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Family Functioning and Resilience among Children with Sensory Disabilities in Enugu State: Moderated Mediation of Achievement Motivation in Special Interests across Perceived Social Acceptance Levels

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Abstract

The family system influences the development of individuals, including adaptive functioning such as resilience. Resilience is crucial for children with sensory disabilities to thrive amidst daily challenges. It is pertinent to understand the factors that promote resilience. This study, therefore, examined the role of achievement motivation in special interests as a mediating mechanism linking family functioning to resilience, while examining perceived social acceptance as a moderator of direct relationship. A cross-section of 120 children with sensory disabilities (blindness or deafness) aged 6 to 12 years, selected through purposive sampling, participated in the study. Data was obtained using standardized questionnaires, and Hayes's PROCESS macro, version 5.0 model 5, was used in data analyses. The results showed that more functional family systems are associated with higher achievement motivation (β FF-AM=1.321), which, in turn, significantly mediates the effect on resilience ((β AM-R=0.262). High levels of social acceptance moderated the direct effect of family functioning on resilience (β_{simple} = 1.3322, $p < 0.001$; 95 % CI [0.4520, 2.2123]). In conclusion, family functioning enhances resilience through achievement motivation, and the direct effect of family functioning on resilience is contingent on social acceptance. Interventions for children with sensory disabilities to enhance resilience should focus on improving family functioning.

Keywords: Sensory disabilities; children; resilience; family functioning; social acceptance; achievement motivation

Introduction

The family is a socializing agent and an enduring institution of society. It is the first social group an individual belongs to. Most of an individual's behavior is shaped by the family environment, thus revealing family functioning. Family characteristics are one of the aspects of family functioning (Dai &

Wang, 2015). According to Lewandowski et al. (2010), family functioning is how a family operates, which encompasses the way family members interact socially and structurally, and it is demonstrated through how well the family is united, close, and has effective communication within itself. Sabah et al. (2023a) defined family functioning as the operation of the family and the support it provides for the members. Poor family functioning has been linked to depression and anxiety in children (Oltean et al., 2020). Family functioning reflects the overall quality of the family environment and the interrelationships among its members (Folk et al., 2020). According to multilevel family systems, interactions and changes among family members not only affect the equilibrium of the entire family system but also have a profound impact on the psychology and behaviour of each member (Cook & Kenny, 2006). In line with this, Zhang et al. (2024) opined that intimate relationships and conflicts within the family functioning can affect children's social skills and ability to cope with mental stress. This ability is referred to as resilience. Several studies have highlighted that healthy family functioning is related to the cultivation of emotional competence and the expression of psychological resilience (Liu et al., 2024; Peng et al., 2025; Seddon et al., 2025; Yang et al., 2025).

According to Masten (2018), resilience refers to an individual's ability to adapt positively and maintain psychological well-being despite adversity or stress. Among children, resilience manifests through emotional regulation, problem-solving, flexible thinking, and positive social relationships, which enable them to thrive even under difficult circumstances (Wright et al., 2021). Resilience may be said to be a product of a supportive relationship, which can come from the family. These relationships help children, including those with sensory disabilities, develop key abilities. Sensory disabilities refer to impairments that limit a child's ability to process information through one or more senses. In this study, children with sensory disabilities were conceptualized as those with hearing and/or vision impairment. According to Mawila (2022), the family serves as a secure base that nurtures coping skills, emotional regulation, and adaptive functioning of children with hearing or visual impairments. When caregivers offer warmth, listen attentively, and advocate for their children's needs, they help them see difficulties as manageable rather than overwhelming (Dürr & Greeff, 2020). A study by Jones and Smith (2020) reveals that resilience is closely linked to motivation and self-perception.

According to Mercer and DeRosier (2020), self-perception entails how individuals assess, understand, and evaluate their personal traits, abilities, and worth. Through this assessment, individuals develop an understanding of themselves by reflecting internally, interacting socially, and interpreting their experiences (Osterhaus, 2025). During childhood, these self-views are largely shaped by feedback and validation received from close family members (Shogren et al., 2022). For children with sensory disabilities, forming a positive self-concept may be more complex due to

difficulties in communication, social stigma, and the low expectations often placed upon them (Steele, 2021). Their unique challenges in communication and social interaction can hinder the development of self-understanding. Still, when parents provide acceptance and tailored support, they help their children build positive self-views, fostering self-esteem, identity stability, and belonging despite sensory limitations (Cadete, 2024; Mestre et al., 2024). Families that emphasise respect and open communication tend to raise children with stronger self-perception, particularly among those with sensory impairments (Brown & Smith, 2018; Oluwakoyode, 2024). Individuals who perceive themselves in a positive light may conform their behaviors to their perceptions.

