

Effect of Laughter Therapy on Self Concept Among Physically Disabled Adolescents

Vivek Kotekar^{1*}, Dr. Arun Shinde²

ABSTRACT

Disability is rapidly increasing in society day by day. It is very essential to find some sustainable solutions to their problems from childhood. This research focuses on the psychological problems of physically disabled adolescents. Self-concept is an important psychological factor in survival in society. Laughter therapy is fastest growing alternative therapy in the world. Effect of laughter therapy on mental, physical and social state of human being was evaluated by many researchers. In this research, researcher concentrated on the self concept of physically disabled adolescents. The aim of the current study was to study the impact of laughter therapy on self-concept among physically disabled adolescents. This was a control experimental pre-post study. A sample of 60 males and females is taken for this study and their age range was 13-19 years. For this study self-concept inventory scale by Sarswat was used. Mean, S.D., independent, and paired sample t-tests were used for the analysis of collected data. Researcher focused on physical, social, temperamental, educational, moral and intellectual self concept of disabled adolescents. Results showed that laughter therapy intervention significantly affects post-test scores of self-concept of physically disabled adolescents. In the conclusion, the researcher concludes that laughter therapy intervention is very useful for physically disabled adolescents to increase their self concept.

Keywords: *Laughter Therapy, Self Concept, Physically Disabled Adolescents.*

Disability is more than just a health issue or a physical characteristic of an individual; it also reflects difficulties that individuals may encounter in their interactions with society and physical movements (Fellinghauer & et al., 2012). The term disability encompasses impairments, functional limitation, and participation restrictions (WHO, 2011). The term "disability" has several different layers of meaning; however, the global burden of disease (GBD) uses that word disability to refer to loss of health, where health is conceptualised as functional capacity in a spectrum of health areas such as mobility, cognition, hearing, and vision. Because of the general health issue and the unique stigma attached to various types of disability, the circumstance for disabled people and their families becomes profoundly challenging (Ghosh, 2007). Disabled people face numerous challenges as a result of participation restrictions, and their lives are impacted by poor health

¹Research Scholar, Shivaji University, Kolhapur, Maharashtra, India

²Professor and Head of Dept., Shendure College, Hupari, Maharashtra, India

*Corresponding Author

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outputs, low levels of education, a lack of social and economic participation, higher rates of poverty, and greater dependence (Kuvalekar and et.al., 2015).

Carl Rogers and Abraham Maslow, both psychologists, had a significant impact on popularizing the notion of self concept. According to Rogers, everyone strives to be their best selves. He believed that a person achieves self-actualization when they demonstrate to themselves that they are capable of achieving their dreams and objectives; however, in order to reach their full potential, the individual must have been raised in healthy surroundings that include genuineness, acceptance, and empathy; however, a lack of relationships with people who have healthy personalities will prevent the person from growing like a tree without light from the sun and water and disturb the individual's development (Ahmad & Ismail, 2015). Rogers also speculated that psychologically healthy people actively move away from roles imposed by others' expectations, instead seeking validation within themselves. Neurotic people, on the other side, have self-concepts that do not correspond to their life experience. They are afraid to accept their own experiences as true, so they distort them to protect themselves or gain approval from others.

