



## Development of a Bibliotherapy Module for Reducing meltdown Behavior (Temper Tantrum) in Autistic Children at SLB Kuncup Mas Banyumas

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### Abstract

Autism is a disorder of the development of brain function which is characterized by being unable to communicate normally, having difficulty learning new things and in general autistic children have three main problems, namely barriers to socializing, communicating, and behaving. Development of the Bibliotherapy module is the activity of reading thematic picture story books about the character of social care, honesty and responsibility to reduce meltdown behavior (temper tantrums) in children with autism. This study aims to determine the effect of module development Bibliotherapy to meltdown behavior (temper tantrums) in children with autism at SLB Kuncup Mas Banyumas. This type of research is Quasi-experimental with pre and posttest design with control group. The population in this study were all autistic children at SLB Kuncup Mas Banyumas. The sampling technique was purposive sampling. The instrument used to assess behavior is the temper tantrum questionnaire to analyze the effect of module development Bibliotherapy to meltdown behavior (temper tantrums) in children with autism is to use Test Wilcoxon Signed Rank Test. The results of this study indicate that there is a significant effect of the development of the Bibliotherapy module on temper tantrum behavior in autistic children at SLB Kuncup Mas Banyumas ( $p = 0.000$  is  $< \alpha = 0.050$ ) and there is no significant effect in the control group ( $p = 0.182$  is  $> \alpha = 0.050$ ). The conclusion in this study is that the development of the Bibliotherapy module has an influence on meltdown behavior (temper tantrums) in children with autism at SLB Kuncup Mas Banyumas.

**Keywords:** Bibliotherapy, meltdown (temper tantrums), autistic.

### Introduction

Autism is a pervasive developmental disorder which covers all aspects of mental development (Durand and Barlow, 2006). Coleman (2005) said that autism is a neurobiological disorder. The neurobiological disorder is caused by a failure of information to the brain which causes the information received to not match the actual situation because there is a reduction in Purkinje cells and an increase in the posterior cerebellar

vermis and hemispheres (DeLong, 2005). In Indonesia, in 2002, there were 1:150 autistic children, meaning that in 150 births, there was one autistic child. In 2006 the number increased to 1:110 autistic children, in 2008 the number increased again to 1:100 autistic children and in 2012 the ratio of autistic children reached 1:88 (Harnowo, 2012). This shows that the number of autistic people in Indonesia is increasing.

Temper tantrum behavior occurs usually when his desires are not fulfilled. At first he would shout to his mother when asking for something. If his mother doesn't immediately grant his request and wish, then his anger will explode followed by tantrum behavior. Bibliotherapy is activities using books appropriate to the end of treatment therapy, which is followed by discussion according to the topic of life problems in accordance with the conditions at that time (Greenberg, 2007 in Oppenheimer, 2010). Bibliotherapy for children is the use of books as therapy in processing difficult personal experiences such as painful and confusing experiences (Austin, 2010)

**Research Methods**

This research is a quantitative study using a Quasi Experimental design with pre and posttest designs with control groups, namely analytic research

**Research Result**

a. Identify the characteristics of respondents based on age in the treatment group and the control group.

**Table 1** Characteristics of respondents based on age in the treatment group and control group

Age (years)	Kelp. Treatment		Kelp. Control	
	f	%	f	%
3 – <5 (toddlers)	3	18,8	4	25,0
5 – <6 (preschool)	9	56,2	7	43,8
6 – 10 (pre teen)	4	25,0	5	31,2
n(sample)	16	100	16	100

Based on table 1 it shows that most of the respondents in the treatment group and the control group have an age range of the pre-school group,

namely 9 students (56.2%) in the treatment group and 7 students (43.8%) in the control group.

b. Identify the characteristics of respondents based on gender in the treatment group and the control group.

**Table 1.2** Characteristics of respondents based on sex in the treatment group and the control group

Gender	Kelp. Treatment		Kelp. Control	
	f	%	f	%
Man	11	68,8	9	56,2
Woman	5	31,2	7	43,8
n(sample)	16	100	16	100

Based on table 1.2 it shows that most of the respondents in the treatment group and the control group were male, namely 11 students (68.8%) in

the treatment group and 9 students (56.2%) in the control group.

c. Identify behavior *meltdown* (*temper tantrums*) autistic children at SLB Kuncup Mas Banyumas

**Table 3.** Identification meltdown behavior (temper tantrums) of autistic children in the treatment group and the control group

Temper Tantrum Behavior	Kelp. Treatment		Kelp. Control	
	f	%	f	%
Light	3	18,8	4	25,0
Currently	9	56,2	7	43,8
Heavy	4	25,0	5	31,2
n(sample)	16	100	16	100

Based on table 1.3 it shows that most of the respondents in the treatment group and the control group had moderate temper tantrum behavior,

namely 9 students (56.2%) in the treatment group and 7 students (43.8%) in the control group.

d. Behavior *meltdown* (*temper tantrums*) autistic child before and after being given the bibliotherapy module in the treatment group and the control group.

