Relationship between Parenting Styles and Temper Tantrums of Bahraini Children aged 24-48 months old at Primary Care, Kingdom of Bahrain

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Received: May 2023. Accepted: June 2023; Published: July 1, 2023.

Citation: Basem Abbas Ahmed Al Ubaidi et al. Relationship between Parenting Styles and Temper Tantrums of Bahraini Children Aged 24-48 Months Old at Primary Care, Kingdom of Bahrain. World Family Medicine. July 2023;

21(6): 6-16 DOI: 10.5742/MEWFM.2023.95256123

Abstract

Background: Temper tantrums are episodic, unmodulated displays of intense emotional distress, often characterized by outbursts of anger, and may involve aggressive or destructive behaviour. These episodes can be effectively managed through the application of evidence-based parenting strategies that are tailored to a child's individual needs and developmental stage.

Objective: This study aimed to determine the relationship between parenting styles and the temper tantrums of children aged 2-4 years old at primary care in the Kingdom of Bahrain.

Research Method: For this research a cross-sectional, descriptive study design was employed, and a non-probability convenience sampling method was utilized to recruit a sample of 400 participants, that included 8 health centres located in Bahrain (Muharraq, BBK Hidd, Jidhafs, Sitra, Hamad Kanoo, Yousef Abdulrahman Engineer, Mohammed Jassim Kanoo, and Sh. Jaber Al Ahmed Al Sabah HCs), for a duration of 3 months (May 2022 to July 2022). The analysis technique employed was the chi-square test, a statistical method that is used to examine the association between two categorical variables.

Results: The findings of this study demonstrated that more than half of the participating children exhibited temper tantrums that lasted more than 30 minutes and showed that approximately less than one-third (31%) of the children experienced weekly or daily tantrums: however, half of the parents reported that moderate tantrums were exhibited by their youngsters. The most frequently reported tantrum behaviour was "crying", followed by "screaming" or "shouting". A child's request for an item or activity was the most frequent cause, and most tantrums occurred when their parents denied this request. Children threw temper tantrums most frequently in their homes or cars. Parents' most common strategy for stopping a child's tantrums was speaking soothingly, with spanking being the least common. The results indicated that permissive parenting styles were associated with a higher frequency of temper tantrums than authoritative parenting styles.

Conclusion: The results highlight significant aspects of tantrums, such as the duration, as children managed to maintain a tantrum episode for more than seven minutes on average. Tantrum behaviours, reasons, locations, context, and parents' strategies to control tantrums were emphasized as significant for developing proper interventions. The findings highlight the importance of parental styles in the development of children and the need for further investigation in this area.

Keywords: children aged 2-4 years old, parenting style, temper tantrum.

Introduction

Temper tantrums (TT) are a common behavioural disorder in children aged 1.5-4 years old. A thorough evaluation of children's developmental, psychological, and physiological milestones is essential for identifying the underlying cause of TT [1]. There are two types of TT: classical and non-classical. Classical TT is unpleasant, exaggerated, and sometimes aggressive expression of a child's frustration or anger that are usually disproportionate to the given situation. They occur once a day for three minutes, with no injury to themselves or others, and last less than one minute [1]. Non-classical TT continue beyond the age of 4, with injury to themselves or others, lasting for more than 15 minutes and occurring more than five times a day with persistent negative mood between tantrums [2, 3].

The clinical features of TT include crying, screaming, biting, destroying property, throwing objects, or showing violence to defiance, with a child expressing their frustration due to poor developmental skills [4, 5]. Children's misbehaviour in TT results from developmental factors, intellectual processing, temperament, health status, and family learning skills acquired through reflection, imitation, and the surrounding environment [6, 7]. TT peak at 18 to 24 months, slightly decline from 30 to 36 months, and sharply decline by 59% after 42 months [8]. Overall, 21.3% of TT occur daily, 37.3% occur weekly, 30.7% occur monthly, and 10.7% occur yearly [5]. A total of 46.5% of TT last between 5 and 10 minutes [9].

