IJNRD.ORG

ISSN : 2456-4184

INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG

An International Open Access, Peer-reviewed, Refereed Journal

A co-relational study to assess the Big 5 Personality Traits and Self-Concept with body image and to assess the effectiveness of Planned Teaching Programme (PTP) to enhance the level of Self-Concept among adolescents in selected Private school of New Delhi

[1]Tanya Masiwal, [2]Arshi Anjum Khan, [3]Anshu Tomar

[1]Masters in Nursing, [2]Assistant Professor, Psychiatric Mental Health Nursing Department, [3]Assistant Professor, Community Health Nursing Department,
[1]Psychiatric Mental Health Nursing Department
[1]Holy Family College of Nursing, New Delhi, India

ABSTRACT

*Background: Adolescents are susceptible to numerous psychological stressors that are frequently overlooked or untreated. Self-concept has a major part in determining a person's personality as it indicates how a teenager sees himself or herself in areas where success is valued. **Purpose:** To assess the Big 5 Personality Traits, Self-Concept with body image among adolescents, to develop, administer and evaluate the effectiveness of Planned Teaching Program (PTP) to enhance the level of Self-Concept, to determine the correlation between Big 5 Personality Traits, Self-Concept with body image and to find out the association between Self-concept of adolescents with the selected demographic variable. **Method:** A quantitative research approach with one group pre-test and post-test design was used. A total of 120 adolescents in the age group of 13-15 years were selected using the total enumeration sampling technique. Three highly versatile instruments were used to collect the data: NEO-IPIP Scale, Robson Self-concept Questionnaire (RSCQ-30) and Body Shape Questionnaire (BSQ-16). Both descriptive (percentage, frequency, mean and standard deviation) and inferential statistics (Spearman's rank and chi-square test) were used for the analysis. **Result:** The findings revealed that the mean post-test self-concept score (128.9) was higher than their mean pre-test scores (95.85) with a mean difference of 33.05 There was a moderate negative co-relation with r_s= -0.35 between the level of self-concept and body image and a very weak negative co-relation with r_s= -0.18 between Big 5 Personality trait: extraversion and body image. A significant association was found between the level of self-concept with selected demographic variables. **Conclusion:** The study concluded that the planned teaching program effectively enhanced adolescents' self-concept. Additional research is necessary to fully understand the elements influencing adolescents' self-concept and the interventions that are required.*

Index Terms: Adolescents, Self-concept, Big 5 personality traits, and Body image

INTRODUCTION

Adolescence is the time between the ages of 10 and 19.[1] With 253 million teenagers making up 21% of the overall population, India has the highest adolescent population in the world.[2] The phase between adolescence to maturity is the transitional one. As a child goes through adolescence, he or she is subjected to many different challenges, various bodily changes, life stressors, and opportunities. Positivity in one's self-concept is crucial in addressing these difficulties. Self-concept and self-esteem issues are common in students with learning challenges, and they can contribute to a variety of problems, including trouble adjusting, substance abuse, depression, and suicidal thoughts. Personality influences our life and significantly correlates with low and high self-concept. It includes moods, attitudes, and ideas and is best exhibited in interactions with other people. A person's character is shaped by both nature as well as nurture. Personality is both largely consistent and flexible with each individual's level of change being unique. [3] D.W. Fiske (1949) was a pioneer psychologist who started to believe that there are only five core personality factors known as OCEAN (openness, conscientiousness, extraversion, agreeableness, neuroticism). Later, this idea was developed by several psychologists, including Norman, Smith, Goldberg, McCrae, and Costa. [4]

