Lives among the agile: Lived experiences of people living with physical disability in Northwest Nigeria

Yusuf Karkarna Mustapha

A thesis submitted for the degree of Doctor of Philosophy in Public Health

School of Health and Social Care

University of Essex

December 2023

Abstract

Research Aim

This study addresses the shortage of research on individuals with physical disabilities in North-western Nigeria. Focusing on the lived experiences of People Living with Physical Disabilities (PLwPDs), the research explores daily navigation, sustenance, resource utilisation, and relationship cultivation within local communities.

Methodology

Employing a narrative storytelling approach, the study documents the experiences of 15 participants through digital audio recordings, supplemented by visual data such as photographs and video diaries. Labov's narrative analysis framework, assisted by NVivo software, facilitated the data analysis.

Findings

The research unveils significant barriers to education, successful navigation of social and environmental challenges, adaptability, resourcefulness in accommodating needs, challenges in forming lasting partnerships, and the government's role in the lives of PLwPDs. Notably, PLwPDs exhibit remarkable resourcefulness, creatively crafting mobility aids such as tricycles to overcome non-disability-friendly environments.

Additionally, the study emphasises the ingenuity of PLwPDs in addressing environmental challenges, particularly through the creation of tricycles and rollers for navigating rough terrains. Despite limited resources, PLwPDs display resilience, which can be attributed to efforts from disability centres and charity organisations providing training for self-sustainability.

Conclusion

This research underscores the resourcefulness of PLwPDs in North-western Nigeria, thus contributing to the 2030 Sustainable Development Goals. The findings offer insights for shaping public health practices and policies, particularly in relation to disability support and accessibility in Nigeria.

ACKNOWLEDGEMENTS

بِسْمِ اللَّهِ الرَّحْمَٰنِ الرَّحِيمِ

In the Name of Allāh, the Most Gracious, the Most Merciful

I would like to take this opportunity to express my heartfelt gratitude and appreciation to the individuals who have been instrumental in my journey throughout the completion of this PhD thesis. Their unwavering support, encouragement, and sponsorship have played pivotal roles in shaping my personal and academic endeavours.

First and foremost, I am deeply indebted to my loving parents for their unconditional love, belief in my abilities, and financial support. Their unwavering faith in me and willingness to invest in education have been invaluable. Without their support, this research would not have been possible. I am forever grateful for their sacrifices, which enabled me to pursue my academic aspirations.

I am also immensely grateful to my esteemed supervisors, Professor Winifred Eboh, and Dr. Stephen Wood, for their invaluable guidance, expertise, and support throughout the completion of this PhD thesis. Their supervision and dedication have been instrumental in shaping my research and personal growth. Together, their collaborative efforts, extensive knowledge, and commitment to excellence provided me with a solid foundation upon which I built my research.

Furthermore, I would like to extend my heartfelt appreciation to my brothers and sisters for their encouragement and support. Their words of motivation, understanding, and reassurance during the challenging moments of this journey have been a constant source of inspiration. Their unwavering belief in my abilities and their ability to lift me when I needed it most have been instrumental in my success.

I would also like to express my gratitude to my academic advisors, professors, and mentors, whose guidance, expertise, and commitment shaped my research and intellectual growth. Their willingness to share their knowledge, challenge my ideas, and provide valuable feedback has been invaluable for refining my work and expanding my academic horizons.

Additionally, I would like to extend special acknowledgment to the remarkable individuals with physical disabilities at the disability centre whom I have had the privilege to work with. Their resilience, determination, and unique perspectives have deeply affected my research and personal growth. Their strength and unwavering spirit have inspired me, and through our interactions, I have gained profound appreciation for the importance of accessibility, inclusion, and equal opportunities for all individuals, regardless of their physical abilities. Their stories have shed light on the barriers faced by individuals with physical disabilities while also showcasing their incredible talents, resilience, and ability to thrive in the face of adversity.

To the individuals at the disability centre, I extend my deepest appreciation for their willingness to share their experiences, collaborate with me, and help me gain a deeper understanding of the challenges and opportunities faced by people with physical disabilities. Their presence has profoundly influenced my research, reminding me of the importance of creating a more inclusive society in which everyone’s voices are heard and valued.

Finally, I extend my sincerest appreciation to all those who have supported me in various ways (especially those in the PhD space, including Roomi, Seyma, Olajumoke, and Obindra). Their unwavering support has had a significant impact on my personal and academic growth, and I am honoured to have had them by my side throughout this remarkable journey. I would also like to give special thanks to my good PhD buddy Dr. Lucia Collen, for her support and assistance throughout this PhD Journey.

