



**PSYCHOLOGICAL ASSESSMENT BETWEEN
INDIAN AND INDONESIAN SPORTS-PERSONS:
A QUANTITATIVE DATA ANALYSIS**

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Abstract:

The motive of this study was to analyze, interpret and assess psychological variables between Indian and Indonesian sports-persons. Two psychological variables i.e. Sports Achievement Motivation and Sports Competition Anxiety were selected to understand the difference and non-difference psychic strength and lacuna between Indian and Indonesian sports-persons. This study also conducted to find out a correlation between Sports Achievement Motivation and Sports Competition Anxiety among Indian and Indonesian sports-persons. For the purpose of this study, 50 elite sports-persons from India and 50 elite sports-persons from Indonesia were randomly selected. The subjects' age ranged between 18-25 years. To measure sports achievement motivation and sports competition anxiety between Indian and Indonesian sports-persons, Sports Achievement Motivation Test (SAMT) developed by M.L. Kamlesh in 1990 and Sports Competition Anxiety Test (SCAT) developed by Rainer Martens in 1977, were introduced respectively. For statistical analysis and interpretation of data, Independent Sample t-Test and Pearson Product-moment Correlation were conducted. The level of significance had been taken 0.01. The study found a significant difference in SAMT between Indian and Indonesian female sports-persons, male sports-persons and sports-persons in toto. It also found a significant difference in SCAT between Indian and Indonesian female sports-persons in toto but did not find any significant difference in SCAT between Indian and Indonesian female and male Sports-persons. This study also found no significant correlation between Sports Achievement Motivation and Sports Competition Anxiety among Indian sports-

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persons but the study detected a significant negative correlation between sports Achievement Motivation and Sports Competition Anxiety among Indonesian sports-persons.

Keywords: Sports Achievement Motivation Test (SAMT), Sports Competition Anxiety Test (SCAT), Indian sports-persons, Indonesian sports-persons

1. Introduction

Sports Achievement Motivation and Sports Competition Anxiety are two different and inversely interrelated psychological variables which are extremely important to achieve higher level sports performance. Achievement Motivation has been considered as an important psychological factor in behavioral psychology. It has been found to be rewarding in competitive sports and very much responsible to achieve higher level sports performance. Sports Achievement Motivation is an innate force that enables an athlete to do a task which may be challenging and most difficult to attain. Competition Anxiety has been considered as an important psychological factor in Psychology of Emotion. It has been found one of the most important psychological aspects which most often negatively influence the performance of elite sports-persons. Sports Achievement Motivation and Sports Competition Anxiety levels varied upon individuals, regions and countries. A study found, Sports Achievement Motivation and Sports Competition Anxiety had a significant negative correlation among Indian female university level elite swimmers and the same time the study also found a negative correlation of Sports Achievement Motivation and Sports Competition Anxiety among Indian male university level elite swimmers (A. Kumar Halder, Ashish Phulkar 2020) [1]. Another study found Sports Achievement Motivation and Sports Competition Anxiety were significant predictors of performance levels (Tor Oskar Thomassen, Lars Bauger, Anee Marte Pensgaard, 2013) [2]. However, most of the experts at sports arena believe that performance of an individual or team is not only shaped by physical and techno-tactical ability but also through positive psychic state of mind management.

2. Methods

For the purpose of this study, 50 elite sports-persons from India and 50 elite sports-persons from Indonesia were randomly selected. The subjects' age ranged between 18-25 years. To measure sports achievement motivation and sports competition anxiety between Indian and Indonesian sports-persons, Sports Achievement Motivation Test (SAMT) developed by M.L. Kamlesh in 1990 and Sports Competition Anxiety Test (SCAT) developed by Rainer Martens in 1977, were introduced respectively. The scores were inserted according to SAMT and SCAT score analysis norms. For statistical analysis and interpretation of data, Independent Sample t-Test was employed to find out the difference levels of Sports Achievement Motivation and Sports Competition Anxiety

between Indian and Indonesian sports-persons. A Pearson Product-moment Correlation was conducted to find out the correlation between Sports Achievement Motivation and Sports Competition Anxiety among Indian and Indonesian sports-persons. The level of significance had been taken 0.01. Descriptive statistics: mean and standard deviation were used to delineate the average and variability of Sports Achievement Motivation and Sports Competition Anxiety.

