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## PERSONALITY TRAITS: AN ANALYTICAL STUDY BETWEEN SEDENTARY MALES AND SPORTS MALES

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### Abstract

**Objective.** It is believed that human being is a summation of body and mind and hence the activities of body and its responses will inevitably be associated with the mind and vice versa. There are number of studies which had attempted to seek the relationship between personality characteristics and athletic activities with different conclusions.

**Methods.** Here, the very purpose of the study was to assess the personality traits of sports men from different games and sports with non-sports men. A total of 32 sports persons from different sports and 12 non-sports men were selected as the subjects.

**Results.** Self-reporting questionnaire was the major tool for collecting the required data. In order to gather the personality traits of the subjects, the 16 PF (personality factor) questionnaire was used. One way analysis of variance (one way ANOVA) was used to test for significant differences ( $p < 0.05$ ) among the personality traits of sports men and non-sports men. Whenever F-ratio was found significant, Newman-Keuls post hoc method was used to determine which group differed significantly from each other ( $p < 0.05$ ) in regard to the personality traits. Significant differences were noted on different personality traits including aggressiveness, realism, apprehension, radicalism, and control. In most of the personality traits, sports persons showed moderately high scores compared to that of non-sports persons.

**Conclusions.** When considering the personality trait O (apprehension), findings indicate that the athletes were more self-assured than the non-athletes. The high level of self-assurance generally reported for sports category could be related to their various achievement behaviors and consequently influence their motivation to succeed in sports competition.

**Key words:** sports psychology, personality traits, self-esteem, aggressiveness, self-concept

### Introduction

Personality is a summation of many attributes combining of physical and psychological characteristics. Since personality is the product of heredity and environment, the people from same environment will have some common characteristics which will reflect in their personality to a great extent.

From this point of view, it can be observed that regular participation in competitive sports will be associated with certain personal and behavioral characteristics which can be categorized as the personality traits of sports men.

The question whether personality and competitive sports are related was a topic with heated discussion on many tables. The sports psychologists and counsellors of different teams participating in higher level tournaments play a very significant role by providing mental support to their athletes and players. Earlier, Morgan (1988) had concluded that success in sports performance is dependent in partly on selected psychological states and traits.

Different studies have shown different and diverse findings on the psychological characteristics of sports men and non-sportsmen

over the last many years.

Many researchers (Kane, 1990; Vanek, 2000; Cratty et al, 2000) have proved that certain personality traits are dominant and are special characteristics of certain specific sports activities.

Swimming, long distance running including marathon or activities like triathlon, cycling and top class professional sports life demands higher level of determination, persistence, introversion emotional stability and self-control. Here, the very purpose of the study was to ascertain the psychological classification of sports men compared to that of non-sports men specifically to the University students concerned.

### Methods

A total of 32 sports persons from four disciplines (swimming, volleyball, soccer and Kabaddi) were selected as sports category group. These players were very active in their corresponding games and activities during the data collection.

Besides this sports men's group, there were another group with twelve ( $n = 12$ ) students who do not have any sports background who were selected as non-sports category.

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The sports persons were having more than four years of experience in participating both in inter collegiate competitions as well as inter university competitions.

Some of them were also part of State teams of their concerned disciplines. The non sports men group were basically sedentary in nature and not used to have any activities in their daily routine. Twenty three out of forty four students were under graduate students and ten students were graduate students. Eleven students were Masters level students who were about to complete their student life.

Prior to the administration of the research program, subjects were given a detailed instruction concerning the procedure of the study and assurance had given regarding the confidentiality of the data collected which contain the personal particulars including behavioral patterns of the individuals. Standardized equipments were used to gather data pertaining to physical characteristics including height and weight.

The major instrument used for collection of data in this study was self –reporting questionnaire. They were asked to give their free responses without any pre planned or prejudiced answers.

The investigator convinced them that the study wont be affecting in any manner and insisted them to get the apt and straight answers and responses to be elicited.

The first questionnaire administered to the subjects sought to obtain information on their medical history of psychological mal adjustment, smoking, alcohol and drug taking habits.

This preliminary survey was necessary since alcoholism (Eshbaugh et al., 1988) smoking (Spielberger and Jacobs, 1992) and drug abuse (Holm et al., 2002) have been associated with altered personality characteristics. Generally, it was ascertained that the subjects were nonsmokers, alcohol and drugs users and did not previously experience health problems of psychological adjustment.

