Barriers of Inclusive Society of Children and Adolescents with Disabilities: "Case of Rwanda."

Charles Nsanzabera [1*], François Xavier Karangwa [2], Maksim Fazlitdinov [3], Elizaveta Zeynalova [4], Patrick Suubi [5], Jean Claude Rukundo [6], Munezero Marie Mediatrice [7], Ndagijimana Olivier [8], Uyisabye Alexis [9], Kayumba Mukubu Jean Gabriel [10], Shyirambere Bruno [11], Nyirabugenimana Sylvie [12], Nyandwi Jean Paul [13], Sarah Uwineza [14]

[1] *School of Public Health, Mount Kenya University, Kigali, Rwanda*
School of Health Science, department of Public Health, Jomo Kenyatta University of Agriculture and Technology, Kenya
African Institute of Research for Public Health and Development (AIRPD), Bujumbura, Burundi, Kigali, Rwanda.
[2, 3, 4] *United Nation Children's Fund, Rwanda*
[5] *College of Medicine and Health Sciences, University of Rwanda, Kigali, Rwanda*
[6] *United Nation Children's Fund, Rwanda.*
National Council of Persons with Disabilities (NCPD), Rwanda
[7, 8, 9, 10, 11] *Umbrella of Organizations of Persons with Disabilities in the fight against HIV&AIDS and for Health Promotion (UPHLS), Rwanda*
[12] *National Council of Persons with Disabilities (NCPD), Rwanda.*
[13] *National Child Development Agency (NCDA), Rwanda.*
[14] *VIAMO, Kigali, Rwanda*
[*] *Corresponding Author: Dr. Charles Nsanzabera*

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ABSTRACT

Background: Children with disabilities are more vulnerable and face more challenges due to lack of necessity and support for social dimension inclusion.

Objective: This study aimed to explore the barriers of inclusive society of children and adolescents with disabilities in Rwanda.

Methods: This study was conducted under a cross-section study design using a qualitative method with Focus group discussion (FGD) and in-depth interview approach, 215 study respondents were included using Yamane sample size and stratified sampling was used to get representativity from children with and without disabilities, parents with and without children with disabilities and key informants composed by professionals.

Results: The results revealed that 12 interrelated sub-themes emerged, which were all summarized into three main themes: attitudinal and social perception barriers, structural and societal norm barriers, and family dynamics and decision-making barriers. The findings revealed that the understanding of disability and differences was dominated by negative attitudes, stereotypes, and devaluing names attributed to children with disabilities, which were linked with negative societal image and led to family conflicts. Family negligence and lack of socialization in the same playgrounds and schools with others increased social distance, unequal opportunities, and isolation of children with disabilities.

Conclusion: This study conclusion highlights persistent barriers to an inclusive society of children with disabilities in Rwanda, encompassing negative societal images, attitudes, and structural norms, including social distance for children and adolescents with disabilities. These challenges stem from societal perceptions and a limited understanding of disability, resulting in the marginalization of families with children with disabilities.

Contribution: This study findings highlight the significance of children and adolescent with disabilities society inclusion by removing barriers such as social distance and minimizing the stigma, discrimination, devaluing names to ensure that children and adolescent with disabilities (CAWD) are in the mainstream school, have equal opportunity and accommodative assistive devices and increase the family support to reduce the family conflict and improve the demographic dividend.

1. Introduction

Children and adolescents with disabilities are considered to be a vulnerable population group and as a result require special support and protection (Brown & Guralnick 2018). The United Nations

Convention on the Rights of the Child (CRC) is one of several international treaties in which children's rights are embedded. According to the CRC, all children and adolescents have the right to participation and children's and adolescent's own views are considered fundamental (United Nations, 1989). The Global Burden of Disease Report estimated that over 150 million children and adolescents under the age of 18 years had a moderate or severe disability (Murray, 2022). The majority of children and adolescents with disabilities live in low- and middle-income countries (LMICs). However, the prevalence of children with disabilities is difficult to determine as the prevalence depends on the assessment of the disability (Mathers et al., 2021).

In Rwanda, as of 2020, 67% of the 13.3 million people in Rwanda were under the age of 25, with 39% under the age of 15. The 2019-20 Demographic Health Survey estimated the all-age prevalence of disability to be 5.9% (5+years). For adolescents, this ranged from 2.2% (12-18 years) to 2.7% (19-25 years). Note that this is likely a low estimate, given that the World Report on Disability estimated 15% prevalence (Memari et al., 2020).

Evidently, the societal image towards children and adolescents with disabilities varies widely depending on cultural, social, and economic factors within a particular community or country (Samuels et al., 2020). In some societies, there may be stigma, discrimination, and misconceptions surrounding disabilities, leading to marginalization and exclusion of children and adolescents with disabilities (Babik et al., 2021). They face barriers in accessing education, healthcare, and employment opportunities, and their capabilities and potential are underestimated or overlooked (Viviers & Lombard, 2021).

However, attitudes towards disabilities are evolving in many parts of the world, with increasing efforts to promote inclusivity, diversity, and equal opportunities for individuals with disabilities (Askheim, 2019). Advocacy, awareness-raising campaigns, and policy initiatives aim to challenge stereotypes, promote acceptance, and ensure the rights and dignity of children and adolescents with disabilities are upheld (Fisher, et al.,2017). In progressive societies, there is a growing recognition of the unique talents, strengths, and contributions of individuals with disabilities, and efforts to provide support, accommodations, and inclusive environments to enable them to thrive (Steinhardt et al., 2021). Nonetheless, there are still lasting prejudices and systemic barriers that need to be addressed to achieve full inclusion for children and adolescents with disabilities (Columna et al., 2021).

In recent years, the influence that the environment has on people with disabilities and their lives has been emphasized in conceptual frameworks such as the World Health Organization's (WHO) The International Classification of Functioning, Disability and Health (ICF) and Child and Youth Version (ICF-CY: WHO, 2020).

Inclusive society of children and adolescent with disabilities is described in the ICF as the society where all individuals, regardless of their backgrounds, abilities, or characteristics, are actively and meaningfully included in all aspects of community life. This includes social, economic, cultural, and political participation, with a focus on eliminating discrimination, prejudice, and barriers to access and opportunity (Eide et al.,2022). Therefore, the inclusion of children and adolescents with disabilities refers to the process of ensuring that these individuals are fully included in mainstream educational, social, and recreational activities alongside their peers without disabilities (Hoehne et al., 2020). It involves creating environments and systems that accommodate diverse needs, promote acceptance and understanding, and provide necessary support and resources to enable participation and success. Inclusion aims to foster social, dignity, and equal opportunities for children and adolescents with disabilities (Almqvist & Granlund, 2020).

As the ICF is based on an ecological model of child development and a biopsychosocial perspective, it acknowledges the situational nature of inclusion, with the environment viewed as a key influencing factor (Anaby et al. 2014). Inclusion restrictions could appear as a result of the dynamic interaction amongst health conditions, the environment, and the person (United Nations, 2007).

Being included in activities of daily life, including both formal and informal leisure activities, is essential for the physical and psychological development of children and adolescents (Steinhardt et al., 2021). To take part in activities in the society with other children and adolescents, it is important for children and adolescents with disabilities to grow as individuals and to enjoy life (Samuels et al., 2020). Children and adolescents with disabilities tend to engage in activities, especially outside the family, to a lesser extent than their peers without disabilities (Anaby et al. 2019; Engel-Yeger et al. 2019). From this evidence, it is clear that children and adolescents with disabilities experience barriers to inclusive society that need to be identified (Brown & Guralnick 2018), which is the purpose of this study.

2. Methods

This study conducted under cross-sectional design with qualitative approach from September to October 2021. The study population was composed by males and females with disabilities and without disabilities. The characteristics of the study population included children aged 12 to 18 years old with disabilities and without disabilities, Parents with children with or without disabilities and Key informants composed by school managers, health and social workers, government and nongovernment organizations representatives were the study population. The qualitative sample size was composed with 215 people from 5 districts (193 people –FGDs, 22 – Interviews) where 25 focus group Discussions(FGDs) divided into 5 focus group discussions for children with disabilities, 5 FGDs for children without disabilities, 5 focus groups discussion for parents of children with disabilities and parents of children without disabilities and 5 focus groups discussion for key informants composed by professionals (i.e. teachers, school management, health and social workers, government and nongovernment organization representatives). The total included sample size was 215 of study respondents. Sample size was obtained from Yamane formula with the study population of 464. Stratified random sampling was used to get the representative sample from children with and without disabilities, parents with or without CWDs and key informants from selected 5 districts.