3. Results

Table 1: Descriptive Statistics of Selected Variables

Variables	N	Mean	SD	Skewness	Kurtosis
SAMT Indian and Indonesian (F+M)	100	26.46	6.92	-.57	-.33
SAMT Indian and Indonesian (F)	50	26.04	6.58	-.63	.06
SAMT Indian and Indonesian (M)	50	26.88	7.28	-.57	-.54
SAMT Indian (F+M)	50	22.52	6.52	.21	.17
SAMT Indonesian (F+M)	50	30.40	4.74	-1.88	5.84
SCAT Indian and Indonesian (F+M)	100	17.83	3.60	-.14	-.27
SCAT Indian and Indonesian (F)	50	17.42	3.49	-.35	-.21
SCAT Indian and Indonesian (M)	50	18.24	3.69	-.01	-.40
SCAT Indian (F+M)	50	19.06	2.90	-.32	1.89
SCAT Indonesian (F+M)	50	16.60	3.82	-.30	-.64

Note: Here N = Number of sports-persons, F=Female and M=Male.

Table 1 shows the means and standard deviations of the selected variables. The Means along with SDs of SAMT Indian and Indonesian (Female + Male) sports-persons, SAMT Indian and Indonesian (Female) sports-persons, SAMT Indian and Indonesian (Male) sports-persons, SAMT Indian (Female + Male) sports-persons, SAMT Indonesian (Female + Male) sports-persons, SCAT Indian and Indonesian (Female + Male) sports-persons, SCAT Indian and Indonesian (Female) sports-persons, SCAT Indian and Indonesian (Male) sports-persons, SCAT Indian (Female + Male) sports-persons, SCAT Indonesian (Female + Male) sports-persons are 26.46±6.92, 26.04±6.58, 26.88±7.28, 22.52±6.52, 30.40±4.74, 17.83±3.60, 17.42±3.49, 18.24±3.69, 19.06±2.90, 16.60±3.82 respectively.

Table 2: Outcomes of Independent t-test, Mean, SD and SEM of SAMT between Indian and Indonesian sports-persons

Group	N	Mean	SD	SEM	t	P
India	50	22.52	6.52	.92	-6.90	.00
Indonesia	50	30.40	4.74	.67		

*Significant level at 0.01.

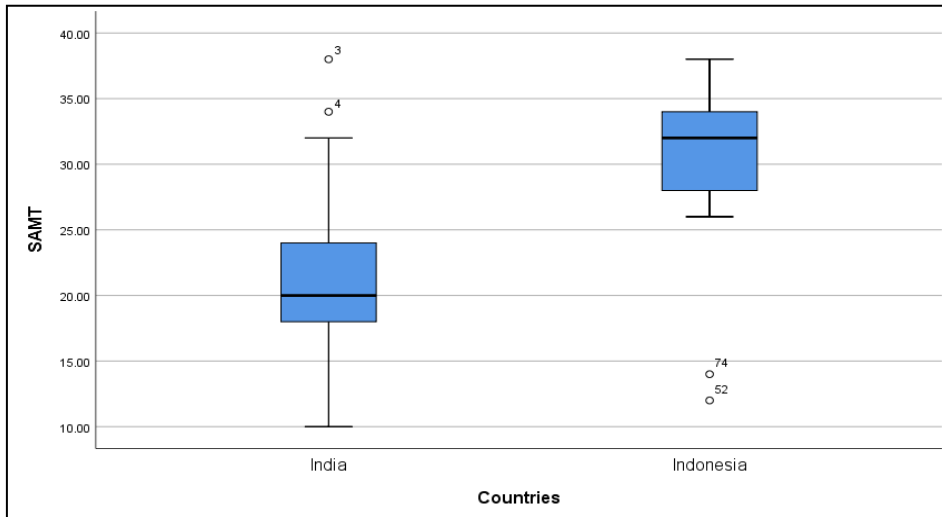


Figure 1: Comparative analysis of SAMT mean between Indian and Indonesian sports-persons

