

Mood State among All India Inter University East Zone Volleyball Players: An Overview of Gender and Playing Position Wise Difference

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Abstract

Background: The ability to produce and maintain appropriate emotional feelings before competition is universally recognized by athletes and coaches as one of the most important factors contributing to athletic performance. Thus it is not surprising that the relationship between pre-competitive emotions and sports performance has generated considerable interest from researchers in the field of sports psychology. Mood states are regarded as an unstable emotional status in response to an environmental stimulus. Mood states are to influence the exertion of efforts.

Purpose: The purpose of the study was to analyze the precompetitive mood state profile among north India inter-university volleyball players on six sub-scales of POMS questionnaire viz; Tension, Anger, Depression, Fatigue, Vigor and Confusion.

Methodology: The selected subjects were volleyball players who participated in the east zone India inter-university volleyball tournament during the academic year 2018-2019 from their respective universities. Sample for the present study consists of seventy two subjects (36 Male and 36 Female), who were in the age group of 19-25. The selected subjects were assessed for mood state by using the Profile of Mood State questionnaire and designed by Mc Nair, et al, (1971).

Results: The results revealed that there was insignificant difference of east zone India inter-university volleyball players with respect to gender and playing positions on 6 sub-scales of Profile of Mood State such as Tension, Anger, Depression, Fatigue, Vigor and confusion.

Keywords: *Competition, Volleyball players, POMS*

Introduction:

Academically and practically sports psychologists endeavor to understand effective factors influencing mood states and stress before competition in athletes that can affect their performance. Moods are known by many psychologists researchers as a sort of short term feeling status or emotional tone which involve various particular type of positive or negative emotions (Beedie, Terry & Lane, 2000; James and Lane, 2002; Lane and Terry, 2000; Lane and Chappell, 2001 and Terry et al, 2006), however there is another definition of mood states, for instance, illustration of a process in which an individual attempts to adopt to environmental demands and external factors such as physical movement and weather condition which affect on mood states. (Cohen, Kessler & Gordon 1995, Stirling & Kerr, 2006), Additionally Terry et al (2006) stated that mood is an influential predictor of performance and work like a transitory construct when some situations are met. Despite the fact that internal factors are influential on moods other factors such as our prediction of what will happen at the competition, also may have their own contributions to athletes performance (Murray et al., 1999). Besides on (Esfahani et al, Gendolla & Kursken, 2001), moods can be categorized as negative emotions for instance anger, confusion, depression, fatigue, tension; however the only positive is vigor. (Gendolla and Kursken) enlightened that moods are able to have an impact on the amount of effort, and any challenge appears harder in negative mood than in a positive one. When athletes are in a positive mood, they attempt more actively competition (Andrew et al., 2004, Neil et al., 2011), in addition according to (Beedie, Terry & Lane, 2000; Lowther and lane, 2002 Scott et al., 2002) one of the most essential factors which predicts the level of athletes effectiveness can be their mood before completion starts. Therefore it seems logical to indicate that the readiness to make excuses before the performance may impress, how athletes feel prior to performance. Mood is proposed to be a more effective predictor of performance in sport of a short duration when the sport involves open skills, and when performance is assessed through a self-reference criterion. (Beedie et al., 2000) Since mood is an important predictor of performance, the ability to control mood would be useful psychological tool for any athlete. Further it suggested that the experience of competition teaches athletes to develop methods to manage mood.

Mood state in athletes before competition or the end of the competition are measured by several methods, Profile of Mood State (POMS) which the most common measurement tool for mood states has been formulated by scholars to be used in sport psychology. The one used in this research is the POMS which was formulated as questionnaires and developed by Mc Nair, Lorr & Droppleman, 1992, to calculate six aspects of mood dimensions including anger, confusion, depression, fatigue, tension and vigor. For example Positive moods such as vigor (feeling of energy, arousal and alertness) are said to facilitate performance because athletes with high vigor put forth greater effort towards successful attaining performance goals (Lane & Terry 2000) on the other hand negative mood states, such as depression (feeling of hopelessness and

worthlessness), fatigue (feeling of mental and physical over exertion), confusion (feeling of bewilderment and uncertainty), anger (feeling of annoyance, aggravation, fury and rage) and tension (feeling of nervousness apprehension and anxiety) has been associated with debilitated performance (Beedie, Terry & Lane 2000). Not all can mood disturbance impede performance. They can also lead to an increased risk of injury

Methodology

Based on this field of study statistical population of the present research consisted of seventy-two (36-Male; 36-Female) inter university east zone volleyball players. Who participated in east India inter university volleyball tournament during the year 2018-2019. The random age ranges of the subjects are 19-25. After necessary arrangements with coach and supervisors of teams, the volleyball players asked to answer the POMS questionnaire according to the feelings before the competition.