According to Zhou and Kang (2019), a child who feels positively about themselves is also more likely to pursue activities that interest them, translating their confidence into motivation toward special interest activities. Motivation is an internal mechanism that propels, guides, and maintains action in the direction of particular objectives (Deci & Ryan, 2000). In childhood, motivation is crucial for promoting learning, self-control, and curiosity; it also shapes children's interactions with their surroundings and helps them acquire lasting abilities (Ryan & Deci, 2017). Motivation toward special interest activities refers to the drive that encourages children to engage repeatedly in pursuits they find meaningful and enjoyable. Meaningful, accessible engagement allows children to experience competence and autonomy, which strengthens self-efficacy and emotional stability (Wong et al., 2024). Studies have shown that when parents provide opportunities for choice, recognize effort, celebrate accomplishments, and set realistic expectations, children cultivate a sense of competence and autonomy that sustains engagement in their interests (Moeller, 2015; Okoye & Eze, 2022). In this study, achievement motivation is conceived as an extrinsic motivational factor that shows one's engagement in special interests due to the success and recognition attached to it. Sustained engagement in a special interest facilitated by motivation has the potential to shape an individual's view of themselves.

According to Bem's self-perception theory (1972), individuals infer who they are by observing their behaviour and the feedback from others. This inference is regarded as self-perception. It may also be considered as the (conscious) beliefs that people have about themselves, which are mostly self-representations of the attributes and characteristics of oneself (Harter, 2012). From infancy, children start differentiating themselves from their environment, gradually grasping their physical and psychological uniqueness. These self-views are largely shaped by feedback and validation received from close family members (Shogren et al., 2022). This feedback could enable them to develop the ability to see themselves from others' perspectives and grasp social evaluations. Several studies have provided evidence on the role of self-perception as an important, internal resource that impacts individuals' daily lives, as well as their long-term well-being (Cole et al., 2001;

Grant et al., 2006; Harter, 2012). This underscores its relevance in child development research.

Children with sensory disabilities, such as hearing and visual impairments, face challenges that extend beyond their physical limitations, often impacting their emotional well-being, learning capabilities, and psychological growth (Olusanya et al., 2016). In areas like Enugu State, where disability-related support services are limited or inconsistently implemented, the family becomes a key influence in shaping how these children cope and develop (Adegboye & Nwankwo, 2022; Iheanacho, 2023). However, many families raising children with sensory disabilities face daily pressures ranging from financial hardship and caregiving stress to social isolation and limited access to support services that can weigh heavily on how the household functions (Omiegbe, 2023). These everyday struggles often affect the emotional tone of the family, reduce patience and availability, and make it harder to maintain healthy communication or routines (Steele, 2021). In such environments, children may not only feel misunderstood or unsupported but may also struggle with how they see themselves, how motivated they are to engage in activities that interest them, or how well they handle setbacks (Luckner & Movahedazarhouligh, 2020).

There is growing concern that children with sensory disabilities in Nigeria are not reaching their full potential, not solely because of their impairments, but because of the quality of support they receive at home (Omiegbe, 2023; Singal, 2016). Although international studies emphasise the benefits of stable and nurturing home environments for children's emotional development, localized data on how family structures affect traits like self-esteem, motivation toward special interest activities, and resilience remains limited (Marc & Knoors, 2020; Zhou & Kang, 2019). According to the World Health Organization (2021), over 1.5 billion people globally live with hearing loss, and more than 2.2 billion experience visual impairments. Many of these individuals are children from low- and middle-income countries, including Nigeria. These impairments are often worsened by poverty, discrimination, and limited access to quality education and healthcare, especially in underserved areas like Enugu State (UNICEF, 2021). When families lack the capacity to buffer these external pressures, children are at higher risk of emotional distress, isolation, and academic failure (Mensah & Adeyemi, 2021; Steele, 2021). In line with this, Masten and Monn (2015) revealed that the fields of child and family resilience developed in parallel rather than in an integrated fashion.

