The Effect Of Social Inclusion Policies On The Welfare Of Persons With Special Needs, A Study Of Ministry Of Women Development And Family Affairs, Puntland, Somalia.

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ABSTRACT: *This study assessed the effect of social inclusion policies on the welfare of persons with special needs in Puntland, Somalia. Guided by Bronfenbrenner's Ecological Systems Theory, the research employed an embedded mixed-methods design. A cross-sectional survey was administered to a sample of 301 persons with special needs, selected via simple random sampling, and in-depth interviews were conducted with 12 purposively selected officials from the Ministry of Women's Development and Family Affairs. The quantitative data, analyzed using descriptive statistics and simple linear regression, revealed that the overall perception of social inclusion policies was fairly satisfactory (Mean=2.7), though this concealed critical deficiencies, with employment and education policies rated very unsatisfactory and unsatisfactory, respectively. The overall welfare of persons with special needs was fair (Mean=2.82), but marked by very poor housing and poor access to healthcare and food. The regression analysis established a statistically significant positive relationship between social inclusion policies and welfare ($R^2 = 0.177$, B = 0.410, $p < 0.001$), leading to the rejection of the null hypothesis. The study concluded that while social inclusion policies are a significant determinant of welfare, their impact is limited and uneven, with resilient microsystems and mesosystems, such as families, compensating for systemic failures. The study recommended targeted policy strengthening, enhanced local government capacity, and meaningful inclusion of persons with special needs in policy processes.*

Keywords: Social Inclusion Policies, Welfare, Persons with Special Needs, Ecological Systems Theory, Puntland, Somalia.

1. INTRODUCTION

In the global discourse on human development and equitable societies, social inclusion has emerged as a cornerstone principle, advocating for the full and active participation of all individuals, regardless of their abilities or backgrounds. For persons with special needs, this concept transcends mere non-discrimination; it necessitates proactive policies and structural modifications designed to dismantle barriers and foster empowerment across critical life domains such as education, healthcare, livelihood, and political participation. The international framework, notably the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), to which Somalia is a signatory, provides a comprehensive mandate for state parties to enact legislation and programs that guarantee the rights and dignity of persons with disabilities. The efficacy of such policies, however, is profoundly contextual, hinging on local governance structures, cultural attitudes, resource allocation, and the specific historical and socio-political milieu in which they are implemented (United Nations, 2006).

The Federal Government of Somalia, including its member states like Puntland, operates within a complex post-conflict reality characterized by nascent institutions, limited public financing, and the lingering effects of decades of civil strife and humanitarian crises. Within this challenging environment, persons with special needs often constitute one of the most marginalized and vulnerable segments of the population, facing profound stigma, systemic exclusion, and a critical lack of accessible services. While Puntland has demonstrated some political will to address these disparities, such as through the development of disability-focused initiatives and its alignment with the National Disability Act, the tangible translation of these policy frameworks into improved welfare outcomes remains ambiguous and under-studied. The gap between de jure policy commitments and de facto lived experiences is often wide, influenced by factors such as inadequate funding, weak monitoring and evaluation mechanisms, and deep-seated societal misconceptions about disability (World Bank, 2021).

Consequently, there is an urgent need for empirical research to critically examine the nexus between social inclusion policies and the actual welfare of persons with special needs in Puntland. Welfare, in this context, is a multidimensional construct encompassing not only material well-being but also psychosocial health, personal agency, and social connectedness. Assessing the impact of existing policies requires moving beyond a mere inventory of laws to a nuanced analysis of their implementation, reach, and perceived effectiveness from the perspective of the intended beneficiaries themselves. This study, therefore, seeks to fill this critical

knowledge gap by investigating the extent to which social inclusion policies have influenced the welfare of persons with special needs in Puntland, Somalia, thereby providing evidence-based insights for policymakers, civil society organizations, and international partners dedicated to fostering a more inclusive and equitable society.

Specific objective of the study

To assess the effect of social inclusion policies on the welfare of persons with special needs, Puntland, Somalia.

Hypothesis of the study

H₀: There is no statistically significant relationship between the social inclusion policies and the welfare of persons with special needs, Puntland, Somalia.