2.1 Validity and reliability of instruments:

The study instruments were structured according to the study objectives and were tested for their validity and reliability. The validity test was carried out through rating by experts using the content validity index, which yielded a result of 0.81. The triangulation method was employed to enhance the reliability of this study's findings by using multiple methods such as focus group discussions, in-depth interviews, and document analysis. This approach ensured that our interpretations were reliable and cross-validated.

2.2 Data analysis:

The data were presented in tables and in quotes. The quantitative data was descriptively analyzed and summarized using themes and sub-themes and grouped codes using ATLAS.ti software. The analysis was complemented with content analysis. The findings were organized according to the data collection methods.

2.3 Ethical clearance:

This study has respected the ethical process in accordance with the requirements of the Rwanda National Ethics Committee (No. 710/RNEC/2021). Prior to the data collection the authorization from different districts was obtained and consent forms were signed by people and parent of children to ensure that the key ethical principles, confidentiality, privacy, and respect of human rights were respected.

3. Results

3.1 Sociodemographic information.

The socio-demographic characteristic of FGD findings for children with and without disabilities in

Table 1 revealed that Study respondents were dominated by Children with disabilities with 63.8% and followed by children without disabilities with 36.3%. The age group from 12 to 15 years old were the majority with 63.8% and females dominated the results with 51.3%. The participants with physical disabilities were the majority with 35%. **(Table 1)**

Table 1: Socio-demographic factors for children with and without disabilities

Variable	Frequency	Percentage
All Children		
Participants		
Children without disabilities	**29**	**36.3**
Children with disabilities	**51**	**63.8**
Total	**80**	**100.0**
Age		
12-15 years	**51**	**63.8**
16-18 years	**29**	**36.3**
Total	**80**	**100.0**
Gender		
Male	**39**	**48.8**
Female	**41**	**51.3**
Total	**80**	**100.0**
District of Residence		
Kicukiro	**17**	**21.3**
Kayonza	**18**	**22.5**
Musanze	**14**	**17.5**
Karongi	**18**	**22.5**
Huye	**13**	**16.3**
Total	**80**	**100.0**
Education		
Illiterate	**3**	**3.8**
Primary	**46**	**57.5**
Secondary	**31**	**38.8**
Total		**100.0**
Wealth level		
Level 1	**11**	**13.8**
Level 2	**27**	**33.8**
Level 3	**42**	**52.5**
Total		**100.0**
Disability type		
Physical disabilities	**28**	**35.0**
Visual Impairment	**6**	**7.5**
Hearing Impairment	**4**	**5.0**
Intellectual& learning disabilities	**0**	**0.0**
Albinos	**2**	**2.5**

Variable	Frequency	Percentage
Little people	**1**	**1.3**
Multiple disabilities	**2**	**2.5**
Total	**80**	**100.0**

Source: Primary data, 2021

The socio-demographic characteristics of Focus group discussion (FGD) findings on adults parents of children with and without disabilities and professionals in Table 2 showed that 41.6% were parents of CWDs and followed by parents of children without disabilities (CWTDs) with 33.6% and 24.8% of professionals participants. The age group from 31 to 40 years dominated the results with 35.4% and followed by age group between 41 and 50 years old with 29.2%. Gender Females dominated adults findings by female with 77% and 60.2% were educated at primary level. **(Table 2)**

Table 2: Sociodemographic factors of adults respondents

Variable	Frequency	Percentage
Adults Respondents		
Parent of CWID	47	41.6
Parent of CWTD	38	33.6
Professionals	28	24.8
Total	113	100.0
Age		
19-30	14	12.4
31-40	40	35.4
41-50	33	29.2
51-60	20	17.7
>60	6	5.3
Total	113	100.0
Gender		
Male	26	23.0
Female	87	77.0
Total	113	100.0
District		
Kicukiro	22	19.5
Kayonza	25	22.1
Musanze	20	17.7
Karongi	25	22.1
Huye	21	18.6
Total	113	100.0
Education		
Illiterate	5	4.4
Primary	68	60.2
Secondary	21	18.6
College	5	4.4
University	14	12.4

Variable	**Frequency**	**Percentage**
Total	113	100.0

Source: Primary data, 2021

The socio-demographic characteristics of in-depth interview findings on Key informants in Table 3 showed that age two age groups (29-40 and above 50 years old) were equally represented with 36.4% each. Males dominated the findings with 59.1%. The findings on education showed that 54.5% of respondents have university level and followed by 44.5% of secondary school. Regarding the occupation, teachers were the majority with 31.8% and followed by 22.7% of organizat ions coordinators. **(Table 3)**

Table 3: Sociodemographic factors of key informants respondents

Variable	**Frequency**	**Percentage**
Key Informants		
Age		
29-40	8	36.4
41-50	6	27.3
>50	8	36.4
Total	22	100.0
Gender		
Male	13	59.1
Female	9	40.9
Total	22	100.0
Profession		
Social Affairs	1	4.5
Nutritionist	1	4.5
Laboratory assistant	1	4.5
Staff sector	1	4.5
Organization coordinators	5	22.7
Gender officer	2	9.1
Teacher	7	31.8
Pastor	4	18.2
Total	22	100.0
Education		
Primary	0	0.0
Secondary	10	45.5
University	12	54.5
Total	22	100.0
Location District		
Kicukiro	5	22.7
Kayonza	4	18.2
Musanze	5	22.7
Karongi	5	22.7
Huye	3	13.6

Variable	Frequency	Percentage
Total	22	100.0
Residence		
Urban	17	77.3
Rural	5	22.7
Total	22	100.0

Source: Primary data, 2021

3.2 Children with disabilities and children without disabilities findings

3.2.1 Attitude and stereotypestowards children with disabilities

The content analysis of the FGD revealed prevalent stereotypes surrounding children with disabilities, often portraying them as alone with 55%, sad with 70%, and "*less capable with 13.8% compared to* their *peers without disabilities"*. However, there is also recognition that environmental factors and parental support significantly impact their well-being. It highlights the importance of fostering inclusive environments and addressing misconceptions about the abilities and potential of children with disabilities. it was also revealed that "*CWDs are not happy most of the time due to their background. Some parents neglect them and do not give them the chance to grow up like other children. But for those whose parents have taken care of them, they are good children like all others.*" And "*CWDs can be with others at school if they are given the chance to go to school.*" **(Table 4)**

Table 4: Attitude and stereotypes towards children with disabilities

Variables	CWD (%)	CWTD (%)	BOTH (%)	NEITHER (%)
Alone	44(55.0)	2(2.5)	18(22.5)	16(20.0)
Bad	4(5.0)	9(11.3)	22(27.5)	45(56.3)
Good	13(16.3)	13(16.3)	47(58.8)	7(8.8)
Happy	10(12.5)	31(38.8)	36(45.0)	3(3.8)
Hardworking	11(13.8)	36(45.0)	27(33.8)	6(7.5)
Lazy	16(20.0)	5(6.3)	32(40.0)	27(33.8)
Sad	56(70.0)	2(2.5)	5(6.3)	17(21.3)
Together	12(15.0)	31(38.8)	32(40.0)	5(6.3)

Source: Primary data, 2021

3.2.2 Social distance and inclusiveness towards children with disabilities

The social distance and inclusiveness findings were related to where children with and without spend times or play to be able to see their social activities with others and associated reasons.

The study FGD findings showed that 13% of children with disabilities spend time in playground while it was 37.5% for children without disabilities. when asking where children with disabilities spend times the results showed that "*around 37% play at home, 15% play at hospital and around 7% don't play because they can't walk, or they were enclosed at home and don't have a place for playing as well."* Hence, "Children with disabilities predominantly spend their time playing at home or in hospitals, reflecting potential limitations in accessing community spaces."

This has surely showed that children with disabilities (CWDs) and children without disabilities spend their time playing in similar locations, such as home, school, and the playground. However, there are differences in the frequency of certain locations, with CWDs less likely to mention playgrounds and more likely to mention home and school.