Description of the Tool

Profile of mood states utilized to estimate acute mood prior to competitions. The POMS test was designed and standardized by Mc Nair et al, (1970) were selected for the study. The POMS test, consisting of 65 items that are factored into six mood scores (Tension, anger, depression fatigue, vigor and confusion), was used to measure fluctuating affective states. It was also mentioned that the whole interest was focused on the players' personal feelings.

Orientation of subjects

To enrich the co-operation of the subjects, the researcher had personally met all the subjects selected for the study. The researcher explained to them the purpose of this investigation and their role as respondents. Furthermore, the investigator gave obvious instructions regarding the method for answering the questionnaires.

Scoring for POMS

Each adjective is awarded the score as circled expect relaxed and efficient, which should be reversed. You then have a raw score (<60) for each subscale. A total mood disturbance (TMD) can be calculated by adding the raw scores from tension, depression, anger, fatigue and confusion and then subtracting the vigor score. This will give a value between -24 and 177, with lower scores indicative of people with more stable mood profiles.

Statistical Analysis of Data

In order to analyze Profile of Mood State of volleyball players, Two way ANOVA was used. When interaction is found significant, simple effect was applied. If simple effect ANOVA

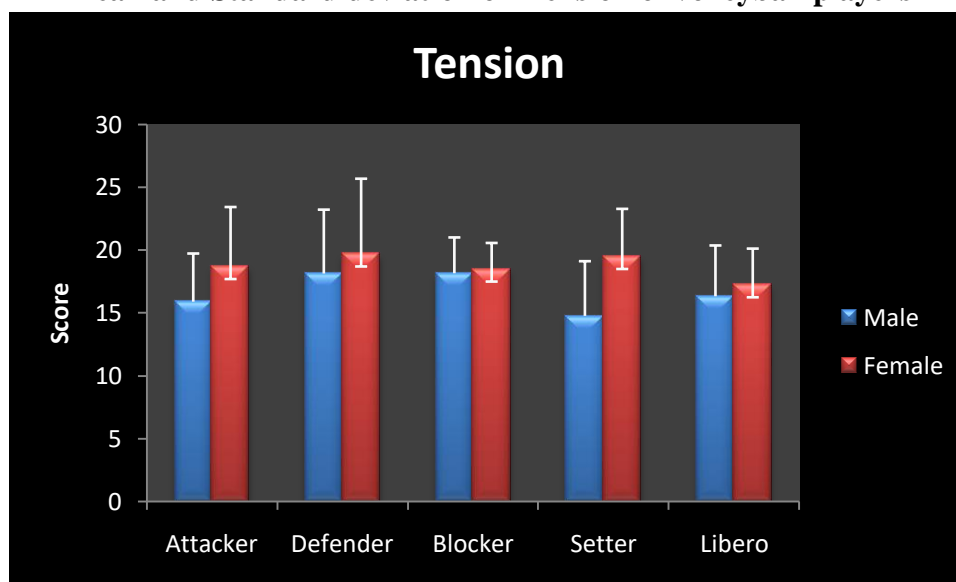
is significant, scheffe's post hoc test was applied. To find out paired mead differences and level of significance was fixed at 0.05.

Results

Tension

The descriptive statistics for East zone India inter university volleyball players on Tension are presented in table

Graph 1
Mean and Standard deviation on Tension of volleyball players



Tension among gender reveals insignificant difference, irrespective of different playing positions (Attacker, Defender, Blocker, Setter and Libero) as the obtained F ratio of 3.470 is less than the required table value of 3.99 at $\alpha = 0.05$ level for the df of 1 & 62.