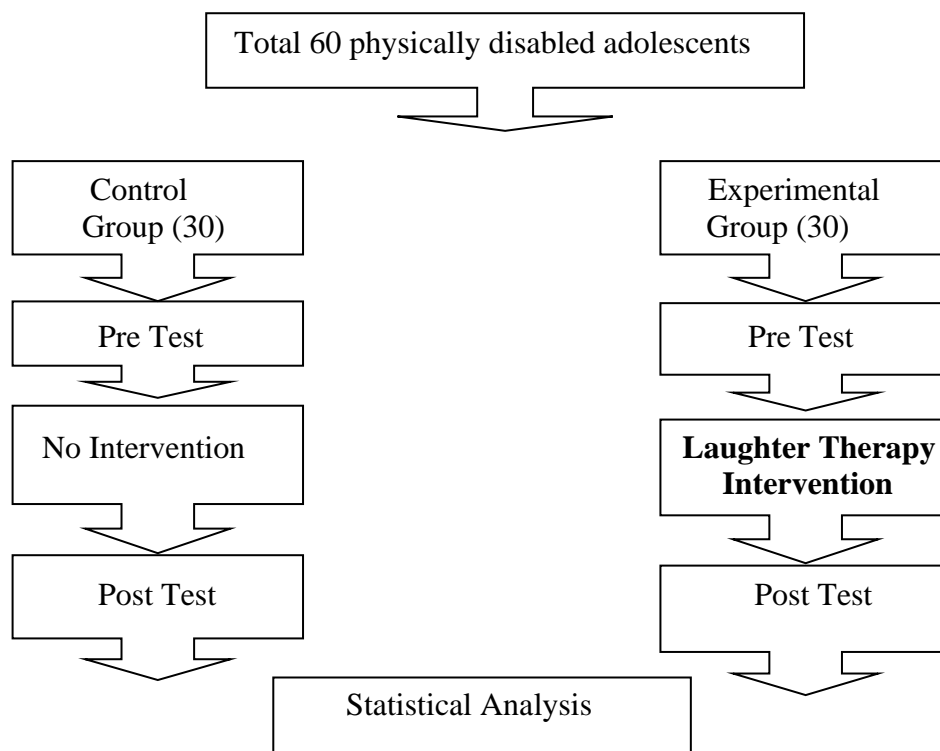
Self-concept is a term created by convictions, which are hierarchically organized; it changes over time and is influenced by other people, situations and culture (Pestana, 2014). The risk factors enter the person's life when self-concept is developed inadequately, or more precisely undeveloped, which influences their next direction and action in life. Self-concept represents an important variable, which seems to be the driving force to success at school and in life. The educational system significantly influences its improvement (O'Neill, 2015; H. J. Liu, 2009; Van Boxtel & A Monks, 1992; Shavelson et al., 1976). The concept of self includes a wide spectrum of terms and from these, each deals with a different area of 'self'. This includes self-concept, self-image, self-esteem, self-worth, and self-efficacy (Konecna et al., 2007). It is about one's own constructs, which are focused on various self-determinants of the individual. All 'self'- constructs are important in their life and during the development of themselves. Each construct is needed for the optimal functioning of an organism as a whole. 'Self'-concept as itself involves the past, present, and future. Individual constructs develop and change throughout a lifetime. The period of adolescence is typical for their formation. The concept of 'I' is a complex personal structure and its development is very sensitive especially in this period of time. The development requires mainly intense cognitive work (Langmeier & Matejcek, 2011).

Laughter is a human behavior which is executed by the brain, helps the social interactions of people, and adds an emotional context to conversations (Farifteh, Mohammadi-Aria, Kiamanesh & Mofid, 2014; Dumbare, 2012). It alleviates fear and anger at least for a moment and evokes the senses of both control and hope (Pattillo, C. & Itano., J. 2001; Wooten, 2000). Laughter is usually contagious and a person who laughs will start positive feedback for other people to laugh (Dumbare, 2012). Laughter therapy has been accepted as a complementary and alternative treatment approach since 1970. Because it is a noninvasive complementary and alternative treatment approach, its usage has rapidly become widespread (Ghodsbin, 2015; Kim, S. H., Kim, Y. H., & Kim, H. J. 2015). Laughter therapy which was developed in India back in 1995 is a combination of imitating laughter and yoga breathing exercises implemented in a group environment. Laughter therapy includes applauses, arm and leg movements, deep breathing exercises and smiling exercises (Bennet, 2015; Yazdani, 2014).

MATERIALS AND METHODS

This experimental pre post study was carried out on physically disabled adolescents from Kolhapur city, Maharashtra, India from November 2021 to December 2021. A total of 60 physically disabled adolescents both male and female included in this study.

Research Design: Control experimental pre post design.



Research Location

Control group's data was gathered from Nandani Tal. Shirol dist. Kolhapur, Maharashtra, India. Actual laughter therapy experiment had conducted at Gharonda hostel Uchagaon (East), Karveer Dist. Kolhapur, Maharashtra, India.

