

**IMPACT OF FINANCIAL INCLUSION ON WELFARE OF PERSONS LIVING WITH DISABILITY
IN KENYA****Catherine Chepkemoi Katam¹ & Dr Peter Miring'u Njenga, PhD²**¹ Post Graduate Student, Kenyatta University, Kenya² Lecturer, Kenyatta University, Kenya**Accepted: November 7, 2024****ABSTRACT**

Financial services are difficult for people with impairments to obtain in both developed and developing countries. This is because they are not seen as a sizable consumer base by banks and other financial institutions. More than 60% of persons with disability in Kenya are impoverished. The Kenyan government has started a number of programs to help persons with disabilities with their financial circumstances. A cash transfer scheme that encourages the use of assistive equipment is one of these. Additionally, there are subsidies and grants available to assist with the costs of schooling. But raising awareness of these advantages is still difficult, particularly in rural regions. Despite these measures there is still a challenge of financial inclusion especially among the mainstream financial institutions. A large number of disabled individuals in Kenya are presently left out in terms of financial access from mainstream financial institutions like banks because the target audience is restricted to those who have severe disabilities. Despite efforts to implement disability laws, there are still issues with financial inclusion for persons with disabilities in Kenya. This study aimed to investigate the financial inclusion and welfare of households with disabled individuals in Kenya. The specific objectives were to determine the impact of financial inclusion on the welfare of persons with disabilities, to assess the effect of household expenditure on their welfare, and to evaluate the effect of education empowerment on their welfare. The study was based on financial growth theory, inclusion theory, consumer behavior theory, and vulnerability group theory. An explanatory research design was used to clarify the relationship between variables, and the study relied on secondary data from the Kenya National Bureau of Statistics, the 2019 Census report, the Kenya Integrated Household Budget Survey, and Financial Access surveys. Descriptive and inferential statistics were performed to determine the impact of financial inclusion on the household welfare of individuals with disabilities residing in Kenya. The data set was found to be suitable for analysis after diagnostic tests such as residual autocorrelation, heteroscedasticity of the error term, normality, and multicollinearity were performed. Based on the study's findings, it was determined that the coefficient of determination (R^2) was 0.791 while the adjusted R^2 was 0.759. From the finding, it can be concluded that; financial inclusion, household expenditure and education empowerment explains 75.9 percent of the changes in the welfare of persons with disabilities. The results show that persons with disabilities' welfare increases significantly ($r=0.0520$, $p<.05$) with each unit increase in financial inclusion. According to the findings, a unit increase in household expenditure increases persons with disabilities' welfare in a nonsignificant way ($r=0.011$, $p>.05$). Lastly, the study's results show that persons with disabilities' wellbeing significantly increases with each unit rise in education empowerment ($r=0.0280$, $p<.05$).

Key Words: Financial Inclusion, Education Empowerment, Household Expenditure

INTRODUCTION

People with disabilities, both in developing and developed countries, often face barriers regarding the utilization of financial services. This is because many financial institutions, including banks, have not recognized them as a significant customer base (Peprah, Avorkpo & Kulu, 2022). According to Goodman *et al* (2017), factors such as income, age, race, and home ownership can contribute to lower rates of banking among people with disabilities. Additionally, individuals with disabilities may have limited access to financial services due to their lower income earning capacity. For instance, a survey conducted by Mactaggart *et al.* (2018) ascertained that adults living with disabilities experience higher level of unemployment than those living without disabilities.

As per the Kenyan population census of 2019, 2.2 percent of Kenyans live with some disability. The prevalence of disability dropped sharply when compared to 3.5 percent from the 2009 census; 2019 census showed a sharp drop in disability prevalence. In terms of the various categories, the prevalence of disability among men dropped from 3.7 percent in the 2009 census to 1.9 percent according to 2019 census. Between 2009 and 2019, the percentage of women with disabilities decreased from 3.9% to 2.5%. Additionally, there were more people with disabilities living in the countryside (2.6%) compared to those in the cities (1.4%), as claimed by KNSPWD 2019.