Theoretical background of the study

The relationship among variables in this study is explained by both the family systems theory (Bowen, 1978) and the bioecological theory (Bronfrenbrenner 1998). According to family systems theory, individuals' character traits and behaviours are learned and reinforced through relationships within the family context. In the family system, there are elements (members) whose relationships are interdependent. Therefore, the emotional functioning of family members affects the functioning of each family member (Kerr & Bowen, 1988). When parents and siblings

collaborate to adjust routines, provide emotional reassurance, and celebrate small victories, children internalize coping models that strengthen their psychological endurance (Ojo & Lawal, 2022). Differentiation of self is one of the concepts of family systems theory that aligns with this study. According to Süloğlu and Güler (2021), this concept is an individual's ability to define oneself and the process of preserving one's existence in intense relationships. Families and other social groups greatly affect how people think, feel, and act, but individuals vary in their susceptibility to "groupthink," and groups vary in the amount of pressure they exert for conformity. These differences between individuals and between groups reflect differences in people's levels of differentiation of self. The less developed a person's "self," the more impact others have on his functioning. Differentiation is central to Bowen's account of systemic and individual developmental trajectories, and it is a fundamental property of family relations and the organization of self (Lampis et al., 2018). Studies have shown that differentiated individuals can tolerate strong emotions even under challenging life conditions and make decisions by considering their thoughts, thus coping with stress more effectively (Bowen, 1978; Rodríguez-González et al., 2019). This is because a person with a well-differentiated "self" recognizes their realistic dependence on others, but they can stay calm and clear-headed enough in the face of conflict, criticism, and rejection to distinguish thinking rooted in a careful assessment of the facts from thinking clouded by emotionality. Resilience may be seen as a function of an individual's differentiation of self since it involves an individual's ability to cope with manageable challenging situations/threats. It is on this premise that the study tested these alternative hypotheses at a significant level of $p < 0.05$.

Hypotheses

H_1: Family functioning is positively associated with resilience in children with sensory disabilities.

H_2: The positive association of family functioning and resilience is mediated by Achievement Motivation.

H_3: Perceived Social Acceptance moderates the positive relationship between family functioning and resilience; such that the higher the perceived social acceptance, the more significant the positive influence of family functioning on resilience among children with sensory disabilities.

Figure 1 shows the conceptual model relationship between family functioning and resilience, and the moderating and mediating roles of perceived social acceptance and achievement motivation, respectively.

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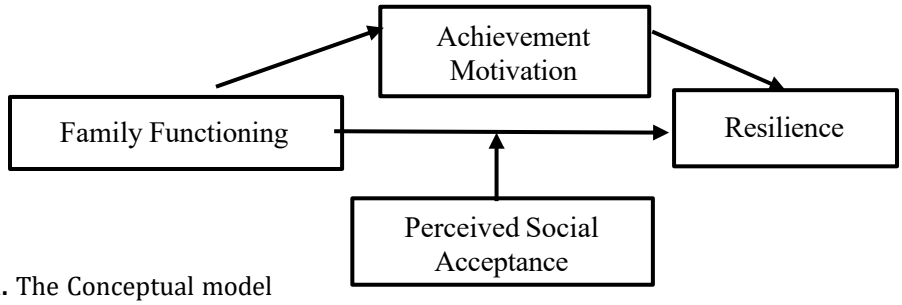

Figure 1. The Conceptual model

Methodology

Study design: A descriptive correlational study design was employed among a cross-section of participants. This design was used as it enables the researcher to describe the relationship among variables without manipulating them (Putri et al., 2025). This design supports the study's hypotheses.

Study Population: The population comprised a total of 140 children from the five (5) special education centers in Enugu State, Nigeria. The participants were aged 6 to 12 years (both male and female) with a known sensory disability.

Sample and Sampling Techniques: Sampling was done in two stages. First, a purposive sampling technique was used to select four out of the five special education schools in the study area. This was considered appropriate, considering the focus on sensory disabilities. All the children whose parents gave consent participated in the study. This was done to have a good representation of the participants, considering the small population size. The second and final stage involved conveniently recruiting students who were present on the day of the visit. This gave a total of 120 pupils who participated in the study.

