

A Study of Mental Skills among Wrestlers at Different Level of Performance

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Abstract:

Context: The comparison of study among wrestlers of different level of performance on the variables, "Mental Skills", will provide us with factors affecting the psychological variables and sporting behaviour and whether improvement measures are needed in the area of concern. **Objective:** To find out the significant differences among wrestlers of different level of performance on the variables, "Mental Skills". **Design:** This is an exploratory study that has employed method of data collection and analysis quantitatively. The purposive sampling technique was used to attain the objectives of the study. **Participants:** For the purpose of the present study, Three Hundred Ninty Seven (N=397), Male subjects between the age group of 18-25 years volunteered to participate in the study. The subjects were purposively selected from the following three universities: Group-A: Guru Nanak Dev University, Amritsar (N₁=140), Group-B: Punjabi University, Patiala (N₃=132), Group-C: Panjab University, Chandigarh (N₂=125). **Statistical Analyses:** In order to analyze the data obtained easily, the data were coded to SPSS 20.0 software as the data obtained from questionnaires. The independent-samples *t* test (between-groups design) were used to evaluates the difference between the means of two independent or unrelated groups (VIZ. Inter-College and Inter-University). The level of significance was set at 0.05. **Results:** To conclude, it is significant to mention in relation to Mental Skill, Imagery Ability, Mental Preparation, Self Confidence, Anxiety and Worry Management and Relaxation Ability were not found significantly different at $p < 0.05$ whereas, in relation to Concentration Ability were found statistically significantly different at $p > 0.05$ among Inter-College and Inter-University Wrestlers.

Keywords: Mental Skill, Imagery Ability, Mental Preparation, Self Confidence, Anxiety and Worry Management, Concentration Ability, Relaxation Ability, Wrestlers.

Introduction

Athletes' success or failure is multifactorial. It depends on the combination of many factors including physical, tactical, technical and psychological factors. The psychological factor is usually the determinant that differentiates a winner and a loser in sports (Brewer, 2009) [1]. For example, Weinberg and Gould (2003) [2] indicated that mental ability contributed over 50% in athletes' success when competing against the opponents. In addition, Gould, Hodge, Peterson, and Petlichkoff (1987) [3] stated that mental toughness was the most important for success in wrestling (rated as 82%). Research across the world has shown that mental skills (VIZ., strategies used to trigger and sustain ideal performance) [4] can be helpful to athletes in the process of achieving optimal athletic performance [5]. More specifically, mental skills such as imagery [6], goal setting [7], self-talk [8] and relaxation techniques [9] have all been documented as useful in facilitating, maintaining, and improving

athletic performance. Generally, the mental skills is a collection of techniques and methods that can be applied for expanding and developing athletes' sport performance, increase of concentration, develop of self-confidence particularly at their learning affairs [10]. In the other hand, the perspective of athletes' mental readiness in various sport is different due to the features of its nature and type of skill; in other words, the optimized level of mental skills is different among sport fields. For example, [11] showed that the pattern of mental skills is not the same among wrestling, yachting and running athletes [12].

Selection of Subjects

For the purpose of the present study, Three Hundred Ninty Seven (N=397), Male subjects between the age group of 18-25 years volunteered to participate in the study.

The subjects were purposively selected from the following three universities:

- Group-A: Guru Nanak Dev University, Amritsar (N₁=140)
- Group-B: Punjabi University, Patiala (N₃=132)
- Group-C: Panjab University, Chandigarh (N₂=125)



Fig. 1:- Distribution of subjects from Guru Nanak Dev University, Amritsar (N₁=140), Punjabi University, Patiala (N₃=132) and Panjab University, Chandigarh (N₂=125).

Table-1: Distribution of subjects (VIZ. Inter-College and Inter-University) from Guru Nanak Dev University, Amritsar (N₁=140), Punjabi University, Patiala (N₃=132) and Panjab University, Chandigarh (N₂=125).

Universities	Inter-College		Inter-University		Total
	Greco-Roman	Freestyle	Greco-Roman	Freestyle	
Guru Nanak Dev University, Amritsar, Punjab (India)	45	75	10	10	140
Punjabi University, Patiala, Punjab (India)	42	70	10	10	132
Panjab University, Chandigarh (UT)	40	65	10	10	125
Sample Size	127	210	30	30	397