The risk factors for TT are linked to either children or parental causes. Child risk factors are more common in males and include physiological triggers, disruptive disorders, behavioural disorders, adjustment disorder, anxiety, posttraumatic stress, expressive language disorder, or intellectual delay. Parental risk factors include maternal employment, child neglect/abuse, parental divorce/separation, parental distress, low-income family status, and authoritarian, permissive, and neglectful parenting styles [10-12].

TT occur as part of a regular behavioural change during preschool age and helps children achieve healthy progress in their early development with appropriate parental support and warmth [13, 14]. To prevent TT, it is crucial to teach children new skills for connecting with others by providing daily living abilities, discouraging inappropriate social interaction, encouraging them to gain autonomy, enhancing independence, establishing gender identity, developing emotional regulation, and promoting self-reflection. Role-model parents help their children develop empathy and recognize identities, feelings, and communication [15, 16]. Poor parenting behaviour and a deprived parenting style lead to children's TT [4]. If parents are flexible, loving, and compassionate in response to their children, TT will be halted [17].

Parenting style plays a crucial role in the development of children's behaviour. The authoritarian parenting style is exhibited thorough evaluation and control of a child's attitude and behaviour following rigorous standards defined by their parents. The permissive parenting style relies on acceptance and nonpunitive parenting towards the child's actions and behaviour. The neglectful parenting style is exhibited through both low demandingness and responsiveness in the form of avoiding behavioural control but setting a small number of conduct expectations. Parenting styles affect TT due to the role of parents as protectors and educators in establishing their children's character formation [10].

Temper tantrums are directly affected by five factors: family environment, parenting style, adjustment, emotional intelligence, and children's independence (29.8%, 22%, 8.68%, 7.06%, and 4.53%, respectively) [10]. An elevated level of parental care of the family environment is associated with fewer TT; in contrast, poor parental care, lack of involvement, and poor supervision are associated with antisocial behaviour such as TT [10]. Self-adjustment and emotional intelligence, which are acquired through family, social and genetic factors, maintain behavioural equilibrium and control negative thinking to develop self-regulated emotions [10]. This is the first study in Bahrain; moreover, there is a scarcity of studies on TT in Arab countries (Emirates and Jordan) [17, 19].

This study will provide parents with observed data to help them reflect on strategies and behaviours for dealing with TT. It will also provide researchers with a fundamental basis for further research to evaluate TT among Arab children and develop mediations and guidelines on how to react to children's TT. The aim of this study is to assess the TT behaviour (e.g., frequency, severity, duration, reasons, locations, context, and parent's strategies) of Bahraini children aged 24 months to 48 months old, including all children of the participant families within the stated age range, and to measure the relationship between TT and common parenting styles.

Materials and Methods

A cross-sectional, descriptive study design was used. Non-probability convenience sampling was used to recruit participants. A Sample Size of 411 participants, was estimated based on The National Education Association Research Bulletin Formula (1960). The expected (P) was set to 0.50 (50%), with a 95% confidence interval (CI) and precision of 0.05. The calculated sample size was approximately 381. The final sample size obtained was 411 participants. Parents of a child aged between 24 and 48 months old at one of 8 health centres located in Bahrain (Muharraq, BBK Hidd, Jidhafs, Sitra, Hamad Kanoo, Yousef Abdulrahman Engineer, Mohammed Jassim Kanoo, and Sh. Jaber Al Ahmed Al Sabah HCs) were invited to participate in this study. The selected health centres are open 24 hours and cover high-density catchment areas for a a duration of 3 months (May 2022 to July 2022).

Inclusion Criteria: If parents can read and write Arabic or English., If parents can provide informed consent and If parents are interested in the study.

Exclusion Criteria: If their children had poor social skills communication., If parents could not read or write Arabic or English and If parents were not interested in the study. For this study, three types of questionnaires were used; the first was used to collect sociodemographic information, the second was a 45-item tantrum questionnaire, and the third explored common parenting styles.

Sociodemographic characteristics: This questionnaire was developed based on previous research. It included eleven items: four items on children (age, sex, child order, number of children) and four items on parents (parent's age at marriage, socioeconomic status, parent's educational levels, parent's employment status). We used the categories of "younger" children aged 24-36 months old and "older" children aged >36-48 months old [20]. The parents were asked to recall their child's behaviour over the last three months and report a description of TT, types, reason, location, context, and their own coping strategies. The 45-item Tantrum Questionnaire collected parental responses using a 5-point Likert scale ranging from 0 "Never" to 4 "Always. It is a valid and reliable scale. This scale is intended to capture children's behaviour and their parent's responses during TT [5].

