

## Nursing

**KEYWORDS:** Temper tantrum, PCIT, Pre-school, emotional behavior

## THE IMPACT OF PCIT (PARENT CHILD INTERACTION THERAPY) ON TEMPER TANTRUMS IN PRE-SCHOOL



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OF PURE MEDICAL RESEARCH**Abstract:**

Temper tantrum behavior is a child's emotional behavior which is shown by explosive anger and some parents consider this behavior to be bad behavior. Temper tantrums can occur in children aged 3-6 years or more. This literature review aims to determine the impact of PCIT (Parent Child Interaction Therapy) on temper tantrums in preschool. In finding this literature review used four databases (ProQuest, Scopus, Pubmed, and Sains Direct) for the design of the study used cross sectional, True Experimental, Observational and Systematic Reviews published in the last five years. The protocol and evaluation of the literature review used the PRISMA checklist to determine the selection of studies that were found and adapted to the objectives of the literature review. The results of literature review analysis of several parents in group and individual PCIT reported that the application of parent-child-based interventions was proven to be effective and has the potential to bring significant and lasting changes in increasing positive behavior in children with external behavior problems. The frequency of problematic child relationship behavior significantly decreased with increasing age of the child. In addition, assessing both positive and negative child relationship behavior could assist parents in understanding the relevance of different aspects for the development of parent-child relationships.

**INTRODUCTION**

Temper tantrums are problematic behaviors in children that need proper attention and treatment by parents. If this temper tantrum behavior is left alone without being handled wisely, this temper tantrum behavior can become a deviant behavior, which can have a bad impact on the child's life in the future. Problematic behavior in children is one of the issues in society that needs attention and treatment by parents during the development and growth of children. In each process of growth and development, children have differences and characteristics of each that are different from one another, one of the differences is in terms of behavior. Parents must be ready and know how to deal with these behavioral differences, both expected behavior and unexpected or deviant behavior, especially in dealing with children who are experiencing temper tantrum behavior. According to (Amin, 2017) temper tantrum behavior is an excessive reaction from a child when his wishes are not in accordance with feelings or expectations. This temper tantrum behavior usually appears when a child who has a temper tantrum faces a situation or obstacle that is not in accordance with his wishes.

According to data from the Central Statistics Agency in 2016 (Alini &

Jannah, 2019) in Indonesia, the number of preschool children with an age range of 2-7 years is 30.26 million. Meanwhile, according to Psychologyzone 2012 in (Ramadia, 2018) states that in Indonesia toddlers who experience temper tantrums occur at the age of 2 to 4 years as much as 23-83% and this temper tantrum lasts for one year. Based on the results of Esti's 2015 research in (Hanura, 2017) conducted in Jember City stated that as many as 17 children (73.9%) were at risk of experiencing temper tantrums because mothers left their children or worked and as many as 6 children (26.1%) were not at risk. experiencing a temper tantrum.

Temper tantrum behavior that often appears in preschool age children usually starts from the interaction between parents and children who are not good, so usually this temper tantrum behavior arises from situations in the house or ineffective behavior from parents. Parents have a great influence on the process of child growth and development, both in the process of physical, mental, social, emotional and spiritual formation. In fact, it is not uncommon for improper parenting to be the cause of problems in children. When children are faced with coercion from parents, such as criticism, repeated orders, and repeated physical prompts, it will usually result in rejection from the child that appears in the form of temper tantrums, vocal rejection, or actions aimed at seeking attention (acting out). For example, when a child starts screaming, crying, or throwing himself on the floor, parents are likely to change their decision more quickly and be reluctant to follow up on disciplinary action (Paramita, Hadis, & Hartiani, 2019). According to Kirana, 2013 in research (Supriyanti et al., 2018), the factors that can cause temper tantrums in children include physiological factors (such as children feeling hungry, tired or sick), psychological factors (when children experience failure and other parents are too demanding that the child is in accordance with the expectations of parents), parental factors (parental care and communication between parents and children) and environmental factors (both the environment in the family and the environment outside the home).

