

Pediatrics

KEYWORDS: Dysfunctional Analysis Questionnaire (DAQ), Social support, counselling.

SOCIAL SUPPORT EFFECTS AND PSYCHOLOGICAL DYSFUNCTION IN CHILDREN WITH INTELLECTUAL DISABILITIES- A CROSS SECTIONAL STUDY



Volume - 7, Issue - 3, March - 2022

ISSN (O): 2618-0774 | ISSN (P): 2618-0766

Dr. Amit Kumar Modi*

Assistant Professor), Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. *Corresponding Author

Dr. Bhawna Kohli

Professor & Head), Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh.

Dr. Mala Chaurasia Modi

Medical Officer), Lal Bahadur Shastri Hospital, Delhi. Department and institution- Department of Paediatrics, Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh

INTERNATIONAL JOURNAL
OF PURE MEDICAL RESEARCH

**ABSTRACT**

AIM: The purpose of this Study to analysed to study whether the dysfunction on various subscales of Dysfunctional Analysis Questionnaire (DAQ) - social, vocational, personal, familial, and cognitive is affected by the degree of social support. **METHODS:** This was a Questionnaire Based cross-sectional study conducted from March 2018 to September 2019. The study wear conducted in Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. Used structured test – Dysfunctional Analysis Questionnaire (DAQ). The randomly selected children (Age 7 to 12 Years), referred by doctors, teachers, tuition teacher, and parents for psychological evaluation and management. Total n 57). Used IBM-SPSS-25 software to analysed Average, percentile, mean, variance, frequency, and paired t-test. **RESULTS:** The current study found statistically significant changes in Social (t value 3.291), Vocational (t value 4.769), Personal (t value 3.334), Family (t value 3.664), and Cognitive (t value 1.727) , statistically significant at $p < 0.05$ level). **CONCLUSION:** Our findings showed that social support training had a significant and positive effect on social, vocational, personal, family, and cognitive skills. The social support-based training relevant outcome, in this approach and beneficial changes seen in parents' mental health specially in mothers' reduction of frustration, depression, anxiety, and negative effects of life stress and enhanced self-esteem.

INTRODUCTION

Intellectual disabilities as neurodevelopmental disorders are characterized by intellectual difficulties as well as difficulties in conceptual, social, and practical areas of living. [1]

Intellectual disabled Children can be mild, moderate, severe, or profound range. Intellectual disabled Children with profound and severe range forms typically require more support from family, social, and school. Children with mild to moderate range Intellectual disabilities can gain and develop independent skills like personal caring, social skills, and community. There are many programs (special educational training) and resources available to help these children as they grow but lack of awareness, knowledge, and support they did not reach and get the services. Children with intellectual disabilities develop differently than their typically developing peers and these variations in development can affect them in many direct and indirect ways, and various disabilities can also affect a child's ability to understand emotion and interact socially. Children in being able to recognize and understand an

emotion within a social situation; this may be due to a failure to recognize social signs or cues, or being able to recognize those cues.[2]

Social support is often identified as a key component of solid relationships and strong psychological health. Social support is a network of family and friends that you can turn to in times of need. Children with Intellectual disability that can affect children in many different developmental domains like communication, physically, socially and emotionally. Children with disabilities often have difficulties creating strong relationships with peers.[3]

This is many reasons, often children with Intellectual disability face more difficulties when they trying to participate in social activities, they neglected by social, peer group, school, even parents also not involving and avoiding in social activities. According to American Psychological Association - social relationships and many different aspects of health and wellness.[4] similar research on social support has indicated that people with strong social support networks tend to report less psychological, physical, and social problems than those without such social support systems.[5, 6]. In one study by Grav S .et al. 2012, mention that those with strong social and emotional support were less likely to die than those who lacked such relationships.[7]

Poor social support has been linked to many social disturbances like -depression, sadness, aggression, frustration, and loneliness and has been shown to alter brain function and increase the risk of cognitive difficulties, emotional disturbances, physical health, and social disturbances. Many researchers suggest that people who hold few positive social relations with others have been found to report negative psychological experiences that may increase their risks for diseases and early mortality rates and poor health.[5, 8,9].

MATERIAL & METHODS:**AIM AND OBJECTIVE**

The purpose of this Study to analysed to study whether the dysfunction on various subscales of Dysfunctional Analysis Questionnaire (DAQ)- social, vocational, personal, familial, and cognitive is affected by the degree of social support.

