Play therapy in children with Disruptive Behavior Disorders: A pilot study

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Abstract

Disruptive Behavior Disorders (DBD) children often have an impaired ability to relate to others aptly due to weak social skills & behaviours that others find nasty. It not only affects child but also their care takers, generating stress in all of them. The aim was to reduce anger, aggression, and family's stress and improve social skill in children and coping in family. A quasi experimental design was used; four subjects with DBD and their parents were recruited in experimental and control group by convenience sampling. Both groups underwent pre assessments on anger assessment checklist, visual analogue scale, strength and difficulty questionnaire & family assessment schedule. Subsequently, both groups received treatment as usual and experimental group in addition received play therapy, 8-15 sessions, twice a week. Post assessment was done after 1 week of the last session. Results revealed that play therapy has significant beneficial impact on anger & aggression control, improving social competence in children, reducing family stress & improving their coping. Study concluded that Behaviour therapy contributed to issues of DBD, whereas the use of play helped the parents at a specific level to connect to the child in joyous, process-based activities, thus enabling the child to experience a more loved and validated sense of personhood.

Key words: Play therapy, family stress, coping, selected variables of children: anger, aggression, social competence, Disruptive Behavior Disorders (DBD)

Background

"Growing numbers of children are suffering needlessly because their emotional, behavioral, and developmental needs are not being met by those very institutions which were explicitly created to take care of them. The increased needs of children suffering from mental health problems are accompanied by an increased need for mental health professionals" **(Satcher, 2001)**[1]. In the process of growing up, children's problems are often compounded by the inability of adults in their lives to understand or to respond effectively to what children are feeling and attempting to communicate. This communication gap is widened as a result of adults' insistence that children adopt means of expression commonly used by adults **(Landreth, 1996)**[2]. Children with DBD often have an impaired ability to relate to others appropriately due to poor social skills & behaviors that others find offensive. This impairment may be due to a combination of how core symptoms compel children with DBD to respond to themselves & others, and how others respond reciprocally to disruptive behaviour **(Judy, 2010)**[3].

Need of the study & Literature Review:

A study by **Deater Deckard (1998)**[4] indicated a strong link between poor parenting and child adjustment, in addition to the mediating effect of parenting behaviour on parenting stress and child adjustment. What the child brings to the table (i.e. temperament, behaviour) is as equally important in the parent child relationship as what the parent brings. Parent child interactions show reciprocity, thereby creating a circle of continued effect on attitudes, relationship, and behaviour between parent and child. Higher levels of parent stress correspond with

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higher levels of children's behaviour problems such as aggression and anxiety **(Deater-Deckard, 2005)**[5]. In support of the theory that problematic parent child interactions continue to worsen over time, **Ackerman, Brown and Izard (2003)**[6] & **Kazdin and Wassell (2000)**[7] determined that effective treatment of aggressive and antisocial child behaviours led to a decrease in parent stress. **Kazdin and Whitley (2003)**[8] later suggested the need for outcome studies targeted at reducing parent child relationship stress in order to identify therapeutic interventions that reduce childhood aggressive behavioural problems. Various behavioural therapies are used in managing DBD children. Among these, parent training is considered to be the Treatment As Usual (TAU) in managing these children. In many moderate to severe attention deficit hyperactivity disorder children, use of medication can also enhance the prognosis.

Early identification of stressful parent child systems and subsequent intervention efforts may possibly reduce behavioural emotional problems among children **(Abidin, 1995)**[9]**.**

Considerable attention is being given to problems of children with disruptive behavior disorders. However, there are very few studies about the effectiveness of play therapy on children with DBD as well as family stress and coping - its effect on parenting and vice a versa. Nursing professionals are the health care team member in constant touch with child and his/ her family, spending maximum time with children. Use of play by Nurses as a therapeutic approach, in dealing with children with DBD and their family will help to improve the prognosis of child. Hence, this pilot study was aimed to assess the effectiveness of play therapy on family stress, coping, child's anger, aggression & social competence of children with Disruptive Behavior Disorders (DBD).