Preschool age children usually start to have the desire to do various things, such as learn to understand and adapt related to the behavior that is expected and not expected by the surrounding environment, and indirectly children also begin to learn which behavior is right and wrong. The role of parents in this case is needed to help children understand the norms and values that apply in their environment. Children need to be given the freedom to do things or activities they want while still providing boundaries in accordance with the norms and values that apply in their environment, so that children understand that there are limits and signs that should not be violated. Thus, it is hoped that through Parent Child Interaction Therapy (PCIT) therapy, parents are able to overcome the problem of temper tantrum behavior that occurs in preschool-aged children by combining play and interaction therapy, so that it is hoped that children can grow and develop well and have a good spirit. independent and responsible.

**METHODS**

The protocol and evaluation of the literature review will use the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) checklist to determine the selection of studies that have been found and adapted to the objectives of the literature review.

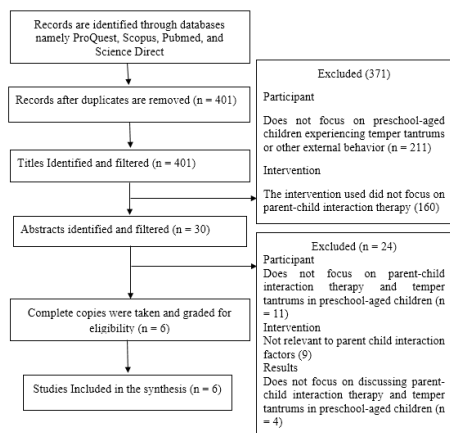
The literature search in this literature review uses four databases, namely ProQuest, Scopus, and Pubmed, Sains Direct.

**Inclusion and Exclusion Criteria**

**Table 1. PICOS Format in Literature Review**

Criteria	Inclusion	Exclusion
Population	The study consisted of a community of preschoolers who experienced temper tantrums or other external behaviors.	Communities other than preschool children with an age range above 10 years
Intervention	PCIT (parent child interaction therapy) Intervention	
Comparison	Other treatments, for example, parenting therapy for children, parenting therapy for children, parenting communication therapy for children.	In addition to parenting therapy for children, parenting therapy for children, parent-child communication therapy
Outcome	The impact of PCIT (Parent Child Interaction Therapy) on temper tantrums in preschool.	No exceptions
Study design and publication type	Studies using cross sectional, True Experimental, Observational and Systematic Review.	No exceptions
Publication years	2015-2021 Years	Year < 2015
Language	English and Indonesian	Languages other than English and Indonesian

**Study Search and Selection Results**



**Quality Rating**

Analysis to assess the methodological quality in each study using the JBI Critical Appraisal Checklist was obtained in each study (n = 6) with an assessment checklist with several questions to assess the quality of the study. We excluded studies of low quality to avoid bias

in the validity of the results and review recommendations. In the last screening, thirty studies achieved a score of 50% and were ready to synthesize data, however due to biased assessment of therapy and articles used in the literature review there were 6 pieces.

**RESULTS AND ANALYSIS**

**Table 2. Study Search Results Based on Research Database**

Source Language	Year	Database	N	Types of Article Research Studies		
				Cross Sectional	Systematic Review	True Eksperimetal
English	2015-2021	ProQuest	173	1	2	1
		Scopus	0	0	0	0
		Pubmed	227	0	1	1
		Sains Direct	1	0	0	0
Results	6	1	3	2		

The contributing factors in the study of parent-child interaction therapy and problem behavior in children are mostly true experimental and systematic literature reviews. The average number of participants is more than 50 individuals. Overall, each study examines the impact of applying parent-child interaction therapy related to behavioral problems in preschoolers. Studies corresponding to this systematic review were carried out on average in Germany with two studies ((Briegel & Hoyer, 2020); (Mingebach, Kamp-Becker, Christiansen, & Weber, 2018), one study in the UK (Ogundele, 2018), one study in Australia (Kohlhoff et al., 2020) and the other two studies conducted in the USA (Lieneman, Brabson, Highlander, Wallace, & McNeil, 2017b)(M. Barnett et al., 2019).

**Table 3. Literature Search Results**

No.	Author and Year	Title	Study Design, Sample	Variable	Instrument	Result of Factor Analysis	Result Summary
1.		Parents' Perception of Their 2-10-Year-Old Children's Contribution to The Dyadic Parent-Child Relationship in Terms of Positive and Negative Behaviors	Design : Cross Sectional Sample : 173 children aged 2-10 years	Parents' Perception, Positive and Negative Behavior	pre-trial questionnaire, observational, scale and checklist	Emotional, physical and intellectual	Statistical results show that the child's relationship behavior is a reliable and valid measure. In their parents' perception, girls show more positive relationship behavior and are less problematic than boys. The frequency of problematic child relationship behavior significantly decreased with increasing age of the child, while positive relationship behavior did not show any correlation with the child's age.