The poverty rate for persons with severe disabilities in Kenya is 42%, with 2.2% of Kenyans living with disability of various forms, most of who live in rural area (KNBS, 2019). They are seen as outcasts and liability. Often such persons are neglected and excluded from social and economic participation and in financial access from the mainstream financial institutions (KNSPWD, 2019). Although some PWD comes from the wealthiest, developed and inclusive societies, some still face poverty, vulnerability, marginalization and even destitution. (Ondieki, 2018). In Kenya, poverty and disability have a strong correlation, with around 67% of PWDs living in poverty. Unfortunately, the majority of PWDs in the country do not benefit from the cash transfer programme as it only targets individuals with severe disabilities (Tirka, 2020). Nonetheless, the Kenyan government has implemented measures to provide support to PWDs and their families. For instance, the National Development Fund for Persons with Disabilities offers a cash transfer programme to support assistive devices, while funds and grants are available to help with education expenses. However, awareness barriers hinder access to these benefits, especially in rural areas. Financial inclusion still remains a challenge despite these measures especially among the mainstream financial institutions (Ondieki, 2018).

Ensuring that all people are included in the many developments within society is the goal of the UN Agenda 2030 for Sustainable Development Goals (SDGs). This means that PWDs should not be excluded from discussions on issues that are supported by the SDGs, including gender equality, poverty, good education, health and wellbeing, hunger, clean and affordable energy, inclusive industry, decent work, infrastructure, the effects of climate change, innovation, sustainable cities and communities, peace and justice, and clean water and sanitation. The goal is to ensure that the SDGs are fully implemented, leaving no one behind in the process.

In terms of legislation and policy framework, Kenya has adopted policies geared towards economic empowerment of PWDs. The plan to incorporate and integrate PWDs started in harness in 2000 when active advocacy for their integration and inclusion attracted global consideration; culminating into the establishment of the UN Convention on the Rights of Persons with Disabilities (UNCRPD) in 2006. In 2003, the Persons with Disabilities Act was put into effect in Kenya to support and safeguard the rights of individuals with disabilities. As a result, the National Council for Persons with Disabilities (NCPWD) was founded on 2004, with members drawn from the government ministries and organizations dedicated to advocating for the rights of PWDs. This Act was later revised in 2016 to include among other rights, the mandatory requirement that any institution has to provide a friendly environment to persons with disability. The NCPWD was then vested with the mandate of ensuring that all policies in the government

including its plans and programmers promotes the needs, aspirations and interests of PWDs. This goes as far as securing employment opportunities for PWD in the Public Service (Republic of Kenya,2016). There have been deliberate efforts to enhance inclusivity by empowering people with disabilities and including them in political and socio-economic development. Kenya signed and ratified the UNCRDP in accordance with Article 2 (6) of the Kenyan constitution, as stated by Onsomu, Mose, and Munene in 2022.

The constitution of Kenya 2010 through Articles 27(4) advocates for equal protection and benefits of the law for all. Further Articles 54 emphasizes on respect and dignity for PWDs, this has compelled the government to put financial inclusion measures towards improving lives and livelihood of PWDs.

Statement of the Problem

The need towards solving the financial challenges facing the PWDs is gaining traction in Kenya. According to the 2019 census, 2.2% of Kenyans are PWDs. The 2019 census revealed that 1.9 percent of gentlemen are PWDs while women constitute 2.5percent. Most disabled persons in Kenya live in rural areas and they lead a very miserable life reason being they are not able to meet their daily needs as they are living in poverty (Kenya, population Census, 2019). They are seen as outcasts and liability. Often such persons are neglected and excluded from social and economic participation. Such persons are not exposed and do not even know that they have rights that protect them (Ondieki, 2018).