Aims

To reduce family stress and improve coping in family members of children with DBD

To reduce anger, aggression and improve social competence in children with DBD

Assumptions

Hospital provides a therapeutic environment which influence child's behavior, and the changes seen during Hospital stay may not sustain in the real life issues.

OPD basis treatment will allow parents to practice the learnt behaviour in actual problem situations at home and will have more beneficial impact on child's prognosis.

Hypotheses

H_{01}: There is no significant effect of play therapy on family stress & coping among family members of children with Disruptive Behaviour Disorder at 0.05 level

H_{02}: There is no significant effect of play therapy on anger, aggression & social competence in children with Disruptive Behaviour Disorder at 0.05 level.

Conceptual Framework

Study was based on Sr. Callista Roy's Adaptation theory (Refer Fig. 1Conceptual framework). Children's behaviour is influenced by various stimuli in the environment & also the surrounding environment reacts in response to child's behaviour which may lead to

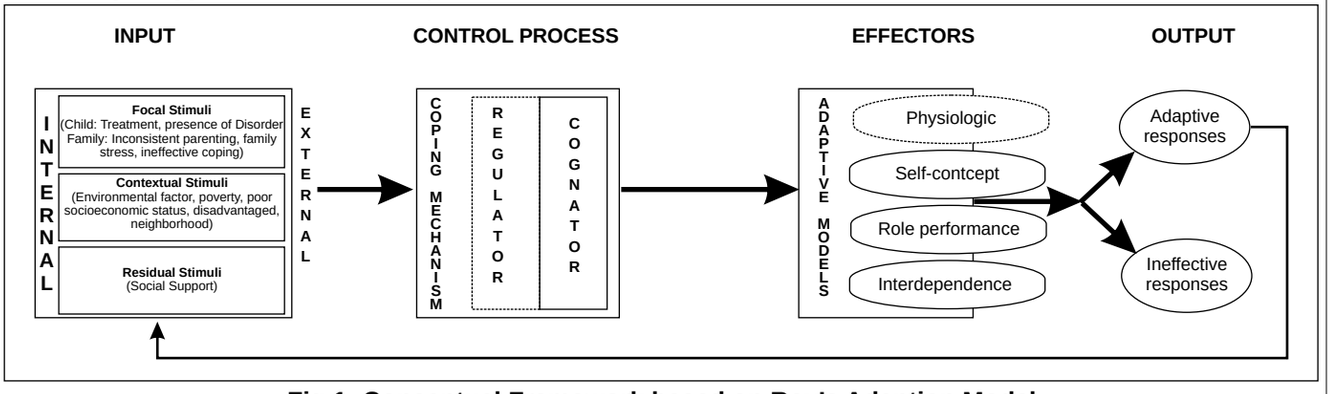

Fig.1: Conceptual Framework based on Roy's Adaption Model

adaptive or maladaptive reactions. Play therapy helps children to teach them appropriate way to respond to the external & internal stimuli whereas the Parent Management Training helps parents to deal with these children, improve parenting and allow them to respond appropriately in order to stimulate child's growth & lead to normal development as well as reduce stress of parenting. The children variables focused in study were anger aggression, social competence & parent variables were stress & ways of coping. Current study focused on self-concept mode, role performance mode, interdependence mode, but did not study the physiological aspect of adaptation process.