Table of Contents

Table of Figures

Table of Tables

Table of Images

Chapter One

Introduction

1.0 Chapter overview

This thesis explores the lived experiences of People Living with Physical Disabilities (PLwPDs) in North-western Nigeria. I used an adapted narrative approach to comprehend the diverse realities faced by these individuals. To enhance the textual insights, I incorporated visual elements, such as photographs and video diaries, to validate and triangulate the participants' narratives. These visuals were thoughtfully centred on various settings, including schools, workplaces, hospitals, and disability support centres. Care was taken to ensure participants' privacy by refraining from intruding into personal living spaces.

In this chapter, my aim is to set the stage by introducing key concepts and terms that constitute the foundation of this thesis. I provide concise explanations of physical disabilities, different models for understanding disabilities, and the socio-cultural context of Nigeria, with a specific focus on the northern region. Furthermore, I outline the healthcare and education systems within the country. Throughout the thesis, I navigate between using both first-person and third-person perspectives, allowing for a blend of personal reflection and objective analysis.

1.1 Definition of Key Terms.

To explore the lived experiences of PLwPDs in North-western Nigeria, I recognised the critical importance of establishing clear and precise definitions for terms such as 'physical disability', 'disability', and 'impairment' within the scope of this study. These definitions serve as the foundation, providing clarity and coherence to my research. By adapting established definitions, I underscore my dedication to methodological rigour and the advancement of discourse in disability studies.

1.1.1 Physical Disability

Physical disability encompasses any condition that impedes an individual's mobility, stamina, dexterity, or physical capabilities. This category encompasses a wide range of conditions, including but not limited to multiple sclerosis, brain or spinal cord injuries, cerebral palsy, epilepsy, respiratory disorders, and visual and hearing impairments (Üstün, 2010; Rubisch et al., 2016; Adeloye et al., 2018). Throughout this study, the terms “physical disability”, “impairment”, and “disability” are used interchangeably. The use of derogatory language is avoided, so the term “cripple” was substituted with “physical disability”, unless it was directly quoted from the participants themselves.

1.1.2 Disability

According to the Centre for Disease Control (2020), disability is any mental or physical condition that obstructs an individual from engaging in activities or effectively interacting with their environment. The definition matches the description provided by the Office of Disability Issues’ report concerning the Equality Act of 2010. The report characterises disability as a prolonged and substantial impairment – whether mental or physical – that curtails an individual’s capacity to carry out routine activities (Centre for Disease Control, 2020).

1.1.3 Impairment

Impairment refers to the absence or notable deviation in an individual’s physical or mental functioning (Centre for Disease Control, 2020). Structural irregularities or deficiencies in body parts or mental faculties can lead to impairments, such as difficulties in hearing or vision and are largely caused by ear or eye structural problems or difficulties with mental functioning due to structural brain anomalies.

1.2 Position of the Researcher and Reflective Statement

In the realm of scholarly exploration, my journey encompassed more than just investigating the research topic; it also entailed a deep exploration of my own personal experiences. This introspective aspect added layers of depth to the study, revealing the intricate interplay between my life and the research that I conducted. This reflective storytelling provides a window into the various influences shaping my trajectory and perspective throughout the study (Lincoln, Lynham and Guba, 2011; Yang, 2015; Mann, 2016).

As an individual who has confronted physical disability, investigating the story of others facing similar challenges compelled me to reflect on my own experiences and the motivations driving my research. My formative years were marked by encounters with polio and sickle cell disease which brought about discrimination, stereotyping, and a sense of isolation. Negotiating educational pathways proved demanding due to the lack of accommodating structures and facilities for someone with my condition. In primary school, I had to navigate by crawling on my hands and knees due to mobility challenges and inadequate accessibility. Nevertheless, I managed to complete my secondary school education despite these hurdles.

These challenges were not limited to my educational journey; they extended to the surrounding environment. The physical environment that I grew up in presented obstacles, prompting contemplation about my identity, sense of belonging, and resilience. Simple walks turned into taxing endeavours due to open drains on the streets. Establishing connections and forming friendships proved challenging due to my mobility limitations. I observed a world in which physical disability often triggered fear or unwarranted treatment from others. This prompted me to reflect deeply on how the community's perceptions influenced my own self-perception.

