

## A Study Body Image in Adolescent and Young Females Based on their Physical Activity Status

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### Abstract

Body image is associated with a person's beliefs and perceptions regarding their appearance. Negativity in body image sometimes leads to other psychological and physical illnesses. Keeping the immense importance of body image in the overall wellbeing of females, the present study was planned to assess body image in the female of 16-28 years age group based on their physical activity status. This study was conducted on 60 adolescent females (Ave. age 17.21 years) and 60 young females (Ave. age 25.28 years). The additional parameter was their physical activity status. The sample consists of 60 physically active and 60 sedentary female participants equally representing adolescent and young females. The sample includes students and working- non-working females. The sample was selected from the Raipur district of Chhattisgarh. The purposive sampling method was used for data collection. The body image of these subjects was determined by BID (Body Image Questionnaire) prepared by Agashe and Karkare and standardized in 2008. Physical activity status was based on routine such as cycling, walking, yoga or physical exercise of moderate intensity. Household chores were not considered as regular physical activity. 2x2 ANOVA technique was employed and the results revealed a significant main effect of age of adolescent and young females and physical activity status on body image. Body image in young females was found to be significantly better as compared to adolescent females while females with regular physical activity showed significantly better body image than the sedentary adolescent and young females. Not surprisingly two factors interaction of age x physical activity status was not found to be statistically significant. It was concluded that adolescent females are more at risk to develop negative body image as compared to young females while regular physical activity may prevent the development of negative body image in adolescent and young females.

**KEYWORDS:** Body image, young and adolescent, females, physical activity

### Introduction

It is a challenge for an adolescent to have a healthy body image and to some extent in young females also. Concern about body image in females is a major psychophysical issue and its prevalence in adolescent and young females are very high (Mission Australia Survey, 2013). The importance given to studying body image is because of its underlying association with several psychological and physical ill-effects such as low self-esteem, eating disorders, signs of depression, variable mood states and unusual physical activity patterns (Coker and Abraham, 2014; Neumark et al., 2006; Mond et al, 2006; Paxton et al., 2006). Researchers like Striegel-Moore and Franko, 2002; Tiggemann and Slater, 2004 reported that body dissatisfaction can affect females of all age groups but with variable intensity. There is a cognitive aspect

related to body image. It has also been proposed that physical activity may promote positive body image. Physical activity is always confused with physical fitness or exercise but its area is different and it is the movement initiated by skeletal muscles associated with the release of energy. Physical activity may be in the form of aerobics, stretching (muscle/bone). Specific exercise routines are followed by individuals to maintain body composition and few researchers suggested that regular physical activity may be good for body image (Kilpatrick et al, 2005) but sometimes it may hurt body image also. Hence it is essential to know that whether with the passage of time body image gets better i.e. with the transition from adolescence to adulthood a female is better adjusted with body image. It is also necessary to analyse the impact of meaningful physical activity on the body image of adolescents and young females. The data on these two parameters can be used to form preventive measures for body image dissatisfaction in females.

### **OBJECTIVE :**

Following objectives were framed by the researcher to conduct this study :

1. To assess the main effect of age on the body image of female participants.
2. To assess the main effect of physical activity status on the body image of adolescents and young females.
3. To assess the joint action effect of age and physical activity status on the body image of female participants.

### **HYPOTHESIS :**

1. Young females will have significantly better body image as compared to adolescent females.
2. Physically active females will have significantly better body image as compared to sedentary females.
3. Age and physical activity status will together significantly influence the body image of female participants.

### **METHODOLOGY**

#### **Sample**

This study was conducted on 60 adolescent females (Ave. age 17.21 years) and 60 young females (Ave. age 25.28 years). The additional parameter was their physical activity status. The sample consists of 60 physically active and 60 sedentary female participants equally representing adolescent and young females. The sample includes students and working- non-working females. The sample was selected from the Raipur district of Chhattisgarh. The purposive sampling method was used for data collection.

#### **Tools**

The body image of the female participants was measured through BIQ i.e. Body Image Questionnaire standardized by Agashe and Karkare (2008). There are 25 statements in this questionnaire with multiple options for each statement. The test-retest reliability of this questionnaire was 0.82 and the validity coefficient of 0.87 obtained from the Lawshe Method proves its validity. The higher the score, the lower the body image is the scoring pattern suggested by the authors.

In the present study, the physical activity status (active/sedentary) of female participants was assessed by their involvement in regular activities such as moderate exercise, walking, yoga, cycling while household chores were not considered under the framework of physical activity status.

**Procedure**

120 female participants including 60 adolescents and 60 young females were selected based on their physical activity status. A body image questionnaire was administered and responses were scored precisely as instructions given in the manual. With the help of 2x2 ANOVA, four cells were formed and the data was placed in it. The analysis is given in table 1 and 2 respectively.

