

## **THE EFFECTS OF TOILET TRAINING ON DEVELOPMENT OF ADAPTIVE BEHAVIOUR AMONG PRESCHOOL CHILDREN**

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### **ABSTRACT**

Toilet training is important for children's development so that they are always in a comfortable, dry and clean state. Educating children to urinate and defecate becomes effective if training is done early. This study used a quasi-experimental design. A total of 60 respondents consisted of two groups 30 children received toilet training and 30 children did not receive toilet training among parents and preschool children at Persatuan Tadika Islam Malaysia. The results of the study found that there was a significant difference between parents' knowledge of children's toilet training and there was a significant difference between toilet training on the adaptive behaviour developments of preschool children. The results of this study explained the effect of toilet training on the development of adaptive behaviour of preschool children as well as differences in the level of knowledge of parents about toilet training on children's toilet training practices. This study adds to the theoretical findings on the influence of parental behaviour on child development in describing in detail and better about the level of parental knowledge of toilet training and the development of adaptive behaviour of children. Parents especially need to know critically about children's developmental needs better and support from the Department of Islamic Development Malaysia can help prospective couples to gain knowledge of parenting through marriage courses conducted.

**Keywords:** toilet training; development; adaptive behaviour; preschool children

### **INTRODUCTION**

Toilet training is one form of developmental training in childhood (Hockenbery, Wilson & Wong, 2012). Toilet training is the process of urination and defecation training in the development of the age of children at the age of 1 year to 3 years. Children will be able to know and appreciate their bodyparts and body functions anatomically. In the process of toilet training, there are changes in children's stimuli and instincts to urinate and defecate (Supartini 2004). However, every child is different because there are also children who already have the necessary physical, mental and emotional development when they reach the age of 18 months but some are not ready for up to 3 to 4 years. Training to the toilet is important for the development of children so that they are always in a comfortable, dry and clean condition. Children around the age of 2 to 2 years 6 months can be trained to keep themselves dry and clean. While for children who do not get toilet training at the age of 4, they may find it difficult to be dry and clean. In recent years, the children's age for parents to start and finish their children's toilet training has increased. To address the problems caused by toilet training delays, it is important to identify parental beliefs and attitudes regarding toilet training (Nunen, Karolien et al., 2015). Among the factors that cause children to not be able to go to the toilet are due to slow self-development and physical problems. In addition, parents or guardians may not provide the necessary necessities and training took place at a relatively late age. Children

are also unable to control their bladders and find it difficult to understand simple instructions. There are several methods of toilet training such as an intensive approach through using a potty and babysitting by going to the toilet as a habit. This approach can be apply when parents are confident that their child's age is suitable to go through toilet training regardless of the child's self- preparedness needs. The second method is a child-oriented approach through the developmental readiness of the child to begin training which usually occurs after the child is 18 months old.

Toilet training is an important developmental phase in a child's life (Salkind, 2006). The age to start toilet training has changed from year to year (Michel, 1999) and the time interval to do toilet training is various. Although toilet training is general in nature, there are also related differences between the time and also the method used due to cultural factors and social norms that influence the toilet training method by parents. Under the influence of the fairly recent approaches within the related studies, the important role of the parent-child relationships in providing healthy life for the children and their families as well. Family is a reality that could not be easily disregarded (Vafa & Ismail, 2017). One of the important stimuli performed by parents is to stimulate children's independent behaviour in performing bowel movements that is urination and defecation (Asti, 2008). Erickson states in his theory of social development at the level of autonomy vs shame and doubt that children will learn to adapt to the wants of society while trying to maintain an independent attitude. Erickson discusses toilet training as the beginning of an understanding of the process of 'holding and releasing,' which is fundamental to future development (Syed & Kate, 2017). Toilet training is one of the basic daily activities that all children need to go through to encourage adaptive behaviour. Toilet training also helps children to learn to always be in a dry and clean condition. It is a normal process that children go through. The readiness to go to the toilet does not happen automatically but it is in line with the increasing age of the child. The onset of going to the toilet depends on a child's physical and emotional factors.