2.	Meta-meta-analysis on the effectiveness of parent-based interventions for the treatment of child externalizing behavior problems	Design : Systematic Literature Review Sample: children under 13 years old	intervention, Child externalizing behavior problems	1. Overall child behavior using instruments: child behavior checklist, Dyadic parent-child interaction coding system, teacher assessment of social behavior and other side specific measures such as child depression interaction, social behavior questionnaire 2. Children's behavior violates using the instrument: Externalization checklist, strengths and difficulties of the questionnaire behavior scale 3. (PRISMA)	Factors that led to children being referred to treatment were behavioral problems [e.g., oppositional defiant disorder (ODD), conduct disorder (CD), ADHD, and children described as having externalizing problems.	Parent-based interventions have been shown to be effective in improving behavior in children with external behavior problems, as assessed using parental reports and observational measures. Further analysis focusing on the child's externalizing behavior yielded a significant and moderate effect (SMD = 0.45).	4.					individuals diagnosed with certain disorders, trauma victims, and hearing loss), changes in format (group and home-based), intensive PCIT teacher-child interaction training, preventive medicine (for problems of externalization, child abuse, and developmental delays), and implementation.	rare studies related to behavioral health. Many studies conducted on small samples, particularly in the mothers involved, have little demographic diversity and few have long-term follow-up
3.	Behavioral and emotional disorders in childhood: A brief overview for paediatricians	Design : Systematic literature Review Sample: 3042 children with an average age of 4-7 years	Care, Behavior in children	Preferred Reporting Items For Systematic Reviews and Meta-analyses (PRISMA)	Disorders, depression, anxiety, post-traumatic stress in childhood and pervasive developmental disorder (autism), characterized by internalizing and externalizing	There is evidence-based improvement for some psychosocial interventions but less leverage for pharmacological treatment other than the use of stimulants for ADHD behavioral problems.	5.	A randomized controlled trial comparing parent child interaction therapy - toddler, circle of security-parenting™ and waitlist controls in the treatment of disruptive behaviors for children aged 14-24 months: study protocol	Design: Randomized Controlled design Sample: 90 Toddlers aged 12-24 months	Treatment, Parent Child Interaction Therapy,	interviews, observations, report questionnaires,	parenting capacity, parenting sensitivity, sense of competence of parents in managing negative emotions of toddlers, sense of powerlessness of parenting, parental mentalization of children, regulation of parental emotions, potential for child abuse and parental stress. For children, it will cover children's socio-emotional functions (initiative, relationships functions, self-regulation), child emotional regulation, child attachment security, and child behavior.	Based on the results of the study, it was shown that Parent Child Interaction Therapy (PCIT) therapy in toddlers has the potential to bring significant and lasting changes to children who experience early behavior problems.
4.	Parent - Child Interaction Therapy : current perspectives	Design : Systematic literature review Sample : Children 2-7 years old	Parent-child Interaction Therapy perspective	Preferred Reporting Items For Systematic Reviews and Meta-analyses (PRISMA)	Treatment effectiveness, treatment components, adaptation for different populations (age groups, cultural groups, military families,	The results of the analysis of various studies indicate that there are several shortcomings of PCIT therapy in contempo							

6.	Group Parent-Child Interaction Therapy: Randomized Control Trial for the Treatment of Conduct Problems in Young Children	Design : Randomized Controlled group pre test post test design Sample: 81 families with children aged 3-6 years as many as 42 children	Interventions, treatment of children's externalizing behaviors or problems	Child Behavior Checklist, Dyadic Parent-Child Interaction Coding System, Teacher Assessment of Social Behavior and on the other hand special measures like for example Child Depression Inventory, Social Behavior Questionnaire	Parenting stress, and social support on admission	Based on the results of the study, parents in both group and individual PCIT reported significant improvements from care to post-treatment and follow-up in their children's behavioral problems and adaptive functioning, as well as significant reductions in parenting stress. Parents in both treatment conditions also showed significant improvement in parenting skills.
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**Characteristics of Study Respondents**

Respondents in this study were all preschool age children who experienced behavioral problems. In this study, factors related to the impact of the application of parent-child interaction therapy (PCIT) on temper tantrums in preschoolers have been mentioned, with the majority of respondents amounting to more than 50 individuals. Respondents in this study were 2-10 years old on average from various countries. The gender characteristics of the respondents are almost the same between men and women. The overall respondents are Asian people and indigenous people from the research location.

