



## The Relationship Between Parenting Style on Toilet Training Achievement in Preschool Children: Evidence from Cirebon City, Indonesia

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### ORIGINAL ARTICLE

#### ABSTRACT

Toilet training is a key developmental milestone in preschool-aged children, influenced by physical, psychological, and social factors. Poor parenting style, poor parental knowledge, and not good cultural and environmental factors play a significant role in the success of toilet training, with educational interventions shown to improve outcomes. This study aims to examine the relationship between parenting style and the success of toilet training among preschool-aged children (2–6 years). This cross-sectional quantitative study examined the relationship between parenting style and toilet training success among 50 parents of preschool-aged children (2–6 years) at UPT Majasem Community Health Center, Cirebon City, Indonesia, with the relatively small sample size noted as a limitation to generalizability. Data were collected via a validated and reliable structured questionnaire, and ethical approval was obtained from the Research Ethics Committee of Institut Teknologi dan Kesehatan Mahardika, with informed consent and confidentiality ensured for all participants. The findings of this study showed that most parents demonstrated a good parenting style (66%), and the majority of children achieved successful toilet training (80%). A significant association was found between parenting style and toilet training success ( $p = 0.009$ , Cramer's  $V = 0.36$ ), indicating a moderate relationship, with children of parents practicing a poor parenting style showing higher success rates (100%) than those with a good parenting style (69.7%). In sum, parenting style significantly affects toilet training success in preschool children, and culturally sensitive parental education is recommended to improve training outcomes and child well-being.

**Keywords:** Parenting Style, Toilet Training Success, Preschool Children, Parenting Education, Cirebon.

#### ABSTRAK

Pelatihan toilet adalah tonggak perkembangan utama pada anak usia prasekolah, dipengaruhi oleh faktor fisik, psikologis, dan sosial. Gaya pengasuhan yang buruk, pengetahuan orang tua yang buruk, dan faktor budaya dan lingkungan yang tidak baik memainkan peran penting dalam keberhasilan pelatihan toilet, dengan intervensi pendidikan terbukti meningkatkan hasil. Penelitian ini bertujuan untuk menguji hubungan antara gaya pengasuhan dan keberhasilan pelatihan toilet di antara anak usia prasekolah (2-6 tahun). Penelitian kuantitatif potong lintang ini menguji hubungan antara gaya pengasuhan dan keberhasilan pelatihan toilet di antara 50 orang tua dari anak usia prasekolah (2-6 tahun) di UPT Pusat Kesehatan Masyarakat Majasem, Kota Cirebon, Indonesia, dengan ukuran sampel yang relatif kecil dicatat sebagai keterbatasan generalisasi. Data dikumpulkan melalui kuesioner terstruktur yang tervalidasi dan andal, dan persetujuan etis diperoleh dari Komite Etik Penelitian Institut Teknologi dan Kesehatan Mahardika, dengan persetujuan dan kerahasiaan terjamin untuk semua peserta. Temuan penelitian ini menunjukkan bahwa sebagian besar orang tua menunjukkan gaya pengasuhan yang baik (66%), dan sebagian besar anak mencapai pelatihan toilet yang berhasil (80%). Ditemukan hubungan yang signifikan antara gaya pengasuhan dan keberhasilan latihan toilet ( $p = 0,009$ , Cramer's  $V = 0,36$ ), menunjukkan hubungan yang moderat. Anak-anak dari orang tua yang menerapkan gaya pengasuhan buruk menunjukkan tingkat keberhasilan yang lebih tinggi (100%) dibandingkan mereka yang menerapkan gaya pengasuhan baik (69,7%). Singkatnya, gaya pengasuhan secara signifikan memengaruhi keberhasilan latihan toilet pada anak prasekolah, dan pendidikan orang tua yang peka budaya direkomendasikan untuk meningkatkan hasil latihan dan kesejahteraan anak.

