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## Geographical analysis on mental skills of male basketball players

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### Abstract

The purpose of the present study was to geographically analyse the factors that determine the performance of sports among the male studying in the Colleges of coastal area and plain area. For this, as samples the male studying in the Colleges of the coastal area (N=247) and plain area (N=198) in the age group of 18-25 years were selected totally 445. To have the quality over the collection of data, the samples identified in this study were clearly explained about the need, nature and purpose of the study. The tools used to collect data are standardized equipments with well established reliability for measuring the psychological: mental preparation, team emphasis, and concentration and The Psychological Skills Inventory for Sports (PSIS R-5; Mahoney, Gabriel, & Perkins, 1987). Using these scientific instruments, the data on selected variables were collected with the help of research assistants. From the response of psychological skills, it was found that 32 male from the coastal area and 23 male from plain area made incorrect response and not accounted for this study. Thus, finally data collected 215 male from the coastal area and 175 male from plain area were considered for this study. The collected data from the variables used in the study were treated with one way analysis of variance so as to analyse geographically. The results derived from the one way analysis of variance are as follows. The findings of this study, clearly explained that other than the very few variables, in the factors of psychological, mostly the male studying in Colleges of coastal area were found to be significantly higher than the male of plain area.

**Keywords:** Geographical, mental skills, basketball players

### Introduction

The present world is a highly competitive one. Everyone is striving to implicate a new formula in their product so as to enhance its quality and to distinguish from others. It helps them to keep their good will and to achieve their goal in time. Psychological skills refer the factors that are significantly influencing the person to drive energy either internally or externally, accommodating the stressful situations, confident over the activity engaged and concentrate over the cues intact with physical and environmental stimuli. Its impacts over the sports performance is at par with the physical factors. Hence, the male of coastal and plain area were assessed on select psychological skills so as to apprehend the influence of geographical structure. Thus the psychological skills such as motivation, confidence, anxiety control, mental preparation team emphasis and concentration used.

### Methodology

The purpose of the present study was to find out the geographical influence on factors determining the performance of sports among the male studying in Colleges of coastal area and plain area. From the selected samples of coastal area (N=247) and plain area (198) based on the incorrect responses to the measures of psychological skills inventory, 32 samples were from coastal areas and 23 samples from plain area were dropped from the further analysis. Finally 215 samples from the coastal area and 175 samples from the plain area selected for further analysis. The age of the selected subjects was in the range of 18 to 25 from the male section. As psychological skills inventory developed by Mahoney (1986) to measure the psychological skill such as selected variables for the present study are: mental preparation, team emphasis, and concentration. The results derived on variables between the bare tested at 0.05 level of significance which was considered as sufficient one.

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**Table 1:** Descriptive statistics on Psychological aspects

Variables	Geographical Conditions	N	Mean	Std. Deviation	Std. Error
Mental Preparation	Coastal	215.00	14.98	3.39	0.23
	Plain	175.00	14.22	3.42	0.26
	Total	390.00	14.64	3.42	0.17
Team Emphasis	Coastal	215.00	25.84	6.02	0.41
	Plain	175.00	27.63	4.59	0.35
	Total	390.00	26.64	5.49	0.28
Concentration	Coastal	215.00	24.85	5.42	0.37
	Plain	175.00	26.86	6.07	0.46
	Total	390.00	25.75	5.80	0.29

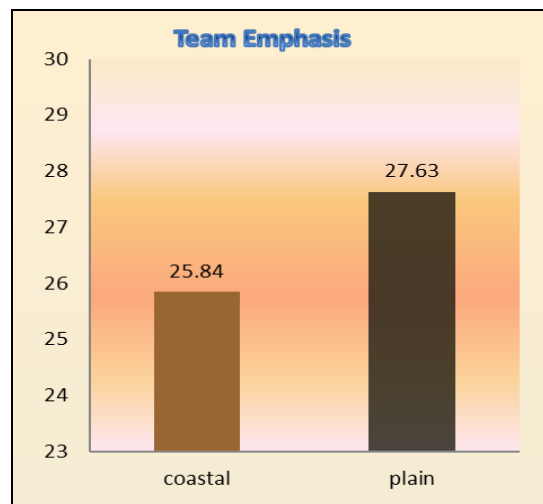
Table - 1 reveals that the mean and standard deviations of psychological variables of male belong to coastal areas and plain area as follows. In mental preparation  $14.98 \pm 3.39$  for coastal area,  $14.22 \pm 3.42$  for plain area, in team emphasis

$25.84 \pm 6.02$  for coastal area,  $27.63 \pm 4.59$  for plain area, in concentration  $24.85 \pm 5.42$  for coastal area,  $26.86 \pm 6.07$  for plain area

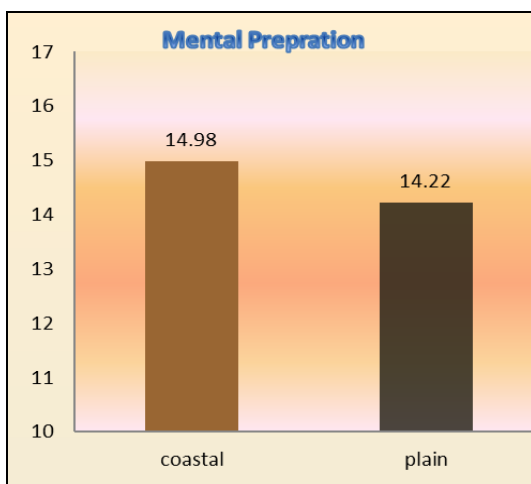
**Table 2:** One Way Analysis of variance on Psychological aspects