STUDY DESIGN

A Questionnaire Based cross-sectional study was conducted from March 2018 to September 2019. The study wear conducted in Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. A sample of 57 mild to moderate Intellectual disabled children from 7 to 12 years old.

TOOL USED

Data was collected using a structured self-administered

questionnaire having in two settings. It contained all socio-demographic characteristics. Second conduct starchier standardizes Dysfunctional Analysis Questionnaire [DAP] Assessment: DAQ is a fifty-item questionnaire in Hindi, developed and standardized in India (Pershad et al,1983 & 1985), which measures dysfunction in five areas of activity, i.e. social, vocational, personal, familial, and cognitive. The instrument can be either self-administered or administered in a structured clinical interview. There are ten items each for the above-mentioned five areas of activity. Each item is rated on a five-point scale (1-5), comparing the present level of functioning to that before the onset of illness.

DATA COLLECTION PROCEDURES

First of all, a checklist of trials was administered to the subjects to induce their original viewpoint. Intellectual Disabled children (boys and girls), who were referred by doctors for I.Q (Intelligence Quotient) assessment, and behaviour problem. (Behaviour Issues, and Educational Difficulties) to Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. The investigator was personally briefed about the purpose of the study to parents or caregivers, general instruction followed by the parents to fill in the questionnaire, and the confidentiality of the information. Inclusion Category- (1). Intellectual disabled (boys and girls) from 7 to 12 years old and (2). Included children with Intellectual disabled Range Moderate to Mild and management for (Social skills). Exclusion category No identifiable neurological, sensory, or physical impairment and people who were unable to talk /hear or profound and severe intellectually disabled children had not been excluded from the study. Each subject took about 60 minutes to respond to the above tools -Dysfunctional Analysis Questionnaire (DAQ), clinical interview, and counselling. Scoring was done consistently with the instructions given within the manual— The second program focuses on helping children with intellectual disabled develop different social skills and life skills through engaging in social activities. Every week activity is created with a specific goal in mind (Like- Helping, Caring, Supporting, etc.), but the children may have to work in pairs, the purpose of this session would be to facilitate the development of kindness, cooperation, compromising in social situations, focus, and acting socially appropriate. 57 subjects have been selected randomly. A period of one year six months was devoted to the data collection.

ETHICAL STATEMENT

Ethical clearance was obtained from an ethical review board Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh. The case file information was identified during data collection and was coded.

STATISTICAL TECHNIQUES USED:

The obtained data will be statistically analyzed by applying descriptive (Average, percentile, mean, standard deviation, and paired t-test) of the significance of mean differences in terms of various variables. We will enter all data and further Statistical Analysis will be done with the help of IBM- SPSS-25 software.

RESULTS

The characteristics of the sample are presented in Table 1. Total 57 children participate in this study with children with Intellectual disability 33 (57.89%) Mild Intellectual Disability range and 24 (42.10%) Moderate Intellectual Disability range. Children between the age range of 7-12 years and mean age is 9.57. In the case of income category, the majority of children with intellectual disability 31.57% of parents belonged to the low-income group, 38.59% parents belonged to medium income group, and 29.82% parents were of high-income group. The majority 56.14% of children with intellectual disabilities hailed from nuclear families, and 43.85% of children hailed from joint families. About parents' education children with intellectual disability, 21.05% parents are 10th /12th class, 28.07% parents are graduate, 14.03% parents are postgraduate, and 36.84% parents are another educational background.

TABLE 1: DEMOGRAPHY PROFILE. DISTRIBUTION OF THE FAMILIES OF STUDIED CHILDREN WITH INTELLECTUAL DISABILITY AND THEIR SOCIO-DEMOGRAPHIC CHARACTERISTICS.