Research Methodology

A quasi experimental pretest- post test, non equivalent control group design was used in the study (Refer Fig. 2 Research Methodology). All children with DBD attending outpatient services during the period of data collection were screened; those children who met the inclusion criteria were recruited for the study. Using convenience sampling, every second child was taken for experimental group. Four subjects i.e. two in experimental & two in control group and their parents were selected in pilot study. Both groups underwent pre assessments using semi structured interview with child & parents, Disruptive Behavior Disorder Rating Scale, Family Assessment Schedule, Anger Assessment Checklist, Visual Analogue Scale for Anger Assessment, Strength & Difficulty Questionnaire. After pre assessments, both groups received treatment as usual (Parent Management Training), 8-15 sessions, twice a week for 45min to 1 hour duration and experimental group in addition received play therapy, 8-15 sessions, twice a week for 45min to 1 hour duration. Assessment of play observation on experimental group was conducted during all play therapy sessions. Post assessment was conducted using same instruments for both groups, after 1 week from the last session (Refer Fig3: Schematic presentation of experimentation)

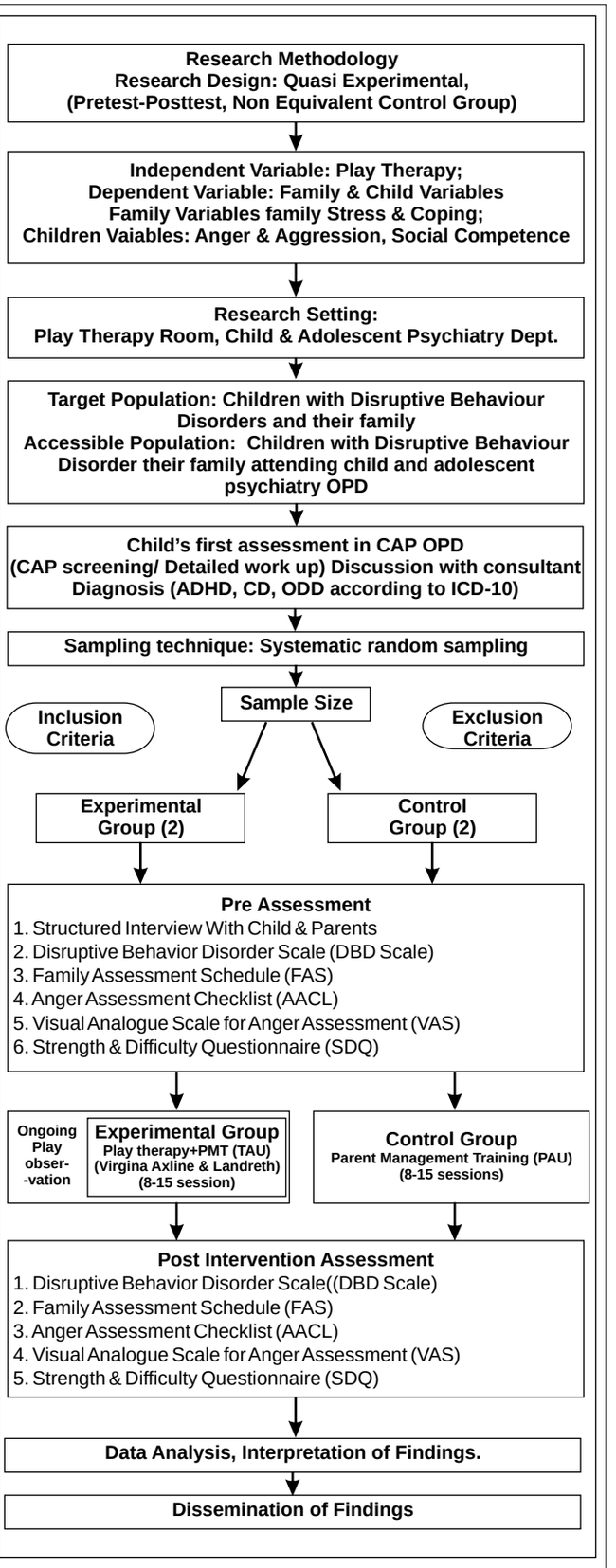

Fig. 2: Research Methodology

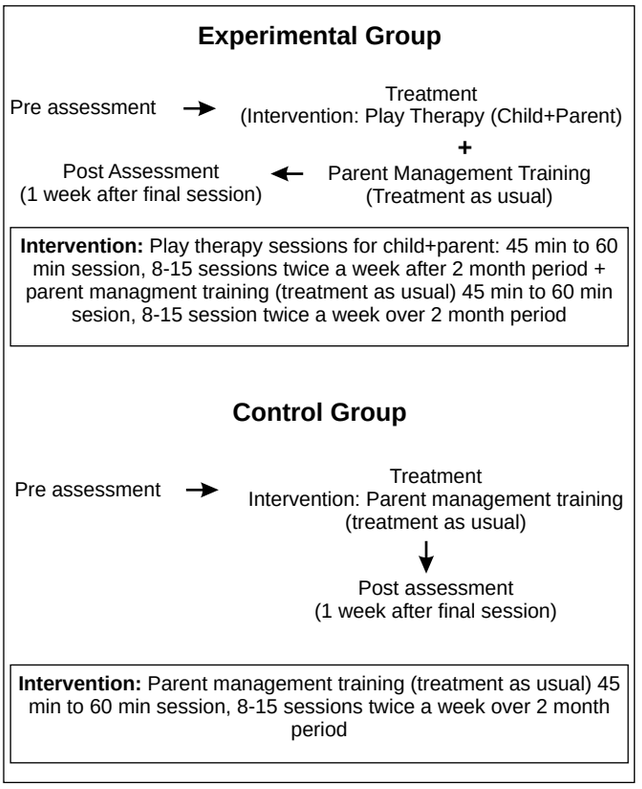

Fig.3 Schematic presentation of experimentation

Following criteria was considered for recruiting the study subjects.

Inclusion criteria:

Children with Disruptive Behaviour Disorders, attending child and adolescent psychiatry outpatient services.

Age below 7 years

Child and family willing to participate in study

Hindi/ English speaking

Exclusion criteria:

Presence of Intellectual Disability

Tools:

A Semi structured interviews with Child and Family Members:

A semi-structured Proforma for socio-demographic data was constructed by the researcher for the study. Socio demographic data included information of child and parents, specifically focusing on age, sex, education, occupation, income, number of children, child's birth order, type of family, religion, health status, parenting style, child's temperament, chief complaints- onset, duration, and treatment details.

Disruptive Behaviour Disorder Rating Scale (DBDRS- Pelham et.al. 1992):

DBDRS measured symptoms of Attention Deficit Hyperactivity Disorder, Oppositional Defiant Disorder & Conduct disorder based on DSM-IV criteria. DBDRS consisted of 45 items out of which 41 measures DBD symptoms. Out of these 18 items measures Attention Deficit Hyperactivity Disorder, 8 items measures Oppositional Defiant Disorder & 15 items measures Conduct disorder. The instrument was used for screening of the patients for DBD. Tool has well documented reliability (0.86) and validity.

Family Assessment Schedule (FAS- Girimaji et. al. 1999):

Family assessment schedule is a modification of Family interview for stress and coping in Mental Retardation (FISC-MR), specially designed to measure family stress and coping strategies of family's of children with emotional and behavioural disorders. Tool has well documented reliability (0.96) and validity.

FAS is a semi structured interview schedule to systematically elicit and quantify:-

The stress experienced (perceived) by families caring for child with DBD (contains eleven subscales) and

Certain key coping resources available for the family which are likely to modify the perceived stress (mediators- contains nine subscales).

Tool was used with a few modifications by adding questions related to disruptive behaviour disorders in place of mental retardation, in consultation with the author of FAS and reliability was established. The sub-scales on stress are rated on a five point scale (no or minimal stress to very high level) and those in the Section-II are rated on a four point scale (most favorable to most unfavorable).