## **REVIEW OF LITERATURE**

### **Theoretical Framework**

#### *Piaget's Cognitive Theory*

Psychologists who adhere to cognitive theory emphasize the question of how we know, acquire, process and use information. Piaget emphasized the function and response of demand to the environment. Children, on the other hand, have curiosity and actively respond to the environment according to the child's understanding and cognitive ability. In general, Piaget states that a child's ability depends a lot on how the child responds to events in the environment and what are the effects of those events on the child's development (Jaafar, 2008). Two important concepts introduced by Piaget are organization and adaptation whereby human beings must adapt to the environment (Lefa & Baken, 2014). An organization is an individual's ability to classify and organize experiences and information or called schematics. Adaptation is the child's ability to adapt information to the needs of the environment. Adaptation occurs in two situations, namely Assimilation and Accommodation. According to Piaget, assimilation is the components of the adaptation when the information arises that can fit into the learner existing knowledge is added into the learners cognitive structures (Lefa & Baken, 2014). While Accommodation is the component of the adaptation and is actually when

the new information arises that contradicts or conflicts with the learners cognitive structures. Accommodation learner have to adjust and reshape his or her cognitive structures so that the new information can be fitted or accommodated in learners mind (Lefa & Baken, 2014). It is also a reorganization of mental organization so that new information can be incorporated. It can be explained that through the training carried out to children they are able to act according to the suitability of the environment. It is a child's ability to adapt information to the demands of the environment so they can behave according to the current situation.

### ***Behaviourism Theory***

Behaviorism, also known as behavioral psychology, is a theory of learning based on the idea that all behaviors are acquired through conditioning (Krapfl, 2016). Conditioning occurs through interaction with the environment (Krapfl, 2016). Behaviorists believe that our responses to environmental stimuli shape our actions. Based by the theorists, behaviour can be systematically studied and observed regardless of the mental state (Abraham, 2013). This learning theory include stwo main types of conditioning, namely classical conditioning and operant conditioning. Classical conditioning is a technique used in behavioral training in which a natural stimulus is matched to a naturally occurring stimulus. Operant conditioning is a method of learning that occurs through reinforcement and punishment. A relationship is made between a behaviour and the consequences of that behaviour. The behaviour becomes more likely to occur again in the future when the desired outcome follows an action. Responses that are followed by poor outcomes, on the other hand will be less likely to occur again in the future (Staddon & Cerutti, 2003). The relationship of parental knowledge level and toilet training can be explained through behaviourism theory when in particular the frequency or likelihood of behaviour is changed accordingly (Murphy & Lupfer, 2014). Parents who have a good level of knowledge will apply their knowledge to the developmental process of their child. The knowledge possessed by parents will educate them to give toilet training to their child. Based on habituation method is a way to understand behaviour and leads to behaviour modification (Adam, 2013) and habituation refers to learning through process involved in the learning through experience. Training is provided when parents know the impact on a child's behaviour if training is not provided. This suggests that parental behaviour is influenced based on stimuli and responses.

### ***Constructive Theory***

This theory is a learning theory that states that individuals learn through adaptation. Individuals learn or adapt influenced by others, materials and situations they are facing. The basis of this theory is subjective knowledge where each person constructs his or her own meaning from a particular experience including what is heard and read. Children learn through the acquisition of new knowledge and integrating it into a form of knowledge. The main idea of constructivism is that human learning is built whereby students build new knowledge based on the foundations of previous learning. This theory explains the role of parents to build an environment that can be stimulating and conducive to the process of formulating meaning and knowledge to children in shaping children's behaviour and applying parental knowledge to the implementation of toilet training.

## **Past Research**

### ***Different Between the Level of Parents' Knowledge of Toilet Training and Toilet Training Practices of Preschool Children***

Based on a study by Siti Nurjannah (2018) that study the relationship between knowledge, maternal motivation and environment with the success of toilet training had showed that the knowledge variable had a significant relationship between knowledge and outcome of toilet training. A study by Anne Shafira Purnama Claytonia Aziz, Yudith Setiati Ermaya and Nur Melani Sari (2019) also examined the relationship between parental knowledge and children's toilet training practices showed that a good parental knowledge helps children do toilet training and therefore goof education of parents is necessary. The results of a study by Septian Andriyani, Kusman Ibrahim and Sri Wulandari (2014) who examined the relationship factors of toilet training in preschool children have shown that the factors related to the outcome of toilet training are caregivers' knowledge of toilet training and environmental factors.