Areas	Counts	Percentage
Disability Range		
Mild Intellectual Disability	33	57.89%
Moderate Intellectual Disability	24	42.10%
Age Range		
7 Years	8	14.03%
8 Years	9	15.78%
9 Years	11	19.29%
10 Years	12	21.05%
11 Years	10	17.54%
12 Years	7	12.28%
Family Economic Status		
Low	18	31.57%
Medium	22	38.59%
High	17	29.82%
Family Type		
Joint	25	43.85%
Nuclear	32	56.14%
Educational Background of Parents		
10th and 12th	12	21.05%
Graduate	16	28.07%
Post Graduate	8	14.03%
Other	21	36.84%

Table no.2 showed that the majority of children with intellectual disability 16 (28.07%) delivered preterm, 30 (52.63%) children with intellectual disability from full term, and 11 (19.29%) children with intellectual disability are from Post-term. 29 (50.87%) delivered through normal vaginal delivery (NVD) and the rest of the 28 (49.12%) through caesarean section (CS), and complications for the child during birth 22 (38.59%) of children parents reported delayed neonate crying, 3 (5.26%) reported decreased oxygenation and 32 (56.14) reported low birth weight. Type of Infant feeding 12 (21.05%) children feeding on breast, 23 (40.35%) children feed on a spoon, and 22 (38.59%) children feed on Bottle-Feeding. See table no.2

TABLE NO.2: DISTRIBUTION OF THE STUDIED CHILDREN WITH INTELLECTUAL DISABILITY ACCORDING TO THEIR PRENATAL, NATAL AND POSTNATAL HISTORIES.

AREAS		COUNTS AND PERCENTAGE
CHILD DELIVERED AS	Pre-term	16 (28.07%)
	Full Term	30 (52.63%)
	Post term	11 (19.29%)
DELIVERY TYPE	Normal Vaginal Delivery	29 (50.87%)
	Caesarean Delivery	28 (49.12%)
COMPLICATIONS FOR CHILD DURING BIRTH	Delayed neonate crying	22 (38.59%)
	Decreased oxygenation	3 (5.26%)
	Low birth weight	32 (56.14)
TYPE OF INFANT FEEDING	Breast feeding	12 (21.05%)

	Spoon Feeding	23 (40.35%)
	Bottle Feeding	22 (38.59%)

TABLE NO.3: DISTRIBUTION OF THE STUDIED CHILDREN WITH INTELLECTUAL DISABILITY REGARDING THEIR DYSFUNCTIONAL ANALYSIS QUESTIONNAIRE (DAQ), AS REPORTED BY THEIR PARENTS PRE & POST ASSESSMENT.

Area		Cou nt	Mean	SD	Pears on Correl ation	df	t- value	Null Hypothesis
FACE 1- SOCIAL	Pre	57	51.12	59.64	0.318	56	3.291	Significant at p < 0.05 level
	Post	57	43.16	321.11	489			
FACE 2- VOCATION AL	Pre	57	59.12	99.53	-0.260	56	4.769	Significant at p < 0.05 level
	Post	57	45.22	295.00	58			
FACE 3- PERSONAL	Pre	57	41.43	244.78	0.549	56	3.334	Significant at p < 0.05 level
	Post	57	35.08	215.95	663			
FACE 4- FAMILIAL	Pre	57	45.40	313.78	0.402	56	3.664	Significant at p < 0.05 level
	Post	57	36.43	254.78	042			
FACE 5- COGNITIVE	Pre	57	52.15	81.88	0.190	56	1.727	Significant at p < 0.05 level
	Post	57	48.21	272.77	827			

As shown in table 3: Face 1- Social: Mean score for Social in the pre-test (Mean 51.12; Std. deviation 59.64) and in the post-test (Mean 43.66; Std. deviation 321.11), and t value 3.291 statistically significant at p<0.05 levels). The present study shows during every month session therapist seen the children are actively participating in every activity and enjoying, properly mixing, enjoying social activities, help others, social interaction. Children with intellectual disabilities were also asked about their understanding of human rights in the social community. During social activities and role play, 23 (40.35%) reported some knowledge of human rights. Children with disabilities have shown a very poor level of understanding about civic rights. [10] Similar to other study training with respect to social behaviors must be deliberately provided and such skills must be taught and made to practice. [11]

Face 2- Vocational: Mean score for Vocational in the pre-test (Mean 59.12; Std. deviation 99.53) and in the post-test (Mean 45.22; Std. deviation 295.00), and t value 4.769 statistically significant at p<0.05 level). The current study shows that social skills training improved children's vocational skills like - taking interest in the task, doing an activity with others if the task is completed they will get the rewards like- chapping, chocolate, Toys). The current study focused on social competency as in independence, socially acceptable behavior, confidence, and maintenance of friendships for children with intellectual disabilities. One of the studies done by Mumpuniarti (2005) children with mild intellectual disabilities is able to work at semi-skilled jobs, children with moderate intellectual disabilities being able to work in sheltered workshops or work for routine work under some supervision. [12]