**Table 4. Demographic Characteristics of the Research Sample in Journal 1**

Author	Data	N	Percent	
(Briegel et al., 2019)	Children's samples	1712	100,0	
	Sex	Woman	843	49,2
		Man	869	50,8
	Children live together	Both parents	1412	82,6
		Widow	171	10,0
		Mom and new partner	89	5,2
		single father	11	0,6
		Foster parents	17	1,0
		New dad and partner	7	0,4
		Adoptive parents	2	0,1
		Is lost	3	-
		Migration background	Yes	223
	No.		1489	87,0

**Table 5. Description of Study Characteristics in Journal 2**

Author	Inclusion Criteria		Child Age	Meta-Analysis Search Results (N)	
(Mingebach et al., 2018)	Positive behavior	Prosocial	Preschool age children and school	Controlled trial	Controlled and uncontrolled trials
	External behavior problems	Disobedient			
		Aggressive behavior			
		Disturbing behavior			
	Symptoms of internalization	Worry			
Symptoms of depression					
Children with mental disorders	ODD				
	CD				
	ADHD				

**Table 6. Description of Study Characteristics in Journal 3**

Author	Children's Behavioral and Emotional Disorders	Age and Gender	
(Ogundele, 2018)	Challenging Behavior	Varies around the world	
			Learning Disabilities
			Impaired social and communication skills
			Autism
	Annoying Behavioral Problems	Neurobehavioral disorders	
		Attention Deficit Hyperactivity (ADHD)	
		Oppositional Disorder (ODD)	
	Emotional Problems	Behavioral disorders (CD)	
		Panic disorder	
		Generalized Anxiety Disorder (GAD)	
		Anxiety leaving	
		Social phobia	
		Specific phobia	
OCD			
Autistic spectrum and	Depression		
	Autism		
	Sindrom esperger		
	Childhood disintegrative disorder (CDD)		
	Pervasive developmental disorder		
	Sindrom rett		
Social communication disorder	ADHD		

	Sindrom william	
	Behavioral disorders	
	Closed head injury	
	Spina bifida	
Sindrom Newson	Autism spectrum	

**Table 7. Description of Study Characteristics in Journal 4**

Author	Inclusion Criteria	Child Age	Main Outcomes Parenting Capacity
(Lieneman, Brabson, Highlander, Wallace, & McNeil, 2017a)	Treatment effectiveness	2-7 years	Based on the results of PCIT research over the past decade focused on examining and enhancing the effectiveness of PCIT in community settings and targeting more families facing complex personal and contextual challenges
	Treatment components		
	Adaptation to specific populations (age groups, cultural groups, military families, individuals diagnosed with certain disorders, victims of trauma and hearing loss)		
	Format-based adaptation		

**Table 8. Description of Study Characteristics in Journal 5**

Author	Inclusion Criteria	Child Age	Main Outcomes Parenting Capacity
	Disruptive behavior (e.g. tantrums, aggression, irritability)	14- 24 months	<ol style="list-style-type: none"> <li>1. Positive and negative parenting</li> <li>2. Parenting sensitivity</li> <li>3. Parental competence in negative emotions of toddlers</li> <li>4. Parental helplessness</li> <li>5. Mentalization of parents about children</li> <li>6. Parental emotion regulation</li> <li>7. Potential for child abuse and parental stress</li> </ol>

**Table 9. Description of Study Characteristics in Journal 6**

Author	Inclusion Criteria	Child Age	Main Outcomes Parenting Capacity
	Children's defiance or conduct disorder	3-6 years	Parents in both group and individual PCIT reported significant improvements from intake to post-treatment and follow-up in their children's behavioral problems and adaptive functioning, as well as significant reductions in parenting stress.
	Parenting stress		
	Social support		
	Post-therapy care and follow-up 6 months		

**DISCUSSION**

This study proves and answers the researcher's question, namely how is the impact of PCIT (Parent Child Interaction therapy) on the temper tantrums of preschoolers. Study characteristics of all included meta-analyses are illustrated in Table 4.2. On average, individual meta-analyses were included in the primary study. While 2 meta-analyses included exclusively controlled trials, the other 4 meta-analyses included uncontrolled trials. Therefore, the resulting effect is estimated on the one hand as a comparison between the experimental and control groups, while on the other hand the pre-to-post or follow-up measures.

