

# Parents' Perceptions of Special Needs Education in Zambia: Digital Advocacy, AI-Assisted Support, and the Path to Inclusive Parental Engagement

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**Abstract** — Parental engagement in the education of children with special educational needs is a critical determinant of educational outcomes, social inclusion, and family well-being for children with disabilities and developmental differences. In Zambia, parental perceptions of special needs education including its value, accessibility, and cultural acceptability significantly shape whether children with special needs are enrolled in appropriate educational programmes or excluded from formal schooling. This article investigates parental perceptions of the importance of special needs education in selected Zambian schools, contextualising findings within global scholarship on AI-assisted parental support platforms, digital advocacy networks, and disability-inclusive educational governance. Drawing on a mixed-methods survey of parents of children with special educational needs, findings reveal that parental attitudes toward special needs education are predominantly positive but constrained by limited knowledge of available services, cultural stigma associated with disability, financial barriers to specialised provision access, and inadequate school-parent communication. The article argues that AI-powered information platforms, digital parental advocacy networks, and community-based disability support systems offer transformative pathways for enhancing parental engagement and expanding access to quality special needs education. Policy recommendations are presented.

**Keywords** — *Special Needs Education; Parental Perception; Disability; Zambia; AI-Assisted Support; Inclusive Education; Parental Engagement.*

## 1. Introduction

The education of children with special needs encompassing learners with physical, sensory, cognitive, and developmental disabilities is a recognised human rights imperative enshrined in national and international legal frameworks including Zambia's Education Act, the UNCRPD, and the Sustainable Development Goals (Ashifa, 2019; Meena et al., 2025). Yet the realisation of this imperative depends critically on the engagement, knowledge, and advocacy of parents who serve as the primary advocates, decision-makers, and support providers for children with special educational needs (Ranganathan et al., 2024; Vettriselvan et al., 2025a). In Zambia, parental perceptions of special needs education are shaped by intersecting factors including cultural beliefs about disability causation, limited knowledge of educational rights and services, economic constraints on accessing specialised provision, and historical experiences of stigma and discrimination (Ashifa, 2021a; Vettriselvan & Rajan FSA, 2019).

Global advances in AI-powered parental information platforms, digital advocacy tools, and community-based disability support networks offer new possibilities for strengthening parental engagement with special needs education in low-resource contexts (Venice et al., 2025a;

Vasanth et al., 2025). This article examines current parental perceptions in selected Zambian schools and identifies evidence-based strategies for enhancing parental engagement drawing on international technology and practice best evidence.

## 2. Literature Review

### 2.1 Parental Perceptions and Their Educational Significance

Parental perceptions of special needs education encompassing beliefs about its value, effectiveness, cultural appropriateness, and accessibility are powerful determinants of whether children with disabilities receive appropriate educational support (Ashifa, 2019; Ranganathan et al., 2024). Research consistently demonstrates that children of parents with positive, knowledge-informed perceptions of special needs education achieve significantly better academic and social outcomes than children of parents with negative or misinformed perceptions an effect mediated through parental decisions about enrolment, attendance, homework support, and school-professional communication (Vettriselvan et al., 2025a; Gayathri et al., 2025b). Cultural beliefs about disability causation including spiritual, moral, and ancestral attribution models prevalent in many Zambian communities can profoundly shape parental

perceptions of special needs education, sometimes generating resistance to medical and educational interventions that conflict with traditional explanatory frameworks (Ashifa, 2021a; Kariveliparambil et al., 2026a). Culturally sensitive communication strategies, community-based disability awareness programmes, and engagement of trusted community leaders in disability advocacy have demonstrated effectiveness in progressively shifting cultural beliefs toward more inclusive disability frameworks (Vettriselvan & Anto, 2018; Rasi & Ashifa, 2019).