2. LITERATURE REVIEW

Theoretical review

This study is conceptually anchored on the Ecological Systems Perspective, pioneered by Urie Bronfenbrenner in 1979. This theory offers a robust and multidimensional framework for understanding human development, asserting that an individual's growth and well-being are shaped by a complex network of interconnected environmental systems. Rather than viewing the person in isolation, Bronfenbrenner proposed that we are all embedded within a series of nested structures, ranging from our immediate surroundings to the broader societal and cultural forces that influence our lives. For a population as vulnerable and context-dependent as persons with special needs, this perspective is particularly salient, as it moves beyond individual deficits to focus on the transactional relationships between the person and their environment. It provides a comprehensive lens to analyze how various levels of social organization, from direct interpersonal interactions to overarching national policies, collectively determine life outcomes.

The core strength of the Ecological Systems model for this research lies in its structured taxonomy of environmental influences, which are categorized into five key systems. The microsystem constitutes the most immediate layer, comprising the settings in which the individual directly participates, such as the family, school, peer group, or local community. For a person with special needs in Puntland, this includes the attitudes of their family, the support (or lack thereof) from immediate caregivers, and their interactions within their neighbourhood. The mesosystem refers to the interconnections between these microsystems; for instance, how a parent's engagement with a local disability support group (one microsystem) influences their care for the child at home (another microsystem). The exosystem encompasses settings in which the individual does not directly participate but which nevertheless affect their experiences, such as a parent's workplace, local government social services departments, or the policies of non-governmental organizations operating in the area.

Crucially, the macrosystem represents the overarching cultural, societal, and political context. This includes the national laws and policies on disability, societal attitudes and stigma towards persons with special needs, religious beliefs, and the broader economic conditions of Somalia and Puntland. This level directly aligns with the study's focus on "social inclusion policies," positioning them as a macrosystemic force intended to permeate and reshape the lower-level systems. Finally, the chronosystem incorporates the dimension of time, accounting for the influence of both personal life transitions (e.g., aging out of school) and historical events (e.g., the evolution of disability rights in Somalia, periods of conflict or drought) on the individual's development and the systems themselves.

By applying this ecological framework, the study on the effect of social inclusion policies on the welfare of persons with special needs in Puntland is transformed from a simple policy analysis into a holistic investigation of systemic interplay. It allows the research to systematically examine how a macrosystemic policy intervention is implemented, mediated, or obstructed at the exosystem level (e.g., by local government capacity); how it influences interconnections at the mesosystem level (e.g., collaboration between schools and health clinics); and how it ultimately impacts the immediate experiences within the microsystem of the individual. This theoretical grounding ensures that the findings will reflect the complex reality that the welfare of persons with special needs is not a product of policy alone, but of the dynamic and multi-layered ecological context in which they live.

3. METHODOLOGY

This study employed an embedded mixed-methods research design to comprehensively investigate the effect of social inclusion policies on the welfare of persons with special needs in Puntland, Somalia. As articulated by Amin (2005), this design is effective for capturing the opinions, attitudes, and practices of a cross-section of a population. In this approach, the quantitative component was the primary method, providing the dominant dataset for meeting the research objectives and testing the hypothesis, while the qualitative component played a supplementary but crucial role to provide in-depth explanations and contextual depth. The synergy

of both methods was essential to mitigate inherent biases; the objectivity of the quantitative data helped to counterbalance the potential subjectivity of qualitative insights, and vice-versa, allowing each dataset to check and illuminate the other (Creswell & Plano Clark, 2017). A cross-sectional survey was chosen as the specific strategy for the quantitative arm, as it facilitates efficient data collection from a sample of the population at a single point in time, providing a valuable snapshot of the phenomena under investigation.

The target population in research is defined as the entire collection of individuals or objects that are the central focus of a scientific inquiry, providing the framework from which a sample is drawn (Mohamed, 2015). For this study, the target population comprised two distinct groups within the Puntland state of Somalia, specifically in its capital, Garowe. The first group consisted of persons with special needs, including those with visual, hearing, and physical disabilities, who possess direct lived experience of the welfare outcomes being studied. The second group included employees of the Ministry of Women's Development and Family Affairs, who are directly involved in the formulation and implementation of the relevant social policies. The total target population was 1,210 registered persons with special needs in Garowe district and 18 ministry employees, as these respondents were deemed to have sufficient information on the state of social inclusion policies and their welfare implications (Ministry of Women Development and Family Affairs, 2023).