Table 1

Tests of Between-Subject Effects					
Dependent Variable Tension					
Source	Sum of squares	df	Mean Square	F	Sig
Factor A (Gender)	65.41	1	65.41	3.47	.067
Factor B (Position)	42.48	4	10.62	.563	.690
Factor A x B	39.54	4	9.88	.524	.718
Error	1168.77	62	18.85		

Level of Significance 0.05

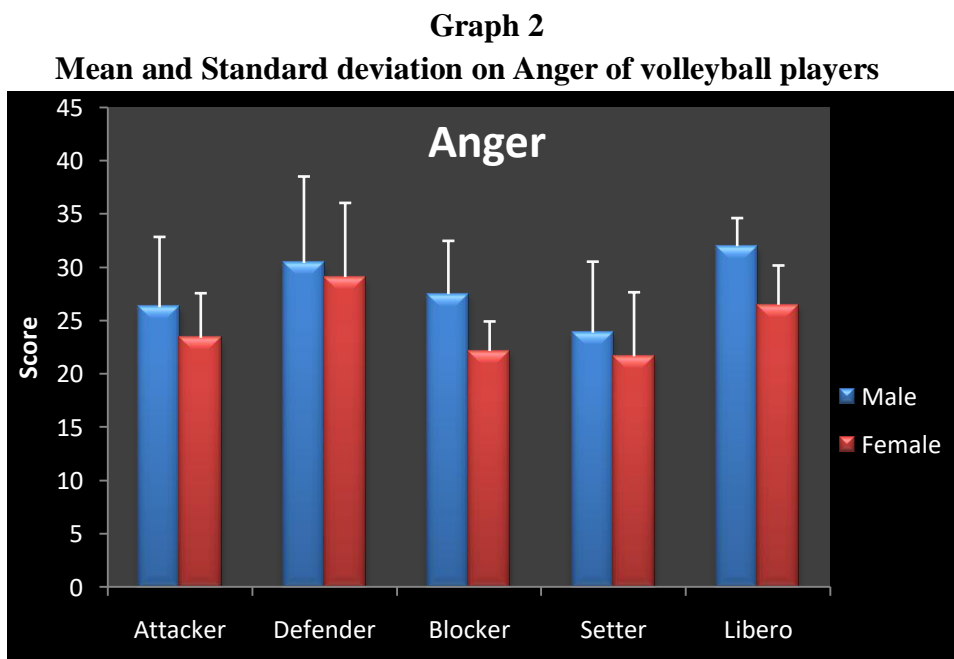
The table value required for significance at 0.05 level of confidence with the df of 1 to 4 is 0.749 and 4 to 62 is 0.674

Table also shows that there is insignificant difference on tension among different playing positions, irrespective of Gender (Male and Female) as the obtained F ratio 0.563 is less than the required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62.

Similarly findings disclose that there is insignificant difference on tension among the interaction of Gender and different playing position as the obtained F ratio is 0.524 is less than required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62. Since AB interaction is insignificant, hence simple effect was not applied.

Anger

The descriptive statistics for East zone India inter university volleyball players on Anger are presented in table



Anger among gender reveals that there is a significant difference, irrespective of different playing positions (Attacker, Defender, Blocker, Setter and Libero) as the obtained F ratio is 5.190 is greater than the required table value of 3.99 at $\alpha = 0.05$ for the df of 1 & 62.

Table 2

Tests of Between-Subject Effects					
Dependent Variable Anger					
Source	Sum of squares	df	Mean Square	F	Sig
Factor A (Gender)	182.90	1	182.90	5.190	.026
Factor B (Position)	500.02	4	125.00	3.54	.011
Factor A x B	40.76	4	10.191	.289	.884
Error	2184.75	62	35.238		

Level of Significance 0.05

The table value required for significance at 0.05 level of confidence with the df of 1 to 4 is 0.749 and 4 to 62 is 0.674

Table also reveals that there is a significant difference on anger among playing positions, irrespective of Gender (Male and Female) as the obtained F ratio of 3.54 is greater than the required table value of 2.51 at $\alpha = 0.05$ for the df of 4 & 62.