Inclusion and exclusion criteria: To participate in the study, the child must have a primary or secondary hearing or sight problem and be between the ages of 6 and 12 years. Children who had both hearing and visual impairment were excluded from the study.

Instrument for Data Collection

Data was obtained using four standardized instruments. Family functioning was assessed using the Family APGAR proposed by Smilkstein (1978). Austin and Huberty (1989) later revised it for children as young as 8. This is a 5-item scale that evaluates 5 aspects of family: family adjustment, partnership, growth, emotion, and intimacy. The items are scored on a 3-point Likert scale ranging from 0 (almost never) to 2 (almost always). A sample item in the scale is "*I am satisfied that I can turn to my family for help when something is troubling me*." Studies have shown that the APGAR family scale demonstrated good internal reliability (alpha = 0.81).

Self-perception was assessed using the Self-Perception Profile for Children (SPPC), developed by Harter (1985). assess children's self-perceptions across six core dimensions: Scholastic Competence (perceived ability in academic work), Social Acceptance (feeling of being liked and accepted by peers), Athletic Competence (perceived ability in sports and outdoor activities), Physical Appearance

(satisfaction with body image and looks), Behavioral Conduct (perception of moral behavior and self-discipline), and Global Self-Worth (overall evaluation of personal value and self-esteem). The SPPC contains a total of 36 items, with six items per subscale, presented in a structured forced-choice format that reduces social desirability bias and encourages honest responses. The overall scale reliability under the parallel model assumption was 0.86. A sample item in the scale is "*I learn new things quickly*." In this study, the scale was adapted to 18 items.

The Special Interest Motivation Skills (SIMS) questionnaire, originally developed by Grove et al. (2016), was designed to assess children's motivation toward engaging in activities that reflect their personal interests, strengths, and talents. The instrument is particularly suitable for research involving children with sensory disabilities, as it captures specific engagement in meaningful, self-directed activities, rather than general motivation. The SIMS comprises 20 items, organized into five subscales: Personal Goals and Values, Intrinsic Interest and Knowledge, Engagement/Flow, Achievement, and Prestige. Items in this questionnaire are scored on a 7-point Likert scale ranging from 'not at all' through to 'exactly' to assess how well each statement describes why individuals engage in their special interest. All items were summed, with higher scores indicating greater motivation toward special interest activities. A sample item in the scale is "*I chose this special interest because it allows me to reach my life goals*." In this study, only the achievement motivation subscale was used. Its reliability score of 0.76 is within the acceptable range and thus justifiable for use in this study.

Resilience was assessed using the Nicholson McBride Resilience Questionnaire (NMRQ). This is a brief instrument developed to assess an individual's capacity to cope with challenges, recover quickly from difficulties, and adapt positively when under pressure. The questionnaire contains 12 items that cover core aspects of resilience, including confidence, emotional control, adaptability, purposefulness, and the ability to seek support. Respondents indicate the extent to which each statement describes them using a 5-point rating scale ranging from 1(strongly disagree) to 5 (strongly agree). A sample item is "*I'm good at finding solutions to problems*." Total scores range from 12 to 60, with higher scores reflecting greater resilience. In this study, the questionnaire was adapted for use by children. All the items were rephrased into simpler words for clarity. The questions were tested for reliability, and a score of 0.72 was obtained.

Validity and Reliability Tests: The instruments underwent face and content validation by three lecturers in the Department of Home Science and Management. They assessed the clarity, relevance, and suitability of the questionnaire items for children with sensory disabilities. The internal consistency of the instrument was assessed, and Cronbach's alpha reliability scores of 0.72 for family functioning, 0.72 for resilience, 0.78 for self-perception, and 0.76 for achievement motivation in special interest scale.

Ethical approval and informed consent: Before the study, ethical approval was obtained from the University of Nigeria Teaching Hospital, Ituku Ozalla, with the reference number NHREC/05/01/2008B-FWA00002458-1RB00002323. Informed consent was obtained from school heads and parents or guardians of the participants. Oral and written informed consents were also obtained from the participants. The goal of the research, procedure, and possible risks were also highlighted. The parents of the participants were assured of the confidentiality of their responses and were allowed to stop the survey at any time they became uncomfortable. All participants were treated with dignity and sensitivity in line with ethical standards for research involving children with disabilities.