Anger Assessment Checklist (AACL-Karpe 1993):

AACL checklist consisted of thirty five statements in first person and two open ended items. Each statement is rated on five point scale from 'never' to 'always' based on extent to which the statement was applicable to them. The scores of the tool ranged between 35 and 175 and

accordingly they were classified in to mild/ moderate/ severe anger. Tool has well documented reliability (0.86) and validity.

Visual Analogue Scale (VAS- Aiteken 1969):

Visual Analogue Scale is a ten cm long line marked from 0-10, at an interval of one centimeter each. Zero indicated no anger and ten indicated the maximum amount of anger experienced. Children were asked to rate their anger based on this scale. Tool has well documented reliability (0.80) and validity.

Strength and Difficulty Questionnaire (SDQ-Goodman, 1997):

SDQ is a brief behavioral screening questionnaire that provides the balanced coverage of children and young peoples' behavior, emotions and relationships. It has been designed to meet the needs of researchers, clinicians and educationists. SDQ has twenty five items which are divided into five scales of five items each covering conduct problems, hyperactivity, emotional symptoms, peer problems and prosocial behaviour. Tool has well documented reliability (0.85) and validity.

Self observation of Play:

Play observation includes child's way of play initiation, communication, emotional expression, energy levels, attention and concentration, social interaction, abnormal patterns of behaviour, special skills in child, contents of play & any other significant findings. Play observation was supervised & rated or recorded then rated by the expert.

Play Therapy Protocol:

The following protocol was developed at the end of pilot study. Play therapy sessions were conducted twice a week with a gap of three days in between each session. The following guidelines were developed and followed in the similar sequence.

Introductory phase (Minimum 2-5 Sessions), Beginning Active phase (Minimum 2-3Sessions), Middle Active phase (2 Non Directive filial sessions), Active phase (Minimum 3-5Sessions), Termination phase (At least 1Session)

I. Introductory phase (Minimum 2-5 Sessions): Initially minimum two to five sessions were done, one to one between child and investigator, following the principles of Non Directive play therapy. The purposes of these sessions were to establish rapport & identify themes behind behavioral problems.

II. Beginning Active phase (Minimum 2-3Sessions): Non Directive sessions for managing the themes behind behavioral problems & Directive activities to teach anger control (counting / deep breathing/ hitting punch bag/ pillow).

III. Middle Active phase(2 Non Directive filial sessions): 30min Sessions with child & parents; observation by investigator

- 1st session (30 min): play observation between child & family members (single/ both parents), followed by 15 min session for demonstration of guidelines to be followed at home for spending quality time through play session (1-2 sessions/week)

- 2nd session: (after three days of the last session, assuming parents have practiced the guidelines discussed earlier) re-demonstration from parents on guidelines to be followed for spending quality time through play session at home, followed by discussion on it, points to be improved, continuation of spending quality time with child at home throughout the therapy program.

IV. Active phase (Minimum 3-5Sessions): In every session, beginning 10mins were spent on Non Directive play activities with parents. Therapist acts as observer for reviewing of guidelines followed by parents for spending quality time at home. Non Directive &Directive filial sessions for improving social competence (through role play of guest at home, school- teacher play & market-market play activity), incidental anger control strategies (counting / deep breathing/ hitting punch bag/ pillow).

V. Termination phase (At least 1Session): sessions with complete withdrawal of all Non-Directive/ Directive play activities and noticing child's response. If child starts involving others in the play activity, sessions can be terminated by giving a note to parents to spend regular quality time with child as per guidelines. If child does not involve others then continue to have similar sessions till child initiates the socialization.

Findings:

Play therapy has significant beneficial impact on anger& aggression control, improving social competence in children with DBD and reducing family stress, improving coping in their family members, after participating in 8 to

15 sessions of play therapy & parent management training (TAU) program.

Results suggest significant decrease in externalizing behaviors and decreased parenting stress in the both study groups. Remarkable decrease in disruptive behaviour such as oppositional behaviour and conduct problems were noticed. Various socio demographic parameters were assessed during the pilot study as mentioned in instrument details, out of which those they were very specific and significant to the study findings are described in the following tables.