Determining an appropriate sample size is a critical step in research, as it improves the precision of the findings and allows for valid inferences to be made about the larger population (Dattalo, 2008). The sample size for the large population of persons with special needs (N=1,210) was calculated using Slovin's formula at a 95% confidence level and a 5% margin of error (e=0.05), yielding a sample of 301 individuals. This sample was proportionally allocated across the three disability categories based on their population size. A simple random sampling technique, such as a lottery method, was used to select individuals within each category, ensuring that every member had an equal chance of being selected, thereby minimizing selection bias and enhancing the representativeness of the sample. For the smaller, expert population of ministry employees, a census approach was not feasible due to potential constraints; therefore, a purposive sample of 12 employees was selected. This non-probability technique was chosen to intentionally target individuals with the specific knowledge and experience relevant to the research objectives, ensuring the qualitative data collected was information-rich (Etikan, 2016).

Table 1: Quantitative Sample Frame

Category	Population	Sample	Sampling Technique
Persons with Hearing Disabilities	341	85	Simple Random Sampling
Persons with Physical Disabilities	487	121	Simple Random Sampling
Persons with Visual Disabilities	382	95	Simple Random Sampling
Total	**1,210**	**301**	

Source: Ministry of Women Development and Family Affairs (2023)

Table 2: Qualitative Sample Frame

Category	Population	Sample	Sampling Technique
Employees of the Ministry	18	12	Purposive Sampling

Source: Ministry of Women Development and Family Affairs (2023

Primary data was collected using two main instruments: a structured questionnaire for the quantitative data and a semi-structured interview guide for the qualitative data. The questionnaire was designed with sections on respondent demographics, social inclusion policies (the independent variable), and the welfare of persons with special needs (the dependent variable). The scales for social policies, measuring social inclusion, social assistance, and social protection, were adapted from established works by Van den Broek & Gornick (2016) and Ferguson & Pashman (2013). The welfare scale was adapted from Gomez and Morency (2005). All scaled

items used a five-point Likert scale. The interview guide, featuring open-ended questions, was used to collect detailed insights from the ministry employees, allowing for probing and deeper discussion. To ensure the instruments' validity, a Content Validity Index (CVI) was computed based on evaluations from three experts. The overall CVI of 0.883, as shown in Table 3.3, confirmed the instrument's validity, as values above 0.70 are considered acceptable (Amin, 2004). Reliability was assessed using Cronbach's Alpha to measure internal consistency. As presented in Table 3.4, all constructs yielded alpha coefficients above the 0.70 threshold, confirming the instrument's reliability (Mugenda & Mugenda, 2003).

Table 3: Content Validity Index (CVI) Assessment

Expert	Valid Questions	Non-Valid Questions	Total Questions	CVI
1	22	4	26	0.92
2	23	3	26	0.884
3	24	2	26	0.846
Total	**69**	**9**	**78**	**0.883**

Source: Researcher based on expert review (2024)

Table 4: Reliability Analysis using Cronbach's Alpha

Study Variable	Anchor	Cronbach's Alpha
Social Inclusion Policies	5-point	0.806
Social Assistance Policies	5-point	0.801
Social Protection Policies	5-point	0.77
Welfare of Persons with Special Needs	5-point	0.73

Source: Researcher (2024)

4.   RESULTS

Response rate

Table 5: Response rate for the respondents

Response	Sample	Response
Questionnaire	301	298(99%)
Interview	12	10 (83.3%)

Source: Filed data, 2025

The response rates presented in Table 5 indicated a highly successful data collection process for both components of the study, with the quantitative arm achieving an exceptional 99% response rate (298 out of 301 questionnaires) and the qualitative arm a very strong 83.3% rate (10 out of 12 interviews). The near-perfect questionnaire response rate significantly strengthened the representativeness of the data from persons with special needs and minimized non-response bias, providing a robust foundation for statistical analysis and hypothesis testing. Similarly, the high interview response rate ensured that the qualitative insights from ministry employees were comprehensive and information-rich, allowing for a thorough understanding of the policy context and ensuring that the study's mixed-methods findings were built upon a reliable and substantial dataset.

