

Parental Roles in Fostering Independence among Children with Down Syndrome

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ABSTRACT

Children with Down syndrome experience challenges in cognitive development, language acquisition, and adaptive functioning, which require intensive support in daily living activities. In this context, parents play a crucial role in fostering children's independence through parenting practices, guidance, and appropriate emotional support. This study aimed to analyze the role of parents in developing independence in children with Down syndrome through a literature review approach. The study was conducted by systematically reviewing scientific journals and academic publications that discuss parenting styles, independence training strategies, and environmental factors influencing the development of children with Down syndrome. The reviewed literature was analyzed thematically to identify key patterns related to parental roles and challenges in promoting independence. The findings indicate that parental roles in developing children's independence are reflected through adaptive communication, habituation and gradual training, positive reinforcement, emotional stability, collaboration with schools, and social support from the surrounding environment. However, several barriers were also identified, including limited parental time, insufficient parental knowledge, and children's physical and developmental conditions, which may affect the effectiveness of parenting practices. This study concludes that consistent, warm, and structured parenting plays a significant role in enhancing independence in children with Down syndrome. It is recommended that parents strengthen collaboration with schools and utilize professional support services to optimize children's developmental outcomes. The findings offer important implications for family-based education and intervention practices for children with Down syndrome.

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Introduction

Children with Down syndrome are categorized as children with special needs who experience developmental delays across multiple domains, including physical, cognitive, motor, and adaptive functioning. This condition results from a chromosomal abnormality involving trisomy 21, which leads to delays in almost all areas of development. Despite these challenges, children with Down syndrome possess considerable potential for growth when provided with appropriate stimulation and continuous support from their immediate environment, particularly the family as the child's first and most influential developmental context (Sriwardani, 2024). One of the most significant challenges faced by children with Down syndrome is achieving independence in activities of daily living. Limitations in skills such as eating, bathing, dressing, and personal hygiene often result in prolonged dependence on caregivers, making parental involvement a decisive factor in fostering children's independence.

The role of parents in developing independence in children with Down syndrome has been widely examined in previous studies. Parents function not only as caregivers but also as role models, trainers, mentors, and sources of reinforcement in the process of independence development. Andriani et al. (2023) reported that parents who demonstrate independent behaviors,

provide consistent guidance, and offer positive reinforcement for children's efforts are more effective in promoting independent functioning. Similarly, parental social support, including attention, motivation, guidance, and the use of simple instructions, has been shown to significantly enhance independent skills in children with Down syndrome (Sriwardani, 2024).

Parenting style also plays a critical role in shaping children's independence. Hasanah, Wibowo, and Humaedi (2015) found that democratic parenting styles tend to provide children with opportunities to practice skills, make simple decisions, and develop autonomy more rapidly compared to permissive or authoritarian approaches. These findings are reinforced by Evania et al. (2020), who demonstrated that authoritative parenting—characterized by warmth combined with clear boundaries—has a positive and significant relationship with children's ability to perform activities of daily living (ADL), such as bathing, eating, and dressing independently. Such evidence underscores the importance of balanced parenting practices that encourage autonomy while maintaining appropriate guidance and structure.

However, despite growing awareness of the importance of parental involvement, many parents of children with Down syndrome continue to adopt overly protective behaviors. Practices such as prematurely taking over children's tasks, shielding them from challenges, or limiting opportunities to practice independence may unintentionally increase dependency and hinder developmental progress. Sriwardani (2024) emphasized that negative parental perceptions regarding children's capabilities can restrict opportunities for learning and reduce children's confidence in performing daily activities independently. This indicates a critical need for deeper understanding of effective parental roles and strategies that balance protection with empowerment within the family environment.

In addition to addressing parental roles, this study is particularly relevant given that most previous research has focused on isolated aspects of parental involvement, such as parenting styles or social support alone. In contrast, this study offers a more comprehensive perspective by integrating multiple dimensions of parental roles, including parenting practices, independence training strategies, emotional support, and the influence of the family environment on children with Down syndrome. The distinctiveness of this study lies in its literature review approach, which synthesizes findings from various empirical studies to provide a holistic understanding of how parents can effectively foster independence in children with Down syndrome in everyday family contexts.

Based on the crucial role of parents and the existing gaps in comprehensive understanding of effective independence-building strategies, this study aims to analyze parental roles in developing independence among children with Down syndrome within the family environment through a literature-based analysis. The findings are expected to provide valuable insights for parents, educators, and professionals regarding evidence-based parenting approaches and family-centered practices that support the development of independence in children with Down syndrome.

