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## Comparison of the body image and self-esteem among the fide rated female chess players in Kerala

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### Abstract

The purpose of the study was to compare the comparison of the Body Image and Self Esteem among the FIDE rated female chess players in Kerala. 180 FIDE rated female chess players were selected as the subjects for the study. FIDE International Rating is used in Chess to calculate an estimate of the Chess playing strength of a player. The subjects under the study were equally assigned to six Groups based on their FIDE International Ratings. The six Groups are given below: Group A- Players with the Rating of 2100 and above; Group B- Players with the Rating between 1900 and 2099; Group C- Players with the Rating between 1700 and 1899; Group D- Players with the Rating between 1500 and 1699; Group E- Players with the Rating between 1200 and 1499; Group F- Players with the Rating between 1000 and 1199. This study examines the differences between the selected groups of FIDE rated female chess players on Body Image & Self-Esteem. Body Image was assessed by the 23-item Body Cathexis Scale; Self-Esteem was measured using the 10-item Rosenberg Self-Esteem Scale (RSE). ANCOVA & Scheffe's Post Hoc test were used to determine the difference between the different groups under the study. The findings of the study indicated that the Players of higher FIDE rating showed better Body Image and Self Esteem than the Players of lower FIDE rating.

**Keywords:** Body image and self-esteem, chess & FIDE rating

### Introductions

Perceptions of the physical body are part of self-concept, and they form an integral part of overall self-worth. The evaluation of one's size, weight, or other aspects of the body that determine the manner in which the body is viewed are the essential components of the physical aspect of body image. The recent heightened concern in this area has arisen as a result of the 'epidemic' of eating disorders. Body image is especially relevant to sport and exercise psychology work on eating disorders and related issues with female athletes. Exercise may be associated with body dissatisfaction, and athletes particularly face tremendous pressure to maintain an ideal body. This pressure may be partly responsible for sustaining the cyclical repetitious nature of eating disorders. The female athlete triad, which includes disordered eating, amenorrhea and osteoporosis, is the physical manifestation of a pathological adherence to exercise, and is often linked with an inappropriate diet <sup>[15]</sup>.

Body image assessment techniques were initially produced to help psychologists understand body image disturbances. Measurement procedures have mainly focused on two aspects of body image: a perceptual component and a subjective component. The perceptual component is also known as size perception accuracy, and is measured by subjects matching the width of the distance between two points to their own estimation of their body size or a particular body site. It has also been measured using schematic figures of different body sizes, where individuals are asked to choose the body size they think reflects their own. The subjective component refers to the degree of satisfaction or dissatisfaction felt about the body's appearance and function. This has been measured by comparing actual and ideal body sizes many questionnaire measures, such as Secord and Jourard's Body Cathexis Scale also assess subjective representations of physical appearance, whereby respondents rate the degree of satisfaction they feel about various body parts <sup>[7]</sup>.

Although research into body image initially focused on eating-disordered populations, it has now progressed to the general population. A normative discontentment with body image has been discovered, with a large proportion of females dieting and admitting to their weight affecting how they perceive themselves. The purpose of the study was to compare the Body Image and Self Esteem of the FIDE rated female chess players in Kerala. 180 FIDE rated female chess players were selected as the subjects for the study.

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**Methodology**

**Subjects**

Kerala was taken as the universe for the present study. 180 FIDE rated female chess players were selected as the subjects for the study. FIDE International Rating is used in Chess to calculate an estimate of the Chess playing strength of a player. The subjects under the study were equally assigned to six Groups based on their FIDE International Ratings. The six Groups are given below: Group A- Players with the Rating of 2100 and above; Group B- Players with the Rating between 1900 and 2099; Group C- Players with the Rating between 1700 and 1899; Group D- Players with the Rating between 1500 and 1699; Group E- Players with the Rating between 1200 and 1499; Group F- Players with the Rating between 1000 and 1199.

**Tools**

Body Image was assessed by the 23-item Body Cathexis Scale; Self-Esteem was measured using the 10-item Rosenberg Self-Esteem Scale (RSE).

**Procedure**

**Body image**

Body image was assessed by the 23-item Body Cathexis Scale [7]. This is also a self-report questionnaire measuring the individual's attitude towards their body. Body Cathexis refers to the degree of feeling of satisfaction or dissatisfaction with various parts of the body. Response to each item is along a five-point Likert-type scale in the direction of dissatisfaction with a 'not important to me' option receiving a score of 0 if selected. This will result in a summed score of 0 - 115. The higher the score, the more

dissatisfaction with the body is indicated, the lower the score, the greater the satisfaction with the appearance of one's body.