Demographic profile of respondents

Table 6: Demographic profile of respondents

Variable	Category	Frequency	Percent
Gender	Male	189	63.40%
	Female	109	36.60%
	Total	**298**	**100.00%**
Age	20-29 years	84	28.20%
	30-39 years	67	22.50%
	40-49 years	85	28.50%
	50 years and above	62	20.80%
	Total	**298**	**100.00%**
Education	Primary & Secondary	172	57.70%
	Certificate	28	9.40%
	Diploma	29	9.70%
	Bachelor's Degree	52	17.40%
	Post Graduate	17	5.70%
	Total	**298**	**100.00%**
Marital Status	Single	100	33.60%
	Married	158	53.00%
	Separated	23	7.70%
	Widowed	17	5.70%
	Total	**298**	**100.00%**

Source: Field data (2025)

The study's sample was predominantly male, with 189 respondents (63.4%), compared to 109 female respondents (36.6%). This indicates that males constituted a larger proportion of the participating persons with special needs in this research. While the gender distribution was not balanced, the significant representation from both groups ensured that perspectives from both genders were captured in the data, providing a more comprehensive view of the community's experiences despite the focus on a ministry typically associated with women and family affairs.

The age distribution of the respondents was relatively well-balanced across the different age cohorts. The largest group was aged 40-49 years (28.5%), closely followed by those aged 20-29 years (28.2%), with the 30-39 and 50+ age groups representing 22.5% and 20.8% respectively. This spread demonstrates that the study successfully engaged a mature and diverse cross-section of the adult population, ensuring that the findings on social inclusion policies reflect the understandings and experiences of individuals across various stages of life.

The educational background of the respondents showed that the majority (57.7%) had attained a Primary or Secondary level of education. Those with tertiary education—comprising Certificate, Diploma, Bachelor's Degree, and Post Graduate holders—collectively accounted for 42.2% of the sample. This profile confirms that the vast majority of participants were literate and possessed a foundational level of education necessary to comprehend and respond to the research questionnaire, thereby lending credibility to the quality and reliability of the quantitative data collected.

More than half of the respondents (53.0%) were married, making it the largest marital status category. Single individuals represented a substantial portion at 33.6%, while those who were separated or widowed constituted smaller segments of the sample at 7.7% and 5.7%, respectively. The predominance of married respondents suggests that the data incorporates the perspectives of individuals who likely have established households and may have experiences with social policies that affect family units, adding a valuable dimension to the study's understanding of welfare.

Descriptive statistics on social inclusion policies, Puntland, Somalia

The analysis of the quantitative data on social inclusion policies utilized a five-point Likert scale, with the mean scores interpreted according to a specific benchmark. The interpretation scale was defined as follows: a mean of 4.22 to 5.00 indicated a Very satisfactory perception, 3.42 to 4.22 was Satisfactory, 2.62 to 3.41 was Fairly Satisfactory, 1.81 to 2.61 was Unsatisfactory, and finally, 1.00 to 1.80 was Very unsatisfactory. The following section presents the detailed findings for each policy area, using this scale to evaluate the respondents' perceptions of their implementation and effectiveness.

Table 7: Descriptive statistics on social inclusion policies

Item Code	Item	Mean	Std. Deviation	Interpretation
SP1	There are inclusion policies for special needs in education.	1.88	1.46	Unsatisfactory
SP2	Health services policies are also tailored to the special needs of persons.	3.71	1.23	Satisfactory
SP3	The housing policies allow for easy access for persons with special needs.	2.67	1.63	Fairly satisfactory
SP4	The housing policies are provided in support of persons with special needs.	3.03	1.57	Fairly satisfactory
SP5	There are supportive employment policies for people with special needs.	1.62	1.33	Very unsatisfactory
SP6	The special needs person is supported with an appropriate policy on access to markets/ economic assets.	3.31	1.5	Fairly satisfactory
	Average Mean	**2.7**	**0.59**	**Fairly satisfactory**

Source: Primary data (2025)

On SP1: "*There are inclusion policies for special needs people in education.*" The mean score of 1.88 indicates an Unsatisfactory perception of educational inclusion policies. Guided by the Ecological Systems Theory, this finding suggests a critical failure at the macrosystem (national policy) level to be effectively implemented at the exosystem (school administration and local government) level. This failure directly negatively impacts the individual's microsystem (the school environment), creating a significant barrier to development and social integration for persons with special needs.

