

# Enuresis Associated with Social-Emotional Development of Preschool Children

Silvia Devi Anggraeni<sup>1</sup>, Isfaizah<sup>2</sup>  
<sup>1,2</sup> Universitas Ngudi Waluyo

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## Article

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## Abstract

Children who experience enuresis tend to be shy, aloof, passive and more silent when playing with their friends. The purpose of this study was to determine the relationship between enuresis and the socio-emotional development of preschool children. The research design is descriptive correlative with a case control approach. The population is all students which are 88 respondents. The sample is 70 children. The sampling technique is purposive sampling. The instrument used the STPPA questionnaire and enuresis observation sheet. Data analysis was univariate with frequency distribution and bivariate with Chi Square. The case group consisted of 35 children (50%) with enuresis and the control group consisted of 35 children (35%) without enuresis. In the case group there were 26 children (66.7%) with social-emotional development as expected, while in the control group there were 17 children (85%) with very good social-emotional development. Bivariate analysis showed that there was a significant relationship between enuresis and the socio-emotional development of preschool children in PAUD and TK Aisyiyah, Jono Village, Bayan District, Purworejo Regency ( $p = 0.001$ ). Preschool children who do not experience enuresis have very good social-emotional development when compared to children who experience enuresis.

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## Introduction

The preschool period is defined as an important period in the growth and basic development of children which can affect the development of children in the future. The development of language skills, creativity, social awareness, emotional and intelligence runs very quickly and is the basis for the next development (Setiowati & Pawestri, 2018).

The main problems that parents will face during the growth and development of preschool age children include sibling rivalry, feelings of anger in children (temper tantrums), negativism, problems in toilet training, and

enuresis. (Kurniawati & Ardiansyah, 2020).

Enuresis This is the intentional or unintentional expulsion of urine after the age at which the child is able to control the bladder, ranging from 3-7 years of age (Elbahnasawy & Elnagar, 2015). As the child's walking ability develops, the child's ability to control the urge to urinate and defecation begins to develop which can lead to enuresis. (Kurniawati & Ardiansyah, 2020)

The life and quality of life of children as adults are affected by the psychological and social impacts of childhood

Corresponding author:

Isfaizah

is.faizah0684@gmail.com

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Universitas Ngudi Waluyo

enuresis (Astuti et al., 2019). The ridicule that children receive from their peers due to bed-wetting causes the child to experience embarrassing things and can become serious problems (Fitricilia et al., 2013). As children get older, the consequences of bed-wetting are increasing such as humiliation, confusion, loss of self-esteem, desire to be alone and embarrassed when participating in overnight activities at school. (Permatasari et al., 2018).

Child development can be affected by enuresis if it is not treated immediately (Permatasari et al., 2018). Kuswanto & Na'imah (2019) stated that enuresis needs to be treated early because if not handled will have an impact on the stage of development. Enuresis has a negative effect on children's mental and social health which can result in psychosocial problems as a reaction to enuresis (Bulut & Nazir, 2020).

Emotional social development is the ability of children to behave so as not to conflict with social demands that already exist in society. The involvement of children with family, children with peers or children with the environment affects their social emotional development (Dachlan et al., 2019). Children with enuresis usually have limitations in social activities, poor family and friend relationships, low self-esteem due to bad treatment from parents or caregivers such as being scolded, punished or rejected by their environment. (Isfaizah et al., 2018). Therefore, it is necessary to pay attention and good treatment to the incidence of enuresis (Fitricilia et al., 2013).

### Method

The research design is descriptive correlative with a case control approach. The population is all students in PAUD & TK Aisyiyah Jono Village, which are 88 respondents. The sample is 70 respondents with the division of 35 respondents with enuresis and 35 respondents without enuresis and the sampling technique is purposive

sampling. The research instrument used the STPPA questionnaire and enuresis observation sheet. Data analysis was univariate with frequency distribution and bivariate with Chi Square using SPSS version 16.

## Results and Discussion

Table 1 Description of Respondents Characteristics

Characteristics	Case		Control	
	F	%	F	%
Gender				
Woman	22	62.9	16	45.7
Man	13	37.1	19	54.3
Age				
3-4 Years	2	5.7	3	8.6
4-5 Years	4	11.4	7	20.0
5-6 Years	29	82.9	25	71.4
TOTAL	35	100.0	35	100.0

Based on table 1, it shows that the sex of the research subjects in the case group was mostly female, as many as 22 children (62.9%), while in the control group the majority were male as many as 19 children (54.3%). Based on the age of the majority of respondents 5-6 years (82.9% vs 71.4%).