In checking the inclusiveness among children, it was found that "*Children without disabilities commonly spend their time playing at playgrounds,* schools, *and in their villages, indicating a diverse range of recreational environments."*

Moreover, "*children with disabilities tend to spend their time playing in environments such as home, hospitals, and schools due to* various *factors including parental concerns, limited mobility, and challenges with social acceptance."* Their preferences for familiar and safe spaces often outweigh opportunities for social interaction in community settings like playgrounds or markets. Other reasons were parents 'fear of challenges outside, feeling safe and comfortable, limited mobility at 43.7% while 11.2% were due to lack of acceptancy by other children and fear of being unable to keep up.

3.2.3 Attitude regarding similarities and differences and social aspect between children with and without disabilities.

Similarity between children with and without disabilities

The most similarity found was residing on "rights and equity" and was shared for around 17.5% whole basic human needs was shared by 16.2%. being children and emotional similarities were share by 15% and 13.7% of children with and without disabilities respectively. Having the family and social life, basic activities, education, socialization, and playfulness were equality shared at around 10%. Therefore, children mentioned that "*We have the same rights, basic human needs as children, born to parents, with similar emotions and we all deserve to be treated equally."* This suggests a fundamental understanding and acceptance of diversity and inclusion among children.

Differences between children with and without disabilities

The study findings showed that impairment and disability was seen as a major difference by 51(63.7%) while social exclusion and discrimination was revealed by 13(16.2%). Limitation and barriers, educational opportunities and family treatment were also found to be the difference between children with and without disabilities. Therefore, some quotes were found to highlight the challenges and burden of children with disabilities. "*Some children with disabilities* feel *isolated and alone, unable to socialize or participate in activities like others*." And "*The treatment from family and society differs for children with disabilities, often leading to feelings of being unloved or unwanted."* These findings the need for increased awareness, acceptance, and inclusivity to bridge these differences and foster a more supportive environment for all children.

Socialization and sharing between children with and without disabilities.

The study findings showed that 66.2% mentioned that they can say hello and socialize with children with disabilities because children with disabilities are "*their fellow and human beings like them*" and 18.7% showed that "*greeting is a cultural norm*." Only a few mentioned that their decision would depend on the type of disability, indicating a nuanced approach to social interactions. Overall, the responses demonstrate a willingness to include and interact with children with disabilities in social settings. In addition, 46(57.5%) out of 80 children mentioned that they can invite and socialize with children with disability and spend time together while 45% mentioned willingness to share belongings such as pencils at school saying that "*They're Like Others*." However, a small portion expressed concerns related to specific disabilities. Overall, the responses demonstrate a willingness to include children with disabilities in social activities at school. Overall, the responses reflect a positive attitude towards inclusion and cooperation among children at school.

Children showed that 35% could invite others to play at school or at home due to the reason that they are friends while 21.2% given the normalcy reasons. The majority of respondents expressed a willingness to invite children with disabilities to their homes, citing reasons such as friendship, normalcy, reciprocity, and cultural values. Some mentioned concerns about potential harassment or the severity of the disability impacting the ability to play. Overall, the responses indicate a positive attitude towards inclusion and socialization among children, emphasizing the importance of treating everyone equally and fostering meaningful relationships.

Sharing secrets was observed to 37% of the children with reasons of friendship except for children with deaf and mental disabilities where the showed that "*It is not easy for deaf and mentally impaired*." Overall, the responses indicate a range of attitudes towards sharing secrets with CWD, influenced by factors such as trust, communication abilities, and perceptions of normalcy.

Some barriers and fear shown by children were mentioned as "*Many children fear children with visual and intellectual impairments."* This may reduce the socialization and inclusion between children.

The overall findings on the Focus group discussion among children showed variety of attitudes towards and inclusion of children with disabilities. While some children express fear of infection or discomfort around children with disabilities, others highlight discrimination and rights deprivation. Communication barriers and lack of awareness also contributed to the challenges faced by CWD. However, there are also "*positive perceptions expressed, including the belief that all children are the same regardless of disability*". The participation of children in the discussions varied, with some being very participative and others not as engaged. Overall, the responses reflect the complex dynamics of inclusion and the need for greater awareness and understanding of disability rights and issues.

3.3 Adult respondents findings

3.3.1 Understanding the concept of child with disabilities.

The disability concept was understandable in different way which mostly mislead people into medical and pity model for children with disabilities instead of social model.

Around 34.5% of the adults study respondents expressed emotional response, sympathy, pity and empathy. Around 26.5% showed that children with disabilities need support and assistance.

Their perception was linked with quote such "*Children with disabilities are perceived as a problem, burden, or loss to the family.*" Which is mostly causing problem of taking care to children. They have also mentioned that "*Children with disabilities deserve the same rights and respect to* thrive." "*There is a need for medical care, rehabilitation, and assistive devices for children with disabilities with disability."*

In a nutshell, the concept of describing children with disabilities involves a complex interplay of emotions, recognition of needs, societal perceptions, rights, medical requirements, stigma, acceptance, and advocacy. It underscores the importance of empathy, support, equal opportunities, and inclusive communities for children with disabilities to thrive.

3.3.2 Understanding social norms.

Children with disabilities abandonment attitude and views

The study findings on the social network were consisted of "*three major network elements which were own family composed by* spouse *and children and community composed by neighbors, friends, finally society composed by civil servants and government officials."* Those three elements were responded by 7.6%, 34.5%, 57.5% respectively.

The major crossmatch of place of children abandonment was found to be institution/ institution with 53.1% while Home/home was 23.8%. Home/institution was 14.1% while institution/home was 8.8%. when asked about preferences with observance of gestures, body language and facial expressions, home preference scored 50.4% while institution preference scored 41.5%. Reasons of home preference were expressed in this way: "*No one can take care of her (Uwiduhaye) as her mother who give birth to her." "Home is where she would be able to get parental love."*

Reasons of institution preference were also expressed in this way: "*Institution is where she will get the best care, life* experience *with those with same situation considering her impairments.*"

The uncertainty or doubt expressed by some respondents highlights the complexity of the issue and the various factors that must be considered in deciding the best care arrangement for children with disabilities.

Inclusive education for children with disabilities

This study findings showed that the majority with 77% selected special/special meaning special education as the best for the described child with disabilities (Innocent). "*The strong reason was due to his special needs related to his jerky speech which could disturb others in general school and needed advocacy and trained teachers within supporting environment for children with disabilities* ". Additionally, another girl (Mary) with disability was also given a special/special institution by 67% of respondents for learning with other traumatized children while others mentioned that Mary could be benefited by learning in general school. In a nutshell, the responses reflect a mix of opinions regarding the appropriate educational setting for children with disabilities like Innocent and Mary. While special schools are favored by many due to their tailored support and trained staff, "*there is also recognition of the potential benefits of general schools for socialization and learning from peers without disabilities."* The decision ultimately depends on the individual needs and capabilities of each child.

3.3.3 Discussed parent behavioral decision regarding children with disabilities.

This study findings showed that reason of feeling, and behaviors of parentsin regard to others behavior were associated at 48% with five reasons which were the parental autonomy and responsibilit y, parental love and attachment, other perceptions and external influence and lack of understanding from other. This showed that parents strongly value their autonomy and responsibility in making decisions for their children with disabilities and showed skepticism about others opinion as they assume to know the value and needs of their children where they said that "*I'm the one who knows the situation of my child, how valuable she is."*The influence of external factors, such as financial constraints and societal expectations regarding schooling options, also plays a role in shaping parents' decisions. Overall, these findings underscore the complex interplay of personal autonomy, social dynamics, and external factors in shaping parental decisions regarding children with disabilities.

The "*type and severity of disability were found to influence the behavior of parents*" at the level of 53.9% while 32% were associated with mixed influence. Additionally, 14% of parents believed that all disabilities should be treated equally and that their behavior wouldn't change based on the type of disability. Overall, "*the responses reflect the complex considerations parents face when making decisions regarding their children with disabilities."*

The parent behavior was found to be motivated by the Child's Wellbeing at 37.1% and considering others advice was 23.8% while 14% of parents stick to their own decision as mentioned that "*I can't change my* position *because of others' opinions."*

Only 18.5% put gender difference first to influence their behaviors and decisions for supporting children with disabilities saying that "*Girls are burden, challenge and more expensive, and need more attention to care.*" Additionally, 37.1% showed that no gender difference for caring children with disabilities. Overall, the responses reflect a range of perspectives on the role of gender in parental behavior regarding children with disabilities.