Item SP2: "*Health services policies are also tailored to the special needs of persons.*" With a mean of 3.71, this item was interpreted as Satisfactory. This is the highest-rated policy area. Through the lens of the Ecological Systems Theory, it appears that macrosystem policies in the health sector have been more successfully translated into practice within the exosystem (health facilities), leading to a more positive direct experience for individuals at the microsystem level. The standard deviation of 1.23, however, indicates that access to these tailored health services is not uniform for all.

Item SP3: "*The housing policies allow for easy access by persons of special needs.*" This item received a mean score of 2.67, which is fairly satisfactory. Analyzed using the Ecological Systems Theory, this suggests that policies aimed at creating physically accessible housing (macrosystem) are only partially effective. The high standard deviation (1.63) reveals significant disparities in the living environments (microsystem) of individuals, implying that the implementation of these policies across communities and local authorities (exosystem) is highly inconsistent.

Item SP4: *"The housing policies are provided in support of persons with special needs."* Scoring a mean of 3.03, this item is also fairly satisfactory. This indicates a perception that support-oriented housing policies exist, but their provision is not comprehensive. The Ecological Systems Theory clarifies that while the intent may be present at the macrosystem level, the translation into tangible support within an individual's immediate home and community (microsystem) is moderate and varies greatly, as shown by the high standard deviation (1.57).

Item SP5: *"There are supportive employment policies for persons with special needs."* This item had the lowest mean score of 1.62, interpreted as Very unsatisfactory. This points to the most severe policy gap identified. From the perspective of the Ecological Systems Theory, this indicates a major breakdown where macrosystem policies fail to create pathways for economic participation. This failure isolates individuals within their microsystem and prevents their integration into the economic exosystem (workplaces), severely limiting their livelihood, independence, and overall welfare.

Item SP6: *"The special needs persons are supported with an appropriate policy on access to markets/ economic assets."* With a mean of 3.31, this was perceived as fairly satisfactory. This suggests that policies facilitating access to finance or entrepreneurship (macrosystem) are somewhat more visible or accessible than other forms of support. The Ecological Systems Theory helps explain that such economic empowerment policies can sometimes have a more direct, though still variable, impact on an individual's agency within their microsystem, even when other systems like formal employment (exosystem) remain inaccessible.

Based on the empirical findings, the study concluded that while the overall perception of social inclusion policies in Puntland was fairly satisfactory, this result concealed severe and uneven implementation across different life domains. The research identified a critical disparity, revealing that health service policies were perceived as effective, whereas policies in the crucial areas of education and employment were deemed highly unsatisfactory. Ultimately, the findings demonstrated that the social inclusion framework had failed to create a coherent and supportive ecological system, leaving persons with special needs systematically marginalized in key aspects of their social and economic welfare.

This was supported by some respondents in the qualitative data set. Respondents 2 and 7, who asserted that,

> *There are housing policies provided in support of persons with special needs, the policies on housing, however, do not provide support mechanisms for how the housing environment can be enhanced. But a policy available provides for the appropriate housing of persons with special needs in Puntland. The housing situation has remained poor, given that laws on housing are not readily available in the execution and management of the activities related to housing conditions of persons with disability.*

Descriptive statistics on the welfare of persons with special needs, Puntland, Somalia

The analysis of welfare outcomes for persons with special needs was conducted using a Likert scale, with results interpreted against a defined benchmark: 4.22-5.00 (Very Good), 3.42-4.21 (Good), 2.62-3.41 (Fair), 1.81-2.61 (Poor), and 1.00-1.80 (Very Poor). The following section details the findings for each welfare indicator, using the Ecological Systems Theory to contextualize the results within the individual's layered environment.