Based on gender, the majority of cases were female as many as 22 (62.9%), while in male as many as 13 (37.1%). This research is in accordance with the results of research conducted Rahardjo (2020) that enuresis was most experienced by women compared to men, namely as much as 45.9%. This is reinforced by Lestariningsih et al (2021) which states that the majority of respondents with enuresis are female, of the 52 female respondents, 14.2% have enuresis, while only 8.1% of male respondents have enuresis.

The condition of the urinary tract in women which is shorter than the urinary tract in men causes stimulation of urination in women to be more frequent and increases enuresis. (Lestariningsih et al., 2021).



Based on the age of the respondents in the case and control groups, the majority were 5-6 years old (82.9% vs. 71.4%). In accordance with research results Rahardjo (2020) which stated that the most common age group of respondents with enuresis was over 5 years as much as 51.1%. This is reinforced by research Lestariningsih et al (2021) that the majority of respondents aged 5 years is 61.6% while the age under 5 years is 38.4%.

Most mothers choose to put diapers on their children for reasons of comfort, practicality, harmlessness, and keeping children's and parents' clothes clean. The use of these diapers can cause children to defecate and defecate in any place so that at the age of children who should already be able to control their bladder their development is disrupted. (Ratnaningsih & Putri, 2020).

Enuresis considered normal if it occurs in children under the age of 3 years. according to Gunarsa (2016) that in the first five years children enter an important year in receiving stimuli from the environment in this case in the form of toilet training. Children who are given toilet training from an early age can reduce the risk of enuresis when the child enters the age that should already be able to control the bladder well. This is in accordance with the statement of Lestariningsih et al., (2021) that in the age period of 3-6 years, the child's body system must be matured by doing toilet training.

Table 2 Overview of Enuresis

<b>EVENT OF ENUResis</b>	
mean	4.40
median	4.00
Mode	4
Std Deviation	1376
Minimum	2
Maximum	7
Sum	154

Based on table 2, the average number of children experiencing enuresis was 4.40 times with the incidence of enuresis at least 2 times and a maximum of 7 times during 7 days of observation.

In this study, the researcher used a case control design using a ratio of 1: 1 so that 35 children (50%) had enuresis in the case group and 35 children (50%) did not have enuresis. In the case group, the average respondent experienced enuresis as much as 4.40 times and at least 2 times during the 7 days of observation.

Table 3 Overview of Children's Social Emotional Development

<b>Children's Social Emotional Development</b>	<b>Case</b>		<b>Control</b>	
	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>
Start Growing	6	17.1	5	14.3
Growing As Expected	26	74.3	13	37.1
Very Well Developed	3	8.6	17	48.6
Total	35	100.0	35	100.0

Based on table 3 in the case group, most of the social-emotional developments were as expected as many as 26 children (74.3%) while in the control group most of them developed very well as many as 17 children (48.6%). The results showed that there were no children with social-emotional development in the undeveloped category, both in the case group and in the control group.

Based on the results of the study, there were three children (5.7%) in the age range of 3-4 years who did not experience enuresis. This is in accordance with research Ningsih, (2018) which states that parenting affects the success rate of toilet training in children aged 18-36 months with the Fisher Exact statistical test results obtained  $X^2$  count = 19,004 and p value = 0.000. Parents with democratic upbringing and have a view of equal rights between parents and children tend to make children more confident.



Entering the age of 2-3 years, children are able to communicate with their parents and caregivers when they feel the urge to urinate and are able to resist the urge to urinate, so that children can be free from enuresis. (Rachmah et al., 2018).

The socio-emotional development of children in the case group showed that the majority of respondents in the category developed as expected as many as 26 children (74.3%), while in the control group the majority of respondents were included in the very well developed category as many as 17 children (48.6%). Children aged 3-4 years in both the enuresis group and the non-enuresis group have something in common, namely developing as expected. Indicators of interaction with peers are happy to play with friends (75% vs 75%), want to greet friends (75% vs 66.7%). The indicator of self-confidence is showing pride in their work (62.5% vs. 66.7%). Indicators of independence are the ability to eat, drink and toilet activities (62.5% vs. 58.3%), perform personal hygiene activities (62.5% vs. 58.3%). Indicators of ability to show reasonable emotions, namely being able to be persuaded when crying (62.5% vs. 66.7%), showing emotion when uncomfortable (62.5% vs. 66.7%), showing emotion when happy (75% vs. 66, 7%).