Istichomah (2010) in his study which examined the relationship between the level of knowledge of mothers with the implementation of toilet training independently in children aged 0 to 6 years also found the results of the same study that there is a relationship between knowledge and implementation of toilet training for children aged 24 months to 41 months. The hypothesis of this study was also agreed by Van Nunen Karolien et al. (2015) in a study that examined parents' views and attitudes about toilet training. Working mothers more often think that children should go through toilet training before the age of 30 months. Therefore, the higher the level of education of the mother, the more likely the child will be sent to school for toilet training. Sahar (2014) in her study conducted in the Pediatric Ward has examined the level of knowledge of mothers. This study concludes that, the majority of mothers have general and specific knowledge about adequate toilet training. Most mothers have poor attitudes, and average practices. There was a very significant relationship between mothers' level of education and their knowledge of toilet training readiness.

Nakysa Hooman et al. (2013) also conducted a similar study. The age of toilet training had no influence on voiding dysfunction. Therefore, the provision of medical guidance to parents is encouraged. Based on a study by Seema and Begum (2008), a large number of parents have started toilet training at the age of 1-2 years of age and most families believe in democratic and permissive methods for training. In addition, there is another study by Eva Novitasari (2017) who examined the picture of mother's success in toilet training in preschool children has shown that one of the factors that influence the success of toilet training are factors of knowledge, attitude, mental, age, manner, infrastructure and the environment. There is another study conducted by Istianah, Indanah and Umi Farida (2014) which aims to examine the relationship between maternal knowledge and toilet training ability to children. This study recommends to increase the knowledge of mothers to improve the ability of toilet training in children, especially young children. Priya Mariam Varghese (2013) stated that there is a need among parents to know about toilet training so that the toilet training conducted can prevent children's problems in the future.

### ***Different Between Toilet Training and The Development of Children's Adaptive Behavior***

According to a study conducted by Santana, Gomes & Bastor (2011), it shows that case control studies were performed on the relationship between the age of completing toilet training during the day and the onset of Dysfunctional Elimination Syndrome (DES). A study conducted by Ayu Safitri (2012) which aimed to find out the relationship between toilet training and enuresis control in children aged 3 to 6 years in Desa Tarasu stated that toilet training in children aged 3 to 6 years is mostly in the good category although there are still 16 children (29.1%) who were unable to control enuresis. Therefore, good toilet training can produce enuresis control in children aged 3 to 6 years. The results of a study by Devitt & Carey (2009) conducted on factors related to difficult toilet training to find out the temperament and behavior patterns in children with difficult toilet training and to compare such children with toilet trained children same age proved parenting style did not significantly differ between the two groups.

The results of a study by Thi Hoa Duong et al. (2013) showed a discussion that almost all mothers in this study started undergoing toilet training at the age of the child as early as birth which is according to the Vietnamese tradition. Duanita Himawati (2017) in her study that examined the effect of toilet training on the improvement of children's independent behavior also found research results that can support the research hypothesis. It shows that toilet training is effective in improving the self-reliance of children there. Dede Kendi, Atti Yudiernawati & Neni Maemunah (2017) in their study which aims to determine the relationship between toilet learning on the ability of children aged 18 - 24 months in controlling elimination has shown that toilet training performed on children is in the good category (41.94%). The ability of children at the age of 18 to 24 months to control urination is in the able category (54.84%). According to a study by Blum, Taubman & Nemeth (2004) conducted to find out the factors associated with delayed toilet training had showed that three factors were consistently associated with later training which included the onset of toilet training at an older age, the presence of rejection toilet and frequent constipation.

### **RESEARCH METHODOLOGY**

This quantitative study was conducted by quasi-experimental in cross sectional study. A number of samples selected based on purposive sampling aims to involve children aged 4 to 6 years at the education centre registered under PERTIM. The sample size comprise of a total of 60 parents and 60 preschool children. Respondents were divided into two group of 30 children received toilet training and the group of 30 children not received toilet training. Both groups were identified in advance to identify whether they had received toilet training or not. Sample size was determined based on the sample value for the T Test should exceed 25 the number of samples. The research instrument used in this study was a set of questionnaires that comprises 3 sections. Section A is to identify the demographic of the participant, section B is to access the level of knowledge of parents about toilet training and section C is to provide an overview of the development of adaptive behaviour among preschool children at home.