Table 7: Descriptive statistics on the welfare of persons with special needs

Item Code	Question	Mean	Std. Deviation	Interpretation
W1	The special needs persons have access to good sanitation and hygiene.	3.04	1.61	Fair
W2	The health environment of persons with special needs is good.	3.34	1.51	Fair
W3	People with special needs have access to appropriate health facilities and health personnel.	1.88	1.37	Poor
W4	There are affordable education services for the special needs in Puntland.	3.32	1.43	Fair

W5	The people with special needs have attained a reasonable education level.	3.8	1.18	Good
W6	Special needs persons attain affordable, quality food.	2.57	1.62	Poor
W7	The special needs have access to good housing facilities.	1.64	1.05	Very Poor
W8	The special needs persons have access to appropriate clothes.	2.98	1.58	Fair
	Average mean	**2.82**	**0.57**	**Fair**

Source: Primary data (2025)

On the item W1: "*The special needs persons have access to good sanitation and hygiene.*" With a mean of 3.04, this was perceived as Fair. This suggests that the immediate living conditions (microsystem) related to sanitation are moderately adequate for some individuals. The Ecological Systems Theory helps explain that this basic need is likely met through a combination of household resources and limited community infrastructure (exosystem), though the high standard deviation indicates that this support is highly inconsistent and not universally available.

Item W2: "*The health environment of the persons with special needs is good.*" With a mean of 3.34, this was perceived as Fair. This indicates that the broader environmental and public health conditions (exosystem) are seen as somewhat acceptable. The Ecological Systems Theory contextualizes this by suggesting that general community health factors, such as the absence of widespread epidemic diseases, may be stable, even while direct access to clinical care remains a critical failure, as shown in item W3.

Item W3: "*People with special needs have access to appropriate health facilities and health personnel.*" With a mean of 1.88, this was perceived as Poor. This reveals a severe deficit in accessing direct clinical services. The Ecological Systems Theory highlights a critical breakdown at the exosystem level, where healthcare institutions and personnel are not effectively reaching the individual's microsystem, creating a major barrier to well-being despite a moderately rated general "health environment."

Item W4: "*There are affordable education services to the special needs in Puntland.*" With a mean of 3.32, this was perceived as Fair. This suggests that financial barriers to education at the macrosystem level (e.g., school fees) are not the primary constraint. The Ecological Systems Theory helps explain that the significant challenges in education likely lie elsewhere in the ecological system, such as in the physical accessibility of schools or the availability of specialized learning materials within the microsystem of the classroom.

Item W5: "*The people with special needs have attained a reasonable education level.*" With a mean of 3.80, this was perceived as Good. This indicates that, against the odds, a significant number of persons with special needs have successfully acquired an education. The Ecological Systems Theory attributes this to the powerful influence of resilient microsystems (e.g., supportive families) and mesosystems (e.g., connections between family and community-based schools) that have enabled educational attainment despite systemic weaknesses.

Item W6: "*Special needs persons attain affordable quality food.*" With a mean of 2.57, this was perceived as Poor. This points to widespread food insecurity and economic hardship. The Ecological Systems Theory frames this as a fundamental failure of the economic macrosystem and social protection exosystems to ensure that a basic need is met within the individual's immediate microsystem, directly threatening their physical health and well-being.

Item W7: "*The special needs have access to good housing facilities.*" With a mean of 1.64, this was perceived as Very Poor. This identifies housing as the most severe welfare deficiency. The Ecological Systems Theory underscores that the core of an individual's microsystem—their home—is largely inadequate, indicating a profound failure of housing policies (macrosystem) and local implementation (exosystem) to provide a safe and dignified living environment.

Item W8: "*The special needs persons have access to appropriate clothes.*" With a mean of 2.98, this was perceived as Fair. This suggests that this basic need is moderately met. The Ecological Systems Theory helps explain that clothing is often procured through the immediate family (microsystem) or through aid from local organizations and community networks (exosystem), but its rating as only "Fair" indicates that meeting this fundamental need remains a persistent challenge for many.

The study concluded that the overall welfare of persons with special needs in Puntland was Fair (Average Mean = 2.82), but this overall score concealed severe and unacceptable deficiencies in critical areas. The findings revealed a welfare landscape characterized by stark contradictions, where individuals reported a good level of educational attainment despite systemic failures, yet suffered from Very Poor housing and Poor access to healthcare and food. This pattern, explained by the Ecological Systems Theory, indicates that resilient microsystems and mesosystems (such as families and community networks) are compensating for profound failures at the exosystem and macrosystem levels. Ultimately, the welfare of persons with special needs remains precarious, being sustained more by informal, personal networks than by effective, systemic public policy and service delivery.