Data Collection Method: Data were collected using standardized questionnaires printed in large fonts and administered directly to the children in their schools. The teachers served as research assistants, after they were provided with the details of the data collection process. The teachers provided sign language support to deaf pupils who were unable to read the questionnaire independently and read the questionnaire items aloud to pupils with visual impairments to facilitate their participation. They provided hearing aids for learners with minor hearing impairments, which facilitated the data collection method. The teachers then assisted in filling in the pupils' responses into the questionnaire. Pupils who were deaf and could read filled the questionnaire themselves. It took 20 minutes for each participant to complete the questionnaire. Only children present on the days of data collection participated in the study, and completed questionnaires were collected on the spot. The data collection stage lasted for three months.

Data and Statistical Analysis: Data were analyzed in SPSS 27.0. First, data were screened for extreme outliers, and moderation mediation assumptions were tested. Pearson's Correlation (r) was conducted to examine the relationships among the study variables at $p < 0.05$. The SPSS Hayes (2013) PROCESS macro model 5 was used for moderated mediation analysis. The bootstrapping method based on 5000 samples was used with a bias-corrected and accelerated of 95% CI.

Results

Demographic characteristics of the respondents

The participants consisted of 120 children, 65 (54.2%) male and 55 (45.8%) female. The median age of the children was 12 years old. There were 83(69.2%) children with hearing impairment and 37(30.8%) had visual impairment. Many of the participants, 91 (75.8%), attended public schools, while a few, 29(24.2%), attended private schools.

Descriptive Statistics and Correlation Analysis

Table 1 shows the mean and standard deviation scores of different variables and their relationship. From the table data, the children showed moderate variability in resilience (M = 37.97, SD = 8.57), family functioning (M = 6.59, SD = 2.46), achievement motivation in special interest (M = 31.71, SD = 8.72). In contrast, the level of perceived social acceptance was

relatively low (M = 2.67, SD = 0.86). As shown in Table 1, Pearson correlation analysis showed a significant ($p < 0.001$) positive relationship between family functioning and resilience ($r = 0.28$) and between achievement motivation and resilience ($r = 0.31$). A negative relationship was also found between perceived social acceptance and resilience though this was not significant ($p > 0.05$). The maximum coefficient value in the correlation between various variables was 0.372, suggesting that the variables' discriminant validity was met. This finding therefore supports hypothesis one.

Table 1: Correlation coefficients of family functioning, resilience, perceived social acceptance, and achievement motivation

	Family functioning	Resilience	Perceived Social Acceptance	Achievement Motivation
Family functioning	1			
Resilience	.282**	1		
Perceived Social Acceptance	.063	.065	1	
Achievement Motivation	.372**	.309**	-.034	1
M	6.59	37.97	2.67	31.71
SD	2.46	8.57	0.86	8.72

** $p < 0.01$.

Achievement Motivation as a mediator of the positive association of family functioning and resilience

Table 2 shows the mediation result and the interaction between family functioning and resilience (R). From the table data, family functioning (FF) was positively associated with achievement motivation (AM); (β FF-AM=1.321, $p < 0.001$; 95 % CI [0.6533, 1.9883]), which in turn was positively linked with resilience (β AM-R=0.262, $p < 0.01$; 95 % CI [0.0637, 0.4593]). The bootstrapping results also reported that the indirect effect of family functioning on resilience via achievement motivation (ab = 0.3454, 95 % CI [0.0881, 0.7783]) was statistically significant. Hence, the link between family functioning and resilience was partially mediated by achievement motivation and supports hypothesis two. The table also shows the results of moderated mediation analysis utilizing Hayes' PROCESS macro (Model 5). The results show that the interaction between family functioning and perceived social acceptance is significantly and positively associated with resilience ($\beta_{FF*SOA-R} = 0.9235$, $p < 0.01$; 95 % CI [0.1934 – 1.6535]). It accounts for 5.52% of the incremental variance in resilience of the main effects: $\Delta R^2 = 0.0552$.