NEED OF THE STUDY

Body image and self-concept are crucial things in this period of age, especially among women and are thus impactful to one's mental health, even could lead to some disorders, and influencing other areas of life. It is the image we have of ourselves and is influenced by many forces, including our interaction with important people in our lives. [5] Various maladaptive behavioral and emotional issues in adolescence have been linked to negative self-concept. Adolescents' body image which generally is poor due to some changes happen caused by puberty because the images found in the social media are internalized to be the ideal body. Continuous exposure to these ideal bodies may affect adolescents' perception of their bodies in a negative way both physical and mental health, and Mahon and Hevey's study (2021) observed that girls' opinions of their bodies are more strongly and detrimentally affected by social media than boys' because they interact with and engage more in physique-related content.[6] One of the most crucial measures educators and parents can do to create a learning environment for adolescents is to help them develop their confidence. Thus, consideration of individual variations in personality traits and self-concept is important in understanding body image concerns. The present study was taken up to find out the level of self-concept and hence, take necessary interventions to enhance it. As a result, the study's goal was successfully met.

RESEARCH METHODOLOGY

The methodology section outlines the plan and method that how the study is conducted. This is a pre-experimental (One group pre-test post-test design) quantitative study. It includes population, sample, sampling technique, sample size, variables, tools and theoretical framework.

3.1 Population and Sample
A total of 120 adolescents (74 females and 51 males) in the age group 13-15 years from St. Michael's Senior Secondary School, Pusa Road were selected using a total enumerative sampling technique to select the adolescents and convenient sampling to select the private school that met the following inclusion criteria: a) Adolescents in the age group 13-15 years. b) Adolescents whose parents have given consent. c) Adolescents who are willing to participate in the study. d) Adolescents who were available during the time of data collection. The exclusion criteria included those with some health issues and were under any treatment. The variables are dependent- Self-concept and independent- Planned teaching programme (PTP).

3.2 Data and Sources of Data
An Online Google consent form was generated, and the link was shared to take the consent from participant parents and verbal consent from participants. The researcher has used standardized tools to collect the data.

The tool is divided into 2 sections for which reliability was already established to collect the data for the present study. Section A: Demographic Profile (Age, gender, religion, type of family, family monthly income, birth order and any long-term illness) and Section B1: Mini IPIP [7] (0.80) Section B2: RSCQ-30 [8] (0.89), Section B3: BSQ-16 [9] (0.93). Tool tryout was carried out on 4 study subjects to check it for clarity, relevance and to determine the time taken for collecting the data. The validity of the tool and content was established by **11 experts** and modified accordingly. Pilot study was conducted over 16 samples at Sahoday Senior Secondary School, Hauz Khas.

Data collection procedure

Data collection was done from 17th Jan to 30th Jan 2023. On the first day collected the data for Big 5 Personality traits and body-image concerns and pre-test assessment for self-concept. Each assessment lasted for 20-25 minutes. On the second day conducted a planned teaching program (PTP) on the topic of enhancement of self-concept among adolescents which took 2 hrs and 30 mins including the lecture method and selected activities. To ensure continuous motivation and maximum recall; selected activities with the collection of the previous day's activities were done every second day. On day 11th post-test assessment was done using RSCQ-30.

3.3 Theoretical framework

The conceptual framework of the present study is based on **Imogene King's Goal Attainment Model (1981).** The model focuses on interpersonal relationships where the nurse and client have an interaction that is influenced by the perception of both. This interaction leads to mutual goal setting that is to be achieved by the client. This model is based on three interacting systems, which are the personal system, interpersonal system, and social system. The concepts of the theory are Perception, Action, Interaction and Communication, and Transaction. This model focused on the interpersonal relationship between the investigator and adolescents.

3.4 Statistical tools and econometric models

Data analysis is the schematic organization and synthesis of research data and testing of research hypothesis using the data. To make the results understandable, the scores were subjected to statistical analysis using both descriptive and inferential statistics. The following plan of analysis was developed with expert opinion.

Section-A: Description of sample characteristics

Frequency and percentage distribution of demographic profile of the adolescents of selected private school of New Delhi.

Section-B: Assessment of Big 5 Personality Traits, Self-concept and Body image.

Frequency and percentage distribution of Big 5 Personality traits, Self-concept and Body image.