Developmental Profile-3 (DP-3) by Alpern (2007) was used to examine the development of adaptive behaviour with 5 questions of adaptive behaviour domains. In this study, only one of the five domains in Developmental Profile-3 were used. Item selected was between ages 4-0 to 5-11 based on children ages involved. The items in this section were



measured with nominal scale where the parents had to answer "Yes" or "No" about the child. Gaining a high score for DP-3 Adaptive Behaviour indicated a high level of adaptive behaviour developments among preschool children through toilet training practices. Cronbach's alpha for this scale was 0.92. The level of parents knowledge about toilet training were accessed by 20 questions of structured questionnaires on aspects of toilet training knowledge in children were developed based on three domains namely knowledge, comprehension and application. It covered 40% of knowledge, 35% of comprehension and 25% of applications of toilet training aspects. All choice questions have four answer choices with one correct answer. Parents were asked to answer the question based on their knowledge. Each correct answer carried a score of one and the wrong answer carried a zero score. Therefore, the maximum score was 20 and zero was the minimum score.

Categorization of parent's knowledge scores was determined by 3 types of level which were Adequate scores of 75% to 100% (15-20), Moderately Adequate scores of 50% to 74% (10-14) and Inadequate scores of 0% to 49% (0-9). Thus, the Cronbach's alpha values for each domain of parent knowledge levels instrument were 0.78 for knowledge, 0.66 for Comprehension while Application was 0.75. Therefore, the Cronbach's alpha value of the whole instrument is 0.87 (> 0.70). Data collection on the level of parental knowledge and adaptive behaviour of children was done through the distribution of a questionnaire to the respondents of the study, which the parents of preschool children in May 2020. Permission to conduct research and distribute questionnaires was obtained in advance. The distribution of questionnaires in the form of Google Form was done through a representative from PERTIM and then was distributed to parents through Whats-app application. For adaptive behaviour studies, it involves parents or guardians as observers and assessing their child's behavioral abilities to answer the questionnaire. The parents were given a brief explanation of the research purposes and ethical research that included the confidentiality of research participant information where any participant information should be protected from the general public. Informed consent should be given to participants about the research they will participate in so that they can make a choice whether or not to participate in the research.

In this study, all the data collected was analyzed using IBM Statistical Package for Social Science (SPSS) version 23 software as it was more efficient and faster to do statistical analysis work. The process of analyzing data includes two types of statistics, which were descriptive statistics and inferential statistics. Descriptive statistics were used to obtain the values of frequency, percentage, mean and standard deviation scores for the background of the respondents involved in this study. Next, inferential statistics were used to test the research hypothesis which was a questionnaire on the level of knowledge of parents on toilet training and the effect of toilet training on the adaptive behaviour of preschool children through T Test.

## **RESEARCH FINDINGS**

This study was participated by 60 respondents consisting of parents with children aged 4 to 6 years in kindergartens who were members of Persatuan Tadika Islam Malaysia (PERTIM). Therefore, the results of toilet training and adaptive behaviour were studied based on these two different sample groups.

Table 1: Descriptive Distribution Profile of Preschool Child Respondents

| Demography aspects of children |             | Frequency | Percentage (%) |
|--------------------------------|-------------|-----------|----------------|
| Gender                         | Female      | 33        | 55             |
|                                | Male        | 27        | 45             |
| Age                            | 4 years old | 13        | 21.7           |
|                                | 5 years old | 21        | 35             |
|                                | 6 years old | 26        | 43.3           |
| Toilet Training                | Yes         | 30        | 50             |
|                                | No          | 30        | 50             |

In this study, T test was used to analyse the significant difference of two group respondents. Results of the study hypothesis 1 as shown in table 2 were significant ( $t = 21.193$ ,  $df = 58$ ,  $p < 0.05$ ). There are differences in the level of knowledge between groups of parents for children receiving toilet training and parents to children not receiving toilet training. The mean difference value of 9.23 indicates that parents of children received toilet training have a higher level of knowledge compared to the group of parents of children who do not receive toilet training.