According to the NCPWD (2019) most PWDs in Kenya are languishing in poverty owing to their exclusion from employment, inability access to education and failure to appropriately address their needs like healthcare needs. The high levels of poverty also implies that their financial capacity becomes limited as they have low income levels which cannot sustain their expenditure for instance medical expenditure and cost of maintaining the aiding tools that they use (International Labour Organization, 2014). Through the National Council of Rights of PWDs, there is an increased emphasis towards addressing the financial needs of the PWDs in Kenya. This is meant to eliminate poverty among the PWDs as well as making them productive members of the society through disability mainstreaming programs. The financial inclusion of the PWDs ensures additional benefits by not only eliminating poverty but also helps in national development (Ondieki, 2018). Vision 2030 under the economic pillar gives prominence to financial inclusion as central in economic growth.

The government has endeavored to increase financial access among the PWDs through its cash transfer program which increased from 14,518 households in 2013 to 52,757 households in 2022 (KIPPRA, 2022). Despite the government efforts, the PWDs still faces the challenge of financial access from the mainstream financial institutions like the banks and SACCOs leaving them to informal financial channels which often attracts extremely high interest rates. According to FinAccess Data (2019), only 13.1 percent of the PWDs accessed finances from the SACCOs and 41.2 percent accessed finance from the banks. Further the data also indicated that 45.7 percent accessed data from informal finance channels. These leaves out a sizeable population of PWDs without access to financial services and as a result become unable to improve their welfare.

Although Financial inclusion (FI) is one of the pillars that supports improvement of household welfare among people living with disabilities, very little research has been undertaken to determine its outcome on the welfare of households of PWD. For instance, Wameyo (2015) studied the nexus between the microcredit services and self-help groups growth for PWDs in Kenya. The study did not however address the financial inclusion of PWDs and the aspect of household welfare as measured by the per capital household income and expenditure. This study examined how financial inclusion has impacted on the household welfare as determined by household income and expenditure. In their 2018 study, Mwangi and Atieno examined how financial inclusion affects consumption expenditure in Kenya. However, they did not investigate financial inclusion specifically for PWDs, which was the key focus of this study. Additionally, their study did not demonstrate the nexus between FI and household welfare of PWDs. Other studies were done in other jurisdictions outside Kenya. For instance, a study by Limaye (2016) on disability mainstreaming through

financial inclusion focused on the Indian context whose policies and operating framework is different from that of Kenya. This therefore implies that the past studies have contextual and conceptual gaps which the study aimed to fill by specifically addressing financial inclusion and household welfare of PWDs within the Kenyan context. The research aimed at answering the following research questions:

- What is the effect of financial inclusion on welfare of people living with disability in Kenya?
- How does education empowerment influence household welfare of persons living with disabilities in Kenya?
- What is the effect of household expenditure on household welfare of persons living with disabilities in Kenya?

METHODOLOGY

The research adopted explanatory research design to clarify the relationship between the studied variables. The study used secondary data on the Kenyan National Census (2019). The records for the PWDs on the aspects being analysed; household expenditure, education and financial inclusion was obtained from KIHBS and KIPPRA. The data was compared and average figures calculated.

Theoretical Framework

The study was backed up by four theories, one is the Financial Inclusion Theory which advocates for an efficient system of accessing finances as an impetus for an environment of economic growth (Serrao (2012). Second is the Inclusion Theory which highlights the essence of financial inclusion in helping households with PWDs to address their needs. Three is the Theory of Consumer is helpful in the study in understanding the nexus between housing expenditure and household welfare of PWDs since the theory expounds on consumption which is manifested through expenditure. Finally, the Vulnerable Group Theory seeks to comprehend the financial inclusion among the PWDs in Kenya who happen to fall under the vulnerability category.

Empirical Model Specification

The study's model specification was grounded on the variables utilized in the study which fits a linear mathematical equation in 3.1 below. The linear model is used when a researcher wants to investigate the connection and relationship linking two sets of variables, where one is dependent on the other. This applies to the theoretical framework of financial inclusion, education, and household expenditure, as explained by Rencher and Schaalje (2008).

$$Y = \beta_0 + \beta_1 X + \varepsilon \dots\dots\dots (1)$$

where; Y is the dependent variable , in this study it is the household welfare of PWD while X is a proxy for the predictor or the independent variable in this study its the financial inclusion.

