that the rate of Confidence, Relaxation, Imagery skills is higher in male Boxers in compare to female. However, the rate of Stress Control, Focusing and Competition Planning skills is higher in Female Boxers as compared to Male Players.

INTRODUCTION

A professional athlete may enhance their performance by developing mental abilities, which are internal qualities that enable them to maintain constant and effective mental control while executing manageable tasks. Mental skill development is the process that offers the strategies and tactics to enhance performance through goal-setting, positive self-talk, visualization, imagery, self-efficiency, and the development of self-confidence and a positive mindset.

According to Singh, Valsaraj, and Mohammad (2013), mental skills are recognized as both a foundational and highly important metric for achieving optimal performance during competition. Along with training-related factors, sports psychologists believe that a wide range of other variables can also affect an athlete's performance and even help players perform at a higher level both during practice and during competition. Not only does physical training result in peak performance during contests, but other elements including weather, training techniques, nutrition, and psychological aspects also have a role (Murphy, 1987; Khan, Ali, & Ahmed, 2015).

Sport psychologists provided evidence that psychological training can assist in achieving desired outcomes when combined with physical training. A person with mental skills is better able to regulate their negative emotions, which might obstruct or hinder their route to success. According to Weinberg and Gould (2003), most



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tournaments, however, are determined by the performance of the players (or their opponents) on any given day.

The mental component of training is crucial for achieving high performance in sports, as demonstrated by Cox & Yoo (1995). The mental component of performance needs to be given the attention it deserves in order to reach high levels of performance. Beswick (2010) has said that mental talents are intended to give athletes psychological moods and abilities that would enhance their performance. According to Williams and Krane (2001), it emphasizes on the mental abilities that players must acquire in order to enhance their performance beyond what can be accomplished by technical and physical training. In general, three preparation factors—physical, skillbased, and mental-are needed to obtain athletic skills. In addition, some research has shown that athletes with good mental preparation are more successful in tournaments, completing specific tasks in the framework of individual and team sports; these better mental skills let them to have high potential performance, particularly at their selfconfidence when they compete in tournaments. It appears that the difference between the champions' performances is largely dependent on their mental preparation. In addition, these athletes are more capable of making positive decisions and thinking positively than other athletes; as a result, their mental preparedness might enhance their physical abilities. According to Cox (2016), mental skills are generally a set of approaches and strategies that may be used to improve an athlete's athletic performance, focus, and self-confidence, especially in academic settings.

According to Suinn (1977), psychological skills are the capacity to give one's whole attention to performance in circumstances when physical prowess ultimately decides the outcome. In the team sport of basketball, the mental and physical health of the team members determines whether the team succeeds or fails. Beswick (2010) confirmed that the nature of this activity necessitates both physical and mental reactions from the participant. In the stressful circumstances of a match, uncertainty about one's choice manifests itself in one's posture or can lead to mistakes or errors that could be the difference between winning and losing.

METHODS

Selection of Subjects

For the purpose of the study a total number of 100 subjects (50male & 50female) are selected from Boxing. The age of the subjects was between 17 to 28 years. The selected athletes are represented at different National Level competitions. The selected subjects are represented to different academies.

Selection of variables

The mental skills are measured using the OMSAT-3. The 48 items in the OMSAT-3 are divided into 12 mental skills, with four items in each skill. These groups are arranged into three primary basic categories: cognitive, psychosomatic, and foundational skills. Goal-setting, self-confidence, commitment, stress reactions, fear



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control, activation, relaxation, imagery, mental practice, focusing, refocusing, and competition planning are the mental skills. The 7-point Likert scale goes from "strongly agree" to "strongly disagree." Demographic data, such as age, gender, sport discipline, highest achievement, and training time, is also included in the OMSAT-3. There were several uses for this information.

RESULT

Independent samples t-test was employed to compare male and female Boxing players with respect to their Mental Skills.

