

Comparative Study of Mental Health, Mental Toughness and Creativity among the Students of Different Professions

Ajjul Rahaman Khan

Ph.D. Research Scholar Guru Ghasidas Vishwavidyalaya, Bilaspur Department of Physical Education

Abstract: The main purpose of the study was to find out the comparative study of mental health, mental toughness and creativity among the students of different professions. 75 male students, 25 from each of Engineering, Physical Education and Ayurveda Medical course, age was ranging from 18 to 25 years from H. V. P. Mandal's College of Engineering, Degree College of Physical Education, and Ayurveda, Amravati were selected as subjects for the purpose of the study. The mental health was assessed by using mental health Questionnaire developed by Peter backer (1989) and score was recorded in number with the help of mental health questionnaire answer key, the mental toughness was assessed through mental toughness Questionnaire developed by Alan Goldberg and score was recorded in number by the use of mental toughness questionnaire's answer key and the creativity was assessed by using creativity Questionnaire developed by Anne de A'Echevarria and score was recorded in number by the use of creativity questionnaire's answer key. To find out the significant differences among the students of Engineering, Physical Education and Medical courses, one-way analysis of variance (ANOVA) and LSD post hoc test were employed. Only creativity showed significant difference ($F=9.99$) among the students of Engineering, Physical Education and Ayurveda Medical professions. Engineering and Ayurveda Medical students were found significantly superior in creativity than the physical education students.

Key words: Mental Health, Mental Toughness, Creativity, Engineering students, Ayurveda Medical students, Physical Education

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I. Introduction

“Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”. WHO stresses that mental health “is not just the absence of mental health disorder”-World Health Organization.

Mental toughness is a collection of attributes that allow a person to persevere through difficult circumstances (such as difficult training or difficult competition situation) and emerge without losing confidence. In recent decades, the term has been commonly used by coaches, sports psychologists, sports commentators, and business leaders.

Creativity is the ability to generate innovative ideas and manifest them from thought into reality. The process involves original thinking and then producing. Creativity refers to the phenomenon whereby a person creates something new (a product a solution, a work of art etc.) that has some kind of value. What counts as “new” may be in reference to the individual creator or to the society or domain within the novelty occurs. What counts as “valuable” is similarly defined in a variety of ways.

Purpose of the Study

To find out the significant difference in the selected psychological variables of mental health, mental toughness and creativity among the students of different professions.

Significance of the Study

1. The findings of this study might be helpful to the teachers of the concerned courses to understand the level of mental toughness, mental health and creativity of their students.
2. The findings of the study would help the teachers to design more appropriate course curriculum through which the selected variables can be developed up to the desirable level.

Hypotheses

On the basis of review of related literatures, discussion with the experts and scholar's own understanding it was hypothesized that-

H₁. There would be significant difference in mental health among the students of three selected professions.

H₂-There would be significant difference in mental toughness among the students of three selected professions.

H₃- There would be significant difference in creativity among the students of three selected professions.

Methodology

Seventy five (75) male students, 25 from each of Engineering, Physical Education and Vidarbha Ayurvedic Mahavidyalaya course, age was ranging from 18 to 25 years in H.V.P.Mandal’s college of Engineering, Degree College of Physical Education, and Ayurveda, Amravati were selected as subjects for the purpose of the study. Random sampling technique was adopted for the selection of 75 subjects.

Selection of Variables

For the present study mental health, mental toughness and creativity were chosen as criterion variables.

Selection of Tools and Criterion Measures

1) Mental Health

Mental health was assessed by using mental health questionnaire developed by Peter backer (1989) and score was recorded in number with the help of mental health questionnaire answer key.

2) Mental Toughness

Mental toughness was assessed through mental toughness Questionnaire developed by Alan Goldberg and score was recorded in number by the use of mental toughness questionnaire’s answer key.

3) Creativity

Creativity was assessed by using creativity Questionnaire developed by Anne de A’Echevarria and score was recorded in number by the use of creativity questionnaire’s answer key.

Collection of Data

The data pertaining to this study were collected on the selected subjects by administering aforesaid questionnaires. Before distribution of questionnaire the researcher explained the purpose of the study to the subjects explicitly so that they could give their correct responses.

Statistical Treatment

To determine the significant mean difference in the variables as well as sub-variable of Mental Health, Mental Toughness and Creativity among the students of Engineering, Physical Education and Medical courses one way analysis of variable (ANOVA) statistical technique was employed independently for each selected variable. While the F-ratio was found to be significant, then LSD post hoc test was applied to assess the significant difference between the paired means.