The variable ε in the model represent the error term. It accounts for measurement errors, random fluctuations or the impact of factors beyond our control. The study's objective involves multiple predictor variables based on a multiple linear model, as shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots (2)$$

Where;

Y : Household welfare of PWD in Kenya between 2000 and 2023

X1 : Financial Inclusion (count of PWDs who accessed credit/cash transfer)

X_2 : Household Expenditure (count of PWDs who utilized the finances in making payment for utilities & purchases)

X_3 : Education empowerment (level of education measured using the schooling years for PWDs) 8 years for primary education, 12 years for secondary education, and 14 years for tertiary education)

β_0 : Constant term

β_1, \dots, β_3 : Regression Coefficients that indicate diverse importance level

ε : Error term

Empirical Results and Discussion

Regression Analysis Results

Table 1

Household Welfare	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]	
Financial Inclusion	0.0520	0.0103	5.06	0.000	0.03060	0.07350
Household Expenditure	0.0110	0.0063	1.75	0.096	0.00219	0.07350
Education Empowerment	0.0280	0.0045	6.22	0.000	0.01859	0.03734
Constant	8.0198	0.2012	39.86	0.000	7.60007	8.43951
Number of Obs	=	24				
F (3, 20)	=	25.24				
Prob > F	=	0.00				
R-squared	=	0.791				
Adj R-squared	=	0.759				

Source: Author's Computation from Research Data (2024)

The regression model that was used is;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots \dots \dots (3)$$

Where; Y=Household welfare

X_1 =Financial Inclusion

X_2 = Household expenditure

X_3 =Education

ε =Error term

Based on the findings in Table 1, the regression model thus becomes;

$$Y = 8.0198 + 0.052X_1 + 0.011X_2 + 0.028X_3 + \varepsilon \dots \dots \dots (4)$$

From the results in Table 1 above, the study established that the coefficient of determination (R²) was 0.791 while the adjusted R² was 0.759. According to Greene (2008), the coefficient of determination (R²), is used to determine the percentage of variations in the dependent variables due to changes in the independent variables. From the finding, it can be concluded that; financial inclusion, household expenditure and education empowerment explains 75.9 percent of the changes in the welfare of PWDs (dependent variable).

In the study, the first goal was to determine how financial inclusion affects the welfare of people with disabilities (PWDs). According to the results presented in Table 1, it is evident that a one-unit increase in financial inclusion of PWDs leads to a significant 0.052 times increase in their welfare. The p-value of 0.000 indicates that the impact of financial inclusion was indeed significant. These findings align with those of DeLoach and Smith-Lin (2018) which established that financial inclusion had helped in improving the welfare

of families in Indonesia specifically health. In another study, Nanziri (2016) established that financial inclusion in South Africa had helped in reducing poverty hence improving the welfare of people. A study by Addury (2019) also found a significant correlation between financial inclusion and household income in Indonesia.

Examining the impact of household expenditure on the welfare of individuals with disabilities (PWDs) was the study's second objective. Holding other parameters constant, Table 1's results show that an increase of one unit in household expenditure leads to a non-significant rise of 0.011 times in PWDs' welfare. It is clear from the p-value of 0.096 that the effect was not significant. These results conflict with the majority of earlier research, which found a strong correlation. For instance, a study by Dupas and Robison (2013) on women market vendors in a village in Western Kenya investigated the relationship between household expenditure and savings. The randomized control trial (RCT) found that users of savings products increased their private expenditure by 13%. In another study, Bernerjee *et al.* (2015) discovered a positive correlation between household expenditure and improvement of well being.

Finally, examining the impact of education empowerment on the welfare of PWDs was the study's third and final objective. From the study findings, when all other factors are held constant, a unit increase in education empowerment significantly raises the welfare of PWDs by 0.028 times. The impact of education empowerment is significant, as indicated by the p value of 0.000. Studies in the past have also shown a link between household welfare and education empowerment. A study by Fafchamps and Shilpi (2014) on education and household welfare in Nepal between 2001 and 2010 found that those families with better education had been able to improve their welfare in comparison with those that had less education. Ogundari and Aromolaran (2014) evaluated the household well-being because of education in Nigeria from 2000 to 2012 and found a positive relationship.