Method

Research Design

This study employed a literature review design to examine the role of parents in developing independence in children with Down syndrome. The review focused on synthesizing existing empirical and theoretical studies related to parenting practices, family support, and independence development in children with Down syndrome.

Data Sources and Search Strategy

Data were obtained through an online literature search conducted during the research period. Relevant sources included peer-reviewed journal articles, research reports, and academic publications addressing parental roles, parenting styles, family support, and independence or adaptive skills in children with Down syndrome. The selection of literature was guided by criteria of thematic relevance, alignment with the research focus, and the recency of publications to ensure the inclusion of up-to-date findings.

Inclusion Criteria

The reviewed literature was selected based on the following criteria: (1) publications discussing parental roles, parenting strategies, or family involvement in the development of independence or adaptive functioning; (2) studies focusing on children with Down syndrome; (3)

relevance to family or home-based contexts; and (4) availability of full-text articles. Publications that did not directly address parental involvement or independence development were excluded from the analysis.

Data Collection and Analysis

Data collection was conducted through intensive reading and systematic note-taking of key findings from each selected source. The extracted data were then organized into thematic categories reflecting major aspects of parental roles in fostering independence. Data analysis was performed using content analysis techniques, involving the comparison, interpretation, and synthesis of findings across sources to identify recurring patterns and conceptual relationships. This analytical process enabled the development of a comprehensive understanding of how parental practices and family environments contribute to the independence of children with Down syndrome.

Result and Discussion

Based on the content analysis of selected literature, several recurring patterns were identified regarding parental roles in developing independence in children with Down syndrome. The synthesis of findings revealed consistent themes across studies, indicating shared approaches and challenges in family-based independence development. The summary of reviewed studies and their primary findings is presented in Table 1.

Table 1. Summary of Previous Studies on Parental Roles in Developing Independence in Children with Down Syndrome.

No	Author(s) and Year	Focus of Study	Key Findings
1	Zeinindra Marlin Alifachrudin & Murfiah Dewi Wulandari (2024)	Adaptive communication and modeling	Simple instructions, visual supports, and parental modeling enhanced children's understanding of self-care activities.
2	Mega Mardiyani Safira & Satiningsih (2023)	Habituation and fading techniques	Gradual training and systematic reduction of assistance improved children's independence skills.
3	Rohani & Tuti (2024)	Parental emotional acceptance	Emotional acceptance by parents positively influenced adaptive parenting quality.
4	Wulandari (2024)	Parent-school collaboration	Consistency between home and school practices strengthened independence development.
5	Elisabeth (2023)	Social support	Emotional and social support from the surrounding environment supported consistency in parenting practices.

Source: Synthesized from selected studies (2023–2024).

The analysis of these studies indicates that parental roles in fostering independence are characterized by several interrelated themes. First, adaptive communication and parental modeling emerged as foundational strategies. Parents who utilized simple language, visual cues, and direct demonstrations enabled children to better understand and perform daily living activities independently. This approach was consistently reported as effective across multiple studies.

Second, habituation through gradual and structured practice was identified as a key mechanism for developing independence. Step-by-step training, combined with the gradual withdrawal of assistance (fading), allowed children to build confidence and competence in performing daily tasks autonomously. This theme highlights the importance of consistency and patience in parental guidance.

Third, parental emotional acceptance and regulation played a critical role in shaping the quality of independence training. Studies emphasized that parents who demonstrated emotional stability, acceptance, and realistic expectations were more likely to apply adaptive and supportive parenting strategies. Emotional readiness of parents was found to influence children's motivation and persistence in practicing independent behaviors.

Fourth, collaboration between parents and schools, along with social support from the surrounding environment, was identified as a reinforcing factor. Consistent training across home and school settings enhanced skill generalization, while emotional and social support from extended family and community networks helped sustain parenting efforts.

Overall, the convergence of findings across reviewed studies underscores that the

development of independence in children with Down syndrome is most effective when parental involvement is comprehensive, structured, and continuous. Independence is not fostered through isolated strategies but through the integration of communication, training, emotional support, and collaborative environments. These results highlight the central role of parents as facilitators of independence within the family context.

Discussion

This literature-based study examined parental roles in developing independence in children with Down syndrome by synthesizing findings from recent empirical studies. The discussion integrates the identified themes with international literature to provide a deeper understanding of how family-based practices contribute to the development of independence in children with Down syndrome.