Sample

For this study, a total of 60 physically disabled adolescents were chosen from the Kolhapur district. A total of 60 adolescents were divided into two groups. The first group of 30 adolescents from the 'Gharonda Hostel' in Kolhapur was included in the experimental group. Another group of 30 adolescents served as the control group Nandani, Tal. Shirol, Dist. Kolhapur, was the source of this group. To collect data, this sample was chosen using a random sampling method. Adolescents with physical disabilities range in age from 13 to 19 years.

Psychological Tool

Self concept Inventory, 2013: The Self concept Inventory developed by Sarswat (2011) having 60 items with 20 items in each of the three areas of self concept: emotional, social and educational was used. Responses are taken in 'yes' and 'no' for each item. The split half reliability is 0.95, the test retest reliability is 0.93 and the K-R formula-20 reliability is 0.94. For each response indicative of self concept '0' is given otherwise '1' is given. The inventory was validated by correlating inventory scores with ratings by hostel superintendent and for this product moment coefficient of correlation was found to be 0.51.

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High scores on AISS indicate poor levels of self concept while low scores indicate good self concept.

Variables

- **Intervention Variable-** Laughter Therapy,
- **Dependent variable-** Self Concept

Statistical Analysis

Mean, SD. Independent and paired 't' test, were used for the analysis of collected data.

Laughter Therapy Intervention

Laughter therapy intervention was very important aspect in this research. This intervention designed on the basis of Dr. Kataria's laughter yoga. This intervention included more than twenty-five laughter exercises. Laughter therapy divided into three parts. First part was physical exercises; second part was actual laughter therapy exercises and final part was self-autosuggestions and discussion. Overall, this therapy made their mood always top-up and energetic.

Schedule of Laughter Therapy Intervention

Total 5 weeks laughter therapy intervention is being conducted in the hostel of Helpers of the Handicapped in Kolhapur. Variety of laughter exercises and positive autosuggestions were taken every evening from 6 to 7 o'clock.

Daily Schedule of Laughter Therapy Session		
No.	Nature	Timing
1	Physical Exercise	5-7 Minutes
2	Clapping Exercise	2 Minutes
3	Laughter Exercise	20-25 Minutes
4	Discussion and Observation	7-10 Minutes
5	Feedback	5-8 Minutes

These laughter exercises have more than seven hundred exercises in laughter therapy. But this research included 15-20 types of laughter exercises. These types of exercises were chosen in such a way that adolescents with disabilities can easily do them, understand them easily and create a sense of happiness in them.

Procedure of Data Collection

The information was gathered from adolescents with disabilities aged 13 to 19. For this, the Self Concept Inventory was used. This test took no more than 15 minutes to complete. The sample was collected by following the instructions in the test manual given to the adolescents to solve this test. Adolescents with disabilities aged 13 to 19 were divided into two groups, one experimental and one control. The researcher then divided the participants into two identical groups. The hostel of Shravanbal Viklang Seva Sanstha was chosen as the control group for this study, while the hostel of Helpers of the Handicapped was chosen as the experimental group. The current experiment ran from January to February, 2022.

RESULTS

Table no. 1 shows means, t value and level of significance for post test of physically disabled adolescents from control and experimental group

Test	Group	N	Mean	SD	Df	t Value
Physical	Control	30	31.23	1.86	58	2.73*
	Experimental	30	32.46	1.61		
Social	Control	30	31.2	6.62	58	4.26**
	Experimental	30	32.73	4.61		
Temperamental	Control	30	28.63	6.62	58	2.57*
	Experimental	30	30.63	4.61		
Educational	Control	30	31.60	6.62	58	3.73*
	Experimental	30	32.93	4.61		
Moral	Control	30	30.73	6.62	58	2.50*
	Experimental	30	31.96	4.61		
Intellectual	Control	30	30.43	6.62	58	4.51**
	Experimental	30	32.13	4.61		
Total	Control	30	183.83	6.62	58	8.52**
	Experimental	30	192.53	4.61		

(*0.05 level of significance, ** 0.01 level of significance)