**Kata kunci:** Pola Asuh, Keberhasilan Toilet Training, Anak Pra-Sekolah, Edukasi Orang Tua, Cirebon.

## INTRODUCTION

Toilet training in preschool-aged children (2–6 years) is a key developmental milestone affecting physical, psychological, and social well-being (Gronski, & Doherty, 2020; Nurherliyany et al., 2024). Research globally indicates that parenting style significantly influences toilet training success. Democratic or authoritative parenting, characterized by warmth, consistency, and responsiveness, generally supports better outcomes, whereas authoritarian or permissive approaches may pose challenges (Lin et al., 2023). Conversely, authoritarian or permissive parenting approaches may hinder the achievement of successful toilet training (Tripon, 2024). Parental education interventions significantly improved toilet training outcomes (Khorasani et al., 2022).

Several factors, including parental education level, cultural background, and availability of sanitation facilities, also contribute to toilet training success (Sclar & Mosler, 2022; Wulandari & Rachmawati, 2024). In response, the Indonesian Ministry of Health has introduced parenting education programs aimed at strengthening parents' knowledge and skills to support this developmental task (Adhe et al., 2020). Authoritarian parenting styles may delay children's ability to achieve independent toileting (Chang et al., 2025). To address these challenges, primary health care centers and early childhood education institutions actively provide parental counseling on appropriate toilet training methods (Eliza & Priyanti, 2025; Nor Azman et al., 2024).

In addition to parenting style, children's temperament and developmental readiness also influence toilet training outcomes (Barutçu et al., 2024). Children who exhibit higher levels of self-regulation and motivation are generally more responsive to training, while those with more challenging temperaments may require tailored strategies and greater parental patience (Jańczak et al., 2025). Moreover, consistent routines, positive reinforcement, and modeling of appropriate behaviors by caregivers have been shown to facilitate the learning process. Understanding these child-specific factors alongside parental approaches can help create more effective, individualized toilet training plans that support both the child's independence and overall well-being (Henning, 2025).

Given the importance of parenting approaches and the local prevalence of delayed toilet training, this study aims to examine the relationship between parenting style and toilet training success among preschool-aged children (2–6 years) at UPT Majasem Community Health Center, Cirebon City.

## RESEARCH METHODS

This study employed a quantitative analytic design with a cross-sectional approach to examine the relationship between parenting style and toilet training success among preschool-aged children. Data on independent and dependent variables were collected simultaneously at a single point in time. The independent variable was parenting style, while the dependent variable was the success of toilet training among children aged 2–6 years. The study population consisted of parents with preschool-aged children in the catchment area of UPT Majasem Community Health Center, Cirebon City. In 2025, the total population was 56 parents, and a purposive sample of 50 respondents was included, representing parents of children aged 2–6 years living in RW 007.

Data were collected using a structured, closed-ended questionnaire in the form of a checklist. The questionnaire measured parenting style and toilet training success using items. Responses were assessed using a Likert scale (strongly agree to strongly disagree). Questionnaires were distributed directly to respondents and self-administered. The instrument was designed to capture parental practices and children's toileting behaviors.

The instrument tested validity and reliability in a similar population. From 30 items, 18 met the validity criteria with a correlation coefficient above the *r*-table at a significance level of 5% (0.514). Reliability testing yielded a Cronbach's Alpha of 0.838, indicating good internal consistency. This study obtained ethical approval from the Research Ethics Committee of Institut Teknologi dan Kesehatan Mahardika with number 007/KEPK.ITEKESMA/III/2025. All respondents were provided with informed consent prior to participation, and confidentiality of the collected data was strictly maintained. Participation was voluntary, and respondents retained the right to withdraw at any stage without any consequences.

## RESULTS

**Table 1.** Distribution of Parenting Style and Toilet Training Success in RW 007, UPT Majasem Community Health Center (n = 50).

Variables	Category	Frequency (n)	Percentage (%)
Parenting Style	Good	33	66.0
	Poor	17	34.0
Toilet Training Success	Successful	40	80.0
	Unsuccessful	10	20.0

Based on Table 1, most parents demonstrated a good parenting style (66%), while the majority of children achieved successful toilet training (80%).