The findings showed that 53.1% of other opinions were not based on the sex of the child and 43% of the study respondents showed that opinion of others is very important for taking decisions. Around 74% showed that "*not heeding the other opinions could lead to negative consequences such rejection, family conflicts, mistreatment, and children abandonment."* Overall, the responses highlight a complex interplay between societal expectations, personal motivations, and the perceived consequences of deviating from others' advice. While many recognize the importance of considering others' opinions and expectations, there is also acknowledgment of potential challenges and risks associated with non-compliance.

3.3.4 Perception of adults towards children with disabilities.

Many FGD "*participants perceived CWD as withdrawn (69%), insecure (44.6%), dependent (31.3%) and negative (31%).*" Many parents of CWD among FGD participants believed that a CWD was dependent (50%), fearful (47%), insecure (48%) and withdrawn (77%), with a few of them thinking of a CWD as a positive (8.5%), hardworking (6.4%), and social (8.5%) of children without disabilities referred often to both, child with and without disability, as brave (45%), hardworking (63%), and positive (47%). Other FGD participants, to include ECD specialists, teachers, gender and family promotion, social protection officers, religious leaders, NCPD Coordinators among others, reported that both, children with and without disabilities are cheerful (78.6%), hardworking (71.4%) and social (75%), lazy (67.9%) and fearful (60.7%). "*Many mentioned that CWDs are withdrawn (57%), and 54% of respondents reported that children without disabilities are independent.*" ***(Figure 1)***

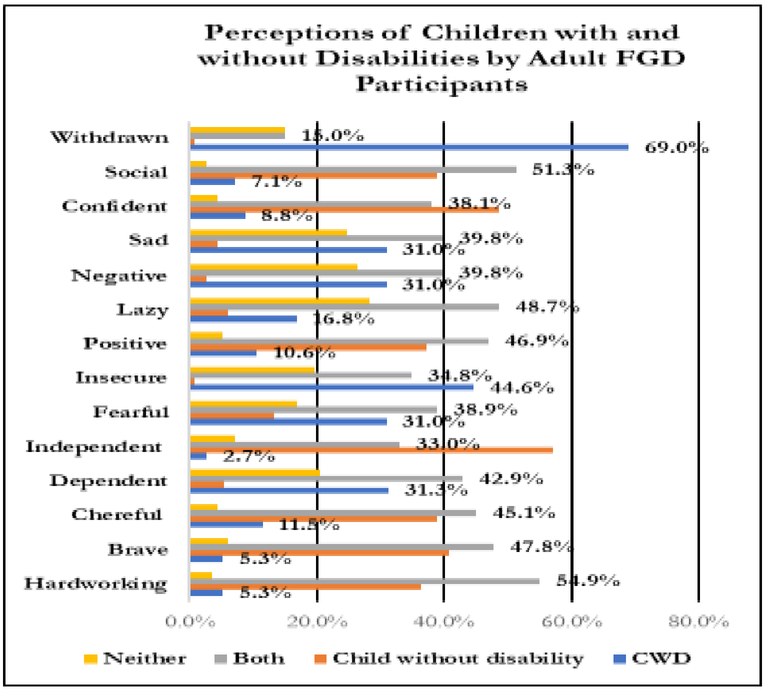

Figure 1: Perception of adults regarding children with disabilities.

3.3.5 Inclusive Society image and equal opportunities for children with disabilities.

Society image for children with disabilities

The FGD findings showed that "*the society image through what people see about children with disabilities, was framed into five potential themes which are Stigmatization, lack of care and basic needs, social exclusion* and *rejection, limited access to education and health and finally the positive perception and effort.*"

The majority of FGD participants with 60(53.1%) mentioned that stigmatization, abuse, and neglect form the society image which followed by 23% of lack of care and basic needs such as clothes as other children. The social exclusion such as being rejected by the family and hidden in the house which create mother harassment and family conflict scored 18.6% while the limited access to health and education scored 16.8%. Although the FGD findings revealed positive perception in Rwandan society, but it was at a lower level with 4.4%.

The FGD findings showed also that the society image through what "*people hear*"about children with disabilities within the same society was framed into five potential themes which are "*devaluation and* stigmatization, *misconceptions and superstitions, lack of support and advocacy, abuse and violence and positive perspective and efforts as well.*"Around 50(44.2%) out of 113 of adults FGD participants showed that devaluation and stigmatization prevailed in Rwanda society and followed by misconception and superstitions such as blaming evil spirits and ritual practices with 22(19.4). Abuse and violence prevailed at 15% while Positive Perspectives and Efforts was 7%. Therefore, it was clear that negative perceptions, devaluation, and stigmatization of children with disabilities are prevalent in society. “*Misconceptions and superstitions about the causes of disabilities also contribute to the negative attitudes.”* Overall, there is a need for more awareness, advocacy, and support to change societal attitudes and provide better opportunities for children with disabilities.

The FGD findings showed also that the society image through what people “*understand and feel about children with disabilities*” within Rwanda society, was framed into four potential themes which are equality and valuing, support and inclusion, love and care, awareness and understanding. The majority of FGD participants with 68(60.1%) emphasized that “*children with disabilities must be valued and have equal opportunity like others because they are able, have the right and deserve respect and support.”*

Around 25.6% of the FGD participants focused on the support and inclusion while 15.9% emphasized on “*the love and care to remind the parent affection, responsibility, and children with disabilities protection.”*

The FGD findings showed also that the society image through what people say and do about children with disabilities in the society, was framed into three potential themes which are love and care, empathy and sensitization, active involvement, and action. Around 61.9% of the FGD participants revealed that Love and care were mostly applied in what people say and do to value children with disabilities. The empathy and sensitization scored 20.3% while active involvement and action is still at low level of 17.7%. Overall, the responses reflect a compassionate and proactive approach towards fostering a more inclusive and supportive environment for children with disabilities.

Society equal opportunity for children with disabilities

The FGD results showed that 57(50.4%) of the participants argued that children with disabilities were treated equally while 32(28%) argued that children with disabilities are taken into consideration in inclusive community. This showed the overwhelming desire for concurring discrimination and commitment to creating an inclusive and supportive environment where all children, regardless of ability, have equal opportunities to thrive. The dimension of what people hear about children with disabilities findings regarding equal opportunity showed that 22(19.4%) could have access to services and education while positive perception and treatment was dominated by positive words and recognition by 52(46%).

What I hear about equal opportunity dimension results from FGD was dominated by equal rights where 64.6% of FGD participants stated that “*All children are perceived to have the same rights,* irrespective *of disability and deserve equal treatment and respect.”* This highlights a collective understanding and commitment to ensuring equal treatment and inclusion for all children, regardless of ability. Moreover, what people say and do to promote equal opportunity for children with disabilities were made of three themes: advocacy and support, inclusive practices and personal commitment and awareness and dominated by advocacy and support with 50(44.2%). The overall findings showed that lack of male participation was emphasized as an issue by 29.7% whileadvocacy and empowerment andFamily and Community Engagement were found to be a solution by 27.6%, 57.8% of FGD participants, respectively.

3.4 Key informants findings

3.4.1 Disability concept and challenges of children with disability and their family among the study participants

The in-depthinterview findings among 22 study participants showed that the disability concept definition was structured into five potential themes which were physical or mental impairment, difference from others, need for support, unintentional nature and humanity and capacity. Therefore, relying to the above provided themes the "*disability concept was defined as a physical or mental impairment that distinguishes an individual from others, often requiring support or assistance due to challenges in functioning normally. Disabilities are typically unintentional and not the individual's fault, and despite their differences, individuals with disabilities are still human and have the potential to achieve and contribute with appropriate care and support."*

The in-depth interview findings revealed that children face six challenges while families face around 10 challenges. Children challenges were Stigma and Discrimination, lack of accessibility and infrastructure, education issue, neglect and carelessness, poverty and Exclusion and Limited Resources and Knowledge. Among these challenges stigma and discrimination and lack of accessibility and infrastructure were the most represented with 13.6% each and showed that they were hidden, neglected, and given disrespectful names. Additionally, Lack of accommodation and user-friendly infrastructure, especially in schools create a climate of being ignored, excluded, and limited access to services.