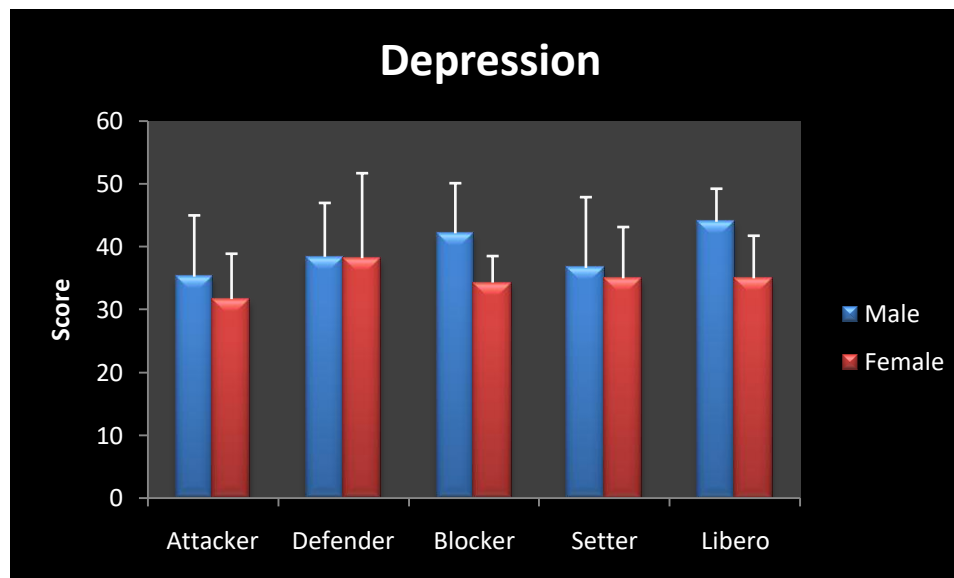
Similarly, the findings disclose that there is insignificant difference on anger among the interaction of gender and playing positions as the obtained F ratio 0.289 is less than the required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62. Since AB interaction is insignificant, hence simple effect was not applied.

Depression

The descriptive statistics of north zone India inter university volleyball players on Depression are presented in table.

Graph 3

Mean and Standard deviation on Depression of volleyball players



Depression among gender reveals that there is insignificant difference, irrespective of different playing positions (Attacker, Defender, Blocker, Setter and Libero) as the obtained F ratio of 3.46 is less than the required table value of 3.99 at $\alpha = 0.05$ level for the df of 1 & 62.

Table 3

Tests of Between-Subject Effects					
Dependent Variable Depression					
Source	Sum of squares	df	Mean Square	F	Sig
Factor A (Gender)	305.45	1	305.45	3.46	.067
Factor B (Position)	349.34	4	87.33	.991	.419
Factor A x B	163.96	4	40.99	.465	.761
Error	5463.76	62	88.12		

Level of Significance 0.05

The table value required for significance at 0.05 level of confidence with the df of 1 to 4 is 0.749 and 4 to 62 is 0.674

Table also shows that there is insignificant difference on depression among playing positions, irrespective of gender (Male and Female) as the obtained F ratio 0.991 is less than required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62.

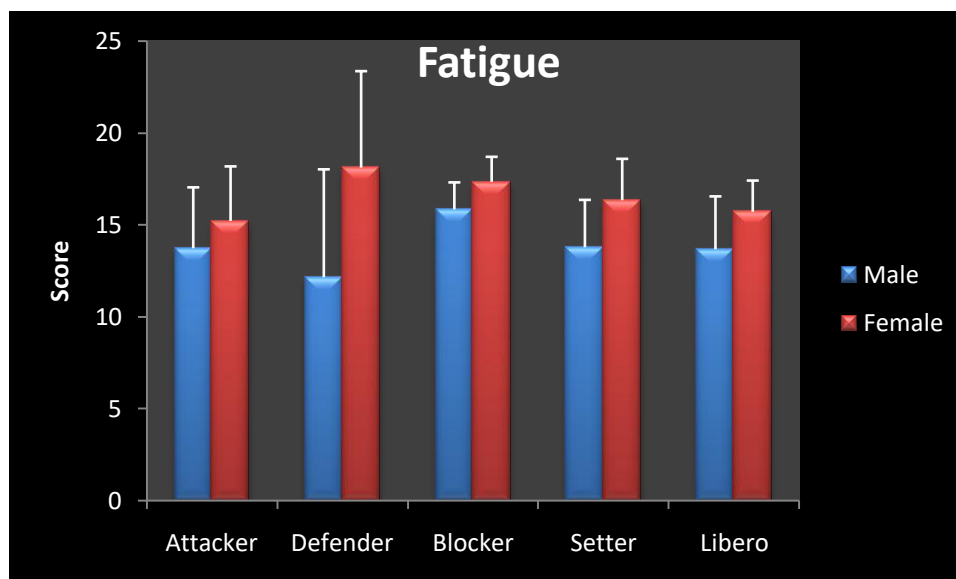
Similarly findings disclose that there is insignificant difference on depression among the interaction of Gender and different playing position as the obtained f ratio 0.465 is less than the required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62. Since AB interaction is insignificant. Hence simple effect was not applied.