## **2.2 AI-Assisted Parental Support and Information Platforms**

Artificial intelligence offers significant potential for enhancing the information access and support available to parents of children with special educational needs (Venice et al., 2025a; Arockia et al., 2025). AI-powered parent information chatbots can provide personalised, accessible, and non-judgmental responses to parent queries about disability, educational rights, available services, and home support strategies in local languages and at appropriate literacy levels (Venice et al., 2025b; Vasantha et al., 2025). Recommendation systems that connect parents with relevant community resources, support groups, professional services, and educational information based on their child's specific disability type and geographic location reduce the information search burden that frequently prevents parents from accessing available support (Venice et al., 2025c; Akila et al., 2025).

Digital parental advocacy networks that connect parents of children with special needs across communities enabling peer support, shared advocacy strategies, and collective voice in policy dialogue have demonstrated significant positive impacts on parental empowerment, well-being, and educational engagement in comparable developing country contexts (Kariveliparambil et al., 2026b; Venice et al., 2026).

Blockchain-enabled individual education plan (IEP) management platforms that give parents secure, portable access to their child's educational records and support entitlements further enhance parental engagement by providing transparent evidence of their child's progress and the support commitments of the educational system (Venice et al., 2025d; Rajeswari et al., 2026).

## **2.3 Family Well-being, Stress, and Support Needs**

Parenting a child with special educational needs is associated with significantly elevated stress, caregiver burden, social isolation, and mental health challenges compared to parenting typically developing children challenges that directly affect parental capacity to engage

effectively with their child's educational programme (Ranganathan et al., 2024; Zahoor et al., 2025; Elkin et al., 2025).

Research has documented that parental emotional intelligence, self-efficacy, and access to social support are significant moderators of caregiver stress with well-supported, emotionally resilient parents providing significantly higher quality educational engagement for their children with special needs (Zahoor et al., 2025; Ashifa, 2022). Family support programmes that combine practical information provision, emotional support, peer connection, and respite care have demonstrated effectiveness in improving both parental well-being and child educational outcomes (Rasi & Ashifa, 2019; Vettriselvan et al., 2025a).

## **2.4 Financial Barriers and Economic Dimensions**

Financial barriers to accessing special needs education are a significant reality for families in low-income Zambian communities, where specialised educational provision including assistive technology, specialised transport, therapeutic support, and school fees for private special schools imposes costs that far exceed most household budgets (Ashifa, 2019; Meena et al., 2025).

The economic opportunity costs of disability including reduced parental labour market participation due to caregiving demands compound the direct financial costs of special needs provision, creating compounded economic vulnerability for families of children with significant disabilities (Ashifa, 2021b; Vettriselvan & Anto, 2018). Social protection programmes that provide disability grants, caregiver allowances, and subsidised access to special needs educational services are essential complements to educational inclusion policies in addressing these economic barriers (Kariveliparambil et al., 2026a; Vettriselvan et al., 2026a).

## **3. Methodology**

This study employed a descriptive survey design to investigate parental perceptions of special needs education in selected primary and secondary schools in Zambia. A mixed-methods approach combined structured parent questionnaires, semi-structured interviews with parents of children with diverse disability categories, and focus group discussions with parent groups and community leaders (Kombo & Tromp, 2014; Orodho & Kombo, 2012). A purposive sample of 80 parents of children with identified special educational needs was drawn from three study schools across two districts. Data were analysed through descriptive statistics for quantitative data and thematic analysis for qualitative data, with triangulation across sources enhancing validity.

## 4. Findings and Analysis

### 4.1 Parental Attitudes toward Special Needs Education

Overall parental attitudes toward special needs education were positive, with 78% of respondents agreeing or strongly agreeing that children with disabilities deserve the same educational opportunities as non-disabled children. However, knowledge of specific special needs educational services, rights, and support mechanisms was limited, with fewer than 30% of parents able to identify available government special education services in their district (Ashifa, 2019; Vettriselvan & Rajan FSA, 2019). Cultural beliefs associating disability with spiritual causation were expressed by 35% of respondents, with this subgroup demonstrating lower educational service uptake and higher rates of keeping children with disabilities at home rather than enrolling them in available programmes.