Scoring: The score was recorded to the nearest whole number.

**Self-Esteem**

Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (RSE) [14]. This is a self-administered questionnaire measuring subjective perceptions of self-esteem, or perceived self-worth on a Likert-type scale of 1 to 4 in the direction of negative self-esteem, yielding a summed score of 10 - 40. Half the items are expressions of positive self-esteem and half are negative. The higher the score, the more negative the self-esteem. Low scores indicate high self-esteem. The RSE is the most widely used measure of global self-esteem within health psychology.

**Procedure**

180 FIDE rated female chess players were selected as the subjects for the study. FIDE International Rating is used in Chess to calculate an estimate of the Chess playing strength of a player. The subjects under the study were equally assigned to six Groups based on their FIDE International Ratings. The six Groups are given below: Group A- Players with the Rating of 2100 and above; Group B- Players with the Rating between 1900 and 2099; Group C- Players with the Rating between 1700 and 1899; Group D- Players with the Rating between 1500 and 1699; Group E- Players with the Rating between 1200 and 1199; Prior to the test, a meeting of all the selected subjects were held and they were explained regarding the objectives of the study, test procedure and effort they had to put in. The necessary data will be collected by administering the tests for the chosen variables.

**Statistical Analysis of Data**

ANCOVA & Scheffe's Post Hoc test were used to determine the difference between the different Groups under the study.

**Results**

The data pertaining to the vital capacity of university level Female Athletes from six different games in Kerala were analyzed by ANCOVA & Scheffe's Post Hoc test with the help of SPSS version 17. Findings pertaining to the Body Image & Self Esteem of the subjects under the study was subjected to analysis of covariance have been presented in the table 1.

**Table 1:** Difference in Means of the Different Groups of FIDE rated female chess players in Body Image and Self-Esteem

Variable	Sources of Variance	df	Sum of Square	Mean Square	'F' Value
Body Image	Within group	173	104.95	0.607	193.71 *
	Between groups	5	587.56	117.51	
Self-Esteem	Within group	173	4.57	0.026	47.35 *
	Between groups	5	6.249	1.250	

\* Significant at 0.05 level of confidence

F 0.05 (5,173) = 2.21

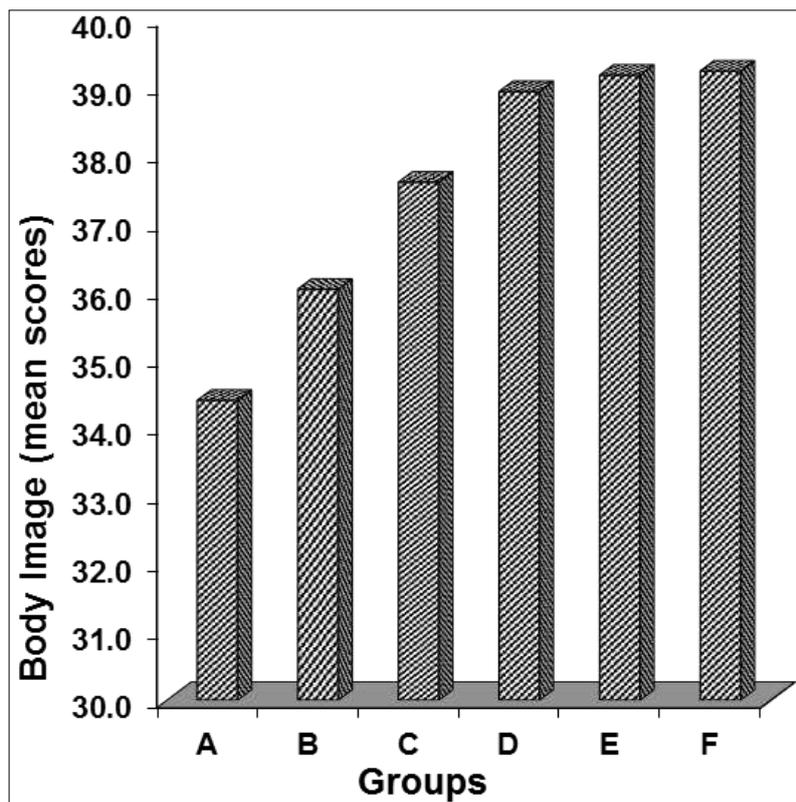
As the 'F' value was found to be significant in the case of the selected variables, the Scheffe's Post Hoc test was applied to test the significance of the difference between the paired means separately for the Body Image & Self Esteem

of the subjects under the study were presented in tables 2 & 3. The mean difference of the Body Image & Self Esteem of the subjects under the study for the selected variable is presented in figures 1 & 2.