II. Findings

Findings pertaining to the selected psychological components i.e., Mental Health, Mental Toughness and Creativity are presented in the table given below-

Table-1

Variable	Source of Variance	Degree of Freedom	Sum of square	Mean sum of square	F-ratio
Mental Health	Between the Groups	2	91.28	45.64	2.21 [@]
	Within the Group	72	1488.80	20.68	
Mental Toughness	Between the Groups	2	46.32	23.16	2.61 [@]
	Within the Group	72	639.36	8.88	
Creativity	Between the Group	2	1867.52	933.76	9.99 [*]
	Within the Group	72	6729.76	93.47	

*Significant at .05 level

Tabulated $F_{.05(2, 72)} = 3.123$

[@]Not Significant at .05 level

It is evident from the above table that significant difference was found in the variables of Creativity ($F = 9.99 > 3.123$). Where as insignificant difference was found in the variables of Mental Health ($F = 2.21$) and Mental Toughness ($F = 2.61$) at .05 level because the obtained F-values are less than that of tabulated F-value of 3.123 for the (2, 72) degrees of freedom at .05 level

Table-2 Paired Mean Difference in the Variable of Creativity among Engineering, Physical Education and Medical Students

Mean of Creativity Ayurveda			Mean Difference	Critical Difference
Engineering	Physical Education	Medical		
70.44	58.76		11.68*	5.44
70.44		67.72	2.72	5.44
	58.76	67.72	8.96*	5.44

*Significant at .05 level

It is evident from the above findings that Engineering students are significantly superior in creativity than the Physical Education students (MD=11.68), and Medical Students are better than Physical Education students (MD=8.96), because both the obtained mean difference values are greater than that of critical difference value of 5.44 required to be significant at 0.05 level. It is also evident from the above table that there is no significant mean difference in between Engineering and Medical students as the obtained mean difference value of 2.72 is less than the critical difference value of 5.44 needed to be significant at .05 level. The difference of means has been depicted picturesquely in Figure- 1

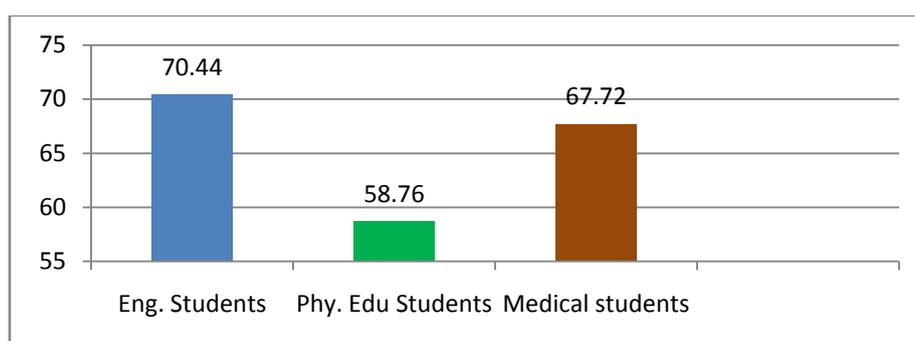


Fig-1: Comparison of Means among Engineering, Physical Education and Ayurveda Medical Students in Creativity

III. Discussion on Findings

Findings of the study revealed that it is also observed that the students of Engineering and Medical professions are significantly better in creativity compared to Physical Education students, it might be because it is experienced that those are meritorious students they always prefer to opt either Medical or Engineering professions, and all those students who prefer to seek admission in Physical Education either they are very good in sports or a general merit student. Hence such results might have occurred in this study. The findings of statistical analysis showed that mental health did not differ significantly among the students of Engineering, Physical Education and Medical profession; it may be because all these three professions first and foremost objective is to develop student's mental health by providing such desirable activities in the course curriculum, hence insignificant difference might have occurred in this study.

IV. Conclusion

Recognizing the limitations of this study and on the basis of findings the following conclusions were drawn-

1. Significant meandifference was observed among the students of Engineering, Physical Education and Ayurveda Medical in the variable of Creativity.
2. Insignificant meandifference was found among the students of three different professions in the variable of Mental Health and Mental Toughness.
3. The students belonged to engineering profession showed superiority in creativity followed by medical profession and least creative were found by the physical education students.

Reference

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