The study averages related to parental behavioral interventions, which are characterized by teaching effective parenting behavioral strategies and skills to manage children's behavior. Some studies use non-behavioral interventions. These interventions focus, for example, on parent-child communication or problem-solving strategies. Furthermore, several meta-analyses have focused on specific parent-based interventions (eg PCIT etc.).

The overall behavior of children, both external and internal, was assessed using instruments in each study (eg child behavior lists, etc.) and using direct observation or through direct reports from parents, teachers and the surrounding environment.

Symptoms of externalizing behavior in preschool children are the main targets in the application of this parent-based intervention, a greater impact of this intervention can be expected compared to the outcome category of interventions for more distant children such as internalizing symptoms or proportional behavior. The impact of parent-based interventions on internalizing symptoms needs to be critically evaluated, because these interventions often accompany externalizing disorders in childhood. In addition, research on parent-based interventions for the treatment of children with internalizing disorders is still very scarce. Although several meta-analyses have presented results on the effects of parent-based interventions on children's proportionate behavior and reported small effects, further research is needed.

**Literature Limitations**

The limitation of researchers in making a thorough discussion in the form of a literature review is that at the stage of searching for journal articles in several databases of international journal articles, there were no journal articles that specifically discussed PCIT therapy on the problem of temper tantrum behavior in preschoolers.

**CONCLUSION**

Parent-child based interventions proved effective in dealing with externalizing behavior problems in children. This intervention is done by reducing problematic behavior in children as a whole. In addition, this intervention is more effective because it can minimize costs and has a positive effect in the long term. Based on the results obtained, this meta-analysis supports parent-based interventions as evidence-based interventions for the treatment of external behavioral problems in children. In addition, this meta-analysis also supports certain interventions that are based on a broad empirical database (eg PCIT etc.).

Based on the results of a strong database analysis showing the effectiveness of parent-based interventions there must be a shift towards broader interventions. The role of parents is very important in the development process of their children and is an influential factor in the origin of externalizing disorders. Therefore, the role of parents or caregivers in the treatment of child behavior disorders is very important. Because, the long-term consequences of externalization problems and disorders that occur in children can be detrimental to children, their families and the surrounding environment. Therefore, it is very important to improve mental health care for children with external problems and disorders.

