



EFFECTIVENESS OF PARENT-BASED BEHAVIOR MODIFICATION IN MANAGEMENT IN THE AGE GROUP OF 2-5 YEARS OF CHILDREN WITH TEMPER TANTRUMS

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ABSTRACT 33 children of both genders between age 2 to 5 years who came to Child Development Centre with features of temper tantrums between April 2019 to September 2019, were included in this observational study. The objectives of the study were 1. To assess the parenting styles of children with temper tantrums 2. To assess the behavior of children with temper tantrums using checklist for behavior in children (CBCL) 3. To assess the effectiveness of parent-based behavior modification of children with temper tantrums. Parenting style was assessed using a structured questionnaire. Behavior of the children was assessed using Child Behavior Checklist (CBCL) for age groups 1 ½ – 5 empirically based scales for boys (under 8 domains) & girls and DSM-5 oriented scales for boys and girls (under 5 domains). Regular monthly interventions were given in the institute and an intervention package was given to the parents to continue intervention at home. After 6 months, CBCL, self-structured behavior analysis questionnaire and structured questionnaire for assessing parenting style were administered (post scores). The effectiveness of the intervention was assessed by statistically analyzing the pre and post scores of CBCL, structured questionnaires for assessing parenting style and self-structured questionnaire for behavior analysis. Following intervention, a statistically significant change in parenting style was noted. Initially permissive parenting style was more but after intervention active parenting style was more among the parents. In the post intervention test of behavior assessment there was statistically significant reduction in all behaviors except self-injurious behavior. According to CBCL there was statistically significant reduction in internalizing and externalizing scores. It was concluded that regular parent-based intervention can bring about significant difference in tantrum behavior.

KEYWORDS : Temper tantrums, parenting styles, behavior

INTRODUCTION:

Brief episodes of extreme, unpleasant, and sometimes aggressive behaviors in response to frustration or anger are called temper tantrums. (1) Temper tantrums are part of the normal course of development occurring most commonly in toddlers. Tantrums occur in 87% of 18 to 24-month-olds, 91% of 30 to 36-month-olds, and 59% of 42 to 48-month-olds. (2) Generally, tantrums are shown by 1 ½ -5-year-old children, occur on an average once a day and last for less than five minutes. (3) Tantrums can be a marker of underlying psychiatric disorder. Over protective parenting, negligence and family discord are found to be associated with tantrum behavior. Children with tantrum behavior can have associated behavioral problems such as hyperactivity, thumb-sucking, bed-wetting and sleep disturbances. Temper tantrums happen since toddlers cannot regulate the anger that is experienced when they are prohibited from exercising autonomy. As the child gets older, the severity, frequency, and length of the events naturally decrease. Although the majority of temper tantrums in toddlers are typical and part of normal toddler behavior, atypical tantrums can be a presenting feature of behavioral and psychiatric disorders. (4) Tantrums are more common in a child with abundant energy, in a hungry, fatigued, bored or ill child. (5) The parental responses and the family environment play a role in helping the child develop adequate self-regulatory abilities. The parenting practices that heighten tantrums include inconsistency, excessive strictness, use of corporal punishment, unreasonable expectations, over protection and overindulgence. (2) Mother is usually the main caregiver. Maternal depression and irritability, low education and marital stress are some psycho social factors that have been identified to be associated with tantrums.