Fatigue

The descriptive statistics for East zone India inter university volleyball players on Fatigue are presented in table

Graph 4

Mean and Standard deviation on Fatigue of volleyball players



Fatigue among gender reveals is significant difference, irrespective of different playing positions(Attacker, Defender, Blocker, Setter and Libero) as the obtained F ratio of 9.10 is greater than the table of 3.99 at $\alpha = 0.05$ level for the df of 1 & 62.

Table 4

Tests of Between-Subject Effects					
Dependent Variable Fatigue					
Source	Sum of squares	df	Mean Square	F	Sig
Factor A (Gender)	113.76	1	113.76	9.10	.004
Factor B (Position)	35.94	4	8.98	.729	.579

Factor A x B	56.43	4	14.10	1.13	.348
Error	770.01	62	12.42		

Level of Significance 0.05

The table value required for significance at 0.05 level of confidence with the df of 1 to 4 is 0.749 and 4 to 62 is 0.674

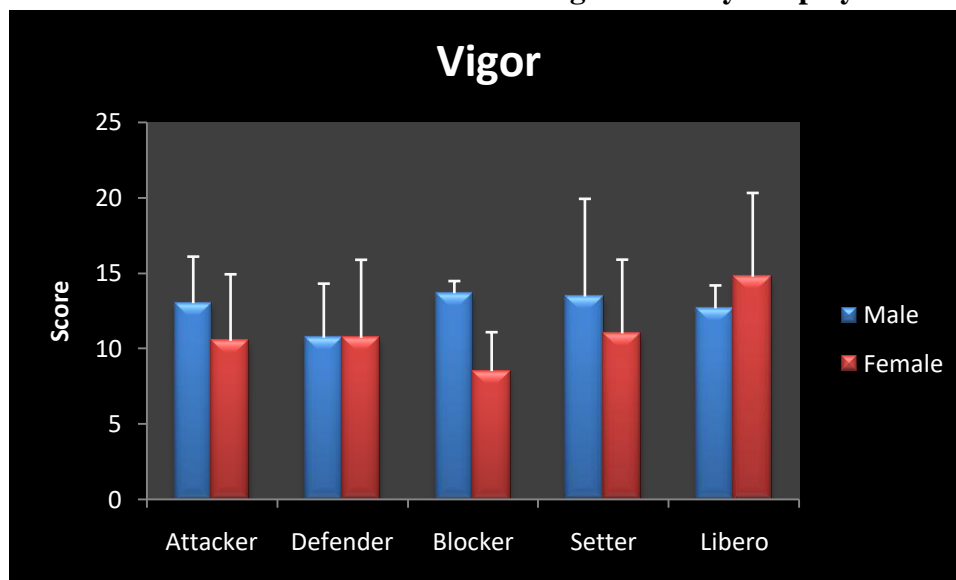
Table shows that there is insignificant difference on fatigue among playing positions, irrespective of gender (Male and Female) as the obtained F ratio of 0.724 is less than the required table of 2.51 at $\alpha = 0.05$ for the df of 4 & 62.

Similarly findings disclose that there is insignificant difference on fatigue among the interaction of gender and different playing positions as the obtained F ratio of 1.13 is less than the required table value of 2.51 at = 0.05 level for the df of 4 & 62. Since AB interaction is not significant, hence simple effect was not applied.