This was supported by some respondents in the qualitative data set. Respondents 6 and 9, who asserted that,

> *The special needs person is supported with an appropriate policy on access to markets/ economic assets, the available policies avoid discrimination against persons of special needs in business and employment sectors, and this has left the persons with special needs to also be part of the business executions.*

Effect of Social inclusion policies on the welfare of persons with special needs, Puntland, Somalia

Table 1: Simple regression analysis (effect of social inclusion policies on welfare of persons with special needs, Puntland, Somalia)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.420[a]	.177	.174	.52370
a. Predictors: (Constant), Social inclusion Policies				

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.417	1	17.417	63.505	.000[b]
	Residual	81.183	296	.274		
	Total	98.600	297			
a. Dependent Variable: Welfare of persons with special needs						
b. Predictors: (Constant), Social inclusion Policies						

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.718	.143		12.052	.000
	Social Inclusion Policies	.410	.051	.420	7.969	.000
a. Dependent Variable: Welfare of persons with special needs						

Source: Field Data, 2025

The simple linear regression analysis revealed a statistically significant relationship between social inclusion policies and the welfare of persons with special needs in Puntland, Somalia. The model was found to be significant, $F(1, 296) = 63.505$, $p < .001$, leading to

the rejection of the null hypothesis. The R-squared value of .177 indicated that approximately 17.7% of the variance in welfare outcomes was attributable to the implementation of social inclusion policies. This finding was further substantiated by the unstandardized coefficient (B = 0.410, p < .001), which quantified a positive relationship, demonstrating that for every one-unit improvement in social inclusion policies, the welfare of persons with special needs increased by 0.410 units. This provided empirical evidence that these policies, despite their noted inconsistencies, had a measurable and positive impact on the lived experiences of the target population.

Interpreting this relationship through the lens of the Ecological Systems Theory, which guided this study, provides a deeper, multi-layered understanding of the findings. The positive regression coefficient signifies that interventions at the macrosystem level—comprising national laws and social inclusion policies—have a demonstrable capacity to permeate the other systems and effect change. The 17.7% explanation of variance suggests that while these macrosystem policies are a powerful and significant force for improving welfare, a larger portion of the outcome is determined by other factors within the individual's ecological environment. This aligns perfectly with the theory's premise, indicating that welfare is also shaped by interactions at the exosystem (e.g., local government capacity, NGO programs), the mesosystem (e.g., linkages between family and school), and the microsystem (e.g., immediate family support), which collectively account for the remaining variance. Therefore, the study concluded that social inclusion policies are a crucial, but not singular, determinant of welfare, functioning as a key macrosystemic driver within a complex ecological framework that collectively shapes the well-being of persons with special needs.

5. DISUCUSIONS

The findings of this study provided a nuanced understanding of the relationship between social inclusion policies and the welfare of persons with special needs in Puntland, Somalia. The simple linear regression analysis yielded a statistically significant result, leading to the rejection of the null hypothesis (H_0). This confirmed that a positive and significant relationship exists between the implementation of social inclusion policies and the welfare outcomes of the target population. The R-squared value of .177 indicated that these policies accounted for 17.7% of the variance in welfare, a finding that, while modest, is substantively important in a complex, post-conflict context. It empirically demonstrated that even amidst implementation challenges, policy interventions at the macro level have a tangible, measurable effect on improving the lives of persons with special needs.

This research was conceptually anchored on Bronfenbrenner's Ecological Systems Theory, and the results strongly validated its applicability as an analytical framework. The theory's utility was evident in explaining the disparate outcomes across different life domains. For instance, the "satisfactory" rating for health policies (SP2) and the "good" rating for educational attainment (W5) could be attributed to effective linkages between the *macrosystem* (policy) and the *exosystem* (health facilities, resilient schools) and *microsystem* (supportive families). Conversely, the "very unsatisfactory" performance of employment policies (SP5) and the "very poor" access to housing (W7) highlighted critical breakdowns where policies failed to permeate these lower-level systems. The regression coefficient further illustrated this dynamic, showing that macrosystemic policies are a significant driver of welfare, while the remaining 82.3% of unexplained variance aptly captured the influence of other ecological layers—such as family support (*microsystem*), community networks (*mesosystem*), and local government capacity (*exosystem*)—as the theory posits.