**Table 4** Behavior *meltdown* (*temper tantrums*) autistic child before and after being given the bibliotherapy module ontreatment group and control group

Temper Tantrum Behavior	Treatment Group			Control Group		
	Means	SD	Min-Max	Means	SD	Min-Max
Before	122,000	14,29	97.0-142.0	122,062	14.79	89.0-140.0
After	46,500	19.57	27.0-92.0	127,875	11.36	101.0-14.0
n(sample)	16			16		

Based on table 1.4 it shows that most of the respondents in the treatment group before being given the bibliotherapy module had an average temper tantrum behavior 122,000 with an SD of 14.29 and after being given the moduleto 46,500

with an SD of 19,57 meaning that there is an average decrease in temper tantrum behavior of 75,500. In the control group, the average value before measurement was 14.79 and after measurement was 11.36.

e. Influence development of behavioral bibliotherapy modules *meltdown* (*temper tantrums*) autistic children in the treatment group and the control group.

**Table 5** The effect of the development of the bibliotherapy module on behavior *meltdown* (*temper tantrums*) autistic childin the treatment group and the control group

Temper Tantrum Behavior	Treatment Group			Control Group		
	Means	Z	p.s	Means	Z	P
Before	122,0046	-6,518	0.000	122.0612	-1.336	0.182
After	,50			7.87		
n(sample)	16			16		

Based on table 1.5, it is obtained that the value of  $p = 0.000$  is  $< \alpha = 0.050$  so that the hypothesis is accepted, meaning that there is a significant influence between the development of the bibliotherapy module on behavior *meltdown* (*temper tantrums*) in the treatment group and in the control group it was obtained that the value of

$p = 0.182$  was  $> \alpha = 0.050$  so that the hypothesis is rejected, meaning there is no significant effect.

**Discussion**

f. Identify the characteristics of respondents based on the age of children with autism in the treatment group and the control group.

Based on the results of the research in table 1.1 it shows that most of the respondents in the treatment group and the control group have an age range of the pre-school group, namely 9 students (56.2%) in the treatment group and 7 students (43.8%) in the control group. This matter in accordance with a report by Priherdityo, (2016) in CNN Indonesia, Thursday, 07/04/2016 stated that in a study conducted in 2013, it was estimated that there were 21.7 million people with autism in the world. The World Agency for Education and Culture, UNESCO, in 2011 estimated that there were 35 million people with autism in the world. This means that there are an average of six people with autism per 1000 people of the world's population. According to 2014 data from the United States Government, in that country as many as 1.5 percent of children or one in 68 children in Uncle Sam's country are autistic. This figure increased 30 percent from 2012, which had a ratio of one in 88 children. In another study conducted in 2012 stated that as many as 1.1 percent of residents over 18 years in England are autistic.

Although there has been no official survey on the number of children with autism in Indonesia, in 2013 the Director of Mental Health Development at the Ministry of Health suspected that the number of autistic children in Indonesia was around 112 thousand with a range of 5-19 years. This figure comes out based on the prevalence of autism by 1.68 per 1000 children under 15 years. With the number of children aged 5-19 years in Indonesia amounting to around 66 million according to the Central Bureau of Statistics in 2010, the figure was 112 thousand.

According to EDUfa Counseling data(2015), prevalence is the proportion between individuals compared to the population. Incidence is the number of new cases that occur in a population during a certain period. In 2011, the prevalence of people with autism was 1: 144. The prevalence of children with autism in various parts of the world shows varying numbers, but every year the trend is increasing. Based on data from UNESCO in

2011, there were 35 million people with autism worldwide.

In Indonesia, data regarding the specific prevalence of Autism is not yet available, the current prevalence refers to the prevalence data for Thailand, namely 1: 150. Based on a release from the Director General of Health Development, Ministry of Health, in 2009 it was estimated that every 1 in 150 children born suffer from Autism and it is estimated that there are 112,000 people with autism with an age range of around 5-19 years. The prevalence of autism is higher than cancer, spinal disorders, Down syndrome and is not influenced by ethnicity and economic class.

g. Identify the characteristics of respondents based on the sex of children with autism in the treatment group and the control group.

Based on the results of the study in table 1.2, it shows that most of the respondents in the treatment group and the control group were male, namely 11 students (68.8%) in the treatment group and 9 students (56.2%) in the control group. This is in accordance with a report by Priherdityo, (2016) in CNN Indonesia, Thursday, 07/04/2016 which states that in South Korea, currently the ratio of the incidence of autism is one in 48 (1:48). And indeed the ratio of boys to girls with autism is more in boys, namely four to one (4:1).

According to Mellisa's data report, Fenny in news Republika.co.id (2018), the prevalence of autism is 1.68 per 1000 for children under 15 years where the number of children aged 5-19 years in Indonesia reaches 66,000,805 based on BPS data for 2010 it is estimated that there are more than 112,000 children with autism in the age range of 5-19 years. Data on children with autism in various parts of the world show varying numbers. Based on data from UNESCO in 2011, there were 35 million people with autism worldwide. This means that an average of 6 out of 1000 people in the world have autism.