Moreover, the instrument is in the common domain and free to use. It was translated from its original language (English) to the target language (Arabic). The parents were asked to recall their parenting style. Then, their scores were added up and the total was divided by the number of items to find the calculated score for each category. The highest calculated score indicated each parent's preferred parenting style. Parental responses on parenting style were collected using a 6-point Likert scale ranging from 1 (never) to 6 (always).

Translation and Pilot Testing:

We used the Arabic version of the 45-item tantrum questionnaire that has been used in other studies and proved its high validity and reliability (Cronbach's alpha of 0.80) [20].

Then, we used the Arabic version in the pilot study with 20 participants who were not involved in the main study. Reliability analysis was performed to assess the internal consistency using Cronbach's alpha test, and the results indicated that Cronbach's alpha coefficients for tantrum behaviour, reasons for child's tantrums, locations of child's tantrums, context of child's tantrum behaviours, parent's strategies for stopping child's tantrums, rate your response, authoritative parenting style, and permissive parenting were 0.889, 0.852, 0.805, 0.833, 0.821, 0.905, 0.928, and 0.762, respectively.

The quantitative variables were presented as the mean and standard deviation, whereas the categorical variables were presented as frequencies and percentages. The internal consistency reliability using Cronbach's alpha coefficient were used to verify the reliability of the questionnaire. Two independent sample t tests were used to verify the significant mean differences in aspects of

tantrum behaviour according to the age of the child and the severity of tantrums. One-way analysis of variance (ANOVA) was used to compare the mean aspects of tantrum behaviour for different groups. The post- hoc test using the Scheffe method was used to determine the significance of pairwise mean differences in the aspects of tantrum behaviour according to different levels. The Statistical Package for Social Sciences (SPSS), version 28 (Chicago, IL, USA), was used to analyse the collected data. Statistical significance was set at p value < 0.05.

Ethical Consideration:

After obtaining ethical approval from the primary care ethical committee, we distributed a questionnaire with a cover letter, which included the purpose and objectives of the study. After a full explanation of the study purpose, the letter included an invitation to all voluntary participants. Additionally, the voluntary participants could withdraw at any time without any consequences. All parents were asked to provide written consent and were assured that their data would remain confidential.

Results

Demographic characteristics of the participants

Atotal of 425 questionnaires were distributed to participants who met the inclusion criteria, and 411 participants agreed to take part. The response rate was excellent at 96.7%. The majority of the children were male (53.3%); most were at the age of 37-48 months (63%), and the mean age of the children was 3.02. Overall, 56.2% and 45.4% of the mothers and fathers, respectively, had an education level of diploma or above. Approximately 92.4% of the fathers and 51.8% of the mothers were employed, and the mean ages of the fathers and mothers were 26.5 and 22.9, respectively (Table 1). As a result, most children were first (36.0%) or second (31.3%) in the sibling order. Overall, 60.3% of the families had an income between 1000-3000 BD/monthly (Table 1).

Table 1. Sociodemographic characteristics of participants (n =411).

Characteristics	Frequency (n)	Percent (%)	
Child gender	1		
Female	192	46.7	
Male	219	53.3	
Child age			
24-36 months	139	37.0	
37-48 months	237	63.0	
Fathers' education level			
Primary	13	3.2	
Intermediate	32	7.8	
Secondary	179	43.7	
Diploma and above	186	45.3	
Mothers' education level			
Primary	15	3.7	
Intermediate	32	7.8	
Secondary	132	32.3	
Diploma and above	230	56.2	
Fathers' occupation			
Employed	376	92.4	
Unemployed	25	6.1	
Others	6	1.5	
Mothers' occupation			
Employed	212	51.8	
Unemployed	191	46.7	
Others	6	1.5	
Childbirth order			
First born	145	36.0	
Second born	126	31.3	
Third born	107	26.6	
Fourth born and beyond	25	6.1	
Income	I I		
Less than 1000	55	13.4	
Between 1000-2000 BD	128	31.1	
Between 2001-3000 BD	120	29.2	
More than 3000 BD	108	26.3	
Age	Mean	St. Deviation	
Child	3.02	1.10	
Father	26.53	6.03	
Mother	22.89	4.49	