Data concerning the personality traits of the subjects were collected through the 16 Personality Factor (PF) questionnaire which was the second instrument used.

The 16 PF questionnaires were administered to all subjects in a single session.

Before the collection of the necessary data, the subjects were given clear explanation on the pattern and structure of the questionnaire.

Eventhough the questionnaire comparatively simple, some of questions from the participants were cleared well with examples so that the respondents had no ambiguity when they filled the questionnaire.

Each 16 PF questionnaire tries to assess the sixteen traits namely Warmth (A) Reasoning

(B) Emotional Stability (C) Dominance (E) Liveliness (F) Rule-consciousness (G) Social Boldness (H) Sensitivity (I) Vigilance (L) Abstractedness (M) Privatness (N) Apprehension/Apprehensiveness (O) Openness to change (Q1) Self-reliance (Q2) Perfectionism (Q3) Tension (Q4).

The Cattell 16 PF instrument is recognized to be a valid psychometric measure of the major dimensions of variation within the sphere of normal personality functioning (Bolton 2008).

The test is an objective measure of personality covering 16 functionality independent and psychologically meaningful dimensions viz, (A) reserved vs outgoing ; (B) less intelligent vs more intelligent (C) low ego strength vs high ego strength (E) humble vs assertive (F) sober vs happy go-go lucky (G) expedient vs conscientious (H) shy vs venturesome (I) tough minded vs tender minded (L) trusting vs suspicious (M) practical vs imaginative (N) forthright vs shrewd (O) self-assured vs apprehensive (Q1) conservative vs experimenting (Q2) group dependent vs self-sufficient (Q3) un disciplined self-conflict vs controlled (Q4) relaxed vs tensed.

Though most of the terms are self explanatory, some of them may need slighter clarifications to participants which has to be done at the time of giving the response sheet to elicit the response from the participants.

Results obtained from the 16 PF test are presented as 'standard ten' (STEN) scores so that a mean STEN reading of 5.5 and a standard deviation of 2 is anticipated for each of the variables in healthy normal individuals.

Statistical analysis:- One way analysis of variance (one-way ANOVA) was used to test for significant differences ( $P < 0.05$ ) among the personality traits of the athletes and non-athletes. Newman-Keuls post hoc method (Hinkle et al., 1979) was used where F-ratio was statistically significant to determine which group differed significantly from each other ( $p < .05$ ) in regard to the personality traits.

## Results

The physical characteristics of subjects are presented in Table 1.

Although a significant difference among the subjects was noted for stature, the subjects were of comparable age and weight.

Table 2 shows the results of the one –way ANOVA and Newman-Keuls post hoc comparison of the 16 PF tests.

When the groups were compared it was found that very little or no significant differences existed for the personality traits of sociability (A) which is considered to be important in one's personality traits.



That means in contrary to the assumptions there is no such significant differences between sports persons and non sports persons in sociability nature and also there was no significant difference among sports people with different team games.

Regarding intelligence (B) which is also as a noted variable, there was no significant differences with sports persons and non persons and among different teams players within sports person group. On the variable, ego-strength (C) which is a factor considered to be more for aggressive games, there was no significant difference between sports man

and non sports man group and also among the different team games.

With regard to surgency(F), conscientiousness(G) it could see that there was no such noted difference between sports man group and non sports man group and among members of different team members. On the variable, adventurousness (H), pretension(L), bohemianism (M), shrewdness (N), self-sufficiency(Q2), and tenseness (Q4) also, there was no such significant difference could note with that of sports man group and non sports man group.