Face 3- Personal: Mean score for Personal in the pre-test (Mean 41.43; Std. deviation 244.78) and in the post-test (Mean 35.07; Std. deviation 215.95), and t value 3.334 statistically significant at p<0.05 level). Some children with mild and moderate intellectual disability will continue to receive assistance throughout life but there are also some children who may need only a little help to improve their day-to-day activities. In the ability to feeding and personal hygiene, almost all children have been able to do independently without assistance, like- eating, buttoning clothes, pulling zippers, pockets, and other activities that require coordination of both hands and

motor skills. Effective social training of the skills of children with intellectual disabilities, parents, special educator, and teachers use the same way in train children self-care that is patiently, slowly, repeatedly, and gradually. According to Akhmetzyanova (2014) who showed that the skill will be faster and more effectively achieved if given step by step. [13] Social support and resources will help children to achieve the expected self-care abilities. [14]

Face 4- Familial: Mean score for Family in the pre-test (Mean 45.40; Std. deviation 313.78) and in the post-test (Mean 36.43; Std. deviation 254.78), and t value 3.664 statistically significant at p<0.05 level). The current study shows after social activities training during every month session children show a positive response towards family and participation in family activities and enjoying, properly mixing and enjoying social activities. Helping people also demonstrate the training of children. [15] Showing respect is an important feature of citizenship. [16, 17] Aware of the knowledge about the role in the community. [18]

Face 5- Cognitive: Mean score for Cognitive in the pre-test (Mean 52.15; Std. deviation 81.88) and in the post-test (Mean 48.21; Std. deviation 272.77), and t value 1.727 statistically significant at p<0.05 level). The present study shows during every month session therapist seen the children are actively participation cognitive skills that have been given special attention in the education system for both primary and secondary levels are effective communication, memories, alertness, self-awareness, decision-making skills, interpersonal relationship, creative thinking, problem-solving, critical thinking, coping with stress, and understanding. Botvin & Griffin, 2004 study gives importance to Life skills programs teaching skills that help to enhance personal and social competencies. [19] A similar study by Turner, McDonald, and Somerset also find significant relationships among life skills, mathematical reasoning, and critical thinking. [20] According to Amal Dandashi et. Al. (2015) study showed positive effects on children with Intellectual Disability, in terms of cognitive and motivational levels, because children with Intellectual Disability are more physically active in the classrooms. [21]

DISCUSSION

The current study examined five factors of social support training focusing on social, vocational, personal, family, and cognitive on children with intellectual disabilities. During the social support activities parents as being major sources of social support, helping in both tangible, instrumental ways, as well as emotionally.

In conclusion, the current study demonstrated that social support training might promote social skills. Social support training is a multilevel behavioral intervention, based on social learning principles, which aims to prevent and treat social, vocational, personal, family, and cognitive skills as well as behavioral, emotional, and developmental problems in children by enhancing their knowledge, skills, and self-concept. However, social support training positively enhancement of relationships and interaction, planning for social support training has particular importance. Our findings also showed that social support training had a significant and positive effect on social, vocational, personal, family, and cognitive skills. The social support-based training relevant outcome, in this approach and beneficial changes seen in parents' mental health specially in mothers' reduction of frustration, depression, anxiety, and negative effects of life stress and enhanced self-esteem.

AUTHOR'S CONTRIBUTIONS

Dr. Amit Kumar Modi distributed the manuscript from its conception, analysis, scoring and interpretation of data and wrote the manuscript, Dr. Bhawna Kohli interpretation of data and commented on and wrote the manuscript for publication, and Dr. Mala Chaurasia Modi participated in data collection and analysis. All authors approved the final manuscript.

ACKNOWLEDGMENT

The authors wish to acknowledge their gratitude to Rama Medical College Hospital & Research Centre, Ghaziabad, Uttar Pradesh for support. Secondly wishing to thanks parents and children for their participation in the study, Dr.Bhawna Kohli (Professor and Head of department in Paediatrics), and Dr. Mala Chaurasia Modi for supporting and helping to collecting data.

LIMITATIONS OF THE STUDY

The Current Study has some necessary limitations that though to be unbroken in mind once decoding the results, first area based study, and second limited sample size. Suggested longitudinal studies are necessary to establish the importance of social support training will impact on social, vocational, personal, family, and cognitive skills.