Section I: Socio Demographic Variables:

Table 1: Frequency & Percentage distribution of parenting styles: Mother

N=4

Parenting Styles	F (%)
Authoritarian Parenting	1(25%)
Authoritative Parenting	2(50%)
Permissive Parenting	1(25%)
Total	**4**

Table 1 shows parenting styles adopted by study subjects Mothers. In the findings 50% mothers using Authoritative Parenting and other 25 % each with authoritarian/ permissive parenting. 25% parents were using Authoritarian and Permissive parenting style to handle their children

TABLE 2: Frequency distribution and percentage of parenting styles in father's of children with DBD

n=4

Parenting Styles	F (%)
Permissive Parenting	4(100%)

Table no 2 shows parenting styles adopted by study subjects Fathers. In current study Father's of all children with DBD, used permissive parenting while managing their children.

Table 3: Frequency distribution and Percentage of temperament of children recruited in study n=4

Child's Temperament	f (%)
Easy Child	2 (50%)
Difficult Temperament	2 (50%)

Table 3 highlights that, 50% of children had difficult temperament in the beginning of their childhood and 50% had easy temperament but gradually the difficulty rose such as negativistic behavior, refusal etc.

Section II: Level of Anger between the Experimental and Control group

Table 4(a): Mean & SD of Pre & Post Intervention of AACL score between the Experimental and Control group

n=4

Study Group	AACL (Mean±SD) Pre Intervention	AACL (Mean±SD) Post Intervention
Experimental Group	115±16.97	79±7.10
Control Group	92.5± 0.71	77± 4.24

Table 4 shows significant reductions in children's anger levels in both groups as per parent's observation. Experimental group showed higher beneficial effect in anger control after intervention of play therapy and parent training.

Table 4(b): Subjective Interpretation of Level of Anger between the Experimental and Control group using visual analogue scale

N=4

Study Group	VAS (Mean±SD) Pre Intervention	VAS (Mean±SD) Post Intervention
Experimental Group	7±0	5±0
Control Group	6±0	5±0

Table 4(b) shows levels of anger expressed by children on visual analogue scale. Children reported mild reduction (10% in control group; 20% in experimental group) in level of anger after the sessions. This finding was related to the information obtained from parents, and it was noticed that these findings are confirmatory in measuring the anger & aggression control. Scores indicate clinically beneficial effect of intervention on the level of anger and aggression in experimental group.

Section III: Assessment of Child's Social Relationship between the Experimental and Control group

Table 5: Changes in Child's Social Relationship between both study groups n=4

SDQ	Experimental Group		Control Group	
	Pre MEAN ±SD	Post MEAN ±SD	Pre MEAN ±SD	Post MEAN ±SD
Total difficulties score (Total 40)	17±2.12	4.5±2.8	15.5±3.5	10±2.2
Emotional Symptoms score (10)	3±2.8	2.5±2.12	4.5±2.12	4±1.4
Conduct Problems score (10)	2±0	1.5±0.7	1.5±0.7	3±0
Hyperactivity score (10)	8±0	6±1.4	5±0	6±0
Peer problem score (10)	4±0	4±0	4.5±2.12	4.5±3.5
Prosocial Behaviour score (Total 10)	6.5±0.7	7±0	9.5±0.7	10±0

Above table 5 shows significant reduction in the total difficulty score of the experimental group which included emotional symptoms, conduct problems, hyperactivity. Peer problems persisted in both the group but parents reported decrease in intensity of those problems. Although no effect was noticed in peer problems, significant improvements in prosocial behaviour of children in both groups were seen.

The findings of SDQ also helped the investigator to correlate the results of other instrument's finding. The detailed analysis of it is beyond the scope of the current study and hence, not mentioned here.