The in-depth interview findings regarding family challenges consisted of financial constraints and poverty, Psychological distress and stigma, Lack of access to necessary devices and services, Family conflicts and accusations, Inability to find appropriate schools and medical care, Time and energy consumption for caregiving, Discrimination and social isolation, Insufficient knowledge and training on caring for children with disabilities, Lack of support and understanding from the community, Challenges related to physical environment. The most represented challenge was poverty and financial constraints with nearly 60% and followed by stigma and psychological distress with 45.4% among 22 in-depth interview participants. Additionally, 40.1% of the participants highlighted that family of children with disability lack the access to necessary devices, medical care, and educational resources and other services. The stigma surrounding disability leads to social isolation, discrimination, and psychological strain on parents and caregivers, compounding the difficulties they face.

The "*stigma surrounding disability leads to social isolation, discrimination, and psychological strain on parents and caregivers, compounding the difficulties they face*". Furthermore, "*the lack of support and understanding from the community, coupled with inadequate knowledge and training on caring for children with disabilities, exacerbates the already challenging situation for families. Family conflicts, accusations, and the strain on time and energy due to caregiving responsibilities further contribute to the burden faced by parents and caregivers*."

3.4.2 Attitudinal drivers regarding treatment of children with disabilities.

The in-depth interview findings showed that children with physical, mental, intellectual, and sensory disabilities are treated differently compared to children without disabilities.

Children with physical disabilities faced more discriminatory treatment where they miss appropriate care and considered as unable or useless due to societal low mindset and negative attitude as shown by 22.7% out of 22 study respondents. Additionally, findings showed that 13% mentioned that children with physical disabilities faced unequal treatment and exclusion. Moreover,36.4% of the participants of in-depth interview revealed that children with intellectual disability such as down syndrome are considered like foolish, useless, and locked up at home as a way of stigma and devaluation. The exclusion and discrimination, lack of understanding and mistreatment, and limited support and care and were mentioned by 22.7%, 18.2% and 22.7% respectively.

Children with mental disability are mostly hidden and misunderstood by the parents and family due to their anxiety and depression. Additionally, children with sensory disabilities such as blind children are given devaluing names, hidden, and not allowed to be to the entertainment events at school. The findings showed that the gender-based treatment was mostly popular to boys and girls. In addition, the majority of the respondents showed that girls face mostly the abuse and gender-based violence while boys are well treated.

Perception about children with disabilities and family impact

The findings showed that "*similarities between children with disabilities and children without disabilities are anchored to human right stated that they are both human beings, with same feelings and basic rights and acknowledged physical difference but with equal competence*."

The findings showed that some families consider the disability of children as a curse, which creates negative emotions and leads to losing hope. Consequently, this creates a negative impact, fostering negative behavior in both parents and children with disabilities, who become victims of familia l negativity, such as hiding their children and engaging in family conflicts. Stress, anxiety, shame, and stigma were mentioned by 27% of the study respondents as being among the behaviors exhibited by families. Additionally, family embarrassment leads to social isolation and hiding. Social exclusion and family conflict were significant, reflecting the strains families experience due to societal attitudes and internal tensions arising from caregiving responsibilities.

3.4.3 Attitudinal family decision regarding boy with disabilities/Family perception and behavior regarding boy or a girl with disabilities

The in-depth interview was carried out using the question asked with vignette model "*Gasore who was a two-year old boy with physical disabilities*". The findings showed that "*gender-based treatment prevailed with 63.6% to change family behavior while 36.4% of the participants didn't* mention *gender difference for changing their behavior."* The place for the boy to live was 50% shared with home and institution as preference of the study participants. Some of the reasons for home as a place to live were that home is a better place to live because he could gain family love and protection and care, and these reasons were mentioned by 63.6% of the study participants. The reasons to live in institution were about getting specialized care and relieving parents of caregiving burdens. The study participants believed to know the need of their children regardless of external expectations. However, acknowledged the community influence.

The second vignette model was regarded to the girl called maria. "*Who was 7-year-old girl with mental and intellectual disabilities".* The findings showed that although the majority of respondents mentioned that Maria as a girl with disabilities must go to school with others while community said different decision because of difficult, she might encounter due to low capacity of grasping lessons and cope with the pace of others. The majority of the respondents said that they can't change their decision due to other opinions. "*I can't change my decision because I know the results unless going with others doesn't work*."

3.4.4 Attitudinal community perceptions, decisions regarding children with disabilities

The findings from the in-depth interviews regarding the community's perception of children with disabilities were categorized into 13 potential themes: Schooling Preference, Community Consensus, Resilience to Community Opinion, Impact on Relationships, Worries about Judgment, Inclus ive Education, Effects on Children without disabilities, Nutrition Challenges, Discrimination Awareness. The second part encompassed Gender Disparity in Discrimination, Strategies to Combat Discrimination, Education Channels, Information Sources, and the Community.

The findings showed "*that 81.8% of the respondents and even the community preferred that children with disabilities could go in mainstream school with children without disabilities."* Nearly 90.1% argued to not change decision according to community opinion. Around 36% of the study participants said that their relationship could not be harmed due to not change the decision after being advised. However,27% argued that the relationship could be remediated positively over time. Respondents arguments revealed that 81% don't worry about other judgements vis a vis their decisions. "*Neary 72.7% showed that children with disabilities could be in general classroom and could have a positive impact to them while 36.4% mentioned also positive effect to children without disabilities* ." Additionally, 45.5% admitted that there couldn't be any effect to children without disability while 18%

mentioned negative effect to children without disabilities if they study together with children with disabilities. Nutritional challenges for children with disabilities were marked by lack of Knowledge and means as revealed by around 90% of the study participants arguments. The majority of the study participants showed that children with disabilities face discrimination and 63% of the respondents marked gender-based discrimination. The findings showed that 90% affirmed that sensitization and Advocacy are the most effective strategy to fight against discrimination while 9% revealed that punishment for Violators could help to fight. "*Teaching people about children with disabilities through communication channels such as Radio, TV and social media, was found to be very effective by the majority of the study participants*". Asked about the source of information their responses revealed that 54.5% got information from training and seminars, 27.3% got information from community interaction while 18.2 got information from social media.

4. Discussion

4.1 Attitudinal barriers and social perception.

Concerning the attitudes and stereotypes towards children with disabilities, the results of the present study revealed that both children and adults had negative perception and attitude towards children with disabilities. Indeed, the content analysis of the FGD revealed often portrayed them as alone with 55%, sad with 70%, and "*less capable with 13.8% compared to their peers without disabilities"*. In the same way, similar results were found by Bantjes et al. (2019), Columna et al. (2021), Conchar et al. (2019) and Frantz et al. (2021). According to these authors, children with disabilities often face being stereotyped as a "problem" and a "burden for the family. Some interviewees go even further by considering CDWs as disgusting until their families do not eat with them at the same table. Conchar et al. (2016) affirmed that CWD needs the help of others to survive. In the same order of ideas, FGD findings in Bantjes' study (2019) showed that CDWs are considered as children with pity, with low expectations. To highlight the extent of the negativity that surrounds CDWs in society, Columna et al. (2021) states that one of their FGD participants claimed that CDWs are horrific children. Others are afraid of meeting them. The similarity of the findings concerning the attitudes and stereotypes towards children with disabilities may be due to the resemblance in the populations targeted by these studies and the shared societal beliefs regarding disability among children (Columna et al., 2021).

In addition, the in-depth interview findings among 22 study participants showed that the disability concept definition was structured into five potential themes which were physical or mental impairment, difference from others, need for support, unintentional nature and humanity and capacity. Therefore, the "*stigma surrounding disability leads to social isolation, discrimination, and psychological strain on parents and caregivers, compounding the difficulties they face*". In comparison to other studies, the attitudes, and stereotypes towards children with disabilities appear to be higher compared to those reported by Frantz et al. (2021) and Memari et al. (2020). According to these authors, children with disabilities face stigma for various reasons depending on how other persons consider them. These children are particularly vulnerable to a lack of services such as health care, rehabilitation, and support. Their data were obtained from four southern African countries showing that half of children with disabilities experienced a high level of stigma related to the attitudes and stereotypes towards them, but almost every child with a disability experienced some form of stigma related to the attitudes and stereotypes towards them. This disparity could be attributed to differences in the populations targeted by the two studies, as the present study focused on both rural and urban population, while Memari's study targeted only urban population (Memari et al., 2020).