Description of children's tantrums

More than one-third (37.8%) of the parents reported that their child had infrequent TT, while less than one-third of the TT occurred weekly or daily, with rates of 31.2% and 31%, respectively. The severity of TT, as reported by parents, was either mild (44.6%) or moderate (50.7%). The mean TT duration was 4.86 minutes, ranging between 5.0 minutes and 20.0 minutes. The most frequently reported tantrum behaviour was 'crying' (mean = 2.43, SD = 1.13; 60.8) followed by 'screaming or shouting' (mean = 2.23, SD = 1.16; 55.8%), which was the normative, distress type of TT, followed by destructive and non-destructive types, as shown in Table 2.

Table 2. Description of child's tantrum (n=411)

Description	N	%
Frequency of child tantrums in the past	three months	
Daily	127	31.2
Weekly	126	31.0
Less often	154	37.8
Severity of tantrums	•	
Mild (Low Risk)	180	44.6
Moderate (Higher Risk)	205	50.7
Severe (Highest Risk)	19	4.7
Duration of tantrums (Minute	es)	
Less than 5 minutes	170	41.4
6-10 minutes	24	5.8
11-30 minutes	6	1.5
More than 30 minutes	211	51.3
Duration of tantrums (Minutes) Mean, Medi	an (IQR) = 4.86, 3 (5-	2)
Tantrum behaviour	Mean (SD)	
Crying	2.43 (1.13)	60.8
Screaming or shouting	2.23 (1.16)	55.8
Hitting parents or siblings	1.23 (1.19)	30.8
Hitting objects	1.05 (1.16)	26.3
Throwing self on floor	0.98 (1.22)	24.5
Stomping feet	0.74 (1.14)	18.5
Deliberately hitting own head against something	0.41 (0.83)	10.3
Breaking things	0.74 (0.99)	18.5
Throwing things	1.11 (1.12)	27.8
Biting	0.55 (0.91)	13.8
Kicking	0.80 (1.04)	20.0

N: Frequency, %: Percentage, SD: Standard Deviation; IQR: Interquartile Range

Reasons for tantrums

Examining the related reasons of child's tantrums revealed (Table 3) that "the child's request for an item or activity (e.g., snack) was denied" was the most common reason for tantrums that parents reported (mean = 2.14, SD = 1.32; 53.5%), followed by "child was involved in the activity and did not want to start/stop/change activity" (mean=1.82, SD=1.32; 45.5%). This was followed by "the child wanted attention" (mean=1.80, SD= 1.29, 45.0%).

Table 3. Reasons for children's tantrums (N=411)

Reasons	Mean (SD)	%
Child was hungry or tired	1.59 (1.27)	39.8
Child wanted attention	1.80 (1.29)	45.0
Child was sick or in pain	1.67 (1.26)	42.8
Child's request for an item or activity (e.g., snack) was denied	2.14 (1.32)	53.5
Child was involved in the activity and did not want to start/stop/change activity (e.g., to get dressed)	1.82 (1.32)	45.5
I do not know what started it	1.47 (1.21)	36.8

SD: Standard Deviation; %: Percentage.

Locations, context, and parents' strategies

The results show that the most frequent location where children threw TT was in the home (mean=2.45, SD=1.26, 61.3), followed by in the car (mean =1.64, SD=1.09, 41.0) and public places (mean = 1.50, SD = 1.30; 37.5%). The most common context for TT was at the child's home when they were supposed to go to bed (mean = 1.37, SD = 1.15; 34.3%) and when left alone (mean=1.37, SD=1.10, 34.3%). The parents' strategies for stopping the TT included speaking soothingly to the child (mean =2.44, SD=1.34, 61%), picking the child up and holding them (mean 2.32, SD= 2.08, 58%), helping the child talk about the cause of their anger (mean=2.30, SD= 1.36, 57.5%), commanding the child to stop throwing a tantrum (mean= 2.19, SD= 1.35, 54.8%) or finding a way to distract the child (mean= 2.13, SD= 1.34, 53.3%) (Table 4).