The tantrum behaviors are usually disproportionate to the situation. In toddlers, behaviors typically include crying, screaming, going limp, flailing, hitting, throwing items, breath-holding, pushing, or biting. Identifying atypical tantrum behavior early and intervening without delay can help parents handle these tantrums and prevent their long-term adverse consequences. If tantrums persist beyond 4 years, tend to be violent in nature, occur more than five times per day or it is a cause of concern. Atypical temper tantrums are present in many behavioral, developmental, and psychiatric conditions like disruptive behaviors, poor impulse-control, and conduct disorders such as oppositional defiant disorder, trauma-related disorders such as post traumatic stress disorder, and neurodevelopmental disorders such as attention deficit hyperactivity disorder, autism, learning disabilities, and vision or hearing deficits. (3) Moreover, if problem behaviors are not managed earlier, it can develop into antisocial behaviors in late childhood, deviance or delinquency in adolescence and even psycho pathological problems, such as anxiety and behavior disorders, in adulthood (5) Considering the impact of parenting styles on children's problem behaviors, it is important to examine the relationship between the two variables with children in early childhood. Evidence-based parent

training programs are essential for parents to gain skills in managing challenging behavior. Studies on parenting style and tantrums in early childhood, particularly in Kerala, are still limited. The present study is an attempt to assess temper tantrums in 2-5 year old children and their parenting styles and to find out the effectiveness of parent-based behavior modification intervention.

MATERIALS AND METHODS

This was a clinic-home based Interventional study conducted at Child Development Centre (CDC), Kerala. Study population included children of both genders between ages 2 to 5 years who came to the clinics with complaints of tantrum behavior. Children with any neurodevelopmental disabilities were excluded from this study as that condition itself may create uncontrollable behavioral issues in children. Children of both genders aged 2 to 5 years who had features of temper tantrums, referred for development evaluation to Developmental Evaluation Clinic I and Developmental Evaluation II, in Child Development were the participants of the study. The calculated sample size for this study was 45. Parenting style was assessed using a structured questionnaire. Behavioral skills of children were also assessed using Child Behavior Checklist (CBCL) (6) for age groups 1 ½ – 5 empirically based scales for boys (under 8 domains) & girls and DSM-5 oriented scales for boys and girls (under 5 domains) Another structured questionnaire was used for analyzing the behavior of children. A behavioral diary was also prepared for each child to note down the frequency of tantrum behavior occurring in each day.

An intervention package based on behaviour modification principle was developed for providing intervention to the child based on expert opinion of clinical child psychologists, developmental paediatricians, developmental therapists and relevant literature review. The parents were put in the structured intervention programme where they were seen every month and methods to modify the child's behavior were taught to them. They were asked to continue intervention at home based on the intervention booklet given to them. The intervention package mainly focused on the activities to reduce tantrum behavior, improve sitting tolerance, attention, concentration and modifications in parenting styles. After six months of regular intervention CBCL, self structured behavior analysis questionnaire and structured questionnaire for assessing parenting style were again administered to find out the effectiveness of intervention.

The data analysis was done using SPSS version 25. The effectiveness of the intervention was analysed through the pre and post score difference of CBCL, self-structured questionnaire for behavior analysis and structured questionnaire for assessing parenting style.

Ethical clearance for the study was obtained from Institutional Ethics Committee of Child Development Centre, Kerala and informed consent was obtained from mothers of children who participated in this

study.

RESULTS

We were able to recruit 33 children consecutively satisfying the inclusion and exclusion criteria during the study period. From that only 18 children regularly participated in the sessions and 15 were lost for follow-up. These 15 lost for follow-up cases were taken as the comparison group. Out of the 33 children, 22 children (66.7%) were in the 2–3-year age group and 11 (33.3%) were in the 3–5-year age group. Two-third (67.7%) of the study participants were boys. Regarding the socio-economic background of the children, 42.4% belonged to upper-lower, 27.3% to upper middle and 15.2% to upper category. Parenting style assessment was done before and after the intervention. Pre-post test was done for both intervention and the comparison group.