**Table 2.** Association Between Parenting Style and Toilet Training Success (n = 50).

Parenting Style	Successful	Unsuccessful	Total
	n (%)	n (%)	n (%)
Good	23 (69.7)	10 (30.3)	33 (100)
Poor	17 (100.0)	0 (0.0)	17 (100)
Total	40 (80.0)	10 (20.0)	50 (100)

*Chi-square test:  $\chi^2 = 6.44$ ,  $p = 0.009$*

*Fisher's Exact Test:  $p = 0.011$  (used due to small expected cell count)*

*Effect size: Cramer's  $V = 0.36$  (moderate)*

*Odds Ratio (OR):  $\infty$  (calculated as  $17 \times 10 / 0 \times 23 \rightarrow$  interpretation: children with "poor" parenting style had higher odds of success; however, OR is technically undefined due to zero cell, so use caution)*

Table 2 shows that the Chi-square test indicated a statistically significant association between parenting style and toilet training success ( $p = 0.009$ ). Children raised with a poor parenting style showed a higher proportion of successful toilet training (100%) compared to those with a good parenting style (69.7%).

## DISCUSSION

This study demonstrated a significant association between parenting style and toilet training success among preschool-aged children. Surprisingly, children of parents classified as practicing a poor parenting style had a higher success rate (100%) compared to those with a good parenting style (69.7%). (Perubahan: menambahkan kalimat baru untuk menjelaskan mengapa temuan ini counterintuitive dan kemungkinan faktor lokal) This counterintuitive finding may reflect specific aspects of what is labeled "poor" in conventional frameworks, such as stricter discipline or higher early expectations, which in the local Cirebon context could accelerate children's compliance with toileting routines. The small sample size may also contribute to this unexpected result, and further research is needed to confirm the pattern.

The results of this study are in line with previous research suggesting that parental behaviors strongly determine toilet training outcomes. Parental education and responsiveness significantly improved the success of toilet training (Agusniatih et al., 2022). Inadequate parental knowledge accounted for a large proportion of delayed toilet training in Indonesian children (Nurherliyany et al., 2024). However, the finding that "poor" parenting style was associated with higher success in this study may reflect local cultural practices in Cirebon, where stricter or more directive approaches may accelerate compliance in children despite being categorized as less favorable in conventional parenting theories.

Cultural and environmental contexts may partly explain these results. In Indonesia, particularly in traditional communities, parents often adopt an authoritarian style, emphasizing obedience and discipline from an early age (Bunga et al., 2024). While such an approach is often criticized in Western settings, it may contribute to earlier toilet training success when combined with consistent reinforcement and expectations. Traditional parenting practices remain influential in children's developmental outcomes, including toileting behaviors (de Carvalho Mrad et al., 2021). Thus, the interplay between cultural norms, parenting style, and children's developmental readiness needs to be carefully considered (Xia, 2020). Traditional parenting in this region often emphasizes obedience, respect for elders, and early adherence to rules, which may make

directive approaches more effective for toilet training despite being categorized as authoritarian or less favorable in Western literature. Such cultural norms underscore the importance of considering local practices when interpreting parenting styles and their effects on child development.

These findings highlight the importance of context-specific parental education programs. Health workers and early childhood education institutions should provide counseling tailored to cultural values while encouraging supportive and responsive parenting approaches using booklet (Assyaidah, 2024). Although authoritarian tendencies may accelerate toilet training, they could also pose risks to children's psychological well-being if applied excessively (Geiger & Schelbe, 2021). These findings suggest that even culturally embedded authoritarian tendencies can be beneficial when combined with consistent guidance and clear expectations. Therefore, interventions should focus on balancing structure with responsiveness, ensuring both the developmental success and emotional well-being of children. Future studies with larger samples and qualitative approaches are recommended to explore the cultural nuances underlying parenting practices and toilet training success in Indonesia.

## CONCLUSION

This study concludes that there is a significant association between parenting style and toilet training success among preschool-aged children at UPT Majasem Community Health Center, Cirebon City. Children raised with a poor parenting style were more likely to achieve successful toilet training compared to those raised with a good parenting style, suggesting that local cultural practices may influence outcomes differently from conventional theories. Based on these findings, it is recommended that health professionals at community health centers and early childhood education institutions provide culturally sensitive parenting education programs to support parents in applying effective and balanced approaches to toilet training, with the ultimate goal of promoting both developmental achievements and children's psychological well-being.

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