Table 2 shows a significant difference in sports achievement motivation levels between Indian and Indonesian sports-persons. The mean and SD of Sports Achievement Motivation Test (SAMT) between Indian and Indonesian sports-persons were 22.52 ± 6.52 and 30.40 ± 4.74 respectively. The calculated t-value was -6.90 and P-value was 0.00. Hence, The $P < 0.01$ clearly indicated a significant difference in sports achievement motivation levels between Indian and Indonesian sports-persons.

Table 3: Outcomes of Independent t-test, Mean, SD and SEM of SAMT between Indian and Indonesian Female Sports-persons

Group	N	Mean	SD	SEM	t	P
India	25	21.44	6.06	1.21	-6.90	.00
Indonesia	25	30.64	2.75	.55		

*Significant level at 0.01.

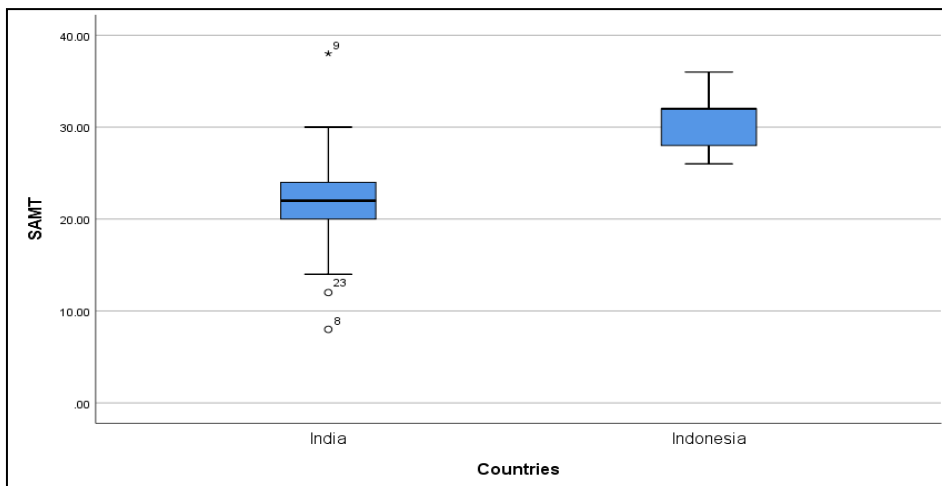


Figure 2: Comparative analysis of SAMT mean between Indian and Indonesian female sports-persons

Table 3 shows a significant difference in sports achievement motivation levels between Indian and Indonesian female sports-persons. The mean and SD of Sports Achievement Motivation Test (SAMT) between Indian and Indonesian female sports-persons were 21.44 ± 6.06 and 30.64 ± 2.75 respectively. The calculated t-value was -6.90 and P-value was 0.00. Hence, The $P < 0.01$ clearly indicated a significant difference in sports achievement motivation levels between Indian and Indonesian female sports-persons.

Table 4: Outcomes of Independent t-test, Mean, SD and SEM of SAMT between Indian and Indonesian Male sports-persons

Group	N	Mean	SD	SEM	t	P
India	25	23.60	6.90	1.38	-3.53	.00
Indonesia	25	30.16	6.18	1.23		

*Significant level at 0.01.

