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THE IMPORTANCE OF PARENTAL ROLE IN EMOTIONAL AND COGNITIVE DEVELOPMENT OF CHILDREN WITH INTELLECTUAL DISABILITY

Psychology

KEYWORDS: BASIC MR scale, Intelligence test, Emotional therapy

Dr. Pankaj Singh	NKP Salve Institute of Medical Sciences, Digdoh Hills, Hingna Road, Nagpur 440019, Maharashtra, INDIA.
Dr.Nilofer Mujawar	NKP Salve Institute of Medical Sciences, Digdoh Hills, Hingna Road, Nagpur 440019, Maharashtra, INDIA.
Dr. Umakant Anekar	NKP Salve Institute of Medical Sciences, Digdoh Hills, Hingna Road, Nagpur 440019, Maharashtra, INDIA.
Dr. Jitesh Dobhal	NKP Salve Institute of Medical Sciences, Digdoh Hills, Hingna Road, Nagpur 440019, Maharashtra, INDIA.

ABSTRACT

The Present study to examine the importance of parent's in emotional and cognitive development of children with intellectual disability. 107 Intellectual Disability children (52 boys and 55 girls), who were referred by doctors for I.Q assessment, and behaviour problem, age range from 8 to 16 years were recruited based on random sampling. They were administered the Behavioural assessment scales for Indian children with Mental retardation (BASIC-MR)- Reeta Peshawaria & S. Venkatesan in the sample group. An Analysis of variance showed that the F ratio is larger than the F crit value 3.024132 .The F crit (3.024132) is the critical value as extracted from the f-distribution in statistical tables based on two values of degrees of freedom df of 2 and 1318. $p < 0.05$ we can reject null hypothesis (Means are different) . Different means say that there is positive effect of parents role on intellectual disable children emotions and cognitive. Present study showed that emotions influence the development of the cognitive system. During early stage emotional reactivity are likely to have an indirect effect on early cognitive development by influencing the type and amount stimulation that parents (caretaker) provide to the children, and both biological and an early environment perspective there is reasons to believe that the children with intellectual disability are not only cognitively but emotionally different and that emotional processes may have positively effects on the development of their cognitive system. Parents with positive role developed skill behaviour –Motor, language, daily routine activity, reading –writing, social interaction, vocational, and decrease the level of abnormal behaviour – violent and Destructive, temper tantrums , misbehaviour, self-injurious, repetitive behaviour, ODD, hyper-activeness, rebellious.

Introduction

Historically, Intellectual disability has been defined in term of cognitive and behavioural deficiencies. "Intellectual Disability refers to substantial limitations in present functioning - It is characterized by significantly sub average intellectual functioning, existing concurrently with related limitations in one or more of the following applicable adaptive skills areas; community ,self- care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure, and work. Intellectual disability manifests before 18.There are four degrees of severity in impairment: mild, moderate, severe, and profound.

However children with intellectual disability encompass a heterogeneous group of people with varying needs. They lean things more slowly (other normal) children of the same age. They slow a delay in development milestone like crying, smiling, crawling, seating, movement, walking, and speech. They also have a deficit in one or more areas like self-help general, eating, dressing, occupation, communication, locomotion, self-direction, and social.

They have difficulty in intellectual functioning and in the performance of day- to- day activities expected of a person of same age. Children with intellectual disability are often at risk for difficulties in home, school, and social system.

The intellectual disability children experience failure, frustration and humiliation because they cannot do things that their normal children's do with relative ease. For instance they get poor marks are not promoted ,find themselves with younger children, are criticized at home for their report card and are addressed as 'lazy or dumb' . The only satisfactions left to these children are those which again do not earn social acceptance, such as day dreaming , truancy, mischievous behaviour, school phobia and compensatory recourse to physical strength through fighting ,parents drives the child to further misconduct through hostile and punitive disapproval and the miseries inflicted by coercive "tutoring".

Emotions play very important part of everyone's life, and the role that emotional processes might play in the development of intellectual disability. The effects of emotional processes on cognitive and behavioural functioning have been seldom emphasized, except for the recognition that persons with intellectual disability have emotional problem.

Cognitive ability – Cognitive executive functions play an important role in learning process. Cognitive executive functions are under control of prefrontal of brain and it is responsible for planning, control and managing behaviour important indicators of cognitive executive functions are as follow attention, working memory, inhibition, and planning

Emotional – Emotions have been basically viewed as internal, covert, and private events, less directly accessible to observation than behaviour such as motoric responses. Cognitions appear to be more easily defined, for example by a person's performance on different type of cognitive tasks or self-reported use of a specific problem-solving strategy. Moreover a richer, more precise and more conventional language system is available for describing cognitive than emotions appear to have less explicit external indices, and to be defined in quite diverse ways such as by a person's verbal reflection on his/her internal states ,facial expressions, general motoric behaviour, and or physiological responses.