Group Statistics									
	GENDER	Ν	Mean	Std.	Std. Error				
				Deviation	Mean				
GOAL-SETTING	Male	50	23.28	3.26	.462				
	Female	50	23.96	2.42	.343				
CONFIDENCE	Male	50	23.72	2.73	.385				
	Female	50	22.32	2.90	.411				
COMMITTMENT	Male	50	23.44	2.85	.403				
	Female	50	23.80	2.45	.346				
STRESS	Male	50	17.72	3.16	.446				
CONTROL	Female	50	20.46	3.40	.481				
RELAXATION	Male	50	21.60	2.92	.413				
	Female	50	14.58	3.81	.539				
FEAR CONTROL	Male	50	18.56	3.25	.460				
	Female	50	19.00	3.54	.501				
ENERGIZING	Male	50	22.18	3.17	.449				
	Female	50	21.20	3.47	.491				
FOCUSING	Male	50	16.98	3.38	.478				
	Female	50	24.30	2.44	.346				
IMAGERY	Male	50	22.56	2.76	.391				
	Female	50	19.56	3.57	.505				
COMPEITION	Male	50	21.98	3.25	.459				
PLANNING	Female	50	24.36	2.70	.382				
MENTAL	L Male		18.28	4.20	.595				
PRACTICE	Female	50	18.26	3.71	.525				
REFOCUSING	Male	50	16.68	3.78	.535				
	Female	50	17.74	3.47	.491				

Table- 1: Descriptive Statistic Analysis of Mental Skills between Male and Female Boxing Players

The group statistics of 50 male and 50 female boxing players' mental skills are shown in table no. 1 above. The aforementioned table displays the mean **Goal-Setting** score



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for males, which was 23.28 with a standard deviation \pm 3.26, while for females; it was 23.96 with a standard deviation \pm 2.42. With a standard deviation \pm 2.90, the mean score for females in **Confidence** was 22.32, while the mean score for males was 23.72. In terms of Commitment, the mean score for men was 23.80 with a standard deviation ± 2.85 , while for women it was 23.80 with a standard deviation ± 2.45 . The average score for men in the Stress-Control test was 17.72, with a standard deviation of \pm 3.16, whereas the average score for women in the same test was 20.46, with \wedge 3.40 standard deviation. Males had an average **Relaxation** score of 21.60 with a standard deviation \pm 2.92, while females scored 14.58 with a standard deviation \pm 3.81. In Fear Control, the mean score for men was 18.56 with a standard deviation \pm 3.25, while for women it was 19.00 with a standard deviation \pm 3.54. Male participants' mean score in **Energizing** was 22.18, with a standard deviation of 3.17; female participants' mean score was 21.20, with a standard deviation of 3.47. **Focusing** scores for men were 16.98 with a standard deviation \pm 3.38 and for women, 24.30 with a standard deviation \pm 2.44. In the category of **Imagery**, the mean score for men was 22.56 with a standard deviation \pm 2.76, while the mean score for women was 19.56 with a standard deviation 3.57. Male competitors' mean scores in **Competition Planning** were 21.98 with a standard deviation \pm 3.25, while female competitors' mean scores were 24.36 with a standard deviation \pm 2.70. In Mental **Practice**, the mean score for men was 18.28 with a standard deviation 4.20, while for women it was 18.26 with a standard deviation 3.71. In the **Refocusing**, the average score for males was 16.68, with a standard deviation of \pm 3.78, while the average score for females was 17.74, with a standard deviation of 3.47.