Table 2: T Test for Differences Level of Parent's Knowledge of Toilet Training between The Two Group Of Preschool Children

| Variable                              | <i>Levene's Test for Equality of Variances</i> |       |      |        |                 |      |
|---------------------------------------|--|-------|------|--------|-----------------|------|
|                                       | F  | Sig.  | t    | df     | Sig. (2-tailed) |      |
| Parents Knowledge of toilet training. | Equal variances assumed                        | 4.889 | .031 | 21.193 | 58              | .000 |
|                                       | Equal variances not assumed                    |       |      | 21.93  | 50.602          | .000 |

The results of hypothesis 2 were significant ( $t = 26.718$ ,  $df = 58$ ,  $p < 0.05$ ) as shown in table 3. The mean difference value of 2.67 indicates that children who received toilet training had better behaviour developments compared to the group of children who did not receive toilet training.

Table 3: T Test of the Effect Of Toilet Training on The Adaptive Behaviour Between Two Groups of Preschool Children

| Variable | <i>Levene's Test for Equality of Variances</i> |      | <i>T test for Equality of Means</i> |    |                 |
|----------|--|------|-------------------------------------|----|-----------------|
|          | F  | Sig. | t                                   | df | Sig. (2-tailed) |

|                    |                         |              |        |        |      |
|--------------------|-------------------------|--------------|--------|--------|------|
| Adaptive Behaviour | Equal variances assumed | 138.970 .000 | 26.718 | 58     | .000 |
|                    | Equal variances         |              | 26.718 | 29.000 | .000 |
|                    | not assumed             |              |        |        |      |

The results of the correlation analysis showed a very strong correlation between toilet training and children's adaptive behaviour ( $r = -.962$ ). Meanwhile, the correlation between toilet training and the level of parental knowledge of toilet training also shows a very strong correlation and these two correlations are negative. All of these correlations were significant at  $p < 0.01$ . The results of the analysis of hypothesis 1 that studies the significant differences between the level of knowledge of parents on toilet training of preschool children in PERTIM is accepted. It was because the results of the study show that there was a significant difference between the level of knowledge of parents about toilet training on children's toilet training practices. Hypothesis 2 was also accepted because there was a significant difference between toilet training and the development of adaptive behaviour among preschool children.

## DISCUSSION

This study was aimed to assess the level of parents' knowledge of toilet training and the effect of toilet training on the adaptive behaviour developments of preschool children at Persatuan Tadika Islam Malaysia (PERTIM). The parents' knowledge levels of toilet training among parents of preschool children in this study was at a good level. However, the level of knowledge about toilet training among parents for children who did not receive toilet training was at a low level. Children development encompassing several important domains such as physical, social, emotion, cognitive, and language/communication that much relates not only from predisposition genetic makeup, but also from the interaction with the immediate environment such as the physical setting at home, school, and in the community at large (Ismail, Badayai & Kulasingam, 2017). Parenting style also plays an important role in determining stability, peace and family happiness. Through good parenting style, it will also able to determines the way they raise children in a happy, joyful, healthy, possessive atmosphere (Ibrahim, Ibrahim & Aziz, 2017).

Low levels of parents on toilet training knowledge, understanding and application impact on the practices of toilet training in turn affected children's development if parents not able to spend their time for their children. The demands of life high require more commitment and time in workplace compared time at home. This situation gives impact on the family systems and change the role of the system in the family (Zubir, Johari, Mahmud, Razak & Johan, 2018). Based on this study, children who received toilet training had a good level of adaptive behaviour and were able to wear shoes without the help of adults, went to the toilet to defecate, washed and dried hands after using the toilet, turn on the television and wear clothes without getting help from parents. Children who received toilet training were more likely to use the toilet skilfully than children who did not receive toilet training. Skills in using the toilet at home were like being able to use the toilet without staining the toilet floor, able to remove pants and reuse after defecation, able to clean the private parts themselves after defecation and went to the toilet when necessary to urinate and defecate.



## **Difference between The Level Of Parents' Knowledge of Toilet Training and Toilet Training Practices Of Preschool Children**

The high level of knowledge among parents is due to the factors of the type of parental occupation as well as the good level of awareness among the parents. Parental awareness towards the importance of toilet training gives a positive impetus for parents to acquire knowledge about toilet training. Some environmental factors motivate parents to carry out toilet training on their child at an appropriate age and effective methods. Parents can influence the productivity of toilet training given to children based on the application of knowledge regarding toilet training. The results of the study on parents indicate that the level of knowledge is not only influenced by personal experience but also through the sharing of close individuals such as friends, parents, and even other family members.