**REFERENCES**



1. Alini, & Jannah, W. (2019). Hubungan Pola Asuh Orang Tua Dengan Kejadian Temper Tantrum Pada Anak Usia Prasekolah Di Kelompok Bermain Permata. 3(23), 1–10.
2. Amin, A. M. (2017). Implementasi Asesmen Dan Intervensi Bagi Anak Berperilaku Temper Tantrum (Suatu Kajian Teori Dan Studi Kasus) Abdul Muis Amin Staf Pengajar Program Studi Pendidikan Guru Pendidikan Anak Usia Dini Jurusan Ilmu Pendidikan Kip Universitas Tadulako Abdul M. 1–9.
3. Barnett, M. L., Niec, L. N., Peer, S. O., Jent, J. F., Weinstein, A., Gisbert, P., & Simpson, G. (2017). Successful Therapist-Parent Coaching: How In Vivo Feedback Relates To Parent Engagement In Parent-Child Interaction Therapy. *Journal Of Clinical Child And Adolescent Psychology : The Official Journal For The Society Of Clinical Child And Adolescent Psychology*, American Psychological Association, Division 53, 46(6), 895–902. <https://doi.org/10.1080/15374416.2015.1063428>
4. Barnett, M., Miranda, J., Kia-Keating, M., Saldana, L., Landsverk, J., & Lau, A. S. (2019). Developing And Evaluating A Lay Health Worker Delivered Implementation Intervention To Decrease Engagement Disparities In Behavioural Parent Training: A Mixed Methods Study Protocol. *Bmj Open*, 9(7). <https://doi.org/http://dx.doi.org/10.1136/bmjopen-2019-028988>
5. Briegel, W., Greuel, J., Stroth, S., & Heinrichs, N. (2019). Parents' Perception Of Their 2–10-Year-Old Children's Contribution To The Dyadic Parent-Child Relationship In Terms Of Positive And Negative Behaviors. *International Journal Of Environmental Research And Public Health*, 16(7), 1123. <https://doi.org/http://dx.doi.org/10.3390/ijerph16071123>
6. Briegel, W., & Hoyer, J. (2020). Psychiatric Disorders And Distal 21q Deletion—A Case Report. *International Journal Of Environmental Research And Public Health*, 17(9), 3096. <https://doi.org/http://dx.doi.org/10.3390/ijerph17093096>
7. Fitri, L. N. (2018). Hubungan Fungsi Afektif Keluarga Dengan Perilaku Temper Tantrum Anak Usia 3-5 Tahun Di Kecamatan Patrang Kabupaten Jember.
8. Hanura, A. F. R. D. (2017). Pengelolaan Orang Tua Terhadap Perilaku Temper Tantrum Anak Usia Prasekolah.
9. Kohlhoff, J., Cibralic, S., Wallace, N., Morgan, S., Mcmahon, C., Hawkins, E., ... Mcneil, C. (2020). A Randomized Controlled Trial Comparing Parent Child Interaction Therapy-Toddler, Circle Of Security- Parentingtm And Waitlist Controls In The Treatment Of Disruptive Behaviors For Children Aged 14–24 Months: Study Protocol. *Bmc Psychology*, 8, 1–14. <https://doi.org/http://dx.doi.org/10.1186/540359-020-00457-7>
10. Lieneman, C. C., Brabson, L. A., Highlander, A., Wallace, N. M., & Mcneil, C. B. (2017a). Parent-Child Interaction Therapy : Current Perspectives.
11. Lieneman, C. C., Brabson, L. A., Highlander, A., Wallace, N. M., & Mcneil, C. B. (2017b). Parent-Child Interaction Therapy: Current Perspectives. *Psychology Research And Behavior Management*, 10, 239–256. <https://doi.org/10.2147/Prbm.S91200>
12. Mingeback, T., Kamp-Becker, Inge, Christiansen, H., & Weber, L. (2018). Meta-Analysis On The Effectiveness Of Parent-Based Interventions For The Treatment Of Child Externalizing Behavior Problems. *Plos One*, 13(9). <https://doi.org/http://dx.doi.org/10.1371/journal.pone.0202855>
13. Niec, L. N., Barnett, M. L., & Shanley, J. (2017). Hhs Public Access. 84(8), 682–698. <https://doi.org/10.1037/A0040218.Group>
14. Niswati, A. K. (2018). Pengelolaan Orang Tua Terhadap Perilaku Temper Tantrum Anak Usia Prasekolah. Pengelolaan Orang Tua Terhadap Perilaku Temper Tantrum Anak Usia Prasekolah.
15. Nursalam. (2020). Literature Systematic Review Pada Pendidikan.
16. Ogundele, M. O. (2018). *World Journal Of Clinical Pediatrics*. 7(1), 9–26. <https://doi.org/10.5409/Wjcp.V7.I1.9>
17. Paramita, A. D., Hadis, F. A., & Hartiani, F. (2019). Penerapan Parent-Child Interaction Therapy ( Pcit ) Untuk Menangani Masalah Perilaku Disruptive Pada Anak Usia Prasekolah ( Parent-Child Interaction Therapy ( Pcit ) For The Treatment Of Disruptive Behavior Problem In Preschool Children ). 10(1), 45–54.
18. Ramadia, A. (2018). Hubungan Pola Asuh Orang Tua Dengan Temper Tantrum Pada Anak Usia Toddler Di Paud Kota Bukittinggi Arya Ramadia. *Xii(7)*, 7–15.
19. Suhartini, T. (2017). Skripsi Hubungan Komunikasi Orang Tua Dengan Temper Tantrum Pada Anak Prasekolah.
20. Supriyanti, E., Hariyanti, T. B., Malang, S. M., Malang, S. M., Anak, P., Tantrum, T., ... Wakschal, M. (2018). Hubungan Antara Jumlah Saudara Dengan Kejadian Tempertantrum Pada Anak Usia 3-5 Tahun Di Tk. (September), 6–8.
21. Yiw'wiyouf, R., Ismanto, A., & Babakal, A. (2017). Hubungan Pola Komunikasi Dengan Kejadian Temper Tantrum Pada Anak Usia Pra Sekolah Di Tk Islamic Center Manado. *Jurnal Keperawatan Unsrat*, 5(1), 110265.