Intellectual disability has traditionally emphasized cognitive deficiencies and defects as both the critical defining characteristic of this disorder and as the causes of behavioural impairment. Current perspective on the nature and development of intellectual disability is overly simplistic and incomplete. From both a biological and an early environmental perspective, there is reason to believe that the persons with intellectual disability are not only cognitively but emotionally different and that these emotional processes may have profound effects on the development of their cognitive system.

Table no.1:1 Problems face by Intellectual Disable students

Physical	Social	Education	Behaviour
Self- Care	Communication	Cannot Count 1-20	Violent and Destructive Behaviours
Daily activities	Peer- relationship	Cannot write his/her name, address, and contact details	Temper Tantrums
Hygienic	social skills (manners, knowing the rules of convers ation, getting along in a group, playing a game);	reading, writing, and basic maths	Misbehaviou r with others
home living (helpi ng to set thetable , cleaning the house, or cooking dinner)	health and safety;	Money concept	Self- Injurious Behaviours
taking care of personal needs (dressing, bathing, going to the bathroom); health and safety;	home living (helping to set the table, cleaning the house, or cooking dinner);		Repetitive Behaviours
			ODD Behaviours
			Hyper-active Behaviours
			Rebellious Behaviours

Objective

- Can parents role helps to development on intellectual disability children's behavior
- Can Primary Caretaker role affects on intellectual disability children Emotional & cognitive development
- Can emotional processes can develop cognitive systems.

Hypotheses

- Parents role positively affects on intellectual disability children Emotional & cognitive. development
- Primary Caretaker role positively develop on intellectual disability children behavior.

In this present study examine what ones know about the emotional processes can develop cognitive systems.

Material & Methods:

1. Place of Study: This study was conducted at NKPSIMS and Lata Mangeshkar Hospital and Research central India Nagpur (Maharashtra)
2. Period of Study: April 2015 to July 2015 (15 month)
3. Inclusion Category

- Intellectual Disability children (boys and girls) (Age group 8 to 16 years)
- Intellectual Disability children (boys and girls), who were referred by doctors for I.Q (Intelligence Quotient) assessment, and behavior problem.

4. Exclusion

- Intellectual Disability children (boys and girls), who are not taking any type of special educational training from special school/ institute from central India Nagpur.

5. Sample size: Intellectual Disability children (boys and girls), who referred by doctors for I.Q (Intelligence Quotient) assessment, and behavior problem at Medical College NKPSIMS and Lata Mangeshkar Hospital and Research center Nagpur were included in the study (N=107)

6. Study Design: Cross sectional study (Questionnaire based)

Procedure of Data collection

For collection of data from NKPSIMS and Lata Mangeshkar Hospital and Research central India Nagpur (Maharashtra) was chosen. By keeping age and gender requirements in mind the subjects were selected more than the required then the test of Behavioural assessment scales for Indian children with Mental retardation (BASIC-MR), Intellectual Disability children (boys and girls), who are not taking any type of special educational training from special school/ institute from central India Nagpur, the needed 107 subjects have been selected randomly (boys 52 and 55 Girls).

First of all, checklist of trails was administered on the subjects to get their original viewpoint. The subjects were randomly selected sample in NKPSIMS and Lata mangeshkar Hospital and Research center Nagpur, Intellectual Disable children (boys 52 and 55 Girls) each subjects took about 40-60 min to respond to all the questionnaire. . A period of fifteen months was devoted for the data collection.

Measuring Instruments-

A checklist developed by National Institute for the Mentally Handicapped – Behavioural assessment scales for Indian children with Mental retardation (BASIC-MR)- Reeta Peshawaria & S. Venkatesan .

Areas Studies:

Part A- Skill Behaviours	Part B Behaviours
• Motor	• Violent and Destructive Behaviours
• Activities of Daily living	• Temper Tantrums
• Language	• Misbehaviour with others
• Reading –Writing	• Self- Injurious Behaviours
• Number-Time	• Repetitive Behaviours
• Domestic – Social	• ODD Behaviours
• Pre- Vocational Money	• Hyper-active Behaviours
	• Rebellious Behaviours

BASIC-MR - which includes total 280 questions in Part A – Skill Behaviour , and 76 questions in Part B –Behaviours , Validated Questions.

Statistical Analysis

The obtain data were statistically analyzed by applying descriptive (Mean, Standard Deviation), ANOVA of significance of mean differences in term of various variable. We have entered all data in Microsoft Excel and further Statistical Analysis was done with the help of QI-Macros 2014 Software.