Section IV: Assessment of family stress and coping between the Experimental and Control group

Table 6: Changes in family stress and coping between both study groups n=4

FAS	Area	Sub Scale	Experimental Group		Control Group	
			Pre Mean Score	Post Mean Score	Pre Mean Score	Post Mean Score
Perceived stress in family	Daily care Stress (4 subscale)	Extra inputs for care	3	1.5	1.5	1
		Decreased leisure time	1.5	1	1.5	0.5
		Neglect of Others	0.5	0.5	0.5	0.5
		Disturbed Behaviour	2.5	1.5	3.5	2
	Family Emotional Stress (4 subscale)	Personal distress	2	1.5	2.5	1.5
		Marital problems	2.5	1	3.5	2.5
		Other Interpersonal Problems	1.5	1	3	0.5
		Effects on sibs & other family Worries	0.5	1	2.5	1
	Social stress (2 subscale)	Altered social life	1.5	1	2	1
		Social embarrassment	2	1	2.5	1
	Financial Stress (1 subscale)	Financial implications	1.5	2	1.5	1.5
Mediators of stress or Coping strategies	Awareness about child's Problem (2subscale)	General awareness about DBD	3	2	2.5	1.5
		Misconceptions	1.5	2	2	1
	Attitudes and Expectations (3 subscale)	Expectations from child	2.5	2	1	1
		General attitude towards child as a person & family member	3	2	2	1.5
		Attitude towards management	2	1.5	1.5	1
	Child Rearing Practices (2 subscale)	General rearing practices	2	1.5	3	1
		Practices specific to Training	1.5	1.5	1.5	1
	Social Support (1 subscale)	Social support	3.5	2.5	2.5	2
	Global (1 subscale)	Global family Adaptation	2.5	1.5	2	1

Table 6 shows significant reduction in perceived stress and improved ability to cope in both the study groups. All

parents' informal reports on changes seen in child and parents, suggest that there were improved relationships with their children, their own confidence increased, generalization of skills, and improvements with regard to behavior problems. The experimental group families reported additionally that, their ability to understand their child's need improved after the play therapy sessions.

Discussion

Behavioral problems in child do point out towards involvement of multiple factors such as child's temperament, inconsistent and faulty parenting techniques, environmental triggers etc. Considering this assumptions, researcher used an approach to involve parents (TAU) and child in the play therapy in order to handle childhood behavioural problems. A meta-analysis of 94 play therapy (from 1947 till 2001) conducted by **Sue Bratton 2005**[10], on effectiveness of play therapy revealed that, effects were more positive for humanistic than for non-humanistic treatments, and that utilizing parents in their child's play therapy produced larger overall treatment effects than play therapy conducted by a professional. Similar findings were noticed in the pilot study and hence the involvement of parents in the play therapy sessions continued. Several researches have been conducted independently on behavioral management techniques involving parents, which have proved that teaching parents on handling these behavioral problems of childhood has significant impact on the child. Current study also suggests that the TAU has beneficial effect but addition of play therapy helps parents to understand child and his reactions in particular situations, and how to manage it. Parents feel more close to their child which they never felt before starting with the sessions. The current study results are quiet similar to that of **Abidin, 1995**[11]**, Kazdin and Wassell's (2000)**[7] findings. Being the pilot study findings, outcome of study cannot be generalized at present. An addition of subjective expression of parent's opinion about child's prognosis was added in the data collection tool of the main study.

Conclusion

Play therapy is based on developmental principles and, thus, provides through play developmentally appropriate means of expression and communication for children. Therefore, skill in using play therapy is an essential tool for mental health professionals who work with children. Therapeutic play allows children, an opportunity to express them fully and at their own pace with the assurance that they will be understood and accepted. The study demonstrates that behaviour therapy such as parent management techniques had contributed to address issues of parenting whereas the use of play helped the parents at a specific level to connect to the child in joyous, process-based activities, where there is no pressure of correct outcomes, thus enabling the child to experience a more loved and validated sense of personhood.

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