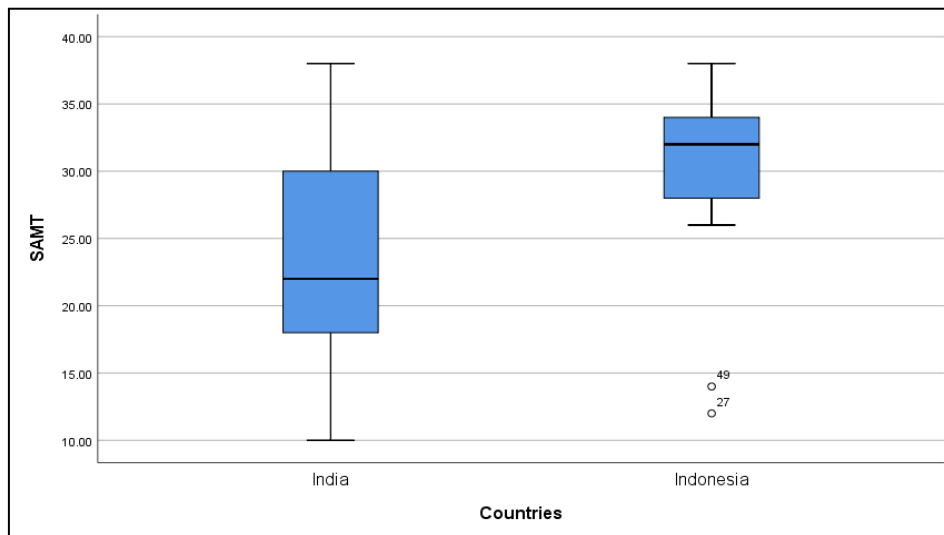


Figure 3: Comparative analysis of SAMT mean between Indian and Indonesian male sports- persons

Table 4 shows no significant difference in sports achievement motivation levels between Indian and Indonesian male sports-persons. The mean and SD of Sports Achievement Motivation Test (SAMT) between Indian and Indonesian male sports-persons were 23.60 ± 6.90 and 30.16 ± 6.18 respectively. The calculated t-value was -3.53 and P-value was 0.00. Hence, The $P < 0.01$ clearly indicated insignificant difference in sports achievement motivation levels between Indian and Indonesian male sports-persons.

Table 5: Outcomes of Independent t-test, Mean, SD and SEM of SCAT between Indian and Indonesian sports-persons

Group	N	Mean	SD	SEM	t	P
India	50	19.06	2.90	.41	3.61	.00
Indonesia	50	16.60	3.82	.54		

*Significant level at 0.01.

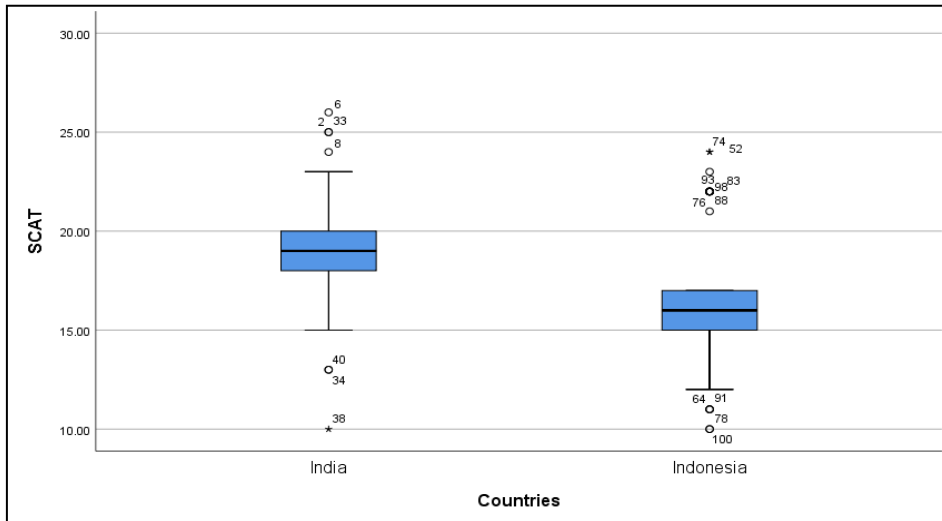


Figure 4: Comparative analysis of SCAT mean between Indian and Indonesian sports-persons