**Table 2:** Difference between the paired means separately for the Body Image of the FIDE rated female chess players in Kerala

Group A	Group B	Group C	Group D	Group E	Group F	Mean Difference
34.40	36.03					1.63 *
34.40		37.60				3.20 *
34.40			38.93			4.53 *
34.40				39.17		4.77 *
34.40					39.23	4.83 *
	36.03	37.60				1.57 *
	36.03		38.93			2.90 *
	36.03			39.17		3.14 *
	36.03				39.23	3.20 *
		37.60	38.93			1.33 *
		37.60		39.17		1.57 *
		37.60			39.23	1.63 *
			38.93	39.17		0.24
			38.93		39.23	0.30
				39.17	39.23	0.06

\* Significant at 0.05 level of confidence. The computed value of critical difference at 0.05 level is 0.97.



**Fig 1:** Body Image of the FIDE rated female chess players in Kerala (Means in numbers) are presented in figure1.

**Table 3:** Difference between the paired means separately for Self- Esteem of the FIDE rated female chess players in Kerala

Group A	Group B	Group C	Group D	Group E	Group F	Mean Difference
21.92	23.02					1.10 *
21.92		24.22				2.30 *
21.92			25.58			3.66 *
21.92				25.67		3.75 *
21.92					25.72	3.80 *
	23.02	24.22				1.20 *
	23.02		25.58			2.56 *
	23.02			25.67		2.65 *
	23.02				25.72	2.70 *
		24.22	25.58			1.36 *
		24.22		25.67		1.45 *
		24.22			25.72	1.50 *
			25.58	25.67		0.09
			25.58		25.72	0.14
				25.67	25.72	0.05

\* Significant at 0.05 level of confidence. The computed value of critical difference at 0.05 level is 0.97.

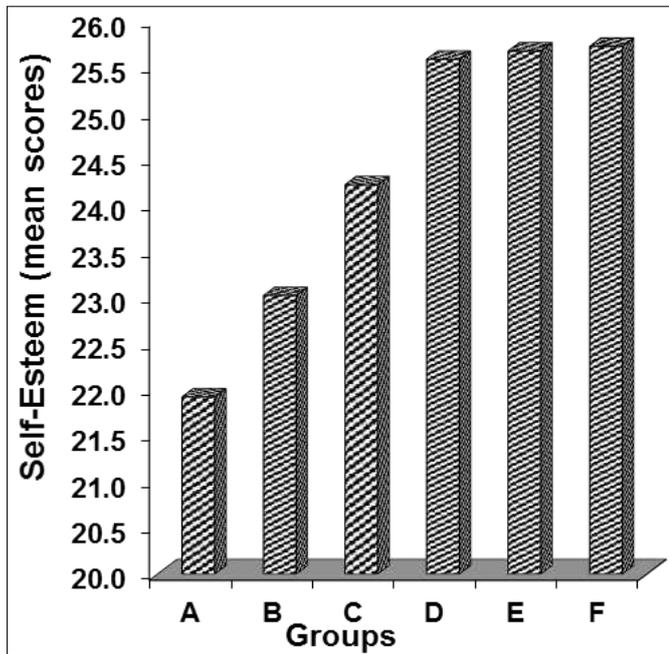


Fig 2: Self-Esteem of the FIDE rated female chess players in Kerala (Means in numbers) are presented in figure 1

### Discussion

The analysis of the results revealed that Players with higher FIDE ratings have showed better scores in Body Image and Self Esteem than Players with lower FIDE ratings. After achieving higher FIDE rating the highly rated female chess players may see a tangible achievement in their goals, they feel better and they develop a sense of competence that in turn provides them with feelings of mastery and control <sup>[5]</sup>. The power of concentration, single mindedness and focusing ability are high among the higher rated chess players. All of these factors may contribute to enhance Self-Esteem of these players. In addition, they also developed their chess playing strength than lower rated players which in turn make them feel better about themselves and improve their self-confidence. Perceptions of the physical body are part of self-concept, and they form an integral part of overall self-worth. The evaluation of one's size, weight, or other aspects of the body that determine the manner in which the body is viewed are the essential components of the physical aspect of body image <sup>[13]</sup>. The body image changed in the higher rated chess players would be the result of participating in tournaments frequently. They gain new social experiences with their colleagues by participating in tournaments as higher rated chess players <sup>[14]</sup>. All of these factors may contribute to enhance Self-Esteem & Body Image of higher rated female chess players than others.

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