In addition, the level of parental education plays a role in determining the level of parental knowledge. According to Notoatmodjo (2007), a person's level of knowledge about something is greatly influenced by the level of education. Thus, there was a relationship between the level of mother education and their knowledge of the physical, psychological and mental readiness of the child towards toilet training (Hussain, 2012). The number of children in the family also affects the level of knowledge of parents about toilet training. The number of children that greatly affects the quality of attention given to children will decrease. The employment status of the parents influenced the opportunities and time used to add knowledge. Parents also tend to neglect toilet training due to job demands that caused parents to be less able to pay attention to the child development process. Age was a physical feature of adulthood and personality maturity which was closely related to decision making. A number of studies have demonstrated that parents from a higher socioeconomic level show higher involvement in their children's education than parents from a lower socioeconomic level (Baker & Stevenson, 1986; Katsilis & Rubinson, 1990; Poston & Falbo, 1990; Ho Sui-Chu & Willms 1996; Balli, at al., 1998; Shaver & Wall, 1998; Desimone, 1999; Fantuzzo et al., 2000; McNeal Jr, 2001; Shuang Ji & Koblinsky, 2009; Sohail et al., 2012). These studies point out that those parents from higher socioeconomic status have a stronger economic background and this helps the parents to provide their children with more educational opportunities and educational resources (Suresh, 2013).

Adults such as parents or guardians need to know the importance of toilet training for child's development. The level of parent's knowledge among children who do not receive toilet training is low due to several factors such as not knowing the importance of toilet training and also due to cultural factors in Malaysia. In Malaysia, the use of disposable diapers until reach the age of 6 is common. Therefore, parents feel that the use of disposable diapers is a necessity throughout the life of the child to prevent children from bed-wetting. Cultural differences are one of the reasons for the implementation of toilet training at the proposed age and with the appropriate approach. In the west country, children who do not get toilet training and not master toilet training well will not be accepted into school as it will add to the workload of teachers (Karolien et al., 2015). Parental education level and type of occupation can influence knowledge and behavior towards children's toilet training. Based on a study done in the United States, children are able to do toilet training when they are 35 months old for girls and 39 months for boys. According to Gilbert (2013) in 2012, children in the United States were found to frequently urinate in their pants. This is due to the lack of knowledge of parents and families to help children to defecate (Wahyuningrum, 2016).

The relationship between parent's knowledge and toilet training was explained through Behaviourism Theory when in particular the frequency or possibility of behaviour was changed accordingly as a result (Murphy & Lupfer, 2014). Parents who have a good level of knowledge applied their knowledge of toilet training for child development. The knowledge possessed by parents motivating them to behave in providing toilet training to their child through habitual methods was a way to understand behaviour and leads to behaviour modification (Adam, 2013) and habitual refers to learning through process involved and learning through experience. Good and effective toilet training practice when parents have a thorough knowledge especially on the effects of not providing toilet training to children. In this study, parents of children who received toilet training realized that children who received toilet training at a later age could affect their child's level of health and psychology.

### **Difference between Toilet Training and The Development Of Children's Adaptive Behaviour**

Most all the children in the group who received toilet training had good adaptive behaviour. The analysis conducted to identify the effect of toilet training on the development of adaptive behaviour on the treatment group showed that there was an effect of toilet training on the adaptive behaviour of preschool children in the age of 4 to 6 years. The group of children who did not receive toilet training had a lack of mastery of adaptive behaviour. There were some children who did not master the skills of manipulating the controls and there were children who still needed the help of adults to go to the toilet. Children who receive toilet training from parents show behaviors that went through something without the help of an adult and can respond well to environmental needs. Over time and as their age increases, children gradually became less dependent on their parents or others around them and learned to be independent (Yamin & Sanan, 2010).