Section-C: Findings related to the effectiveness of Planned Teaching Programme (PTP) on Enhancement of Self-concept among adolescents.

Mean, standard deviation, standard error and mean difference of Self-concept among adolescents. Paired t-test to find the effectiveness of Planned Teaching Programme (PTP) on Enhancement of Self-concept among adolescents.

Section-D: Findings related to the relationship between Big 5 Personality traits, Self-concept with Body image.

Correlation between Big 5 Personality traits, self-concept and body image among adolescents by using Spearman's rank correlation.

Section-E: Findings related to association between Self-concept of adolescents with selected demographic variable.

Chi-square to find out the association between Self-concept of adolescents with selected demographic variable.

IV. RESULTS AND DISCUSSION

4.1

TABLE-1
Frequency and percentage distribution of sample characteristics of adolescents
n=125

DEMOGRAPHIC PROFILE	FREQUENCY (f)	PERCENTAGE (%)
Age of respondents		
• 13-15 years	124	99.2 %
• Above 15 years	1	0.8 %
Gender		
• Male	51	40.8 %
• Female	74	59.2 %
• Transgender	0	0 %
Religion		
• Hindu	94	75.2 %
• Muslim	15	12 %
• Sikh	8	6.4 %
• Christian	8	6.4 %
• Others, specify it	0	0 %
Type of family		
• Nuclear	71	56.8 %
• Extended	8	6.4 %
• Joint	46	36.8 %
Monthly family income		
• ≤ Rs. 10,000	5	4 %
• Rs. 10,001-40,000	28	22.4 %
• Rs. 40,001-70,000	45	36 %
• ≥ Rs. 70,000	47	37.6 %
Birth order		
• 1st child	64	51.2 %
• 2nd child	49	39.2 %
• 3rd child	12	9.6 %
• 4th child or above	0	0 %
Any long-term illness		
• No	121	96.8 %
• Yes, specify it	4	3.2 %
✓ Deafness	1	
✓ G6PD deficiency	1	
✓ Sinusitis	1	
✓ Hypothyroidism	1	

The data presented in Table 1 shows that out of 125 adolescents, majority were in the age group of 13-15 years i.e., 124 (99.2 %) and 1 (0.8 %) was above 15 years of age. Majority of them were females i.e., 74 (59.2 %) and 51 (40.8 %) were males. 75.2 % were Hindus, 12 % were Muslims and 6.8 % each in Sikh and Christian category. Majority of them were from nuclear family i.e., 71 (56.8 %), 8 (6.4 %) were from extended family and remaining 46 (36.8 %) were from joint family. Regarding family monthly income, majority had ≥ Rs. 70,000 i.e., 47 (37.6%), 45 (36 %) had Rs.40,001-70,000, 28 (22.4 %) had between Rs.10,001-40,000 and 5 (4 %) had ≤ Rs. 10,000. Majority of them 64 (51.2 %) adolescents were 1st child in family, 49 (39.2 %) were 2nd child and 12 (9.6 %) were 3rd child. 121 (96.8 %) had no long-term illness and 4 (3.2 %) had long term illness (Deafness, G6PD deficiency, Sinusitis, Hypothyroidism).

Out of 125 adolescents, 5 were excluded so now, total participants in the study are 120 adolescents. The findings of the study revealed that out of 120 adolescents, the majority of them 53 (44.16%) were high in openness, 53 (44.16%) were low in conscientiousness, 43 (35.83%) were high in extraversion, 53 (44.16%) were very high in agreeableness and 50 (41.67%) were neither high nor low in neuroticism. The majority of them 59 (49.16%) were having no concerns and 29 (24.17%) were having mild concerns whereas 18 (15%) were having moderate concerns and 14 (11.67%) had marked concerns about their body image. It