Research by the Center for Disease Control (CDC) in America in 2008 stated that the ratio of autism in children aged 8 years who were diagnosed with autism was 1:80. The Hong Kong

Study in 2008 reported that the prevalence of autism in Asia reached 1.68 per 1000 for children under 15 years.

Autism is a complex developmental disorder with symptoms including differences and disabilities in various areas such as communication skills, motor skills, and social interaction. Genetic factors, drug consumption, and consumption of metals through food can cause children to become autistic. The condition of children in the golden period (1-5 years) should be able to talk, tend to play alone, no eye contact or emotion, but if there is a delay in growth and development unlike other children, parents must be aware of the symptoms of autistic children. .

h. Identify behavior *meltdown* (*temper tantrums*) autistic children at SLB Kuncup Mas Banyumas.

Based on the results of the study in table 1.3 it shows that most of the respondents in the treatment group and the control group had moderate temper tantrum behavior, namely 9 students (56.2%) in the treatment group and 7 students (43.8%) in the control group.

This is in accordance with the EDUfa Counseling data report (2015), that autism symptoms can appear in children from the age of 2.5 years from birth to a maximum age of 3 years. The symptoms of autism can be seen if the child has weaknesses in three specific domains, namely the existence of barriers to social interaction, communication and repetitive behavior.

In line with the results of research by Mutyah (2017) concerning the effect of parental education and emotional intelligence on temper tantrum behavior in children aged 3-6 years at Romly Tamim Kindergarten in the coastal area of Kenjeran, Surabaya, it shows that there is a significant effect ( $p=0.001$  is  $< \alpha = 0.050$ ).

The results of another study by Sitepu (2015), regarding teacher communication strategies in dealing with temper tantrums in autistic children in a qualitative descriptive study on autistic children at YAKARI School show that teachers have communication strategies and also the

obstacles to be able to produce effective communication. Teachers or therapists who teach at YAKARI in dealing with autistic children and autistic children who experience temper tantrums are communication in the form of commands and praise such as "no", "applause", "sit down", "stand up", "fold hands", "great", "good". This is because most autistic children cannot understand complex communication or long communications. The obstacles experienced by autistic children have tantrums usually because the teacher who teaches them does not understand what the child wants. there is something the child doesn't like, the child feels prohibited from doing something he wants, and something has changed from his habit. These things make autistic children into tantrums.

d. Behavior *meltdown* (*temper tantrums*) autistic child before and after being given the bibliotherapy module in the treatment group and the control group.

Based on the results of the study in table 1.4 it shows that most of the respondents in the treatment group before being given the bibliotherapy module had an average temper tantrum behavior 122,000 with an SD of 14.29 and after being given the module to 46,500 with an SD of 19,57 meaning that there is an average decrease in temper tantrum behavior of 75,500. In the control group, the average value before measurement was 14.79 and after measurement was 11.36.

According to Nababan's research (2014) regarding the effectiveness of the singing treatment to reduce meltdown/temper tantrum behavior in autistic adolescents by using coping theory in an emotion-focused coping strategy, where the singing treatment is used as a medium for people with autism to divert negative emotions into positive ones so that meltdown/temper tantrum behavior decreases. The results showed that there was a decrease in meltdown/temper tantrum behavior after being given the singing treatment for 10 meetings. In the baseline 1-10 phase, 288 occurrences of behavior, treatment phase 1-10, 68 occurrences of behavior, baseline 1-10 repeating



phase, 105. This indicates that treatment in the form of singing treatment can be used to reduce meltdown/temper tantrum behavior.

i. The effect of the development of the bibliotherapy module on behavior *meltdown (temper tantrums)* autistic children in the treatment group and the control group.

Based on the results of the research table 1.5, it was obtained that the value of  $p = 0.000$  was  $< \alpha = 0.050$  so that the hypothesis was accepted, meaning that there was a significant influence between the development of the bibliotherapy module on behavior *meltdown (temper tantrums)* in the treatment group and in the control group, the  $p$  value = 0.182 was  $> \alpha = 0.050$  so the hypothesis is rejected, meaning there is no significant effect.

## Conclusions and Recommendations

### j. Conclusion

- Research on the development of the Bibliotherapy module in autistic children produces a product in the form of a picture story book entitled "Me and My World".
- Most of the respondents in the treatment group and the control group had an age range of the pre-school group, namely 9 students (56.2%) in the treatment group and 7 students (43.8%) in the control group.
- Most of the respondents in the treatment group and the control group were male, namely 11 students (68.8%) in the treatment group and 9 students (56.2%) in the control group.
- Most of the respondents in the treatment group and the control group had moderate temper tantrum behavior, namely 9 students (56.2%) in the treatment group and 7 students (43.8%) in the control group.
- There was an average decrease in temper tantrum behavior of 75.500 in the treatment group and the control group had an average value before the measurement

was 14.79 and after the measurement was 11.36.

f. There is a significant effect of the development of the bibliotherapy module on temper tantrum behavior in autistic children at SLB Kuncup Mas Banyumas ( $p$  value = 0.000 is  $< \alpha = 0.050$ ).

### k. Suggestion

- For further research on the development of the bibliotherapy module, it will be expanded to instill other characters based on the values needed by autistic children.

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