Table 4. Sites, context, and parents' strategies for coping with children's tantrum behaviour (N=411)

Description	Mean (SD)	%
Locations of child's tantrum		9
At home	2.45 (1.26)	61.3
In public places	1.50 (1.30)	37.5
In the car	1.64 (1.09)	41.0
When visiting someone else's home	1.08 (1.03)	27.0
Context of child's tantrum behaviour		0
When dressing	1.12 (1.02)	28.0
At meals	1.35 (1.15)	33.8
When getting washed	1.24 (1.12)	31.0
When they were supposed to go to bed	1.37 (1.15)	34.3
When left alone	1.37 (1.10)	34.3
When in the company of other children	1.12 (1.05)	28.0
When routines changed	1.18 (1.21)	29.5
In their own home, when having guests	0.85 (1.01)	21.3
When troubled by intense sounds or lights	0.86 (1.02)	21.5
In new, unfamiliar situations	1.13 (1.25)	28.3
Parent's strategies for stopping child's tantrums		
Speaking soothingly to the child	2.44 (1.34)	61.0
Picking the child up and holding him or her	2.32 (2.08)	58.0
Commanding the child to stop	2.19 (1.35)	54.8
Stating a consequence (e.g., timeout)	1.77 (1.46)	44.3
Spanking the child	0.85 (1.19)	21.3
Ignoring the behaviour	1.46 (2.94)	36.5
Giving the child what he or she wanted	1.74 (1.97)	43.5
Offering the child a reward if he or she would behave	1.94 (1.26)	48.5
Turning their back on the child and walking away	1.42 (1.31)	35.5
Finding a way to distract that child's attention away from whatever was upsetting him or her	2.13 (1.34)	53.3
Helping the child talk about the causes of his or her anger	2.30 (1.36)	57.5

Comparison of aspects of tantrum behaviour according to the age of the child and the severity of tantrums

The study results of the independent samples t test revealed that there was no statistically significant difference in the mean of the aspects of tantrum behaviour between the younger and older children (Table 5).

Table 5. Comparison of the aspects of tantrum behaviour between younger and older children

	Child's age				
Aspects of Tantrum Behaviour	Younger Children (n=118)		Older Children (n=206)		P. value
	Mean	St. Deviation	Mean	St. Deviation	
Reason	10.61	5.55	10.49	5.55	0.852
Locations of child's tantrum	6.90	3.36	6.55	3.23	0.336
Context of child's tantrum	11.25	6.77	11.91	7.22	0.391
Parent's strategies	19.79	8.03	20.29	8.27	0.588

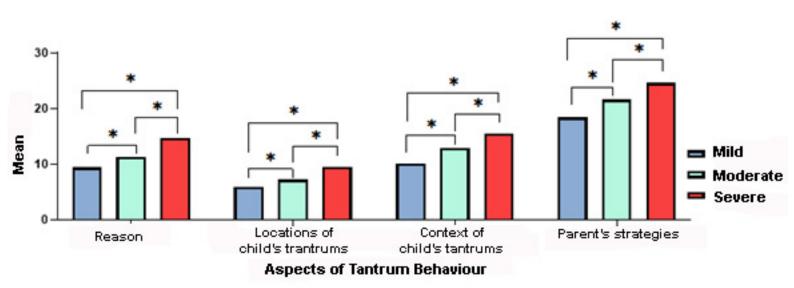
To compare the aspects of tantrum behaviour according to the level of severity of tantrums, analysis of variance (ANOVA) was conducted, and the results indicated that there were statistically significant differences in the mean of all aspects of tantrum behaviour (reason, locations of child's tantrum, context of child's tantrum, and parents' strategies) according to the level of severity of tantrums F(2, 346) = 10.753, p < 0.001; F(2, 389) = 15.518, p < 0.001; F(2, 377) = 9.689, p < 0.001; and F(2, 357) = 8.724, p < 0.001, respectively (Table 6).

Table 6. Analysis of variance to compare the aspects of tantrum behaviour according to the severity of tantrums.