Adaptive Communication and Parental Modeling as Foundations of Independence

The findings highlight adaptive communication and parental modeling as fundamental strategies in fostering independence. This result aligns with international research emphasizing that children with Down syndrome benefit from clear, concrete, and visually supported communication due to limitations in expressive and receptive language (Fidler, 2005; Daunhauer & Fidler, 2011). Modeling daily living activities allows children to observe and imitate functional behaviors, which is consistent with social learning theory that underscores the role of observational learning in skill acquisition (Bandura, 1986). Previous studies have shown that parental modeling enhances understanding and retention of self-care routines, particularly when combined with consistent verbal cues and visual supports (Wishart, 2007). Thus, adaptive communication and modeling function as foundational mechanisms that enable children with Down syndrome to gradually internalize independent behaviors.

Habituation and Gradual Training in Daily Living Skills

Another prominent theme emerging from the review is the role of habituation through gradual and structured practice. International literature consistently supports the use of task analysis, step-by-step instruction, and fading techniques to promote independence in children with intellectual disabilities, including Down syndrome (Snell & Brown, 2015). Gradual reduction of assistance allows children to transition from dependence to autonomy while maintaining emotional security. Studies in adaptive behavior development indicate that repeated practice in natural settings, such as the home environment, is particularly effective in strengthening daily living skills and facilitating generalization (Wehmeyer et al., 2017). This finding reinforces the importance of consistent parental involvement in embedding independence training into everyday routines rather than treating it as an isolated instructional activity.

Parental Emotional Acceptance and Regulation

The analysis further reveals that parental emotional acceptance and regulation significantly influence the effectiveness of independence development. International research has demonstrated that parents' emotional responses to their children's disabilities shape parenting behaviors, expectations, and the learning environment (Hastings & Brown, 2002). Parents who demonstrate acceptance, emotional stability, and realistic expectations are more likely to adopt supportive and autonomy-promoting practices. Conversely, parental stress, anxiety, or denial may lead to overprotective behaviors that limit opportunities for independence (Glidden & Schoolcraft, 2003). The present findings support family systems theory, which posits that children's developmental outcomes are closely linked to parental emotional well-being and family dynamics. Emotional readiness among parents thus emerges as a prerequisite for effective independence training.

Parent-School Collaboration and Social Support

The findings also emphasize the importance of collaboration between parents and schools, as well as broader social support systems. International studies highlight that consistency across home and educational settings enhances the generalization and maintenance of adaptive skills in children with developmental disabilities (Bronfenbrenner, 1979; Turnbull et al., 2015). Family-school partnerships enable alignment of goals, strategies, and expectations, thereby reducing confusion and reinforcing learning. Additionally, social support from extended family and community networks has been shown to buffer parental stress and sustain long-term caregiving

efforts (Dunst & Trivette, 2009). This theme aligns with family-centered intervention models, which view independence development as a shared responsibility among families, educators, and support systems.

Integrative Perspective on Parental Roles

Taken together, the findings suggest that parental roles in developing independence in children with Down syndrome are multidimensional and interdependent. Independence is not achieved through a single strategy but through the integration of adaptive communication, structured practice, emotional support, and collaborative environments. This integrative perspective is consistent with international frameworks on adaptive functioning, which emphasize the interaction between individual abilities and environmental supports (Schalock et al., 2010). The present study extends existing literature by synthesizing these dimensions into a coherent framework that underscores the central role of parents as facilitators of independence within the family context.

Conclusion

This literature review highlights the pivotal role of parents in fostering independence in children with Down syndrome within the family environment. The synthesis of findings demonstrates that independence development is most effectively supported through an integrated approach that combines adaptive communication, parental modeling, gradual and structured training, emotional acceptance, and consistent collaboration with educational settings and social support systems.

The review underscores that parental practices characterized by warmth, consistency, and clear structure enable children with Down syndrome to acquire and generalize daily living skills more effectively. Parents who provide opportunities for practice, apply positive reinforcement, and regulate their own emotional responses create supportive environments that promote autonomy rather than dependence. Moreover, alignment between home and school practices, along with sustained social support, further strengthens the continuity and sustainability of independence development.

Overall, this study affirms that the development of independence in children with Down syndrome is not solely determined by individual limitations but is significantly shaped by family-centered practices and environmental support. These findings emphasize the need for empowering parents through education, guidance, and professional collaboration to optimize children's adaptive functioning. Future research is encouraged to explore empirical and longitudinal approaches to further examine the dynamic interactions between parental roles, family contexts, and independence outcomes in children with Down syndrome.

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