Result

A) Skill Behaviour

Table no. 1:2- Mean and SD of boys and girls along with their statistical significance of difference between mean

Area		Su m	Me an	SD	df	F			Null Hypothesis
Motor	1	4353	40.68	334.01	Between Group- 2 Within Group- 318	9.642	0.000	3.024 132	Significant at P < 0.05 level
	2								
	3	4924	46.01	527.20					
		5838	54.56	770.34					
Activities of Daily living	1	10046	93.88	794.89		16.91	0.000	3.024 132	Significant at P < 0.05 level
	2	11163	104.32	951.59					
	3	12736	119.02	1280.40					

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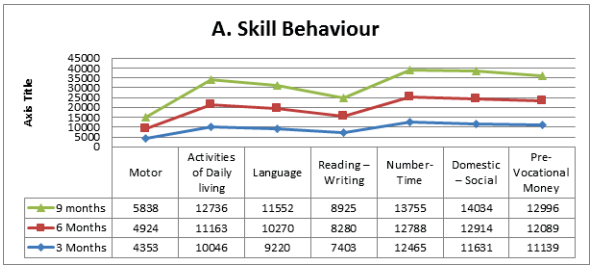
Language	1	9220	86.16	618.87	Between Group- 2 Within Group- 318	14.025	0.000	3.024132	Significant at P < 0.05 level
	2	10270	95.98	887.35					
	3	11552	107.96	1220.56					
Reading –Writing	1	7403	69.18	676.24	Between Group- 2 Within Group- 318	6.3969	0.002	3.024132	Significant at P < 0.05 level
	2	8280	77.38	889.23					
	3	8925	83.41	992.41					
Number-Time	1	12465	116.49	9663.34	Between Group- 2 Within Group- 318	1.194916	0.304	3.024132	Non-Significant at P > 0.05 level
	2	12788	119.514	427.87					
	3	13755	128.55	481.28					
Domestic – Social	1	11631	108.70	417.23	Between Group- 2 Within Group- 318	24.53002	0.000	3.024132	Significant at P < 0.05 level
	2	12914	120.69	572.68					
	3	14034	131.15	662.62					
Pre-Vocational Money	1	11139	104.10	735.88	Between Group- 2 Within Group- 318	10.03351	0.000	3.024132	Significant at P < 0.05 level
	2	12089	112.98	767.32					
	3	12996	121.45	906.28					

*P < 0.05, SD- Standard deviation

Figure 1:1 The result of the graph correspond with the result of the ANOVA



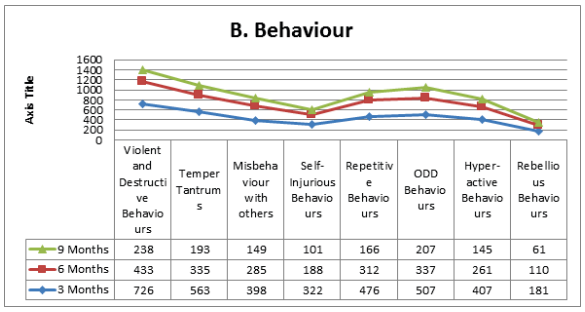
B) Behaviors

Table no. 1:3- Mean and SD of boys and girls along with their statistical significance of difference between mean

Area	Sum	Mean	SD	df	F	p-value	F-crit	Null Hypothesis
Violent and Destructive Behaviours	726	6.78	11.39	Between Group- 2 Within Group- 318	87.24.39	0.000	3.024132	Significant at P < 0.05 level
	433	4.04	5.44					
	238	2.22	2.55					
Temper Tantrums	563	5.26	6.49	Between Group- 2 Within Group- 318	90.53542	0.000	3.024132	Significant at P < 0.05 level
	335	3.13	2.86					
	193	1.80	1.42					
Misbehaviour with others	398	3.71	3.16	Between Group- 2 Within Group- 318	60.5475	0.000	3.024132	Significant at P < 0.05 level
	285	2.66	2.41					
	149	1.39	1.61					
Self-Injurious Behaviours	322	3.009	2.87	Between Group- 2 Within Group- 318	64.35986	0.000	3.024132	Significant at P < 0.05 level
	188	1.757	1.58					
	101	0.943	0.940					
Repetitive Behaviours	476	4.448	4.26	Between Group- 2 Within Group- 318	87.26026	0.000	3.024132	Significant at P < 0.05 level
	312	2.91	2.23					
	166	1.55	1.13					
ODD Behaviours	507	4.73	5.94	Between Group- 2 Within Group- 318	58.44987	0.000	3.024132	Significant at P < 0.05 level
	337	3.14	3.01					
	207	1.93	1.89					
Hyper-active Behaviours	407	3.80	4.83	Between Group- 2 Within Group- 318	48.42856	0.000	3.024132	Significant at P < 0.05 level
	261	2.43	3.30					
	145	1.35	1.83					
Rebellious Behaviours	181	1.69	1.64	Between Group- 2 Within Group- 318	33.60308	0.000	3.024132	Significant at P < 0.05 level
	110	1.02	0.93					
	61	0.57	0.454					