### 4.2 School-Parent Communication

School-parent communication regarding special educational needs was characterised by informality, infrequency, and inadequate professional support. Fewer than 25% of parents reported receiving regular written progress reports on their child's special needs support; most communication occurred through occasional informal conversations with class teachers who lacked specialist training in special needs (Gayathri et al., 2025b; Vettriselvan et al., 2025e). Parents expressed strong desire for more frequent, detailed, and understandable communication about their child's educational programme and progress a need that AI-powered parent communication platforms could substantially address (Venice et al., 2025a; Vasantha et al., 2025).

### 4.3 Financial and Resource Constraints

Financial barriers were a significant constraint on educational engagement for 65% of respondents, who reported difficulty meeting the transport, material, and sometimes fee costs associated with their child's special needs educational programme. Assistive device provision was severely limited, with 80% of children with sensory or physical disabilities lacking appropriate assistive technology despite school enrolment. Parents reported high caregiving time demands that reduced household income generation capacity a finding consistent with the economic vulnerability research on disability and caregiving (Ashifa, 2019; Ashifa, 2021b; Meena et al., 2025).

### 4.4 Support Needs Identified by Parents

Parents identified five primary support needs: more information about their child's disability and educational

options (88%), peer support connections with other families of children with special needs (74%), financial assistance with disability-related educational costs (72%), better school-parent communication (68%), and access to community-based therapeutic services (60%). These expressed needs align closely with the capabilities of AI-powered parent information platforms, digital peer support networks, and blockchain-enabled entitlement management systems (Venice et al., 2025b; Kariveliparambil et al., 2026b; Rajeswari et al., 2026).

## 5. Discussion

The predominantly positive but knowledge-constrained parental attitudes documented in this study suggest that the primary barrier to effective parental engagement with special needs education in Zambia is not attitudinal resistance but rather systemic information gaps, cultural misconceptions, and resource deficits that prevent well-intentioned parents from accessing and effectively utilising available special education services (Ashifa, 2019; Ranganathan et al., 2024; Zahoor et al., 2025).

This finding has important policy implications: it suggests that investment in parent information, communication, and support systems would yield significant returns in enhanced parental engagement without requiring the attitudinal change campaigns that are more resource-intensive and slower to produce impact. AI-powered parent information chatbots, digital peer support networks, and mobile-accessible educational rights information platforms represent contextually appropriate and immediately deployable technologies for addressing the information gaps documented in this study (Venice et al., 2025a; Vasantha et al., 2025; Arockia et al., 2025). The cultural dimensions of parental perception particularly spiritual disability attribution require community-based engagement strategies that work through trusted community leaders and institutions rather than purely individual information provision approaches (Kariveliparambil et al., 2026a; Rasi & Ashifa, 2019).

## 6. Conclusion and Recommendations

This article has investigated parental perceptions of special needs education in Zambia, connecting local findings with global scholarship on AI-assisted parental support and inclusive educational governance. Findings confirm positive but knowledge-constrained parental attitudes alongside significant information, resource, and communication barriers. Recommendations: (1) deploy AI-powered parent information platforms providing disability education resources in local languages (Venice et al., 2025a; Vasantha et al., 2025); (2) establish digital peer support networks connecting families of children with special needs (Kariveliparambil et al., 2026b; Venice et al., 2026); (3)

improve school-parent communication through digital progress reporting and parent-teacher communication platforms (Venice et al., 2025b; Gayathri et al., 2025b); (4) expand social protection disability grants and caregiver allowances (Ashifa, 2019; Meena et al., 2025); and (5) conduct community-based disability awareness programmes through trusted cultural and religious leaders (Kariveliparambil et al., 2026a; Rasi & Ashifa, 2019).

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