The 30 participants who received laughter therapy treatment ($M = 32.46, SD = 1.61$) compared to the 30 participants in the control group ($M = 31.23, SD = 1.86$) demonstrated significantly better physical self concept, $t(58) = 2.73, p < 0.05$. The 30 participants who received laughter therapy treatment ($M = 32.73, SD = 1.28$) compared to the 30 participants in the control group ($M = 31.2, SD = 1.49$) demonstrated significantly better social self concept, $t(58) = 4.26, p < 0.01$. The 30 participants who received laughter therapy treatment ($M = 30.03, SD = 1.64$) compared to the 30 participants in the control group ($M = 28.63, SD = 2.49$) demonstrated significantly better temperamental self concept, $t(58) = 2.57, p < 0.05$. The 30 participants who received laughter therapy treatment ($M = 32.93, SD = 1.52$) compared to the 30 participants in the control group ($M = 31.6, SD = 1.52$) demonstrated significantly better educational self concept, $t(58) = 3.73, p < 0.01$.

The 30 participants who received laughter therapy treatment ($M = 31.96, SD = 1.92$) compared to the 30 participants in the control group ($M = 30.73, SD = 1.89$) demonstrated significantly better moral self concept, $t(58) = 2.50, p < 0.05$. The 30 participants who received laughter therapy treatment ($M = 32.13, SD = 1.56$) compared to the 30 participants in the control group ($M = 30.43, SD = 1.35$) demonstrated significantly better intellectual self concept, $t(58) = 4.51, p < 0.01$. The 30 participants who received laughter therapy treatment ($M = 192.53, SD = 4.33$) compared to the 30 participants in the control group ($M = 183.83, SD = 4.33$) demonstrated significantly better self concept, $t(58) = 8.52, p < 0.01$.

Table no. 2 shows mean, SD, and t value of pre-post test of physically disabled adolescents in control and experimental group

Factor	Control				t value	Experimental				t value
	Pre		Post			Pre		Post		
	Mean	Sd	Mean	Sd		Mean	Sd	Mean	Sd	
Physical	31.03	2.10	31.23	1.86	1.64	31.23	2.01	32.46	1.61	4.56*
Social	31.13	1.87	31.2	1.49	0.29	31.36	1.65	32.73	1.61	4.65*
Educational	31.46	1.83	31.6	1.52	0.81	30.96	1.03	32.93	1.22	8.46*
Temp.	28.36	2.48	28.63	2.49	0.70	28.76	1.85	30.3	1.64	4.58*

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Moral	30.6	2.28	30.73	1.89	0.75	30.36	2.25	31.90	1.92	5.30*
Intellectual	30.3	1.64	30.43	1.35	0.89	30.53	1.50	32.13	1.56	6.47*
Total	182.9	5.18	183.83	4.33	1.66	183.22	4.05	192.53	3.54	12.09*

(*0.05 level of significance, ** 0.01 level of significance)

Results of the paired-t test in control group indicated that there is a non significant small difference between pre ($M = 31.03$, $SD = 2.10$) and post ($M = 31.23$, $SD = 1.86$), $t(29) = 1.64$, $p = .102$. for physical self concept, pre ($M = 31.13$, $SD = 1.87$) and post ($M = 31.2$, $SD = 1.49$), $t(29) = 0.29$, $p = .102$. for social self concept, pre ($M = 31.46$, $SD = 1.83$) and post ($M = 31.6$, $SD = 1.52$), $t(29) = 0.81$, $p = .102$. for educational self concept, pre ($M = 28.36$, $SD = 2.48$) and post ($M = 28.63$, $SD = 2.49$), $t(29) = 0.70$, $p = .102$. for temperamental self concept, pre ($M = 30.06$, $SD = 2.28$) and post ($M = 30.73$, $SD = 1.89$), $t(29) = 0.75$, $p = .102$. for moral self concept, pre ($M = 30.3$, $SD = 1.64$) and post ($M = 30.43$, $SD = 1.35$), $t(29) = 0.89$, $p = .102$. for intellectual self concept, pre ($M = 182.9$, $SD = 5.18$) and post ($M = 183.83$, $SD = 4.33$), $t(29) = 1.66$, $p = .102$. for total self concept.