Table 2: Summary of Moderated Mediated Analysis Predicting Resilience

Predictor	B (Coeff)	se	t	p	LLCI	ULCI
Motivation Achievement (M) (R^2=0.1384; F=15.4269*)**						
Constant	23.0076	2.3643	9.7314	0.0000	18.3146	27.7006
Family Functioning (X)	1.3208	0.3363	3.9277	0.0002	0.6533	1.9883
Resilience (Y) (R^2=0.1869; F=5.3427)						
Constant	40.7948	7.6778	5.3134	0.0000	25.5483	56.0413
Family Functioning (X)	-1.9270	1.0873	-1.7723	0.0796	-4.0862	0.2322
Motivation Achievement (M)	0.2615	0.0996	2.6256	0.0101	0.0637	0.4593
Social Acceptance (W)	-5.5408	2.6255	-2.1104	0.0375	-10.7544	-0.3271
Family Functioning x Social Acceptance (X x W)	0.9235	0.3676	2.5118	0.0137	0.1934	1.6535
Indirect effects on family functioning on resilience via achievement motivation						
	Effect	**SE**	**LLCI**	**ULCI**		
Achievement motivation	0.3454	0.1801	0.0881	0.7783		

Perceived Social Acceptance moderates the positive relationship between family functioning and resilience

Table 3 shows the conditional effects of family functioning predicting resilience at three levels of social acceptance. The result of the simple slope tests reveals that the association between family functioning and resilience is insignificant and negative at a low level of perceived social acceptance (β_{simple} = −0.2485, p > 0.01; 95 % CI [−1.2494, 0.7524]), but that this relation is significant and positive at a high degree of perceived social acceptance (β_{simple} = 1.3322, p < 0.001; 95 % CI [0.4520, 2.2123]). This indicates that family functioning improves resilience only when social acceptance is high. This finding supports hypothesis three.

Table 3: Conditional Effects of family functioning at levels of social acceptance

Family functioning	Effect	SE	t	p	LLCI	ULCI
-1 SD	-0.2485	0.5040	-0.4931	0.6231	-1.2494	0.7524
Mean	0.5418	0.3553	1.5249	0.1307	-0.1638	1.2474
+1 SD	1.3322	0.4432	3.0055	0.0034	0.4520	2.2123

Figure 3 shows the effect of family functioning on the resilience of children with sensory disabilities according to their perceived social acceptance. The slopes differed across the levels of the moderator. At moderate and low levels of perceived social acceptance, where the slope was positive, steep, and attenuated, respectively, resilience increased with a corresponding increase in family functioning. However, it was found that resilience increased with decreased family functioning at a high level of perceived social acceptance. This is shown by the slightly negative slope. This suggests that perceived social acceptance determines the extent of influence of family functioning on

children's level of resilience, revealing its protective role.

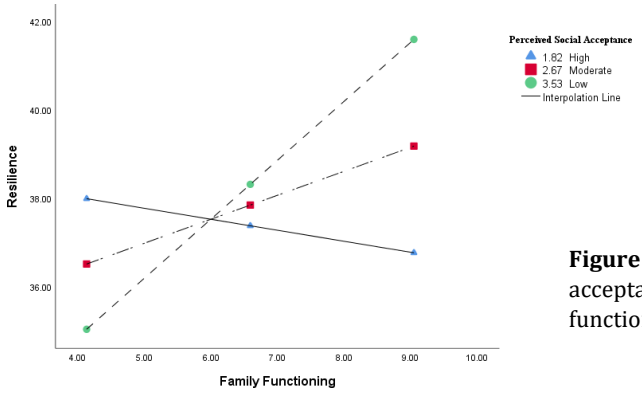

Figure 3. The moderating effect of perceived social acceptance on the relationship between family functioning and resilience.

Discussion

The situation of the country puts extra pressure on families with children with disabilities who are already facing daily pressures emanating from limited disability-related support services. This can influence family functioning and consequently impact children. This study explored how achievement motivation for special interests mediates the influence of family functioning on the resilience of children with sensory disabilities and the role of social acceptance as a moderator. The study revealed that family functioning is positively associated with resilience in children with sensory disabilities. This is not surprising considering that children in the study area, irrespective of their developmental status, are usually trained to become problem-solvers, persistent, and self-sufficient, which are key aspects of resilience. This finding suggests that parents in the study area may have provided emotional support, which is an aspect of family functioning. Such support enables members to cope with stressors. The findings of this study is consistent with several studies that reveal that children acquire beliefs, attitudes, values, and behaviours deemed appropriate by society from families, which are the foundational frameworks and primary source for individual development (Roman et al., 2016; Sabah & Alduais, 2024). According to Mawila (2022), the family serves as a secure base that nurtures coping skills, emotional regulation, and adaptive functioning for children with hearing or visual impairments. Dou et al. (2023) also established a strong association between family functioning and family resilience. Several researchers have shown that family functioning significantly affects family resilience (e.g., Kukihara et al., 2020; Lu et al., 2017; Zarei & Fooladvand, 2022). This implies that, in resonance with the present study, family functioning significantly influences family members' resilience.