**Table 1 . Physical characteristics of subjects ( Mean ±SD)**

Variable	Volleyball players (n=8)	Soccer players(n=8)	Kabaddi Players(n=8)	Swimmers (n=8)	Non-athletes (n=12)	F ratio
Age (yrs)	18±7	19±5.1	19±4.3	20±3.9	18±6.8	
Height(cm)	178±1.2	171±2.5	169±3.8	175±4.4	172±3.3	
Weight (kg)	68±4.9	66±3.6	67±4.7	65±3.2	73±5.2	

\*p<0.05

**Table -2 – Personality traits of athletes and non-athletes (Mean± SD)**

Profile	Group 1	2	3	4	5	F- ratio	Significant
component	Volleyball players (n=8)	Soccer Players (n=8)	Kabaddi Players (n=8)	Swimmers (n=8)	Non-athletes (n=12)		Post hoc comparisons
A	6.3±2	8.2±1.4	6±1.8	6.8±1.6	6 ±1.5	.89	
B	5.8±2	7±1.2	5.6±1.5	4.9±1.9	5.8±1.2]	.92	
C	5.7±2	7±2.1	5.8±1.8	6.8±2.4	6.3±1.9	1.91	
E	7.7±1	7.2±1.1	5.9±1.7	5.5±1.9	3.6±1.3	4.12*	1-3-1-5 3-6
F	6.1±2.4	6.9±2.1	5.8±2.7	6.6±2	6.3±1.8	1.92	
G	6.2±2.3	7.1±3	6±2.6	7.6±2.2	5.4±1.7	2.34	
H	5.4±1.8	6.5±1.9	6.8±2.1	7.5±3.1	6 ±2.5	1.04	
I	5.4±1.6	5.9±1.8	3.4±1.1	7±2.8	6.8±2.7	5.23*	1-4 1-6 -4 -4
L	5.7±2.3	4.8±1.7	4.7±1.5	5.3±1.2	6.1±2	.92	



M	5.5±2.8	5.7±1.5	5±1.3	5.6±1.9	6.3±2.3	.73	
N	6.1±3.1	7±3	6.5±2.4	6.7±2.2	5.8±1.7	1.09	
O	4.5±1.9	4.6±1.8	5±1.7	5.1±1.6	7.2±2.6	3.34	
Q1	4.4±1.8	5.8±1.4	6.5±2.1	5.7±1.2	5.5±1.6	4.12	
Q2	5.3±2.04	5.8±1.7	6.3±1.9	7±2.3	6.7±2.8	1.87	
Q3	5.9±1.7	6.5±1.9	6.2±2.7	5.4±2.4	4.3±1.2	3.87*	1-4 2-4 3-5
Q4	6.3±2.1	5.8±1.5	6.4±2.3	6.7±3.7	5.8±2.4	.97	

P<0.05

### Discussion

The very purpose of the study was find out the psychological characteristics of sports men in selected games to that non sports men for the choosen variables which contained in the PF 16 questionnaire.

When analyzed the results of the one – way ANOVA and Newman-Keuls post hoc comparison of the 16 PF tests, it found that significant personality differences (p<0.05) were observed among the groups on the factors of aggressiveness(E), realism (I), apprehension(O), radicalism(Q1), and control(Q3).

In general, athletes were found to be more aggressive (E) than their untrained counterpart. This study substantiates the findings of Salokum S & Toriola L (1985).

This substantiates the contention that sports participation requires competitive aggressiveness (Brunner 1999, Singer, 1999, Samuel, Salokum and Toriola 1985 and Schurr 1990).

Of the various categories of subjects, the Kabaddi players were most significantly (0.05) realistic (I).

The markedly high level of tough-mindedness in the kabaddi group which may be culturally and environmentally determined (Catell 2000) is probably as a result of the psychological demands associated with participation in the sport. It has to be noted that Kabaddi is a tough contact game where aggression and quick intervention with direct contact is a vital part of the game.

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### Conclusions

When considering the personality trait O (apprehension), findings indicate that the athletes were more self-assured than the non-athletes.

The high level of self-assurance generally reported for sports category could be related to their various achievement behaviors and consequently influence their motivation to succeed in sports competition.

Factor Q1 (radicalism) also differentiated the groups. The kabaddi players were significantly more experimenting than volleyball players. In contrast to non-athletes, swimmers have been found to be conservative and conventional in their responses to social situations and are comparable in regard to radicalism (Q1).

An examination on factor Q3 revealed that the kabaddi and soccer players scored higher on this trait than the control subjects. As has been suggested by Joseph (2009), research in sports personality is affected by methodological, conceptual and interpretative problems.

Similarly, the factors responsible for the lack of congruency in the findings of studies seeking to describe athletes' personality traits have earlier been given.

In addition to solving the methodological problems of sport personology research, similar studies in future should examine the issue of whether the duration and level of athletes' competitive sports career could differentiate their personality characteristics.

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