Concerning social distance and inclusiveness, the study FGD findings showed that 13% of children with disabilities spend time in playground while it was 37.5% for children without disabilities. when asking where children with disabilities spend times the results showed that "*around 37% play at home, 15% play at hospital and around 7% don't play because they can't walk, or they were enclosed at home and don't have a place for playing as well."* Hence, "Children with disabilities predominantly spend their time playing at home or in hospitals, reflecting potential limitations in accessing community spaces." The same results were found by Nelson et al. (2021) in their study on the meaning of participation for children in Malawi where they found that CWDs play at home while children without disabilities played at school, playground, or at church (Nelson et al., 2021).

Moreover, "*children with disabilities tend to spend their time playing in environments such as home, hospitals, and schools due to various factors including parental concerns, limited mobility, and challenges with social acceptance."* Their preferences for familiar and safe spaces often outweigh opportunities for social interaction in community settings like playgrounds or markets. In contrast to the present study, Hui et al. (2018) found that CWD have insufficient means to adapt themselves to the playing settings. Some of their interviewees affirmed that "CWDs do not play with other children". These findings showed a persisting problem of stigma and exclusion delaying the complete fulfillment of children and adolescents with disability. The dissimilarities in findings may be due to the studies being conducted in African and Asian countries, regions with differing cultural beliefs regarding disability compared to Rwanda (Hui et al., 2018).

However, some participants in this study nuanced the level of social distance towards the children and adolescents with disabilities as the findings showed that 66.2% mentioned that they can say hello and socialize with children with disabilities because children with disabilities are "*their fellow and human beings like them*" and 18.7% showed that "*greeting is a cultural norm*." Contrary to these findings, Shields et al. (2012) found that most of children and adolescents with disabilities are affected by stigma and exclusion resulting in social distance vis-à-vis their peers as their key-informers affirmed that some children might physically avoid interacting with peers with disabilities due to discomfort, lack of understanding, or fear of saying or doing something wrong. In addition, these authors noted the consistent exclusion of children and adolescents with disabilities by peers from social activities or group interactions, consciously or unconsciously, due to differences in abilities or communication styles (Shields et al., 2020).

Concerning the perception of differences and similarities between children with and without disabilities, the most similarity found was residing on "rights and equity" and was shared for around 17.5% whole basic human needs was shared by 16.2%. Being children and emotional similarities were share by 15% and 13.7% of children with and without disabilities respectively. Having the family and social life, basic activities, education, socialization, and playfulness were equality shared at around 10%. Children who participated in FGDs mentioned that "*We have the same rights, basic human needs as children, born to parents, with similar emotions and we all deserve to be treated equally."* This suggests a fundamental understanding and acceptance of diversity and inclusion among children. In the same way, Frantz et al. (2021) found that the perception of differences and similarities between children and adolescents with and without disabilities varies widely depending on individual perspectives, societal attitudes, cultural influences, and personal experiences. According to these authors, children and adolescents with disabilities are perceived as physically different due to visible impairments or differences in mobility. However, children and adolescents, regardless of disabilities, often share common interests, hobbies, and activities (Frantz et al., 2021).

4.2 Structural and societal norms.

Concerning the understanding and acceptance of the concept of disability, around 34.5% of the adults study respondents expressed emotional response, sympathy, pity, and empathy. Around 26.5% showed that children with disabilities need support and assistance. Their perception was linked with quote such "*Children with disabilities are perceived as a problem, burden, or loss to the family*." Which is mostly causing problem of taking care to children. They have also mentioned that "*Children with disabilities deserve the same rights and respect to thrive*." "*There is a need for medical care, rehabilitation, and assistive devices for children with disabilities with disability."* Similarly, Lygnegard et al. (2019) found the same level of understanding and acceptance of the concept of disability. According to these authors, the level of understanding and acceptance of the concept of disability within society varies widely across different cultures, regions, and communities. While progress has been made in many parts of the world to promote inclusion and reduce discrimination against people with disabilities, there are still significant challenges and disparities that exist. Their perception was linked with quote such "CWDs' parents do not let them go to school as they are afraid of what could happen to them" showing that there is still much work to be done to create truly inclusive communities where people of all abilities are valued and fully included (Mizunoya et al., 2018).

In matter related to education of children with disability, the findings showed "*that 81.8% of the respondents and even the community preferred that children with disabilities could go in mainstream school with children without disabilities."* Nearly 90.1% argued to not change decision according to community opinion. Around 36% of the study participants said that their relationship could not be harmed due to not change the decision after being advised. However, 27% argued that the relations hip could be remediated positively over time. Respondents arguments revealed that 81% don't worry about other judgements vis a vis their decisions. "*Neary 72.7% showed that children with disabilities could be in general classroom and could have a positive impact to them while 36.4% mentioned also positive effect to children without disabilities*." This is contradictory to the results found by Olsson et al. (2020) where it was affirmed that the decision to send a child or adolescent with a disability to school is a significant one that involves careful consideration and often collaboration among various stakeholders, including parents or guardians, educators, healthcare professionals, and sometimes the students themselves. According to their informants, "The primary consideration is the individual needs and abilities of the child or adolescent with a disability. Children with disabilit ies could go in the same schools than those without disabilities". This disparity could be attributed to differences in the populations targeted by the two studies, as the present study focused on the Rwandese population while Olsson's study concerned the Swedish population with a lot of differences with African beliefs (Olsson et al., 2020).

In matters related to equal opportunities and societal image of children with disabilities, this study findings showed that the majority with 77% selected special/spec ial meaning special education as the best for the described child with disabilities (Innocent). "*The strong reason was due to his special needs related to his jerky speech which could disturb others in general school and needed advocacy and trained teachers within supporting environment for children with disabilities*". In the same order of ideas, Wilson and Clayton (2020) arrived at the same conclusion as they found that inclus ive education is a key principle aimed at providing equal opportunities for children with disabilities. It involves the inclusion of students with disabilities into mainstream educational settings to the greatest extent possible, alongside their peers without disabilities. Inclusive education promotes diversit y, equity, and the full participation of all students in learning activities. According to one of the participants in their FGDs, "*CWD has insufficient means to adapt himself to the school*" highlight ing the challenges encountered by those children and adolescents in their school life (Vosloo, 2019).

4.3 Family dynamic and decision-making

Concerning the parental behavioral decisions regarding the upbringing and inclusion of children with disabilities, this study findings showed that reason of feeling, and behaviors of parents in regard to others behavior were associated at 48% with five reasons which were the parental autonomy and responsibility, parental love and attachment, other perceptions and external influence and lack of understanding from other. This showed that parents strongly value their autonomy and responsibilit y in making decisions for their children with disabilities and showed skepticism about others opinion as they assume to know the value and needs of their children where they said that "*I'm the one who knows the situation of my child, how valuable she is."* Similar results were found by Spencer-Cavaliere and Watkinson (2020) in their study on inclusion understood from the perspectives of children with disability. According to these authors, "Parental behavioral decisions regarding the upbringing and inclusion of children with disabilities are influenced by various factors, including the specific needs and abilities of the child, cultural beliefs and values, available support services, and parental attitudes and beliefs". One of their interviewees was quoted saying that "*Parents must decide on the most appropriate educational placement for their child with a disability*". This decision may involve choosing between inclusive education settings, special education programs, homeschooling, or other educational options based on the child's individual needs, preferences, and available resources (Viviers & Lombard, 2021).

In this study, only a few mentioned that their decision would depend on the type of disability, indicating a nuanced approach to social interactions. Overall, the responses demonstrate a willingness to include and interact with children with disabilities in social settings. In addition, 46(57.5%) out of 80 children mentioned that they can invite and socialize with children with disability and spend time together while 45% mentioned willingness to share belongings such as pencils at school saying that "*They're Like Others*." However, a small portion expressed concerns related to specific disabilities. Overall, the responses demonstrate a willingness to include children with disabilities in social activities at school. Overall, the responses reflect a positive attitude towards inclusion and cooperation among children at school. Contrary to these findings, Huus et al. (2020) were told that "*Children and adolescents with disabilities are not like others. They need advocacy in their daily activities*". In their study on the awareness of primary caregivers in South Africa of the human rights of their children with intellectual disabilities, it was found that parents often engage in advocacy efforts to ensure that their child's rights are protected, and their needs are met within various settings, including education, healthcare, and community services (Grant & Booth, 2019).