Table 5 shows a significant difference in sports competition anxiety levels between Indian and Indonesian sports-persons. The mean and SD of sports competition anxiety Test (SCAT) between Indian and Indonesian sports-persons were 19.06 ± 2.90 and 16.60 ± 3.82 respectively. The calculated t-value was 3.61 and P-value was 0.00. Hence, The $P < 0.01$ clearly indicated a significant difference in sports competition anxiety levels between Indian and Indonesian sports-persons.

Table 6: Outcomes of Independent t-test, Mean, SD and SEM of SCAT between Indian and Indonesian Female sports-persons

Group	N	Mean	SD	SEM	t	P
India	25	18.60	3.12	.62	2.51	.01
Indonesia	25	16.24	3.50	.70		

*Significant level at 0.05.

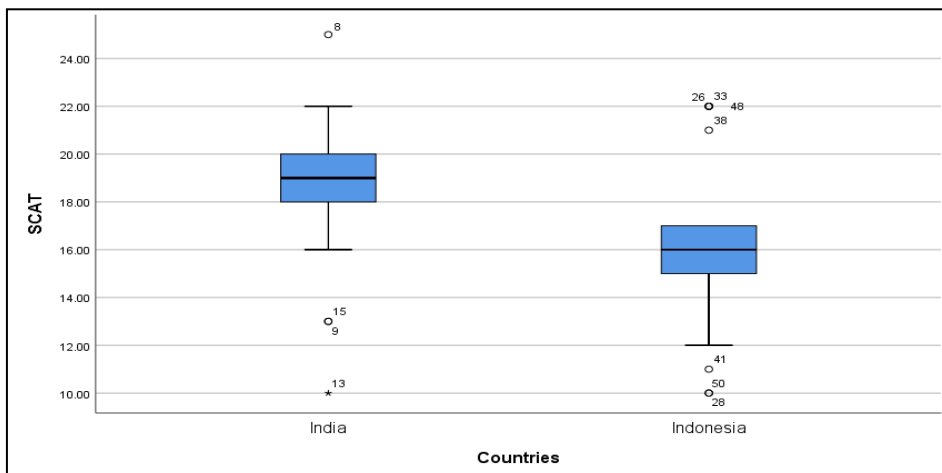


Figure 5: Comparative analysis of SCAT mean between Indian and Indonesian female sports- persons

Table 6 shows no significant difference in sports competition anxiety levels between Indian and Indonesian female sports-persons. The mean and SD of sports competition anxiety Test (SCAT) between Indian and Indonesian female sports-persons were 18.60 ± 3.12 and 16.24 ± 3.50 respectively. The calculated t-value was 2.51 and P-value was 0.01. Hence, the $P=0.01$ clearly indicated insignificant difference in sports competition anxiety levels between Indian and Indonesian female sports-persons.

Table 7: Outcomes of Independent t-test, Mean, SD and SEM of SCAT between Indian and Indonesian Male sports-persons

Group	N	Mean	SD	SEM	t	P
India	25	19.52	2.66	.53	2.58	.01
Indonesia	25	16.96	4.16	.83		

*Significant level at 0.05.