	Se			
Aspects of Tantrum Behaviour	Mild (n=156)	Moderate (n=173)	Severe (n=18)	P. value
	Mean ± SD	Mean ± SD	Mean ± SD	
Reason	9.37 ± 5.06	11.28 ± 5.51	14.61 ± 5.61	< 0.001
Locations of child's tantrum	5.85 ± 3.25	7.18 ± 2.97	9.44 ± 4.15	< 0.001
Context of child's tantrum	10.13 ± 6.42	12.80 ± 6.87	15.53 ± 9.42	< 0.001
Parent's strategies	18.39 ± 8.25	21.57 ± 8.33	24.56 ± 7.37	< 0.001

To determine the significance of pairwise mean differences in the aspects of tantrum behaviour according to the levels of severity of tantrums, the posthoc test using the Scheffe method was employed and showed that there were statistically significant differences in the mean of all aspects of tantrum behaviour (reason, locations of child's tantrum, context of child's tantrum, and parents' strategies) between the children whose level of tantrums was severe and those whose level of tantrums was moderate, with the severe level being favoured, between severe and mild, with severe being favoured, and between moderate and mild, with moderate being favoured (Figure 1).

Figure 1. Post hoc test to compare the significance of the differences between the means of aspects of tantrum behaviour according to the severity of tantrum.



Type of parenting style:

To compare the type of parenting style according to maternal years of education, analysis of variance (ANOVA) was conducted, and the results revealed that there were statistically significant differences in the mean of democratic and permissive styles F(3, 380)=7.167, p<0.001; F(3, 223)=2.842, p=0.039, respectively (Table 7).

Table 7. Analysis of variance to compare the parenting style according to the maternal years of education

	Mother's years of education				
Parenting style	Primary (n=13)	Intermediate (n=29)	Secondary (n=122)	Diploma and above (n=217)	P. value
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	
Democratic Parenting Style	5.04 ± 0.97	3.97 ± 1.37	4.56 ± 0.98	4.66 ± 1.00	< 0.001
Authoritarian Parenting Style	2.09 ± 2.37	2.07 ± 1.38	2.02 ± 1.54	1.70 ± 1.55	0.269
Permissive Parenting Style	1.45 ± 1.66	1.72 ± 1.16	2.56 ± 1.52	2.47 ± 1.43	0.039

To determine the significance of pairwise mean differences in the type of parenting style according to the maternal years of education, the posthoc test using the Scheffe method was employed and indicated that there were statistically significant differences in the mean of the democratic parenteral style between mothers with a primary education level and an intermediate level, with primary being favoured, between secondary and intermediate level, with secondary being favoured, and between diploma and above and intermediate, with diploma and above being favoured (Figure 2). Regarding the permissive style, the results showed that there were statistically significant differences in the mean of the parenting style permissive between mothers with secondary level and primary or intermediate education level, with secondary level being favoured, and between diploma and primary or intermediate level, with diploma being favoured (Figure 3).

Figure 2. Post hoc test to compare the significance of the differences between the means of parenting styles according to the mother's years of education.

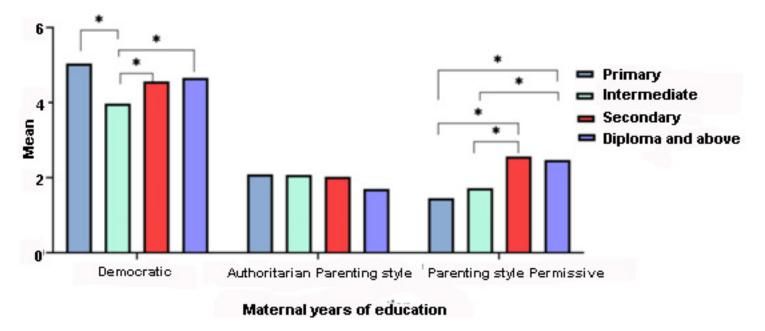
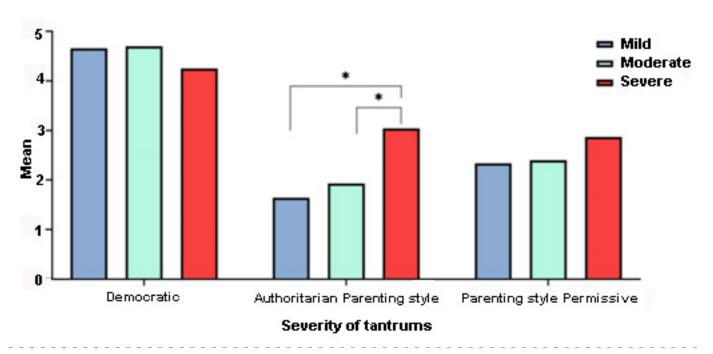