Children aged 4-5 years in the enuresis group developed as expected while the non-enuresis group developed very well, namely on indicators of interaction with peers such as asking permission when using other people's objects (68.8% vs. 82.1%), communicating with people they meet (62.5% vs. 82.1%), listen and talk to adults (62.5% vs. 78.6%), complain about problems (75% vs 78.6%), want to greet friends and people adults (52.3% vs. 78.6%). The indicator of self-confidence is showing pride in their work (68.8% vs 82.1%). The indicator of independence is playing according to the type of game he chooses (68.8% vs 78.6%).

Children aged 5-6 years in the enuresis group developed as expected while the non-enuresis group developed very well in interactions with peers and adults, namely praising friends/others (69% vs 77%). The indicator of confidence is playing pretend about profession (72.4% vs. 76%). Indicators of independence are eating alone (72.4% vs. 76%), playing according to the type of game they choose (69.9% vs. 83%). The indicator shows a natural emotion that is willing to give and apologize (68.1% vs. 78%). The indicator of discipline and obedience is to throw garbage in its place (64.7% vs. 79%).

At preschool age children begin to learn to express the emotions they feel marked by the emergence of a sense of pride, shame and guilt. When children think that they are not able to meet certain standards, it will cause embarrassment (Nurmitasari, 2015). The emergence of a sense of lack of self-confidence, the interaction with the surrounding environment becomes disturbed is the influence of enuresis on children's social development (Fatmawati & Mariyam, 2013).

In the results of this study, the socio-emotional development of children aged 3-4 years has something in common, namely developing according to expectations, while at the age of 4-5 years and 5-6 years the socio-emotional development is different between children with enuresis and children without enuresis, children with enuresis have development as expected and children who are not enuresis develop very well. This happens because there are differences in the emotional development achieved by children according to their age. At the age of 3 to 4 years, children's emotional development is more in the reaction of anger (if they feel disturbed or treated differently) and regret (if they make a mistake). At the age of 4-5 years began to show self-confidence and began to control his feelings. Entering the age of 5-6 years, children can express their



emotions according to the conditions experienced (such as happy, sad, embarrassed, and so on). This shame causes children to withdraw from their environment, so that emotional development has a major influence on children's social development (Nurmitasari, 2015).

The results showed that there were three children (8.6%) with enuresis in the age category of 5-6 years who had social-emotional development in the very well-developed category. In Tirtayani et al., (2014) There are other factors that can affect children's social emotional development apart from enuresis including age, physical condition, intelligence, causes of conflict and environmental factors. At the age of 5-6 years, children are able to express the emotions they feel according to the conditions experienced such as feelings of joy, sadness, shame and so on so that at this age is a mature age for social emotional development. (Nurmitasari, 2015).

The results showed that there were 5 children (14.3%) without enuresis who had social-emotional development in the category of starting to develop. Of the five children who have the category of starting to develop, the majority are in the 3-4 year age group. Apart from enuresis, there are other factors that influence the social emotional development of children, one of which is age (Tirtayani et al., 2014).

According to Nurhasanah et al., (2021) states that children's social emotional development can develop well if children get good habits from their environment both from parents, caregivers and educators at school. The habituation includes giving attention, being introduced to various positive and negative emotions and their impacts, fulfilling children's needs, creating positive behavior in children, having opportunities for children to play, choosing and actualizing their hobbies, and establishing good communication so that their social and emotional potential and abilities become develop.

Table 4 Relationship of Enuresis with Social-Emotional Development of Preschool Children

Enuresis Kejadian	Social Emotional Development of Preschool Children						p value
	Start Develop		Develop According to expectations		Develop to Very good		
	F	%	F	%	F	%	
Enuresis	6	54.5	26	66.7	3	15.0	0.001
No Enuresis	5	45.5	13	33.3	17	85.0	
Total	11	100.0	39	100.0	20	100.0	

Based on table 3, it shows that children with enuresis have more social-emotional development as expected as many as 26 (66.7%), while children without enuresis are more in the very well developed category as much as 17 (85%). The results of calculations with SPSS version 19 for Windows obtained a value of  $p=0.001$  ( $p < \alpha$ ), then  $H_a$  is accepted and  $H_o$  is rejected. This shows that there is a relationship between enuresis and the socio-emotional development of preschool children in PAUD and TK

Jono Village, Bayan District, Purworejo Regency.