Concerning family perceptions and behaviors concerning gender-specific disabilities impacting socialization and support, the findings showed that the gender-based treatment was mostly popular to boys and girls. The majority of the respondents showed that girls face mostly the abuse and gender-based violence while boys are well treated. Contrary to these findings, Glumac (2019) found that the relationship of gender with a high level of exclusion was not statistically significant at $p<0.05$. This disparity could be attributed to the differences in the populations targeted by the two studies, as the present study focused on the population of Rwanda, while Glumac's study targeted the population of Guatemala, whose culture and beliefs are totally different from African behavior (Glumac, 2019).

In addition, social exclusion such as being rejected by the family and hidden in the house which creates mother harassment and family conflict between the father and the mother based on the children with disabilities was confirmed by the majority of FGD participants. Similarly, to these findings, Anaby et al. (2019) came to the same conclusion in their study on the mediating role of the environment in explaining participation of children and youth with and without disabilities across home, school, and community. According to these authors, although fathers and mothers differ in the way that they grieve for the 'expected' child, both experience enduring pain which often surfaces as recurring grief with each new difficult situation. The intensity and duration of their suffering are explained by the unpredictable nature of the event and the inability to determine the causes of the child's disability (Anaby et al., 2019).

Concerning attitudinal community perceptions and decisions regarding the inclusion of children with disabilities, which can either facilitate or hinder inclusion efforts, the FGD findings showed that "*the society image through what people see about children with disabilities, was framed into five potential themes which are Stigmatization, lack of care and basic needs, social exclusion and rejection, limited access to education and health and finally the positive perception and effort.*". Exactly, these findings are in the same order of ideas as those found by McConkey et al. (2013) in their study on promoting social inclusion through unified sports for youth with intellectual disabilities. Indeed, they affirmed that social exclusion and exclusion such as being rejected by the family and hidden in the house which creates mother harassment and family conflict scored 19% while the limited access to health and education scored 18% confirming the low level of positive perception in the Rwandan society. This may be because the society in general considers children and adolescents with disabilities as persons with low expectations (McConkey et al., 2013).

Studying the barriers of inclusive society of children and adolescent with disabilities in Rwanda provides valuable insights into the challenges they face and inform interventions to support their well-being. However, such a study has its strengths and limitations. Strengths include the identification of key barriers, early intervention opportunities, a holistic perspective, and potential long-term impact (Cuhada & Diken, 2019). Limitations include the complexity of stigma, methodological challenges, bias and subjectivity, and limited generalizability. Findings from few districts of Rwanda may not be generalizable to all children and adolescents with disabilities, as experiences of exclusion can vary widely depending on factors such as location, disability type, cultural background, and access to support services. Replication studies across diverse populations are needed to enhance the generalizability of findings (Du et al., 2019).

Despite these limitations, research on barriers of inclusive society of children and adolescent with disabilities holds promise for informing policies and practices aimed at promoting their society inclusion and well-being. By addressing these challenges and building on strengths, government can contribute to creating more inclusive and supportive environments for all children through comprehensive approach. Firstly, there needs to be a shift in societal attitudes and perceptions towards disabilities, promoting acceptance, respect, and recognition of the rights and capabilities of individuals with disabilities. Education plays a crucial role in this regard, fostering awareness, empathy, and understanding among the general population (Bunning et al., 2019).

Secondly, policies and legislation should be enacted and enforced to ensure equal access to education, healthcare, transportation, employment, and other essential services for individuals with disabilities. This includes providing reasonable accommodations, such as assistive devices, accessible infrastructure, and specialized support services, to enable their full participation and inclusion in all aspects of society. Thirdly, efforts to promote social inclusion should prioritize the building of supportive networks, fostering peer relationships, and creating opportunities for participation and engagement in recreational, cultural, and community activities. This empowers children and adolescents with disabilities to lead fulfilling and meaningful lives as valued members of society (Grant & Booth, 2019). In sum, the findings provide valuable insights into the prevailing barriers to inclusive society of children and adolescent with disabilities in Rwanda, and the suggested recommendations present potential solutions to tackle this issue.

5. Conclusion

In conclusion, this study has revealed the persistence of barriers to the inclusive society of children and adolescents with disabilities in Rwanda. Evidence suggests that attitudinal barriers and social perceptions contribute significantly to these challenges, with negative attitudes and stereotypes prevalent towards children with disabilities. Moreover, the issue of social distance and inclusiveness remains a prominent obstacle. Concerning structural and societal norms, numerous barriers persist, particularly related to the low level of understanding and acceptance of the concept of disability, as well as negative societal perceptions regarding equal opportunities and the societal image of children with disabilities. Consequently, this situation often results in poor family dynamics and decision-making processes, leaving this population marginalized.

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Authors' contribution

Each author played a substantial role in the development of this article. F.X.K., P.S, J.C.R., and C.N., N.O., M.M.D formulated the study concept. F.X.K., P.S., J.C.R., M.F., E.Z., managed the project and provided oversight for staff training. C.N. conducted the data analysis, while F.X.K., J.C.R., M.F., E.Z., supervised the manuscript and C.N. drafted the initial version. Subsequent revisions were collaboratively reviewed and discussed among F.X.K., J.C.R., and C.N. U.A., K.M.J.G., S.B., N.S., N.J.P., S.U., contributed to editing and finalizing the manuscript. All authors participated in reviewing and endorsing the final version of the manuscript.

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Data availability

Data cannot be shared because it goes against ethical obligations and the privacy concerns of respondents.

References:

[1] Almqvist, L. & Granlund, M. (2020) 'Participation in school environment of children and youth with disabilities: A person - oriented approach', Scandinavian Journal of Psychology 46(3), 305–314.

[2] Anaby, D., Law, M., Coster, W., Bedell, G., Khetani, M., Avery, L. et al. (2019). 'The mediating role of the environment in explaining participation of children and youth with and without disabilities across home, school, and community', Archives of Physical Medicine and Rehabilitation 95(5), 908–917.

[3] Arksey, H. & O'Malley, L. (2020). 'Scoping studies: Towards a methodological framework', International Journal of Social Research Methodology 8(1), 19–32.

[4] Askheim O.P. (2019). The Norwegian System of Supporting People with Disabilities in Independent Living, Including Assistant Services. Lillehammer, Norway: Innlandet University College

[5] Babik I, Gardner ES. (2021). Factors Affecting the Perception of Disability: A Developmental Perspective. Front Psychol. Jun 21; 12:702166. doi: 10.3389/fpsyg.2021.702166. PMID: 34234730; PMCID: PMC8255380.

[6] Bantjes, J., Swartz, L., Conchar, L. & Derman, W. (2019). 'Developing programmes to promote participation in sport among adolescents with disabilities: Perceptions expressed by a group of south African adolescents with cerebral palsy', International Journal of Disability, Development and Education 62(3), 288–302.

[7] Brown, S.E. & Guralnick, M.J. (2018). 'International human rights to early intervention for infants and young children with disabilities: Tools for global advocacy', Infants and Young Children 25(4), 270.

[8] Bunning, K., Gona, J.K., Newton, C.R. & Hartley, S. (2019). 'Caregiver perceptions of children who have complex communication needs following a home-based intervention using augmentative and alternative communication in rural Kenya: An intervention note', Augmentative and Alternative Communication 30(4), 344–356.

[9] Columna, L., Fernández-Vivó, M., Lieberman, L. & Arndt, K. (2021). 'Recreational physical activity experiences among Guatemalan families with children with visual impairments', Journal of Physical Activity and Health 12(8), 1119–1127.

[10] Conchar, L., Bantjes, J., Swartz, L., Derman, W. (2019). 'Barriers and facilitators to participation in physical activity: The experiences of a group of South African adolescents with cerebral palsy', Journal of Health Psychology 21(2), 152–163.

[11] Cuhadar, S. & Diken, I.H. (2019). 'Effectiveness of instruction performed through activity schedules on leisure skills of children with autism', Education and Training in Autism and Developmental Disabilities 46(3), 386–398.