Discussion of the Results

Per capita household spending was used to measure the dependent variable, which was the household welfare of PWDs, and it was then regressed against three independent variables: financial inclusion, household expenditure, and education empowerment for PWDs. In order to regress the result variable against the predictor variables, the study examined secondary data spanning the years 2000 to 2023. The Kenya National Bureau of Statistics (KNBS), the 2019 Kenya National Population Census report, and the Kenya Integrated Household Budget Survey were some of the platforms from which this data was obtained. Data analysis was carried out using statistical tools such as regression analysis, diagnostic analysis, descriptive analysis, and Pearson's correlation analysis using the SPSS software.

Based on the findings, the research established that the coefficient of determination (R^2) was 0.791 while the adjusted R^2 was 0.759. From the finding, it can be concluded that; financial inclusion, household expenditure and education empowerment explains 75.9 percent of the changes in the welfare of PWDs.

The study's primary goal was to determine how financial inclusion affected the welfare of PWDs. The results show that PWDs' welfare significantly increases by 0.052 times for every unit increase in financial inclusion. The considerable impact of financial inclusion is indicated by the p value of .000.

Examining the impact of household expenditure on the welfare of PWDs was the study's second goal. According to the findings, while all other factors remain constant, a unit increase in household expenditure results in a non-significant rise in PWDs' welfare of 0.011 times. The effect was not significant, as indicated by the p-value of 0.096 which is >0.05 .

Ultimately, the study's third goal was to investigate how education empowerment affects the welfare of PWDs. According to the study's findings, when all other factors are held constant, a unit increase in education empowerment significantly raises the wellbeing of people with disabilities by 0.028 times. The tremendous impact of education empowerment is indicated by the p value of .000.

CONCLUSION AND RECOMMENDATIONS

The study underscores the significant and positive impact of financial inclusion, and education empowerment on the welfare of persons with disabilities (PWDs) in Kenya. Household expenditure was found to be non-significant. In terms of financial inclusion, the study affirms that providing financial services to PWDs significantly enhances their well-being, emphasizing the importance of accessible financial opportunities. Finally, with education empowerment, education emerges as a crucial factor in enhancing the welfare of PWD households, stressing the need for investment in educational initiatives tailored to this community.

Based on the above conclusions, the study proposes the following policy implications:

Enactment of legislation on financial inclusion of PWDs in Kenya as an avenue for boosting the economy is an added advantage. Therefore, the study urges the government, particularly through the National Council of People with Disabilities, to enact legislation promoting financial inclusion for PWDs. This entails not only providing financial services but also developing the necessary infrastructure to facilitate accessibility. Another recommendation is the need of clarifying the objective of each financial inclusion initiative. Policymakers and practitioners should clearly define the objectives of financial inclusion initiatives for PWDs. This clarity will aid in assessing the effectiveness of each initiative and ensure alignment to improve household welfare. In terms of promoting investment, both public and private sectors should be encouraged to invest in financial inclusion initiatives for PWDs. Additionally, policies fostering inclusivity should be prioritized to support marginalized communities. Lastly, the study showed a positive relationship between education empowerment and household welfare of PWDs, thus the government should investment in education initiatives for PWDs and create more awareness of the same.

Areas of Further Research

- **Examining other socioeconomic aspects:** To give a thorough evaluation of the effects of financial inclusion, future research might explore socioeconomic aspects such as independence and self-esteem that go beyond household welfare.
- **Regional Analysis:** Similar research might be carried out at the regional level, particularly for each county in Kenya, to provide a more detailed understanding of the variables affecting PWDs' welfare in various regions.
- **International Analysis:** To compare findings and provide highlights of how other nations use the element of financial inclusion to improve PWDs' household welfare, a comparable study carried out in a different country will be highly beneficial.

Disclosure Statement

I wish to confirm that there is no known conflict of interest concerning the publication of this document.

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