A group of children who received toilet training had the ability to put on their own shoes, go to the toilet without the help of an adult, wash and dry their own face and hands after using the toilet, turn on the television, and put on complete clothing. One of the ways that can be used to train a child's behavior is through toilet training. Toilet training is an effort to train children to control urination and defecation in the right place. This exercise is included in psycho-motor development because this exercise requires muscle maturation of the anal area and urinary tract. This exercise can be done on children when the child is 18 months old and is less suitable if teaching children to do toilet exercises at the age of less than 18 months because it can cause negative experiences (Sari, 2014). According to Dede Kendi, Atti Yudiernawati & Neni Maemunah (2017) there is a relationship between toilet training on the ability of children aged 18 to 24 months in controlling the bladder and intestines.

Based on this study, the group of children who received toilet training had good adaptive behaviour development. Toilet training was an effort to train children to control urination and defecation. Toilet training was also an exercise for children to urinate and defecate in the right place. This exercise was included in psycho-motor development as this exercise required muscle maturation of the anal area and urinary tract. One of the factors that influenced the success of toilet training was the child's readiness in learning of toilet training. The success or failure of toilet training taught by parents was seen in terms of the success of children using the toilet when they were 3 years old and above. This indicated that the success of toilet training in preschool children on the results of the study was largely in good condition. In addition, children who receive toilet training cause children to have self-confidence and

perform their duties. Children's abilities were closely related to self-concept. A child who was able to do his own work has strong self-confidence.

Children who do not receive toilet training indicate that children do not fully master adaptive behaviors well and need to seek help from adults. According to a study by Ayu Safitri Yusuf (2012) there is a clear difference can be seen between children getting toilet training and children not getting toilet training where children who get toilet training are good and can control enuresis while only a few children who not toilet trained were able to control enuresis. The results of his study found that there was a relationship between toilet training and enuresis control. This situation emphasizes the actions that need to be taken by parents in dealing with the problem of enuresis that occurs during bedtime where children need to defecate before going to bed. One of the factors influencing the success of toilet training is the readiness of children in toilet learning and training. Group children who received toilet training indirectly developed adaptive behaviors to adapt to the situation and environment and respond appropriately. The learning process of children occurred when children were able to understand the concept of adaptation itself. They act according to the needs of the situation that occurred such as going to the toilet when wanting to defecate. While Brien & Brandt (1997) stated that constructivism was a teaching approach based on research on how humans learn. Children's differences based on toilet training showed that a learning experience integrated toilet training experience with adaptive behaviour that not only occurred when going to the toilet but it was also used as an analogy to do other things such as the need to tie shoelaces freely without help and go to the toilet without adult help.

## **CONCLUSION**

The study found that the level of parent's knowledge was high among the parents of the group of preschool children who received toilet training. However, there was a low level of knowledge among parents of groups of children who did not receive toilet training. The results of this study showed that the importance of the implementation of toilet training in children as results of studies show a group of children who receive toilet training have the development of good adaptive behaviour. Among the implications mentioned were theoretical implications and practical implications. Implications of the practice suggested a framework of action plans or recommendations that need to be done by certain parties such as the Department of Social Welfare, Department of Islamic Development, Ministry of Education Malaysia, Associations, kindergarten teachers and especially parents of children.

In this study, there were 3 theories used in conducting research on toilet training and adaptive behaviour of children namely Behaviourism Theory, Constructive Theory and Piaget Cognitive Theory. Once the study was conducted, there are some limitations faced throughout the study process. Furthermore, the use of the set of questionnaires as a tool for data collection was limited as it was distributed using Google Form medium. Therefore the respondents' answers were difficult to confirm and data collection methods that can only be done through online will limit the number of questionnaires to be answer and it is quite difficult to encourage respondents to answer. Access to technological tools and use of the internet may also limit the number of respondents to answer the questionnaire. The respondents involved were parents who need to be observers and answer questions based on their child's development. The answers given may not be completely accurate as parents may be less comfortable stating their child's weaknesses explicitly. Other limitations included race and religion of respondents as the study respondents were only among Malay races and

Islamic religions.

Thus, it is suggested that further studies can involve a more diverse demographic of respondents and a larger sample size so that it can be generalized to a larger population, especially for preschool children in Malaysia. It will be better if the study can be conducted involving teachers and parents to answer the questionnaire to be evaluated comprehensively and comparing differences in toilet training results based on cultural, religious and gender differences.

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