[12] Du, C., Yu, J., Zhang, J., Jiang, J., Lai, H., Liu, W. et al. (2019). 'Relevant areas of functioning in people with adolescent idiopathic scoliosis on the international classification of functioning, disability and health: The patients' perspective', Journal of Rehabilitation Medicine 48(9), 806–814.

[13] Eide AH, Ofstad D, Støylen M, Hansen E, Høiseth M. (2022). Participation and Inclusion of Children and Youth with Disabilities in Local Communities. Int J Environ Res Public Health. 19(19):11893. doi: 10.3390/ijerph191911893. PMID:

36231197; PMCID: PMC9565650.

[14] Elo, S. & Kyngäs, H. (2018). 'The qualitative content analysis process', Journal of Advanced Nursing 62(1), 107–115.

[15] Engel-Yeger, B., Jarus, T., Anaby, D. & Law, M. (2019). 'Differences in patterns of participation between youths with cerebral palsy and typically developing peers', The American Journal of Occupational Therapy 63(1), 96.

[16] Fisher, K.R. and Purcal, C. (2017) 'Policies to change attitudes to people with disabilities', Scandinavian Journal of Disability Research, 19(2), p. 161-174. Available at: https://doi.org/10.1080/15017419.2016.1222303.

[17] Frantz, J., Phillips, J.S., Matheri, J.M. & Kibet, J.J. (2021). 'Physical activity and sport as a tool to include disabled children in Kenyan schools', Sport in Society 14(9), 1227–1236.

[18] Glumac, L.K., Pennington, S.L., Sweeney, J.K. & Leavitt, R.L. (2019). 'Guatemalan caregivers' perceptions of receiving and using wheelchairs donated for their children', Pediatric Physical Therapy 21(2), 167–175.

[19] Grant, M.J. & Booth, A. (2019). 'A typology of reviews: An analysis of 14 review types and associated methodologies', Health Information & Libraries Journal 26(2), 91–108.

[20] Hansen, A.M.W., Siame, M. & Van der Veen, J. (2021). 'A qualitative study: Barriers and support for participation for children with disabilities', African Journal of Disability 3(1), a112.

[21] Hoehne C., Baranski B., Benmohammed L., Bienstock L., Menez N., Margoles e N., Anaby D. (2020). Changes in overall participation profile of youth with physical disabilities following the PREP intervention. Int. J. Environ. Res. Public Healt h. 17:3990.

[22] Hui, N., Vickery, E., Njelesani, J. & Cameron, D. (2018). 'Gendered experiences of inclusive education for children with disabilities in West and East Africa', International Journal of Inclusive Education 22(5), 457–474.

[23] Huus, K., Dada, S., Bornman, J. & Lygnegård, F. (2020). 'The awareness of primary caregivers in South Africa of the human rights of their children with intellectual disabilities', Child: Care, Health and Development 42(6), 863–870.

[24] Imms, C., Adair, B., Keen, D., Ullenhag, A., Rosenbaum, P. & Granlund, M. (2016). '"Participation": A systematic review of language, definitions, and constructs used in intervention research with children with disabilities', Developmental Medicine & Child Neurology 58(1), 29–38.

[25] Law, M., Petrenchik, T., King, G. & Hurley, P. (2019). 'Perceived environmental barriers to recreational, community, and school participation for children and youth with physical disabilities', Archives of Physical Medicine and Rehabilitation 88(12), 1636–1642.

[26] Lygnegård, F., Donohue, D., Bornman, J., Granlund, M. & Huus, K. (2019). 'A systematic review of generic and special needs of children with disabilities living in poverty settings in low-and middle-income countries', Journal of Policy Practice 12(4), 296–315.

[27] Mathers, C., Fat, D. & Boerma, J. (2021). The global burden of disease: World Health Organization, The World Health Report, World Health Organization, Geneva.

[28] Maxwell, G., Alves, I. & Granlund, M. (2020). 'Participation and environmental aspects in education and the ICF and the ICF-CY: Findings from a systematic literature review', Developmental Neurorehabilitation 15(1), 63–78.

[29] McConkey, R., Dowling, S., Hassan, D. & Menke, S. (2021). 'Promoting social inclusion through unified sports for youth with intellectual disabilities: A five-nation study', Journal of Intellectual Disability Research 57(10), 923–935.

[30] Memari, A.H., Panahi, N., Ranjbar, E., Moshayedi, P., Shafiei, M., Kordi, R. et al. (2020). Children with autism spectrum disorder and patterns of participation in daily physical and play activities, Hindawi Neurology research international, London.

[31] Mizunoya, S., Mitra, S. & Yamasaki, I. (2018). 'Disability and school attendance in 15 low-and middle-income countries', World Development 104, 388–403.

[32] Mudyahoto, T. and Dakwa, F.E. (2020). 'An analysis of the level of participation in sport by learners with disabilities in inclusive settings', Zimbabwe Journal of Educational Research (ZJER), vol. 24, no.3, pp. 303–311, Harare: HRRC.

[33] Munn, Z., Peters, M.D., Stern, C., Tufanaru, C., McArthur, A. & Aromataris, E. (2018). 'Systematic review or scoping

review? Guidance for authors when choosing between a systematic or scoping review approach', BMC Medical Research Methodology 18(1), 143.

[34] Murray, C.J.L. (2022). Global Burden of Disease Study 2021 estimates: implications for health policy and research. London: The Lancet.

[35] NCPD (2021). Annual Report. Kigali: NCPD

[36] Nelson, F., Masulani-Mwale, C., Richards, E., Theobald, S. & Gladstone, M. (2021). 'The meaning of participation for children in Malawi: Insights from children and caregivers', Child: Care, Health and Development 43(1), 133–143.

[37] Olsson, L.M., Bengtsson, S., Granlund, M., Huus, K., Andersson, E.E., & Kåreholt, I. (2020). 'Social service utilisation in relation to class setting-a longitudinal study among children with mild intellectual disability in Swed en', European Journal of Special Needs Education 35(4), 1–15.

[38] Schlebusch, L., Huus, K., Samuels, A., Granlund, M. & Dada, S. (2020). 'Participation of children and youth with disabilities and/or long-term health conditions living in low- and middle- income countries: A scoping review', Developmental Medicine & Child Neurology 62(11), 1259–1265.

[39] Shields, N., Synnot, A.J., Barr, M. (2020). 'Perceived barriers and facilitators to physical activity for children with disability: A systematic review', British Journal of Sports Medicine 46(14), 989–997.

[40] Samuels A., Dada S., Van Niekerk K., Arvidsson P., Huus K. (2020). Children in South Africa with and without intellectual disabilities' rating of their frequency of inclusion in everyday activities. Int. J. Enviro n. Res. Public Health. 17:6702.

[41] Spencer-Cavaliere, N. & Watkinson, E.J. (2020). 'Inclusion understood from the perspectives of children with disability', Adapted Physical Activity Quarterly 27(4), 275–293.

[42] Steinhardt F., Ullenhag A., Jahnsen R., Dolva A.-S. (2021). Perceived facilitators and barriers for participation in leisure activities in children with disabilities: Perspectives of children, parents and professionals. Scand. J. Occup. Ther. 28:121 – 135.

[43] Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K.K., Colquhoun, H., Levac, D. et al. (2018). 'PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation', Annals of Internal Medicine 169(7), 467–473.

[44] United Nations. (1989). 'Convention on the Rights of the Child, 20 November 1989', Annual Review of Population Law 16(95), 485–501.

[45] United Nations. (2007). 'Convention on the rights of persons with disabilities', European Journal of Health Law 14(3), 281–298.

[46] Viviers, A., Lombard, A. (2021). 'The ethics of children's participation: Fundamental to children's rights realization in Africa', International Social Work 56(1), 7–21.

[47] Vosloo, S.-M. (2019). 'The functioning of primary school learners with paraplegia/paraparesis in mainstream schools in the Western Cape, South Africa. An exploratory study', Disability and Rehabilitation 31(1), 23–31.

[48] Wilson, P.E. & Clayton, G.H. (2020). 'Sports and disability', PM&R 2(3), S46–S54.

[49] World Health Organization (2020). International classification of functioning, disability, and health: Children & yo uth version: ICF-CY, World Health Organization, Geneva.