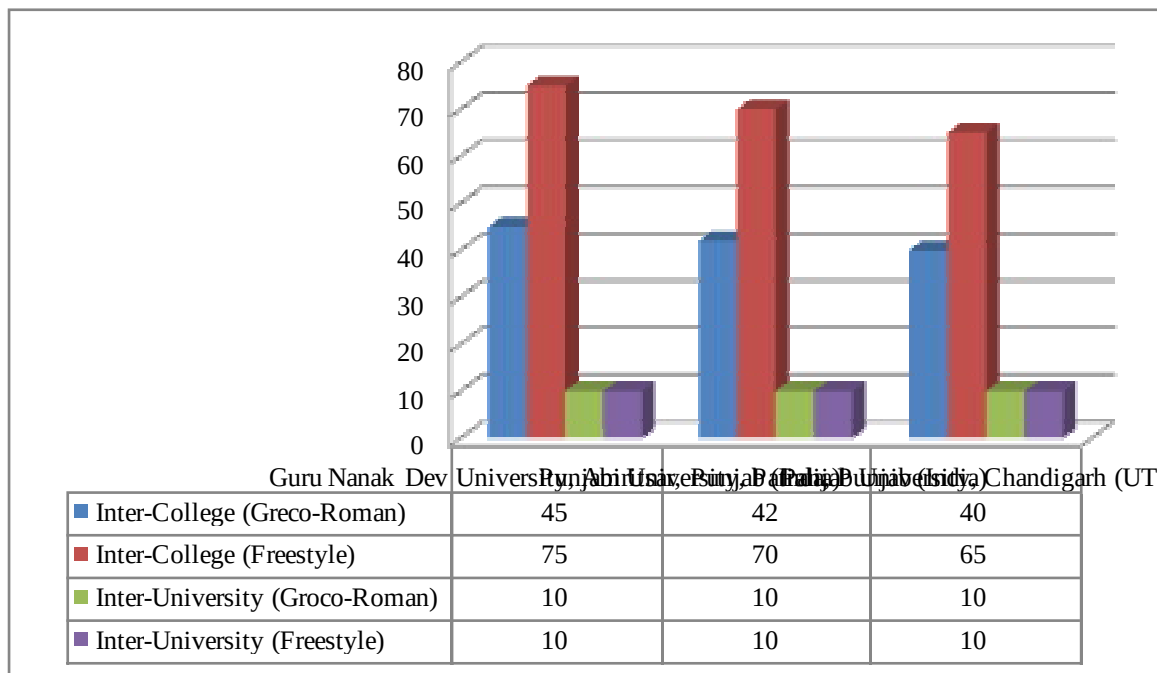


Fig. 2:-Distribution of subjects (VIZ. Inter-College and Inter-University) from Guru Nanak Dev University, Amritsar (N₁=140), Punjabi University, Patiala (N₂=132) and Panjab University, Chandigarh (N₃=125).

Selection of Tools

Mental Skills Questionnaire

The data was collected through the administration of Mental skill Questionnaire as developed by Hardy and Nelson (1996). The six areas of mental skills covered by this questionnaire are:

- Imagery Ability
- Mental Preparation
- Self Confidence
- Anxiety and Worry Management
- Concentration Ability
- Relaxation Ability

Research Design

This is an exploratory study that has employed method of data collection and analysis quantitatively. The present study has been undertaken to find out the significant differences among wrestlers of different level of performance on the variable, "Mental Skills". The differences in the mean of each group for selected variable were tested for the significance of difference by The independent-samples *t* test (between-groups design).

Statistical Analyses

In order to analyze the data obtained easily, the data were coded to SPSS 20.0 software as the data obtained from questionnaires. The independent-samples *t* test (between-groups design) were used to evaluates the difference between the means of two independent or unrelated groups (VIZ. Inter-College and Inter-University). The level of significance was set at 0.05.

Results

For each of the chosen variable, the result pertaining to independent-samples *t* test (between-groups design) among Inter-College and Inter-University Wrestlers with regards to variable "Mental Skills", are presented in the **Table-2**:

Table-2: Comparison Matrix among among Inter-College and Inter-University Wrestlers with regards to variable Mental Skills.

Psychological Variables	Inter-College		Inter-University		t-value
	Mean	Standard Deviation	Mean	Standard Deviation	
Mental Skill	84.8071	14.3621	84.4167	14.0052	0.1947
Imagery Ability	14.1039	5.5836	15.4	5.1394	1.6759
Mental Preparation	14.5015	5.7202	13.95	5.6461	0.6894
Self Confidence	14.3531	5.9819	14.6167	5.9492	0.3147
Anxiety and Worry Management	14.6617	5.4993	13.8167	5.5188	1.0961
Concentration Ability	13.3709	5.4534	11.8667	4.9693	1.994
Relaxation Ability	13.816	5.3493	14.7667	5.3373	1.2687