also showed that 59 (49.17%) had low self-concept, 40 (33.33%) had average self-concept and 21 (17.5%) had high self-concept. The findings of the study shown in Table 2 and Figure 1 revealed that the planned teaching program (PTP) was effective in enhancing the level of self-concept among adolescents with a mean difference of 33.05.
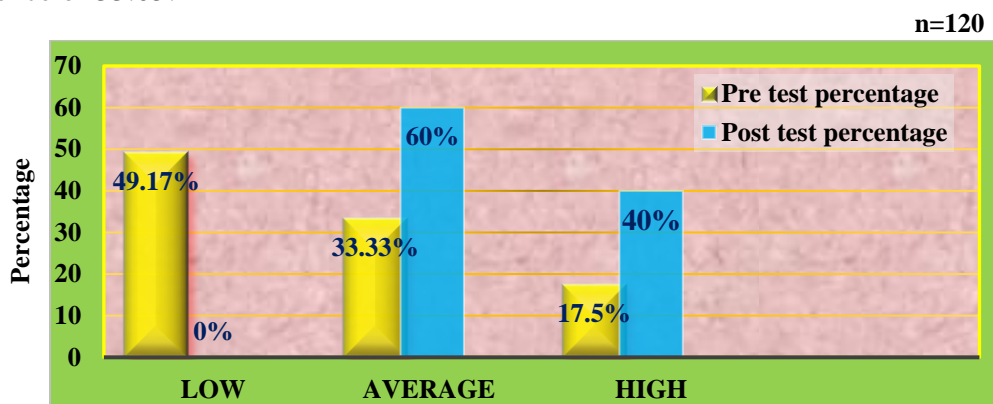
n=120

Figure 1: Percentage distribution of level of Self-concept among adolescents before and after the administration of Planned teaching program (PTP)

Table 2: Mean, S.D. and Mean difference (MD) of the level of self-concept among adolescents.

n=120

	Scores	Mean	SD	MD	t value
Level of Self-concept	**Pre-Test**	95.85	33.11	33.05	17.29
	Post-Test	128.9	25.99		

t (118) = 1.96 *p<0.05 *Significant at 0.05 level

Table 2 shows that there is a statistically significant mean difference found between pre-test and post-test scores of levels of self-concept among adolescents Hence, the research hypothesis (H_1) is accepted and null hypothesis (H_{01}) is rejected.

Table 3: Co-relation between extraversion and body image among adolescents

n=120

Variables	Mean	SD	r value
Extraversion	12.35	3.68	-0.18
Body image	87.19	28.85	

t (118) = 0.17 *p<0.05, Significant at 0.05 level

Table 3 shows that there exists a very weak negative correlation between the Big 5 Personality trait: extraversion and body image.

Table 4: Co-relation between the level of self-concept and body image among adolescents

n=120

Variables	Mean	SD	r value	p value
Level of self-concept	95.85	33.11	-0.35	0.00*
Body image	87.19	28.85		

t (118) = 0.17 *p<0.05, Significant at 0.05 level

Table 4 shows moderate negative correlation between self-concept and body image among adolescents. Hence, the research hypothesis (H$_2$) is accepted and null hypothesis (H$_{02}$) is rejected.

Table 5: Association between the self-concept of adolescents with the selected demographic variable

n=120

Demographic profile	High	Average	Low	Chi square (χ2)	df	Table value	p value
Gender • Male • Female • Transgender	16 14 0	19 21 0	14 36 0	**6.084**	4	9.488	0.047*

t (4) = 9.488 *p<0.05, Significant at 0.05 level

Table 5 shows that there is an association between the self-concept of adolescents with the selected demographic variable. Hence, the research hypothesis (H$_3$) is accepted and null hypothesis (H$_{03}$) is rejected.

The results of this research study revealed that extraversion personality traits and self-concept were significant negative predictors of body image. In terms of gender differences, females had a low level of self-concept when compared with males. As a result, it could be seen that personality traits, self-concept and body image influence an individual's life to some extent.