Vigor

The descriptive statistics for East zone India inter university volleyball players on Vigor are presented in table

Graph 5
Mean and Standard deviation on Vigor of volleyball players



Vigor among gender reveals is insignificant difference, irrespective of different playing positions (Attacker, Defender, Blocker, Setter and Libero) as the obtained F ratio of 2.08 is less than the required table value of 3.99 at $\alpha = 0.05$ level for the df of 1 & 62.

Table 6

Tests of Between-Subject Effects					
Dependent Variable Vigor					
Source	Sum of squares	df	Mean Square	F	Sig
Factor A (Gender)	39.72	1	39.72	2.08	.154
Factor B (Position)	52.40	4	13.10	.687	.860
Factor A x B	76.80	4	19.20	1.007	.398
Error	1182.50	62	19.07		

Level of Significance 0.05

The table value required for significance at 0.05 level of confidence with the df of 1 to 4 is 0.749 and 4 to 62 is 0.674

Table also shows that there is insignificant difference on vigor among playing position, irrespective of gender (Male and Female) as the obtained F ratio 0.687 is less than the required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62.

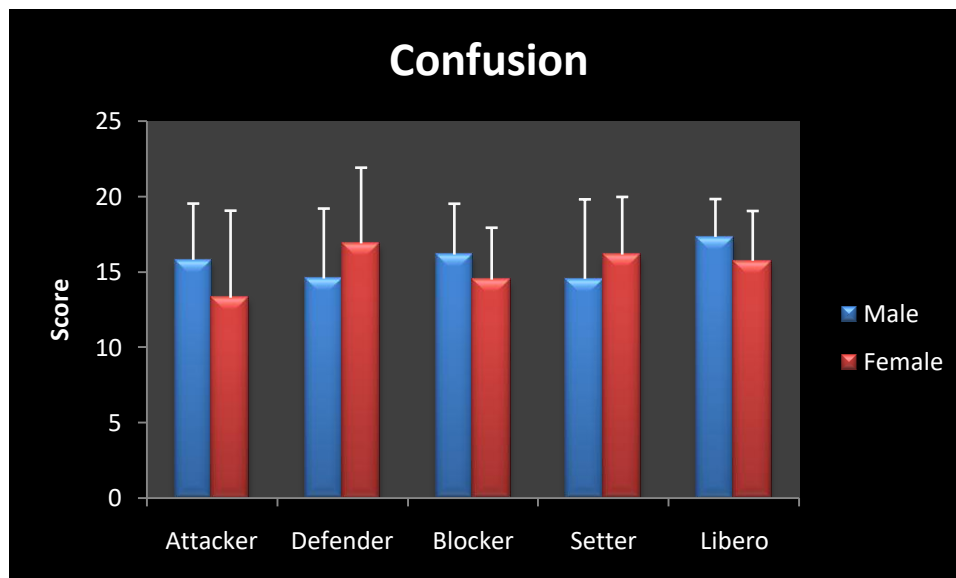
Similarly findings disclose that there is insignificant difference on vigor among the interaction gender and playing positions as the obtained F ratio of 1.007 is less than the required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62. Since AB interaction is insignificant, hence simple effect is not applied.

Confusion

The descriptive statistics of East zone India inter university volleyball players on Confusion are presented in table

Graph 6

Mean and standard deviation on Confusion volleyball players



Confusion among gender reveals is insignificant difference, irrespective of different playing positions (Attacker, Defender, Blocker, Setter and Libero) as the obtained f ratio 0.054 is less than the required table value of 3.99 at $\alpha = 0.05$ level for the df of 1 & 62.

Table 6

Tests of Between-Subject Effects					
Dependent Variable Confusion					
Source	Sum of squares	df	Mean Square	F	Sig
Factor A (Gender)	1.084	1	1.084	.054	.818
Factor B (Position)	26.24	4	6.56	.325	.860
Factor A x B	83.43	4	20.85	1.03	.398
Error	1253.65	62	20.22		

Level of Significance 0.05

The table value required for significance at 0.05 level of confidence with the df of 1 to 4 is 0.749 and 4 to 62 is 0.674