- It is evident that Inter-College and Inter-University Wrestlers group with regards to **Mental Skill** were not found significantly different at $p < 0.05$.
- It is evident that Inter-College and Inter-University Wrestlers group with regards to **Imagery Ability** were not found significantly different at $p < 0.05$.
- It is evident that Inter-College and Inter-University Wrestlers group with regards to **Mental Preparation** were not found significantly different at $p < 0.05$.
- It is evident that Inter-College and Inter-University Wrestlers group with regards to **Self Confidence** were not found significantly different at $p < 0.05$.
- It is evident that Inter-College and Inter-University Wrestlers group with regards to **Anxiety and Worry Management** were not found significantly different at $p < 0.05$.
- It is evident that Inter-College and Inter-University Wrestlers group with regards to **Concentration Ability** were found statistically significantly different at $p > 0.05$.
- It is evident that Inter-College and Inter-University Wrestlers group with regards to **Relaxation Ability** were not found significantly different at $p < 0.05$.

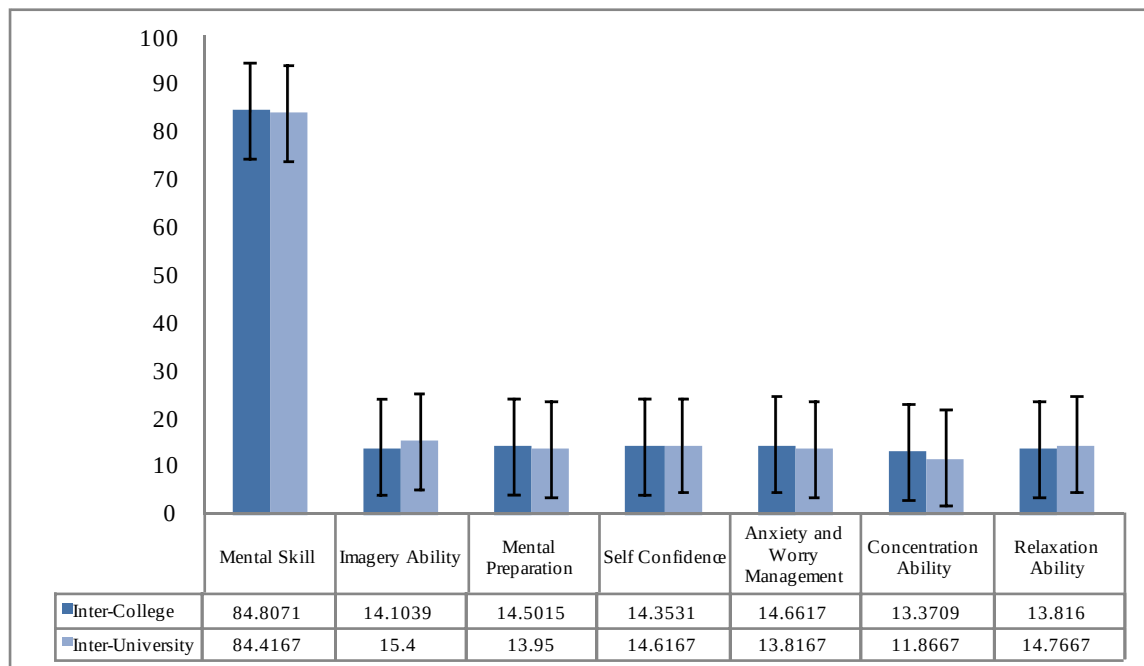
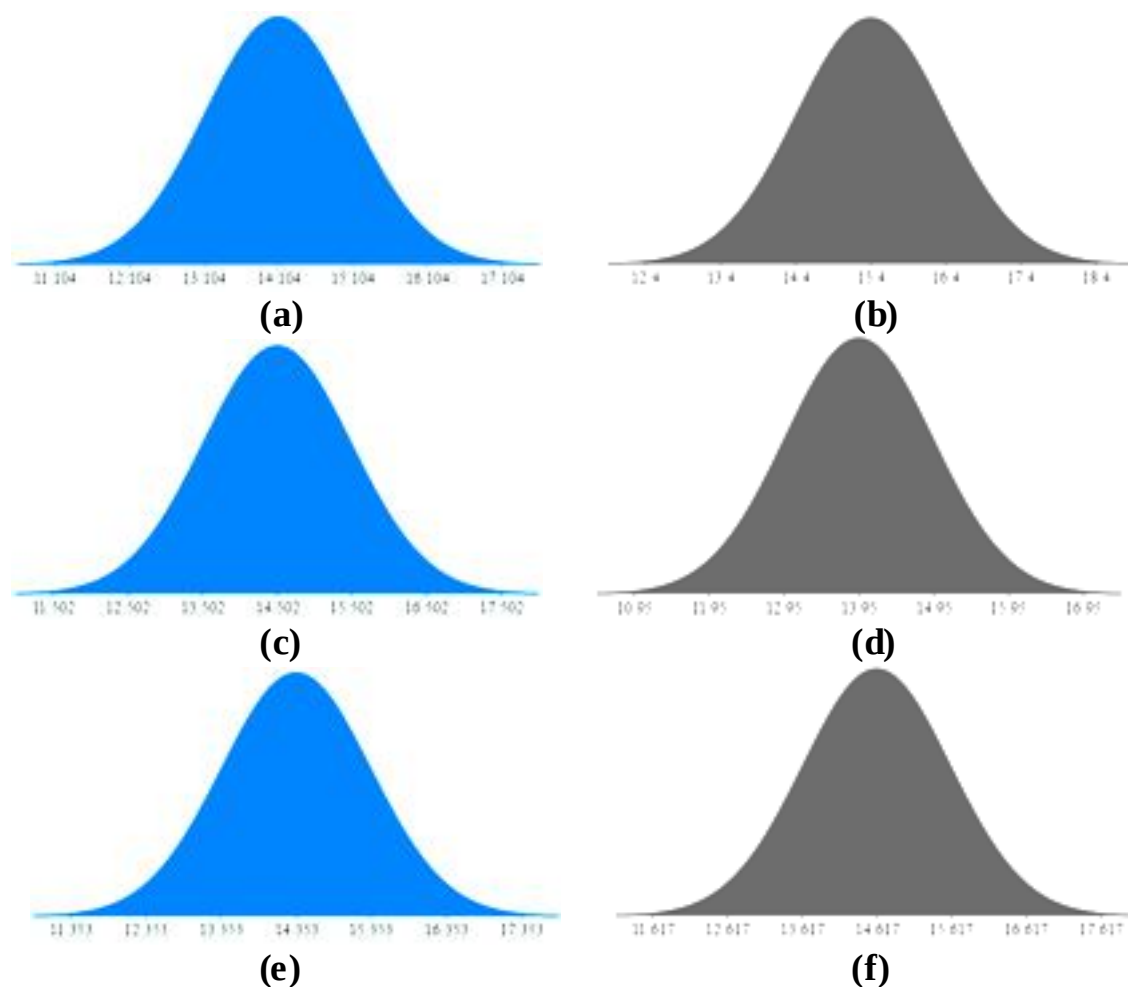