**RESULTS :**

**Table 1**  
**Effect of Age (A) x Physical Activity Status (B) on**  
**Body Image of Females**

		Physical Activity Status (B)		Marginal Mean
		Active (b <sub>1</sub> )	Sedentary (b <sub>2</sub> )	
Age(A)	Adolescent Females (a <sub>1</sub> )	N=30 M=18.80 S.D. = 10.60	N=30 M=22.43 S.D.=4.91	20.61
	Young Females (a <sub>2</sub> )	N=30 M=10.10 S.D.=4.67	N=30 M=14.53 S.D.=7.17	12.31
Marginal Mean		14.45	18.48	

**ANOVA Summary**

Source of Variation	SS	df	MS	F
A	2066.700	1	2066.700	39.36**
B	488.033	1	488.033	9.29**
AB	4.800	1	4.800	0.09(NS)
Within treatment (Error)	6090.333	116	52.503	

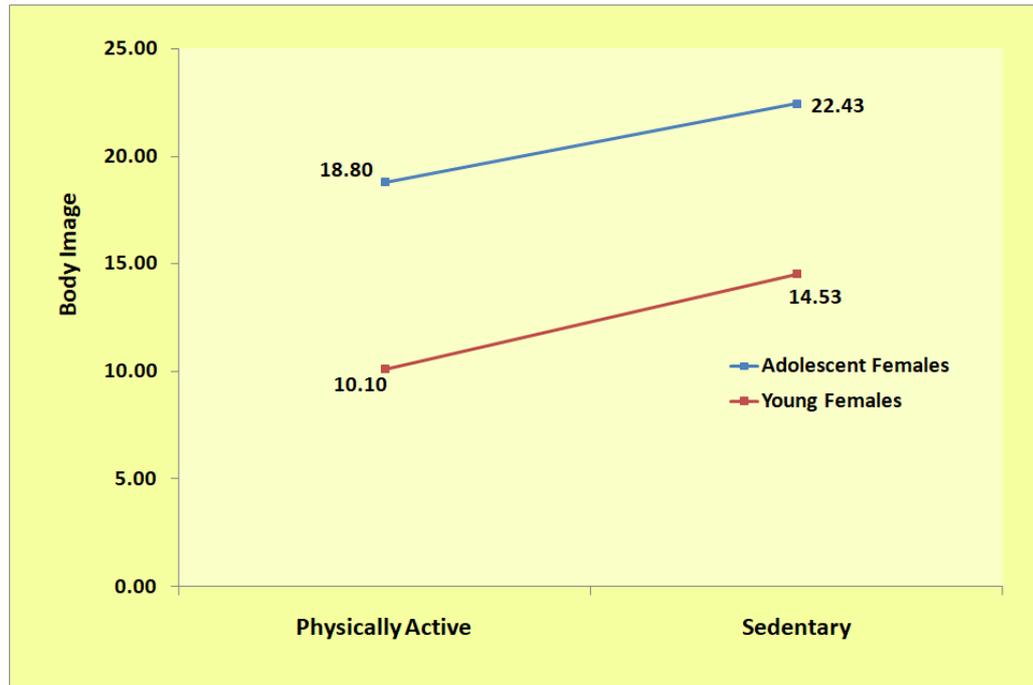
\*\* Significant at .01 level; NS Not Significant

Table 1 reveals the following facts–

- The main effect of participants age on body image was statistically significant which is denoted by F=39.36 and according to the significant F value at .01 level it can be said that the body image of young females was significantly better (M=12.31) as compared to the body image of adolescent females (M=20.61). The findings are based on the higher the score, the lower the body image scoring pattern of the instrument.

- The main effect of physical activity status on body image of females of 17 to 28 years age group was also significant which is denoted by  $F=9.29$  and according to this value at .01 it can be said that the body image in physically active ( $M=14.45$ ) adolescent and young females are far superior to the body image of sedentary ( $M=18.48$ ) adolescent and young females.
- The two-factor interaction (Age x physical activity status) on the body image of females was not found to be statistically significant and can be seen from two parallel lines in the graph shown below.

**Figure 1: Two x Two Factor Interaction Effect**



### DISCUSSION:

The first part of the results showed that body image in young females was significantly better as compared to adolescent girls in the age bracket of 17-19 years. Adolescent females are more conscious about their looks and appearance and thereby they are more prone towards inferior body image whereas although young females are not immune to body dissatisfaction but to a slightly lesser extent because of their maturity. Hence the first part of the result is not surprising because body dissatisfaction has been recognized among major issues among adolescents (Holmqvist and Frisen (2012).

The second part of results showed that physically active females in terms of regular exercise, cycling, swimming or yoga possesses more magnitude of positive body image as compared to sedentary females. Schilder, 1935, Drought, 1980 have documented that meaningful physical activity such as exercise programs, yoga, cycling or swimming are dynamic activities and they keep body composition in proper order along with maintaining weight. Apart from this exercise tone our musculature and a person feels good about body appearance and hence the results of the present study are also consistent with previously reported literature.

When two factors are strong and significant at .01 level it invariably negates the interaction effect and hence the two-factor interaction effect of age and physical

activity status was not statistically significant on the body image of selected female participants.

### **CONCLUSION:**

1. Body image in young females was significantly superior as compared to adolescent females.
2. Regular physical activity in the form of moderate-intensity exercise, walking, cycling etc. are beneficial for adolescent and young females body image.

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