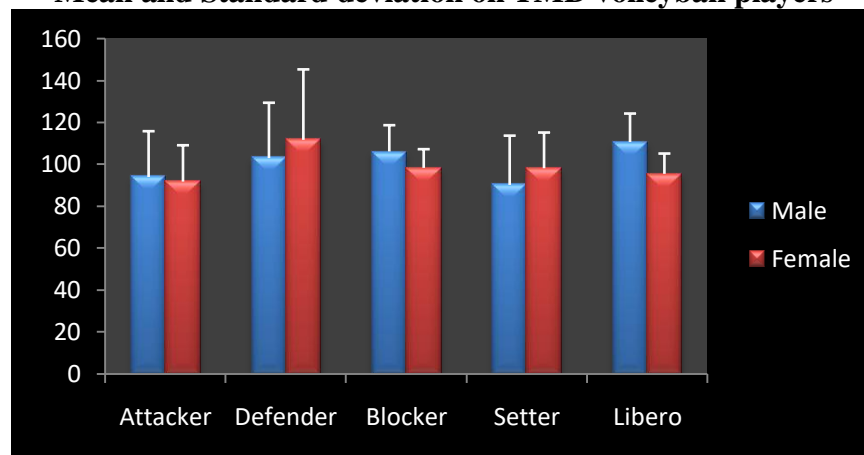
Table also shows that there is insignificant difference on confusion among playing positions, irrespective of gender (Male and Female) as the obtained F ratio 0.325 is less than the required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62.

Similarly findings disclose that there is insignificant difference on confusion among the interaction of Gender and playing position as the obtained F ratio of 1.03 is less than the required table value of 2.51 at $\alpha = 0.05$ for the df of 4 & 62. Since AB interaction is insignificant, hence simple effect is not applied.

Total Mood disturbance

The descriptive statistics of East zone India inter university volleyball players on Total Mood Disturbance are presented in table

Graph 7
Mean and Standard deviation on TMD volleyball players



Total mood disturbance among gender reveals insignificant difference, irrespective of different playing positions (Attacker, defender, Blocker, setter and Libero) as the obtained F ratio 0.104 is less than the required table value of 3.99 at $\alpha = 0.05$ level for the df of 1 & 62.

Table 7

Tests of Between-Subject Effects					
Dependent Variable Total Mood Disturbance					
Source	Sum of squares	df	Mean Square	F	Sig
Factor A (Gender)	49.25	1	49.25	.104	.749
Factor B (Position)	2447.03	4	611.75	1.286	.285
Factor A x B	1147.14	4	278.61	.586	.674
Error	29495.92	62	475.74		

Level of Significance 0.05

The table value required for significance at 0.05 level of confidence with the df of 1 to 4 is 0.749 and 4 to 62 is 0.674

Table also shows that there is insignificant difference on TMD among playing positions, irrespective of Gender (Male and Female) as the obtained F ratio of 1.286 is less than the required table value of 2.51 at $\alpha = 0.05$ for the df of 4 & 62.

Similarly findings disclose there is insignificant difference on TMD among the interaction of gender and playing positions as the obtained F ratio 0.586 is less than the required table value of 2.51 at $\alpha = 0.05$ level for the df of 4 & 62. Since AB interaction is insignificant, hence simple effect is not applied.

Discussion

In the present study pre competitive mood state was measured for east zone India inter-university volleyball players. POMS questionnaire used in the study consists of positive mood factors (Vigor) and negative mood factors (Tension, anger, depression, fatigue and confusion). These mood factors clearly distinguish the level of players as successful and less successful performers based on their mood states on pre or prior to competition. Specifically, athletes who are less anxious, angry, depressed, confused and fatigued, and more vigorous will be more successful than those athletes who exhibit the opposite profile. This study was intended to measure the pre competition profile of mood states of east zone India inter university volleyball players on six subscale mood factors of POMS which demonstrated insignificant difference on tension, anger, depression, fatigue, vigor and confusion. This insignificant difference on POMS may be due to the subjects for this study being experienced familiar and adopted to such pre competitive situations. The findings are agreed with the findings of T. Harikrishnan et al, (2012) who investigated the Mood State at the end of Competitive Season between high and low level cricketers. The results indicated that there was no significant difference between high level and low level cricket players on tension, anger, depression, fatigue and confusion.

Conclusion

After going through the interpretation of the results of this study, it was concluded that there was no significant difference in tension, anger, depression, fatigue, vigor and confusion of east zone India inter university volleyball players on profile of mood state (POMS)

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