TABLE-2: Comparative Statistical Analysis (Independent T-Test) Model of Male and Female Boxing Players

Independent Samples Test											
		Leve	ene's	t-test for Equality of Means							
		Test	for								
		Equal									
		Variances									
		F	Sig.	t	df	Sig.	Μ	S.E.	95%		
						(2-	D	D	Confi	dence	
						taile			Interva	l of the	
						d)			Difference		
									Lowe	Uppe	
									r	r	
0	Equal	3.97	.04	-1.18	98	.24	68	.57	-1.82	.46	
Ū	variances		9								



IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES

ISSN PRINT 2319 1775 Online 2320 7876

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	assumed									
	Equal			-1.18	90.4	.24	68	.57	-1.82	.46
	variances				4					
	not									
	assumed									
	Equal	.028	.86	2.49	98	.015	1.4	.56	.28	2.52
Ē	variances		8				0			
N	assumed									
DI DI	Equal			2.49	97.6	.015	1.4	.56	.28	2.52
NF	variances				2		0			
[O]	not									
	assumed									
<u> </u>	Equal	1.60	.20	68	98	.50	36	.53	-1.42	.69
N	variances		9							
IM	assumed									
LL	Equal			68	95.8	.50	36	.53	-1.42	.69
IW	variances				2					
MC	not									
ŭ	assumed									
	Equal	.810	.37	-4.18	98	.00	-	.66	-4.04	-1.44
ol	variances		0				2.7			
ntr	assumed						4			
Co	Equal			-4.18	97.4	.00	_	.66	-4.04	-1.44
ess	variances				6		2.7			
Str	not						4			
	assumed									
	Equal	1.03	.31	10.34	98	.00	7.0	.68	5.67	8.37
N	variances		2				2			
II	assumed									
XA	Equal			10.34	91.7	.00	7.0	.68	5.67	8.37
[A]	variances				8		2			
RE	not									
	assumed									
	Equal	.599	.44	65	98	.52	44	.68	-1.79	.91
Ы	variances		1							
ntre	assumed									
Col	Equal			65	97.3	.52	44	.68	-1.79	.91
ar	variances				1					
Fe	not									
	assumed									
Э	Equal	.517	.47	1.47	98	.14	.98	.66	34	2.30



IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES

ISSN PRINT 2319 1775 Online 2320 7876

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	variances		4							
	assumed									
	Equal			1.47	97.2	.14	.98	.66	34	2.30
	variances				3					
	not									
	assumed									
	Equal	4.26	.04	-	98	.00	-	.59	-8.49	-6.15
ى	variances		2	12.42			7.3			
Ä	assumed						2			
SU:	Equal			-	89.2	.00	-	.59	-8.49	-6.15
00	variances			12.42	6		7.3			
Ĩ	not						2			
	assumed									
	Equal	2.94	.09	4.70	98	.00	3.0	.64	1.73	4.27
Х	variances		0				0			
ER	assumed									
Ð	Equal			4.70	92.2	.00	3.0	.64	1.73	4.27
MA	variances				2		0			
Ι	not									
	assumed									
n	Equal	.945	.33	-3.98	98	.00	-	.60	-3.57	-1.19
Pla	variances		3				2.3			
-uo	assumed						8			
titi	Equal			-3.98	94.8	.00	-	.60	-3.57	-1.19
upe	variances				5		2.3			
Con	not						8			
	assumed									
	Equal	.909	.34	.025	98	.98	.02	.79	-1.55	1.59
tice	variances		3							
rac	assumed									
l P	Equal			.025	96.5	.98	.02	.79	-1.55	1.59
inte	variances				3					
Me	not									
	assumed									
NG	Equal	.045	.83	-1.46	98	.15	-	.73	-2.50	.38
	variances		3				1.0			
ISO	assumed						6			
	Equal			-1.46	97.2	.15	-	.73	-2.50	.38
UFC	variances				8		1.0			
RF	not						6			
	assumed									



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Comparative statistical data can be observed in Table-2 for male and female Boxing Players, the T independent sample test shows that no significance difference goal setting (P = 0.24, t(98) = 1.18), commitment (P = 0.50, t(98)=0.68), fear control (P = 0.52, t(98) = 0.65), energizing (P = 0.14, t(98)=1.47), mental practice (P = 0.98, t(98)=0.025) refocusing (P = 0.15, t(98)=1.46). Also, confidence (P = 0.015, t(98) = 2.49), stress control (P = 0.00, t(98)=4.18), relaxation (P = 0.00, t(98) = 10.34), focusing (P = 0.00, t(98)=12.42), imagery (P = 0.00, t(98)= 4.70) competition planning (P = 0.00, t(98)= 3.98).