The Chi Square test showed significant results with a p-value of 0.001. This shows that there is a significant relationship between the enuresis variable and the social-emotional development of preschool children, meaning that children with enuresis can affect their social-emotional development.



Children's lives and quality of life as adults can be disrupted due to enuresis which has a negative impact on children psychologically and socially (Astuti et al., 2019). This is in accordance with research from Thibodeau et al (2013) said that urinary incontinence (measured by DVSS) has a major influence on children and families and has an impact on children's quality of life (measured by PIN-Q) indicated by 12% of children getting a score of 8-20 (mean 12.8) on PIN-Q (mild effect on QoL) and 8-14 (mean 12.0) on DVSS, 70% scored 21-50 (mean 37,0) on PIN-Q (moderate and symptomatic QoL) and 3-21 (mean 12.0) on DVSS, 7 children reported a severe effect on quality of life and symptom severity (PIN-Q 51, mean 57.9; DVSS 14, mean 15.6). Other research conducted by Grzeda et al (2017) stated that constant bedwetting in childhood led to an increase in problems with peer relations in adolescence [0.19 (0.03, 0.34)].

The results of previous research conducted by Ring et al., (2017) The mean total score for PIN-Q-SWE in all groups was  $26.3 \pm 13.37$  with an average of 5-58 with peer social relations and self-esteem included in the most affected domain so it was concluded that children with enuresis have impaired self-esteem and impaired quality of life that affect their relationships with peers. Other research by Azarfar et al., (2021) stated that enuresis can cause social emotional problems for children and their families. Children with developmental delays in bladder control and persistent bedwetting have increased psychosocial problems in adolescence. Emotions affect children's mental activities such as concentration, memory, reasoning. In Tirtayani et al., (2014) states that psychologically the effects of emotional stress will affect attitudes, interests and other psychological impacts if the child's emotions are disturbed.

As a result of enuresis not being treated immediately, the child lacks self-

confidence, shame and disrupts social relations with friends. This is in accordance with research by Caldwell et al., (2013) Having a child with enuresis low self-confidence scores will improve after successful therapy and only 14% of children are quite happy and do not want treatment for enuresis. Other research by Kanaheswari et al., (2012) shows that children with enuresis have a lower body self-esteem score that interferes with their social life. Lower scores were associated with the severity of enuresis ( $p=0.027$ ), older age ( $p=0.001$ ) and female sex ( $p=0.03$ ). according to Dachlan et al., (2019) Emotions play an important role in the success of children's relationships with peers because children with moody and negative emotions will experience greater rejection than peers. The condition of enuresis in children causes social and hygienic impacts. Shame and frustration are felt by someone with out-of-control urine output that occurs anytime and anywhere (Soemyarso et al., 2015). according to Bahnasy et al (2018) children's behavior showed symptoms of depression, higher anxiety, social problems, attention problems, and internalization problems in enuretic children compared to control subjects (not enuretic).

To improve the quality of life of children with enuresis, attention, patience and dedication are needed to help children with enuresis (Soemyarso et al., 2015). The family environment has an important role for children because most children are in the family sphere so that most children's education is received from the family. Dachlan et al., 2019). Changes in behavior that parents give to children, such as ensuring proper daily fluid intake and getting used to urinating before the child goes to bed can help treat enuresis in children. Apart from changes in behavior, lifestyle changes are also recommended such as placing a child's bed close to the toilet so that it is easily accessible to the child, encouraging changes in eating patterns, using appropriate mattress protectors that are



easy to wash, following the time frame previously agreed upon by the parents. and children to pee before bed (Marthese et al., 2016).

### Discussion

#### Conclusions and suggestions

Preschool children who do not experience enuresis have very good social-emotional development when compared to children who experience enuresis. Parents are expected to prevent the occurrence of enuresis for their children, such as teaching toilet training so that children's social emotional development can develop properly. Health workers are expected to be able to provide socialization to the wider community about enuresis and children's social emotional development.

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