Results of the paired-t test in experimental group indicated that there is a significant difference between pre ($M = 31.23$, $SD = 2.01$) and post ($M = 32.46$, $SD = 1.61$), $t(29) = 4.56$, $p < 0.001$ for physical self concept, pre ($M = 31.36$, $SD = 1.65$) and post ($M = 32.73$, $SD = 1.61$), $t(29) = 4.65$, $p < 0.001$ for social self concept, pre ($M = 30.96$, $SD = 1.03$) and post ($M = 32.93$, $SD = 1.22$), $t(29) = 8.46$, $p < 0.001$. for educational self concept, pre ($M = 28.76$, $SD = 1.85$) and post ($M = 30.3$, $SD = 1.64$), $t(29) = 4.58$, $p < 0.001$. for temperamental self concept, pre ($M = 30.36$, $SD = 2.25$) and post ($M = 31.90$, $SD = 1.92$), $t(29) = 5.30$, $p < 0.001$. for moral self concept, pre ($M = 30.53$, $SD = 1.50$) and post ($M = 32.13$, $SD = 1.56$), $t(29) = 6.47$, $p < 0.001$. for intellectual self concept, pre ($M = 183.22$, $SD = 4.05$) and post ($M = 192.53$, $SD = 3.54$), $t(29) = 12.09$, $p < 0.001$. for total self concept.

DISCUSSION

The goal of this study was to evaluate the effect of laughter therapy on self concept in physically disabled adolescents. In this study, the dependent variable was self concept. Laughter therapy was used to aid in the development of this self concept. In response to the above objective, the following hypothesis was developed: Laughter therapy experiment will have a significant impact on self concept. Appropriate statistical analysis was used to investigate this hypothesis. The following are the results of the discussion and observations:

Pre and post tests of physically disabled adolescents from the experimental group, As a result, hypothesis is accepted because the post-test self concept score of physically disabled adolescents in the experimental group is higher than the pre-test self concept score of physically disabled adolescents in the experimental group (Table no. 2).

For 45 days, the Intervention Program has been running on disabled adolescents. In this study, the researcher discovered some important insights about self concept. Many new things came to the researcher's attention while talking with and interviewing the adolescents. Prior to the assessment, these adolescent disabled denied being in any unfavourable situation. In essence, their disability was the most important issue in his life.

Adolescents with disabilities had a negative attitude towards their own body and posture. But laughter therapy created positive emotions in their mind throughout therapy session. During therapy sessions researcher taught more laughter exercise to disabled adolescents. Most of them were related to increasing self love, self acceptance, self esteem and self

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image i.e., self love laughter, appreciation laughter, laughter cream laughter, self hug laughter, body massage laughter and many more. Adolescents learned these laughter exercises. They did practice of these laughter exercises. After some days, they saw positive changes in themselves. They experienced more easy, happy and stable life.

The adolescents learned to accept every situation in their life whether it is positive or negative. The feeling of 'we can do something even if we are disabled' was created in them. Gradually, the concept of one's own body and personality became positive.

Laughter connects people. Laughter leads to friendship. While the adolescents were enjoying the laughter, they realized that talking to people or mixing with them removes the fear about society. Their attitude towards society was changing. As a result, adolescents began to integrate freely into society. Thus, laughter can be an effective tool for promoting social self-concept. The adolescents came to realize that by going among the people, they should speak in the society. This led to the development of morality in them. They were getting moral education from the society itself. The scope of their knowledge widened. Their self-concept began to develop in all fields like academic, moral, social and intellectual. Therefore, researchers believe that laughter therapy may be an effective way to develop self-concept.

CONCLUSION

In the conclusion, researcher concludes that laughter therapy intervention is very useful for physically disabled adolescents. On the basis of research objectives following conclusions have drawn. There is a large difference in self concept between before and post tests of physically disabled adolescents from the experimental group. With the help of the laughter therapy intervention experimental group is differ from control group. There is a significant difference between the control and experimental groups of physically disabled adolescents post test score of self concept. It means laughter therapy intervention significantly affect post test scores of self concept of physically disabled adolescents.

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Conflict of Interest

The author(s) declared no conflict of interest.

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