Table 1: Temper Tantrums in children

Tantrums	Number	Percent
Throwing things	25	75.8
Beating	24	72.7
Rolling on floor	23	69.7
Kicking	12	36.4
Spitting	12	36.4
Biting	14	42.4
Yelling	21	63.6
Head banging	10	30.3
Breath holding	6	18.2
Using Bad words	5	15.2
Twitching body muscles	3	9.1
Self injurious behavior	2	6.1

Percentage exceed 100% due to multiple tantrum behaviors in children

During tantrums, 24 children (72.7%) had a pattern of beating behavior, 12 (36.4%) had the behavior of kicking, 12(36.4%) had a behavior of spitting, 14 (42.4%) had biting behavior, 21 (63.6%) children had yelling behavior, 23 children (91.3%) used to roll on the floor, 10 children had head banging behavior (30.3%), majority (25 children - 75.8%) had the behavior of throwing things, 5 children (15.2%) used bad words, 2 (6.1%) had self-injurious behavior. 6 (18.2%) children had the behavior of holding breath.

Table 2. Comparison of Pre-post score of the intervention group (N=18) based on parenting style assessment

Parenting style	Mean	Standard deviation	P value (paired t test)
Authoritarian			
Pre	29.00	6.28	0.001
Post	22.56	4.83	
Permissive			
Pre	30.94	4.41	0.001
Post	22.44	7.78	
Authoritative			
Pre	27.00	4.08	0.061
Post	30.83	7.21	

There was statistically significant reduction in authoritarian and permissive parenting and significant increase in authoritative parenting following 6 months intervention

Table 3: Comparison of post intervention parenting styles in the intervention group and comparison group

	Autocratic (authoritarian)	Permissive	Active (authoritative)	Total
Intervention group	2 (11.1%)	2 (11.1%)	14 (77.8%)	18 (100%)
Comparison group	0 (0%)	10 (66.7%)	5 (33.3%)	15 (100%)

In the intervention group, after 6 months of intervention, 77.8 % of parents had ideal type of authoritative parenting while 66.7% of parents in comparison group were following permissive parenting.

Table 4: Result of paired T test of pre and post CBCL scores of intervention group (N=18)

	Mean	Std Deviation	Paired 't' test
Total raw score			
Pre	50.50	13.435	P value= 0.00
Post	19.28	22.46	

Internalizing			
Pre	6.72	4.184	P value= 0.00
Post	1.78	3.209	
Externalising			
Pre	29.28	6.632	P value= 0.00
Post	11.56	14.101	

As evident from Table 4, statistically significant difference occurred in the pre and post CBCL scores for internalizing and externalizing disorders.

DISCUSSION:

Temper tantrums are a normal part of a child's development but dealing with them can be a very frustrating and sometimes embarrassing experience for teachers, parents, and caregivers. (5) Tantrums are the child's way of showing anger and frustration. In permissive parenting, almost all the needs of the child are met by the parents without any discernment. This can facilitate temper tantrums since children are used to instant gratification. In this study permissive and authoritarian parenting were found to be more common among parents, but after intervention most of the parents adopted an active or authoritative parenting which is the ideal type of parenting. Following regular intervention for 6 months, there was marked difference in all the tantrum behaviors except self-injurious behavior. A statistically significant difference in the internalizing and externalizing scores were seen in the children following intervention. This study shows that change in parenting attitudes and the behavior of the children can be brought about by regular parent mediated intervention. The study results proved that children with temper tantrums benefit from early intervention. The findings of this study are of practical use in equipping parents with the appropriate strategies to enable them to control tantrums among children. Small sample size was a limitation of this study. Future research should involve a larger number of participating parents to enable the use of more advanced statistical analyses. Despite its limitations, this study reveals the crucial role of parenting styles and effectiveness of a structured parent based intervention in minimizing temper tantrums in children.

CONCLUSION:

The results indicated the significant effects of changing parenting styles and a parent based structured intervention on temper tantrums in children 2-5 years. Parents need awareness on how to manage tantrums in children before it becomes out of control which would minimize their stress by practicing consistent management strategies. While the pediatrician is almost always involved in the care of toddlers with temper tantrums, a team of specialists that include a developmental and behavioral pediatrician, child psychologist, and developmental therapist greatly contribute to the management.

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