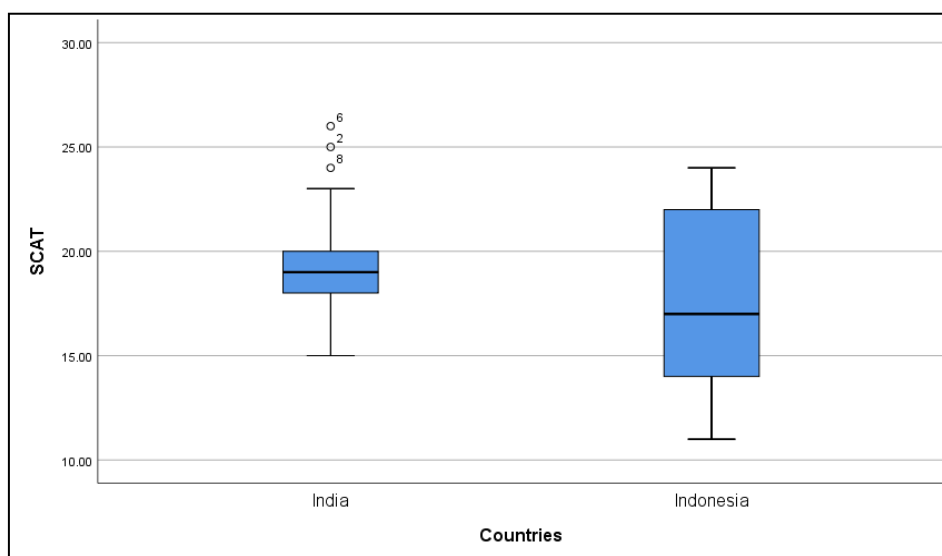


Figure 6: Comparative analysis of SCAT mean between Indian and Indonesian male sports- persons

Table 7 shows no significant difference in sports competition anxiety levels between Indian and Indonesian male sports-persons. The mean and SD of sports competition anxiety Test (SCAT) between Indian and Indonesian male sports-persons were 19.52 ± 2.66 and 16.96 ± 4.16 respectively. The calculated t-value was 2.58 and P-value was 0.01. Hence, The $P=0.01$ clearly indicated insignificant difference in sports competition anxiety levels between Indian and Indonesian male sports-persons.

Table 8: Correlation between SAMT and SCAT of Indian sports-persons

Name of the variables	N	r	p
SAMT	50	-.08	.54
SCAT	50		

*Significance level at 0.01.

Table 8 shows Pearson Product Moment Correlation among the selected variables with P value and sample size. A negative correlation was found ($r = -.08$) between Sports Achievement Motivation Test (SAMT) and Sports Competition Anxiety Test (SCAT) among Indian sports-persons. The P-value $0.54 > 0.01$ clearly indicated insignificant correlation between Sports Achievement Motivation and Sports Competition Anxiety among Indian sports-persons.

Table 9: Correlation between SAMT and SCAT of Indonesian sports-persons

Name of the variables	N	r	p
SAMT	25	-.69*	0.00
SCAT	25		

*Significance level at 0.01.

Table 9 shows Pearson Product Moment Correlation among the selected variables with P value and sample size. A significant negative correlation was found ($r = -.69^*$) between Sports Achievement Motivation Test (SAMT) and Sports Competition Anxiety Test (SCAT) among Indonesians sports-persons. The P-value $0.00 < 0.01$ clearly indicated a significant correlation between Sports Achievement Motivation and Sports Competition Anxiety among Indonesians sports-persons.

4. Conclusions

Based on data meaning and statistical result analysis, the conclusions of this study are as follows:

Firstly, the study found that there was a significant difference in Sports Achievement Motivation and Sports Competition Anxiety levels between Indian and Indonesian sports-persons. It also proved that Indonesian sports-persons had much higher level of Sports Achievement Motivation and much lower level of sports Competition Anxiety than Indian sports-persons.

Secondly, the study observed no significant correlation between Sports Achievement Motivation and Sports Competition Anxiety among Indian Sports-persons.

Finally, the study detected a significant correlation between Sports Achievement Motivation and Sports Competition Anxiety among Indonesians sportspersons which indicate that sports achievement motivation is one of the most important psychic tools to reduce sports competition anxiety and concomitantly helps to maintain performance in sport.

Conflict of Interest Statement

The authors declare no conflicts of interests.

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