Figure 3. Post hoc test to compare the significance of the differences between the means of authoritarian parenting styles according to the severity of tantrums.



Discussion

This study aimed to investigate the relationship between parental styles and the frequency of temper tantrums and their coping strategies. Over half of the participants' children exhibited tantrums lasting more than 30 minutes, in contrast to a study in Wisconsin in which 75% of tantrums lasted 5 minutes or less [9]. Crying was the most common tantrum behaviour, with screaming and shouting being the second most common, which aligns with the findings of a study conducted in Jordan [20].

Our study found that the most common cause of tantrums was the denial of a child's request for an item or activity, which is consistent with a study conducted at the University of Connecticut [21]. This finding contrasts with the statement in "Essentials of Pediatric Nursing" that hunger and attention seeking are the most common reasons [22]. Tantrums most commonly occurred at home and least frequently in someone else's house, which corresponds to another study [21]. Speaking soothingly to the child was the most common parental strategy for stopping tantrums, while spanking was the least common, consistent with a published guideline article [23].

The topic of children's temper tantrums and the impact of parental styles on their occurrence is of significant interest in the field of child development and psychology. Our study revealed a significant association between parental styles and the frequency of children's temper tantrums. Permissive parenting styles were associated with a higher frequency of temper tantrums compared to authoritative parenting styles, consistent with previous research [24, 25]. Chen et al. also found a negative relationship between parental control and temper tantrums in preschool-aged children, while parental warmth was positively related to

temper tantrums [26]. Kim et al. found that parental stress is associated with an increased frequency of children's temper tantrums [27]. This is important, as permissive parenting styles have been linked to higher levels of parental stress [28].

The strength of medical research on the relationship between parental style and children's temper tantrums lies in identifying specific behaviours and attitudes that contribute to the problem and inform the development of more effective interventions. However, this research may not fully capture the complexity of the relationship between parental style and children's temper tantrums due to other factors, such as genetics or environmental factors, which also play a role. Small sample sizes or other limitations may affect the generalizability of some studies to the broader population.

Our results contribute to the growing body of literature that suggests a link between parental styles and the frequency of children's temper tantrums. The findings highlight the importance of parental styles in the development of children and the need for further investigation in this area. By identifying the factors that contribute to the development of temper tantrums, research can inform the development of more effective interventions for children with temper tantrums and improve their well-being.

In conclusion, this study found a significant association between parental styles and the frequency of children's temper tantrums, consistent with previous research. Our results highlight the importance of investigating parental styles in connection to the development of children and inform the development of more effective interventions for temper tantrums.

Acknowledgements:

Declaration of conflicting interests: The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding: Self-funded research