FINANCIAL SUPPORT AND SPONSORSHIP- The authors have indicated they have no financial relationships relevant to this article to disclose.

CONFLICT OF INTEREST- The authors declare that they have no conflict of interest.

REFERENCES

1. APA (American Psychiatric Association). Diagnostic and statistical manual of mental disorders. DSM fifth ed. Washington, DC: APA; 2013.
2. Alisauskaitė, I., & Butkiene, D. (2013). Emotion perception from situation: Comparing the abilities of children with intellectual disability and children with regular development. *Special Education*, 37-46.
3. Wendelborg, C., & Kvello, O. (2010). Perceived Social Acceptance and Peer Intimacy Among Children with Disabilities in Regular Schools in Norway. *Journal Of Applied Research In Intellectual Disabilities*, 23, 143-153.
4. American Psychological Association. Manage stress: Strengthen your support network, October 8, 2019. <https://www.apa.org/topics/stress/manage-social-support>
5. Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
6. Gerich, J. (2013). Effects of social networks on health from a stress theoretical perspective. *Social Indicators Research*, 1, 349-364.
7. Grav S, Hellzèn O, Romild U, Stordal E. Association between social support and depression in the general population: The HUNT study, a cross-sectional survey. *J Clin Nurs*. 2012;21(1-2):111-20.
8. Fiorillo, D., & Sabatini, F. (2011). Quality and quantity: The role of social interactions in self-reported individual health. *Social Science & Medicine*, 73, 1644-1652
9. Park, J., Kitayama, S., Karasawa, M., Curhan, K., Markus, H. R., Kawakami, N., ... Ryff, C. D. (2012). Clarifying the links between social support and health: Culture, stress, and neuroticism matter. *Journal of Health Psychology*, 18, 226-235.
10. Quaynor LJ (2012). Citizenship education in post-conflict contexts: A review of the literature. *Educ. Citizenship Soc. Justice* 7(1):33-57.
11. Hallahan, D., & Kauffman, J. (2000). *Exceptional learners: Introduction to special education*. Boston: Allyn & Bacon.
12. Mumpuniarti, (2006). Manajemen Pembinaan Vokasional Bagi Tunagrahita di Sekolah Khusus Tunagrahita. *Journal Pendidikan Khusus Vol 2 No.2, November 2006*.
13. Akhmetzyanova AI (2014). The development of self-care skills of children with severe mental retardation in the context of Lekoteka. *World Applied Sciences Journal*, 29(6): 724-727. <https://doi-org/10.5829/idosi.wasj.2014.29.06.13922>
14. Renpenning KM (2003). Self-Care Theory in Nursing. <http://qums.ac.ir/portal/file-/?180442/Self-Care-Theory.pdf>
15. Flanagan C, Levine P (2010). Civic engagement and the transition to adulthood. *Future of Children* 20(1):159-179.
16. Waghid Y (2009). Education and madrassahs in South Africa: on preventing the possibility of extremism. *Br. J. Religious Educ.* 31(2):117-128.
17. Kubow PK (2007). Teachers' constructions of democracy: Intersections of Western and indigenous knowledge in South Africa and Kenya. *Comp. Educ. Rev.* 51(3):307-328.
18. Tipton LA, Blacher J (2014). Brief report: Autism awareness: Views from a campus community. *J. Autism Devel. Disorders* 44(2):477-483.
19. Botvin, G. J., & Griffin, K. W. (2004). Life skills training: empirical findings and future directions. *Journal of Primary Prevention*, 25(2), 211-32.
20. Turner, N. E., Mc Donald, J., & Somerset, M. (2008). Life skills, mathematical reasoning and critical thinking: A curriculum for the prevention of problem gambling. *Journal of Gambling Studies*, 24(3), 367-80.
21. Amal Dandashi, Abdel Ghani Karkar, Sawsan Saad, Zaara Barhoumi, Jihad Al-Jaam, Abdulmotaleb El Saddik (2015). Enhancing the Cognitive and Learning Skills of Children with Intellectual Disability through Physical Activity and Edutainment Games, *International Journal of Distributed Sensor Networks* Volume 2015, Article ID 165165, 11 pages, <https://journals.sagepub.com/doi/pdf/10.1155/2015/165165>