Achievement motivation for special interest was found to mediate the interaction between family functioning and resilience. This finding may be attributed to the cultural context of the study area, where there is a high expectation of success

among family members. Within this environmental context, children are encouraged implicitly or explicitly to focus their efforts on socially acceptable areas of achievement. The mediating role of achievement motivation underscores the intersectionality of cultural norms and disability, particularly for children with hearing and visual impairments. The finding suggests that family functioning does not influence resilience solely through direct means, but also indirectly by changing how motivational processes are formed and internalised. Resilience, therefore, emerges as a product of both internal psychological resources and external support. The findings of this study therefore give credence to the concept of differentiation of self-highlighted in the family systems theory. When children perceive themselves as capable and experience a sense of ownership over their achievements, their motivation becomes more sustained and meaningful.

The moderated mediation analysis revealed that the indirect effect of family functioning on resilience through achievement motivation varied according to the levels of social acceptance. Specifically, the association between family functioning and resilience is insignificant and negative at a low level of social acceptance, but this relation is significant and positive at a high level of social acceptance. This suggests that family functioning increases resilience only when social acceptance is high. Simply put, the positive impact of a well-functioning family on resilience may only be properly transferred into adaptive outcomes if individuals believe they are socially accepted and supported. The findings of this study support Ferguson et al. (2013), who noted that family members display emotional connections and interaction patterns that may influence the development of an individual's behavior. The results can also be understood within the framework of Bronfenbrenner's (1999) bioecological theory, which reveals how the proximal processes, individuals' characteristics, context, and time environment shape human development. In this context, an interaction between the proximal processes (family functioning) and individuals' characteristics (perceived social acceptance) may be said to have resulted in the level of resilience shown by children. The negative and nonsignificant relationship observed between family functioning and resilience under low social acceptance conditions may indicate insufficiency in the buffering effect of family functioning against the harmful effects of social exclusion. The findings of this study support Gaspar et al. (2021), who opined that family functioning factors are closely linked to social relationships, social support, quality of life, mental health, and health behaviors of parents and children.

Conclusions

This study highlights the pivotal and interdependent roles of microsystems (family and friends) in the development of resilience among children with sensory disabilities. Social acceptance was found to moderate the mediating effect of achievement motivation in the relationship between family functioning and resilience. Although the association between family functioning and resilience is insignificant

and negative at a low level of social acceptance and positively significant at a high level of social acceptance, family functioning is still an important aspect in children's development. This finding implies that positive family functioning alone may not be sufficient to foster resilience if children simultaneously experience low levels of acceptance and support within their broader social environment. Consequently, supporting experiences outside of the family are necessary for the protective effect of good family functioning on resilience. A multidimensional approach to resilience-building initiatives is therefore required.

Study Limitations

The cross-sectional design employed in the study limits causal inference about relationships among family functioning, achievement motivation, social acceptance, and resilience. Additionally, the study addressed two sensory difficulties (hearing and seeing), therefore, caution should be exercised when generalizing to sensory difficulties.

Recommendations

1. Interventions aimed at developing resilience should take a more ecological approach, improving family functioning while also encouraging achievement motivation and promoting inclusive and supportive social contexts for children.
2. Aspects that support families in fostering children's social integration may be included in parenting interventions.

Future Research Directions

1. Considering that this research employed a cross-sectional study, future research should examine these relationships longitudinally to ascertain causal pathways among family functioning, achievement motivation, social acceptance, and resilience across developmental stages.
2. The study population included only children who had visual and/or hearing impairments. Future studies should include those with other forms of sensory difficulties.
3. Considering the influence of culture on the views of family functioning and social acceptance, future cross-cultural studies should be conducted to validate the generalizability of these findings.

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