References

- 1. Watson S, Watson T, Gebhardt S. Temper Tantrums: Guidelines for Parents and Teachers. National Assosiation of School Psychologists, Miami University: Oxford O. 2010.
- 2. Daniels E, Mandleco B, Luthy KE. Assessment, management, and prevention of childhood temper tantrums. Journal of the American Academy of Nurse Practitioners. 2012;24(10):569-73.
- 3. Weathers LS. Pediatrics: A Primary Care Approach. Archives of Pediatrics & Adolescent Medicine. 1997;151(7):749-.
- 4. Ogundele MO. Behavioural and emotional disorders in childhood: A brief overview for paediatricians. World journal of clinical pediatrics. 2018;7(1):9.
- 5. Österman K, Björkqvist K. A cross-sectional study of onset, cessation, frequency, and duration of children's temper tantrums in a nonclinical sample. Psychological reports. 2010;106(2):448-54.
- 6. Feldman R, Dollberg D, Nadam R. The expression and regulation of anger in toddlers: Relations to maternal behavior and mental representations. Infant Behavior and Development. 2011;34(2):310-20.
- 7. Edinyang SD. The significance of social learning theories in the teaching of social studies education. International Journal of Sociology and Anthropology Research. 2016;2(1):40-5.
- 8. Potegal M, Davidson RJ. Temper tantrums in young children: 1. Behavioral composition. Journal of Developmental & Behavioral Pediatrics. 2003;24(3):140-7.
- 9. Potegal M, Kosorok MR, Davidson RJ. Temper tantrums in young children: 2. Tantrum duration and temporal organization. Journal of Developmental & Behavioral Pediatrics. 2003;24(3):148-54.
- 10. Umami DA, Sari LY. Confirmation of Five Factors That Affect Temper Tantrums In Preschool Children: A Literature Review. Journal of Global Research in Public Health. 2020;5(2):151-7.
- 11. Eisbach SS, Cluxton-Keller F, Harrison J, Krall JR, Hayat M, Gross D. Characteristics of temper tantrums in preschoolers with disruptive behavior in a clinical setting. Journal of psychosocial nursing and mental health services. 2014;52(5):32-40.
- 12. Benedek EP, Huettner SA. Divorce and coparenting: A support guide for the modern family: American Psychiatric Pub; 2019.
- 13. Poehlmann J, Miller Schwichtenberg A, Hahn E, Miller K, Dilworth-Bart J, Kaplan D, et al. Compliance, opposition, and behavior problems in toddlers born preterm or low birthweight. Infant Mental Health Journal. 2012;33(1):34-44.

- 14. Kiff CJ, Lengua LJ, Zalewski M. Nature and nurturing: Parenting in the context of child temperament. Clinical child and family psychology review. 2011;14:251-301.
- 15. Weiss H, Caspe M, Lopez E. Family involvement in early childhood education. Family involvement makes a difference. Evidence that family involvement promotes school success for every child of every age. Harvard Family Research Project (HFRP). 2006;1:1-8.
- 16. Wilson L. Partnerships: Families and communities in early childhood development: Thomson/Nelson; 2005.
- 17. Stocker JNM, Khairia Ghuloum A. Parent-child relationships in the United Arab Emirates. International Journal of Developmental and Educational Psychology. 2014.
- 18. Querido JG, Warner TD, Eyberg SM. Parenting styles and child behavior in African American families of preschool children. Journal of Clinical Child and Adolescent Psychology. 2002;31(2):272-7.
- 19. Salameh AKB, Malak MZ, Al-Amer RM, Al Omari OS, El-Hneiti M, Sharour LMA. Assessment of temper tantrums behaviour among preschool children in Jordan. Journal of Pediatric Nursing. 2021;59:e106-e11.
- 20. Townsend MC, Morgan KI. Psychiatric mental health nursing: Concepts of care in evidence-based practice: FA Davis; 2017.
- 21. Broder L. Individual differences in toddlers' temper tantrums: The role of language and self-regulation. 2013.
- 22. Stack C, Dobbs P. Essentials of paediatric intensive care: Cambridge University Press; 2004.
- 23. Harrington RG. Temper tantrums: guidelines for parents. NASP Resources. 2004.
- 24. Baumrind D. Child care practices anteceding three patterns of preschool behavior. Genetic psychology monographs. 1967.
- 25. Baumrind D. Current patterns of parental authority. Developmental psychology. 1971;4(1p2):1.
- 26. Bahrami B, Dolatshahi B, Pourshahbaz A, Mohammadkhani P. Parenting style and emotion regulation in mothers of preschool children. Practice in clinical psychology. 2018;6(1):3-8.
- 27. Lyons AM, Leon SC, Roecker Phelps CE, Dunleavy AM. The impact of child symptom severity on stress among parents of children with ASD: The moderating role of coping styles. Journal of child and family studies. 2010;19:516-24.
- 28. Maccoby EE, Martin JA. Socialization in the context of the family: Parent-child interaction. Handbook of child psychology: formerly Carmichael's Manual of child psychology/Paul H Mussen, editor. 1983.