Fig. 3:- Comparison of Mean of Inter-College and Inter-University Wrestlers group with regards to variable Mental Skills.



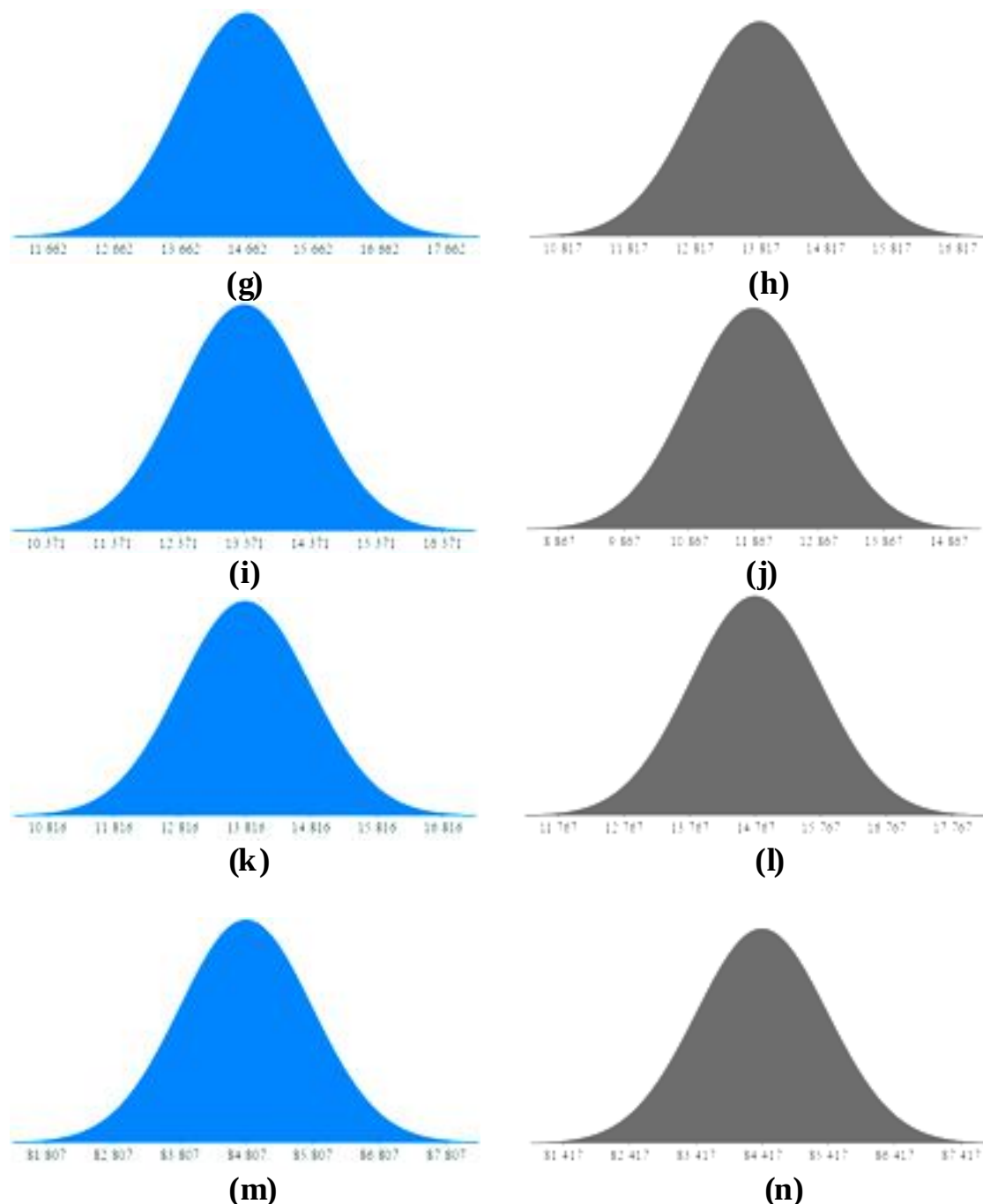


Fig. 4:- Normal distribution (Mean & Standard Deviation) of Imagery Ability (a). Inter-College (b). Inter-University. Mental Preparation (c). Inter-College (d). Inter-University, Self Confidence (e). Inter-College (f). Inter-University, Anxiety and Worry Management (g). Inter-College (h). Inter-University, Concentration Ability (i). Inter-College (j). Inter-University, Relaxation Ability (k). Inter-College (l). Inter-University and Mental Skill (m). Inter-College (n). Inter-University.

Discussion

The primary purpose of this study was to determine the significant differences among wrestlers of different level of performance on the variables, "Mental Skills". The comparison of study among wrestlers of different level of performance on the variables, "Mental Skills", will provide us with factors affecting the psychological variables and sporting behaviour and whether improvement measures are needed in the area of concern. Given that the use of

mental skills in sport performance has been supported by research for a long time [13]. Results indicated that in relation to Mental Skill ($0.1947 < 1.968$), Imagery Ability ($1.6759 < 1.968$), Mental Preparation ($0.6894 < 1.968$), Self Confidence ($0.3147 < 1.968$), Anxiety and Worry Management ($1.0961 < 1.968$), and Relaxation Ability ($1.2687 < 1.968$), were not found significantly different at $p < 0.05$ whereas, in relation to Concentration Ability ($1.994 > 1.968$), were found significantly different at $p > 0.05$ among Inter-College and Inter-University Wrestlers. Previous studies [14, 15] also indicate that differences in attitudes toward sport psychology may exist as a result of sex, sport type, and level of competition. Empirical studies have also shown that formalized psychological or mental skills training programs are very effective in fostering greater and more elaborate psychological skills in athletes from a range of sports [16, 17]. The current results support previous studies that found support for mental techniques developed through natural learning experiences [18, 19]

Conclusion

To conclude, it is significant to mention in relation to Mental Skill, Imagery Ability, Mental Preparation, Self Confidence, Anxiety and Worry Management and Relaxation Ability were not found significantly different at $p < 0.05$ whereas, in relation to Concentration Ability were found significantly different at $p > 0.05$ among Inter-College and Inter-University Wrestlers.

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Conflict of interests

The authors declare that there is no conflict of interests.

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Dr. Baljinder Singh Bal Sequeria's life path can best be viewed as a distinctive kind of fusion of an academician and sportsperson par excellence. Dr. Bal is an educationist. Indeed, in the world of physical education in India he is the leading physical educationist who attains (RA) Research Award for the year along with (MRP) Major & Minor Research Project by UGC - statutory body of the Government of India. He is working as Assistant Professor in the Department of Physical Education (Teaching) at Guru Nanak Dev University, Amritsar.

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