DISCUSSION

The results indicated that the rate of Confidence and Relaxation skills is higher in male Boxers in compare to female. Also its been obvious in the findings of the study of **M.S. Sotoodeh et.al. (2012).** In which he stated that the Confidence and relaxation skills were higher in elite male players. The result shows that male boxers have higher imagery skill than female. The Findings of **Fairouz Azaiez et.al.(2013) and Sanjay Kumar(2012)** also traces the same result that the imagery skills possess a great expertise in male as if than female. However, the rate of Focusing and Competition Planning skill is higher in Female Boxers as compared to Male Players. The findings of the study had been supported by **M.S. Sotoodeh et.al.(2012),** Which inculcates that the mean score of female elite athletes for the focusing and competition planning skill is higher as compared to male players. The mean score of female athletes' stress control of mental skill was greater than that of male Athletes.

CONCLUSION

In this study, psychological characteristics of female and male boxers were compared. Competence and physical condition alone may not always be enough to achieve the required results at the highest level. An athlete's psychological condition also affects their performance. Many psychological features are innate, but with psychological skill training, some may be acquired.

REFERENCES

- Ercis, S. (2018). Comparison of Mental Skills of Elite and Non-Elite Athletes. Journal of education and training studies, 6(n4a), 72-75.
- Das, R., Jhajharia, B., & Das, K. (2022). Prediction Model of Success and Failure in Football Competitions Prediction Model of Success and Failure in Football. International Journal of Research Pedagogy and Technology in Education & Movement Sciences, 12. https://doi.org/10.55968/uniaca.2022.11.2.3
- Sotoodeh, M. S., Talebi, R., Hemayattalab, R., & Arabameri, E. (2012). Comparison of selected mental skills between elite and non-elite male and female Taekwondo athletes. World Journal of Sport Sciences, 6(1), 32-38.



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- Stevenson, M. (1999). The use of mental skills by male and female athletes. University of Ottawa (Canada).
- Das, R., & Jhajharia, B. (2022). Association between physical fitness and BMI among school going male children. 2, 111–114. https://doi.org/10.33545/27077012.2021.v2.i1b.45
- Pashabadi, A., Shahbazi, M., Hoseini, S. M., Mokaberian, M., Kashanai, V., & Heidari, A. (2011). The Comparison of mental skills in elite and sub-elite male and female volleyball players. Procedia-Social and Behavioral Sciences, 30, 1538-1540.
- Das, R., Jhajharia, B., & Kumar, D. (2021). Analysis isokinetic muscular strength of knee flexors and extensors between bowlers, batsman and wicketkeepers in cricket. 1, 50–53.
- Adams, L., & Smith, D. E. (2013) A Comparative analysis of cognitive difference among female elite and nonelite high school physical education class nonathletes. Montral. Canada.
- Rahmani, M., Bahari, M., & Ahmadi, P. (2020). Comparison of mental skills of athletes of the iranian national team in Asian games in 2006 and 2018. Sport Psychology Studies, 9(33), 1-18.
- Malik, P. (2008). A comparative study on psychological traits among male and female junior Indian boxers. Anxiety, 7.
- Azaiez, F., Chalghaf, N., Cherif, E., Achour, K., & Souissi, C. (2013). Evaluation of the Mental Skills of the High Level Athletes: Example of the Athletes of Martial Arts. IOSR-JHSS, 10(4), 58-65.
- Kumar, S. Mental Toughness and sports competition anxiety among national level wrestlers and boxers.