The findings of this study are consistent with a growing body of international research investigating the implementation gap in social inclusion policies. Similar studies conducted in recent years have reported analogous patterns. For example, research in post-conflict regions like Northern Uganda and Sierra Leone has also found that while policy frameworks exist, their translation into tangible benefits is often uneven, with economic inclusion and employment lagging significantly behind other sectors (Smith & Ahlgren, 2021). A study in Kenya by Oketch and Ngware (2020) similarly highlighted that educational attainment for children with disabilities was more strongly correlated with familial support (*microsystem*) than with national policy alone. Furthermore, investigations in similar contexts by the World Bank (2021) and Mji et al. (2019) in Southern Africa corroborate the finding that access to healthcare services can see relative success compared to livelihood and housing initiatives. The consistent theme across these studies, including this one, is that the effectiveness of social inclusion policies is not a function of their existence but of their successful integration and implementation across the entire ecological system of the individual.

6. CONCLUSIONS

In conclusion, this study established that social inclusion policies in Puntland, Somalia, have a statistically significant and positive, albeit limited, effect on the welfare of persons with special needs. The research revealed a landscape of stark contrasts, where areas such as health services and educational attainment showed relative promise, largely sustained by resilient familial and community structures, while critical domains of employment, accessible housing, and direct healthcare access were marked by severe policy and implementation failures. The application of the Ecological Systems Theory proved invaluable, demonstrating that welfare is not a product of policy in isolation but is determined by the dynamic interplay between the individual and the multiple, nested environmental systems that surround them. Ultimately, while social inclusion policies are a necessary and impactful macrosystemic

lever, the current framework in Puntland remains insufficient to ensure comprehensive welfare, leaving persons with special needs reliant on fragile, informal networks rather than a robust, systemic support structure.

7. RECOMMENDATIONS

Based on the findings, the following recommendations are proposed for key stakeholders:

For the Puntland Ministry of Women Development and Family Affairs and other relevant government bodies: Prioritize the development and stringent implementation of specific policies in the most deficient areas, particularly inclusive employment quotas and accessible housing standards. This should be coupled with a significant increase in budgetary allocation and the establishment of robust monitoring and evaluation units to track policy implementation from the *macrosystem* to the *exosystem* level.

For International Partners and NGOs: Technical and financial support should be strategically directed towards strengthening the *exosystem* and *mesosystem*. This includes capacity-building for local government departments, funding for community-based rehabilitation programs, and initiatives that foster collaboration between schools, health clinics, and disabled persons' organizations to create a more integrated support network.

For Civil Society and Disabled People's Organizations (DPOs): Advocate for the meaningful participation of persons with special needs in all stages of policy design, implementation, and review. Empower these organizations to conduct social audits and hold local authorities accountable, thereby ensuring that policies are responsive to the lived realities at the *microsystem* level.

8. CONTRIBUTION OF KNOWLEDGE

This study makes a significant contribution to the existing body of knowledge by providing one of the first empirical analyses of the effect of social inclusion policies on the welfare of persons with special needs in the specific context of Puntland, Somalia. It moves beyond a mere inventory of policies to a quantitative and qualitative assessment of their real-world impact. Furthermore, the research demonstrates the robust explanatory power of the Ecological Systems Theory in a post-conflict, non-Western setting, offering a validated framework for future studies in similar contexts. The findings provide policymakers and practitioners with evidence-based insights into which policy domains are failing and which show promise, enabling more targeted and effective interventions. Finally, the methodological rigor, including a high response rate and validated instruments, sets a benchmark for future research in this field within the region.

9. AREAS FOR FURTHER RESEARCH
I.   A longitudinal study to track changes in the welfare of persons with special needs over time, assessing the long-term impact of specific policy interventions.
II.   An in-depth qualitative investigation into the role of the family (*microsystem*) as a primary coping mechanism and its interaction with formal support systems in Puntland.
III. Research focusing specifically on the barriers and facilitators to economic inclusion and employment for persons with different types of disabilities in the Somali context.
IV.   A comparative study across different Federal Member States of Somalia to analyze variations in policy implementation and welfare outcomes.
V.   An evaluation of the capacity and effectiveness of local government structures (*exosystem*) in delivering inclusive services to persons with special needs.

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