*P < 0.05, SD- Standard deviation

Figure 1:2 The result of the graph correspond with the result of the ANOVA



Emotional and cognition function in a reciprocal and interactive fashion, is particularly useful for viewing the development of Intellectual disability. Healthy and adaptive functioning is a function of two sets of processes

In this present study emotional interactional climate for developing cognitive endeavours the progressive internalization of the affective quality of the primary attachment relationship is associated with the elaboration of cognitive executive functions- specifically, those related to socially, coordinated task engagement between parents of the child (Intellectual Disable). Mild and Moderate intellectual disable children who have experienced affectively positive relationship with their parents (caretaker), are more likely to develop skills behaviour and reduce the level of behaviour to cognitively engage their environment in an active. Present study show that emotions affective context is translated behaviourally to support parents who attached emotionally with intellectual disable children, and emotional attachment affective context is translated behaviourally to support naturally and energize cognitive activities. Barrett & Campos (1987), who conceived of emotions as members of families, with emotions within families sharing in common certain intrinsic features and emotions in different families sharing some common features but also possessing unique characteristics. Included among the features that distinguish different emotion families are particular action tendencies, appreciations, vocal and facial patterns, physiological patterns goals, and adaptive functions.

After given proper management and training program during 20 months the level of skill behaviour are increase abnormal behavioural are decrease. In addition variation in mental performance is more striking when everyday experiences are different or unusual. There is an evidence for context specific knowledge in intellectual delay children may able to understand things of they are placed in context for them .Problem solving also is better when the problem is familiar to them, when the same task and problem is presented to them in an unfamiliar way. Most of the Mild and Moderate intellectual disable children failure on a mental task, does not mean that the specific cognitive skill is not present.

Regarding too emotional understanding children with intellectual disable may express mixed feelings. The ability to control emotion

and attachment is more influenced by given environment where children with intellectual disability, learn skill behaviour and behaviour. Emotions are knowledge primary sources playing a major role in the individual's adaptation to the environment. Thus even if the cognitive limitations of the intellectual disable children are low, they can interact with the world through basic emotions. Barett and Campos also emphasized that emotions influence both cognitive development and the socialization process.

Present study showed that emotions influence the development of the cognitive system. During early stage emotional reactivity are likely to have an indirect effect on early cognitive development by influencing the type and amount stimulation that parents (caretaker) provide to the children, and both biological and an early environment perspective there is reasons to believe that the children with intellectual disability are not only cognitively but emotionally different and that emotional processes may have positively effects on the development of their cognitive system. Brooks –Gunn and Lewis 1982, their research suggest that handicapped infants smile less often and cry more frequently. Of particular importance is their finding that mothers of handicapped infants do not seem to encourage positive affect and become increasingly less responsive to their infants negative affective expressions.

Discussion

Present study showed that parent's role is so important for intellectual disability children's life, and the parents role affect on cognitive and emotional level, at which intellectual disability (mild and moderate intelligence), children's can independently make any action within this skills and the following small step to which a child should be trained. The development of skills like- motor coordination, daily living, language development, reading –writing, number –time, social pre-vocational money ,and behaviour. The influence of attachment appears to extend beyond the mother–child relationship. Researchers from many developmental perspectives agree that affective events during childhood, particularly within child–caretaker relationships, strongly influence the nature and the quality of an individual's adulthood relationships (Bowlby 1979; Maccoby 1980; Main et al. 1985; Collins & Read 1990). Cognitive development of interventions which improve the quality of the environment and the child-caregiver relationship (Susanne Anjos Andradea, Darci Neves Santosa et al.2005). Lazarus (1982) contended that emotion are contingent on cognitive process with appraisal giving rise to a particular emotion and the intensity of the emotion, depending on the person's perception of the nature of an environmental event and its relationship to the person's well-being
Everyday household situations are used In the process of skill development and behaviour modification (shaping) and various cognitive games exercises to enhance the effect. Where the children with intellectual disability can fulfil tasks on their own, optimization of parent- children's interactions, or role creation of the developing environment.

Limitation of the research

- Limited sample size
- Areas based research

Future research is required to further delineate and characterize the prevalence, frequency, and psychosocial correlates related to the Intellectual Disability children.

Future prospect study should be developed in cooperating large sample size and mass study with appropriate methodology to capture the frequency and prevalence of training and parents program.

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