The findings of the study had been discussed in terms of the objectives, theoretical base and hypothesis formulated and revealed that in general, body image has a negative and significant correlation with self-concept. The more individual's body image concern, the lower the self-concept in the individual, and vice-versa. There was a significant mean difference t-value of 17.29 (critical value= 1.962) which was significant at 0.05 level. Hence, the planned teaching program (PTP) effectively enhanced adolescents' self-concept. Also, there is a moderate negative correlation between self-concept and body image (r$_s$= -0.35) very weak negative correlation between the Big 5 Personality trait: extraversion and body image (r$_s$=-0.18, p<0.05). Moreover, there was a significant gender difference with the self-concept (χ2=6.084 p ≤ 0.05).

The findings were consistent with the study conducted by **R. Gayatri, Kurup Rajika (2019)** [10] which shows that there exists a correlation between body image and self-esteem, also there is a significant mean difference in the perception of body image among male and female employees as the calculated t-value is 0.005 and the critical value of t is 0.05 which is significant at 0.01 level. The study notably showed a relation between body image and self-esteem (r= -0.263, p=0.004).

The findings of the study were inconsistent with the study conducted by **Křížová Veronika (2019)** [11] which showed neuroticism to be a significant predictor of both body image dissatisfaction and social physique anxiety, however, extraversion was not revealed as a predictor of social physique anxiety. Correlation analyses did not show any of the traits of extraversion, conscientiousness, agreeableness, and openness to experience to be significantly related to body image dissatisfaction, nor was it shown in the case of the correlation between openness and social physique anxiety.

ACKNOWLEDGEMENT

REFERENCES

1. World Health Organization. Adolescent Health. WHO; 2019. Available from: https://www.who.int/maternal_child_adolescent/adolescence/en/.
2. Census of India Website (2023): Office of the Registrar General & Census Commissioner, India. Available from: http://censusindia.gov.in/.
3. DiSalvo, D. (2018, August 20). Can Personality Change or Does It Stay the Same for Life? A New study suggests it's a little of both. Retrieved December 29, 2022, from https://www.forbes.com/sites/daviddisalvo/2018/08/20/can-personality-change-or-does-it-stay-the-same-for-life-a-new-study-says-its-a-little-of-both/.
4. Kaur Avanish et al. (2019). The Relationship between Personality and Self-Esteem. Retrieved December 29, 2022, from https://www.atlantis-press.com/article/55914445.pdf
5. Bailey JA 2nd. Self-image, self-concept, and self-identity revisited. J Natl Med Assoc. 2003;95(5):383-386.
6. Mahon, C., & Hevey, D. (2021). Processing Body Image on social media: Gender Differences in Adolescent Boys' and Girls' Agency and Active Coping. Frontiers in Psychology, 12:626763.
7. Caubalejo KC. Activity 1 uts [Internet]. studylib.net. 2022 [cited 2023 Apr 7]. Available from: https://studylib.net/doc/25731628/activity-1-uts
8. Octc.co.uk. [cited 2023 Apr 5]. Available from: https://www.octc.co.uk/wp-content/uploads/2013/02/Robson-Self-Concept-Questionnaire-and-norms.doc
9. BSQ English download [Internet]. Psyctc.org - Work mostly by CE other than CORE (for which, see: www.coresystemtrust.org.uk). PSYCTC.org; 2019 [cited 2023 Apr 5]. Available from: https://www.psyctc.org/psyctc/root/tools/bsq/bsq-english-download/
10. R. Gayatri, Kurup Rajika. Body image and self-esteem among employees of multinational corporations. Journal of Global Biosciences. 2019.Vol.8(5) ISSN 2320-1355: 6236-6256.
11. Krizova, V. (2017). The Relationship between Personality Traits, Body Image Dissatisfaction, and Social Physique Anxiety among Females [Bachelor's thesis, State University of New York Empire State College]. Available from file:///C:/Users/masiw/Downloads/Krizova,%20Veronika_514751_Bachelors%20Thesis.pdf