Variables	Source	Sum of Squares	DF	Mean Square	F	Sig.
Mental Preparation	Between Groups	55.67	1.00	55.67	4.81	0.03
	Within Groups	4492.63	388.00	11.58		
	Total	4548.30	389.00			
Team Emphasis	Between Groups	307.98	1.00	307.98	10.46	0.00
	Within Groups	11423.48	388.00	29.44		
	Total	11731.46	389.00			
Concentration	Between Groups	392.23	1.00	392.23	12.00	0.00
	Within Groups	12686.64	388.00	32.70		
	Total	13078.87	389.00			

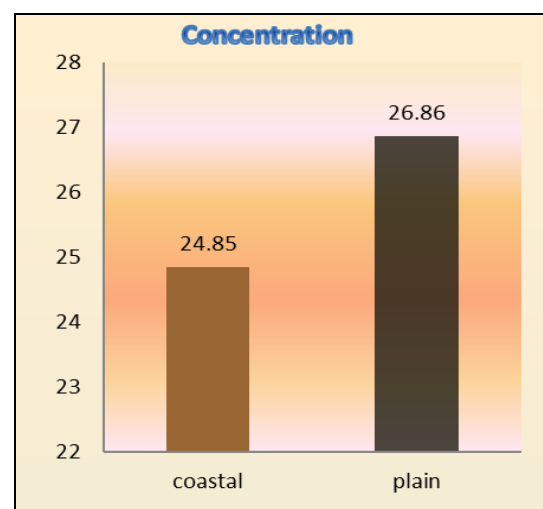
Table 2 reveals that the F-ratio of selected psychological skill variables are: 4.81 (mental preparation), 10.46 (team emphasis) and 12.0 (concentration). The observed 'F' ratio was tested for significance at 0.05 level. To be significant at 0.05 level for degree of freedom 1 and 388, the required critical value was (3.87). Other than the motivation and confidence the F -ratio on variables such as 4.81(mental preparation), 10.46 (team emphasis) and 12.0 (concentration) were found to be statistically significant at 0.05 level of significance as they exceed the required critical value (3.87). Since, the observed F -ratio fails to reach the significant level. From the results, it was observed that the mean difference exists on mental preparation, team emphasis and concentration among the students pertain to coastal areas and plain areas were found to be statistically significant. From the results it was inferred that the geographical impacts on psychological skills was statistically significant.



**Fig 2:** Bar diagram showing the mean difference on Team Emphasis



**Fig 1:** Bar diagram showing the mean difference on Mental Preparation



**Fig 3:** Bar diagram showing the mean difference on Concentration

### Discussion on Findings - Psychological Skills

The results derived on psychological skills of mental preparation and concentration are discussed as follows. Mental preparation is a psychological skill; it refers to the ability of an individual to prepare himself for the activity in which he has to engage himself. Mental preparation is a skill that helps the individual to mentally rehearse the activity; the bond between the stimuli and response would be strengthened through the feedback servo mechanisms. It enhances the efficiency over the success of the task. Moreover, the mentally prepared over the activity in which one engages make them with commitment and control. Resulting of this distraction over an activity will be minimized based on the factors behind the mental preparation. When analyzing the dominance of coastal area students over the plain area students it was observed as follows. As for as coastal area students are concerned the activities they have a limited as compared to the plain area where the options are more. When the activities are more they may have more distractions which affect their mental preparation and concentration of the students in the coastal area were to prove control over their activities. Since the activities and options for giving task are very less as compared to the students in plain areas. Thus, such a prevalence exists in the coastal area may be a significant source for their dominance on mental preparation and concentration compared to plain area students.

### Conclusions

Based on the findings of the study, the following conclusions have been made.

Malty *et al.* (2015) and Jones, G., & Hanton, S. (1996) [6] findings of this study, clearly explained that other than the very few variables, in the factors of psychological, mostly the male studying in Colleges of coastal area were found to be significantly higher than the male of plain area. Further, considering their food items, the main food item of coastal area people is sea foods, which enhance the essential nutrient and improves the circulation and keep lungs stronger which is the foremost one for the sportsman to excel in performance. Research over the past few decades has shown that the nutrients and minerals in fish, and particularly the omega 3 fatty acids are heart friendly and can make improvements in brain development and reproduction. This has highlighted the role of fish in the functionality of the human body. Based on this, it was concluded that, such inherent nature of coastal area may be a source for their dominance on selected psychological factors over to the male' plain area.

### Reference

1. Ahmed F, Coyne T, Dobson T, McClintock C. Iron status among Australian adults: findings of a population based study in Queensland, Australia. *Asia Pacific Journal of Clinical Nutrition*. 2008; 17(1):40-7.
2. Ait-Yahia D, Madani S, Prost E, Prost J, Bouchenak M, Belleville J. Tissue Antioxidant Status Differs in Spontaneously Hypertensive Rats Fed Fish Protein or Casein Protein. *The American Society for Nutritional Sciences Journal of Nutrition*. 2003; 133:479-82.
3. Hilvari H. Effects of mental practice on performance are moderated by cognitive anxiety as measured by the Sport Competition Anxiety Test. *Perceptual and Motor Skills*. 1996; 83:1375-1383.
4. Malty, Moumita, Mukhopadhyay, Barun Physical Growth and Nutritional Status of Children and Adolescents among the Fishing Community Inhabiting

- the Coastal Area of West Bengal and Orissa. *Journal of the Indian Anthropological Society*. 2010; 45(2):193-203.
5. Manisha Goel, Preeti Aggarwal. A Comparative Study of Self Confidence of Single Child and Child with Sibling, *International Journal of Research in Social Sciences*. 2012; 2(3)
  6. Jones G, Hanton S. Interpretation of competitive anxiety symptoms and goal attainment expectancies. *Journal of Sport and Exercise Psychology*. 1996; 18:144-157.