A pivotal turning point came when I made the decision to undergo surgery to address my physical challenges. This pursuit, driven by a yearning for independence, underscored the inherent unpredictability of life. Despite the hurdles and extended hospital stays, this quest for personal growth not only contributed to my academic accomplishments but also gave me a clearer sense of purpose. The challenges I confronted during my educational journey highlighted my resilience, ultimately steering me towards achieving a bachelor's degree, a master's degree, and driving me to pursue a PhD. While this is the motivation for conducting this PhD, it also raised the question, 'To what extent did it influence my data collection and analysis?' I answer this question in Chapter Two, where I provide a detailed reflective account of my experience and how it influenced this research, as well as any potential biases that might arise.

The narrative of my reflection created a bridge between my personal experiences (expounded upon in Chapter Two) and my scholarly research. After spending time in the United Kingdom (UK), my curiosity was piqued about the struggles faced by individuals with physical disabilities in Northern Nigeria. This focus emerged from the research gap in this domain, particularly within the North-western region of the country.

The research methodology that I adopted, centred around storytelling sessions to gather individuals’ narratives, resonated with the North-western Nigeria’s cultural approach to sharing knowledge (Kuokkanen, 2000; Tuwe, 2016). A central concern was to ensure that my research was conducted with respect and authenticity, guided by decolonising methodology principles. In Chapter Four, I provide a detailed explanation of what decolonising methodology entails. The use of storytelling served to break the silence surrounding subjects that have been inadequately addressed, especially in the Global South.

Transitioning from reflecting on my personal experiences to investigating the lives of others with disabilities involved a series of deliberate phases. Initially, I conducted an in-depth review of existing research on physical disabilities in Nigeria to comprehend the extent of the main issues prior to this research (this is followed up in Chapter Three). Subsequently, I embraced storytelling as a research approach, aligning with the cultural norms of Northern Nigeria and the goal of amplifying marginalised voices (this is followed up in Chapter Four). Before embarking on the primary research, I conducted a preliminary small-scale study (pilot study) to evaluate the effectiveness of this approach in eliciting meaningful narratives (this is followed up in Chapter Five).

1.3 Disability: A Rethinking of Perspectives

For more than two decades, Western industrialised societies have predominantly perceived disability through the lens of the prevailing medical model (Barnes and Mercer, 2010; Mitchell, 2018). This perspective emphasises functional limitations, pathology, and deficits (Barnes and Mercer, 2010). Mitchell’s (2018) research echoes this viewpoint, historically portraying disability solely from a medical standpoint. This portrayal depicts People with Disabilities (PwDs) as “sick” and dependent, thereby reinforcing submissive roles. In some societies, disability is stigmatised, leading to the perception of PwDs as a burden (Barnes and Mercer, 2010; Mitchell, 2018). This perpetuates social disadvantages and dependency and justifies interventions by health and welfare professionals. Consequently, a range of public attitudes have emerged, spanning from indifference to sentimentality, hostility, and rejection of those who do not conform to established norms (Barnes and Mercer, 2003; 2010).

However, within this prevailing narrative, the broader reality of disability often goes unnoticed. The World Report on Disability emphasises that nearly everyone will encounter temporary or permanent impairment at some point, especially as aging individuals face increasing mobility challenges (Barnes and Mercer, 2003; World Health Organization, 2011; Orlin et al., 2014). Disabled family members are not uncommon within extended families, often leading non-disabled individuals to take on caregiving roles (Orlin et al., 2014). As demographic shifts occur, this challenge is becoming more pronounced, particularly due to an aging population (World Health Organization, 2011).

Yet, scrutinising the language we use when discussing disability is crucial, as it mirrors societal attitudes. From the outset, careful language selection is essential to avoid unintentionally demeaning PwDs (Barnes and Mercer, 2003; Berger, 2013). This involves refraining from using derogatory terms like “spastic”, “gimp”, or “retard”. It also includes avoiding adages that conflate mental and physical impairments (“the blind leading the blind”), or convey indifference (“turning a deaf ear”). Even terms such as “invalid” suggest illegitimacy rather than referring to a person with a physical disability. In contemporary disability studies, a focus on “person-first” language is common, such as “persons with disabilities”, which emphasises the individual before their disability. In the UK, the term “disabled people” is embraced to promote a positive identity and acknowledge the collective struggle of a specific political constituency (Barnes and Mercer, 2003; 2010; Berger, 2013).

However, understanding these nuances can be challenging for those without disabilities, especially when PwDs do not find certain terms offensive, in the same way that the word “queer” is embraced within the LGBTQ+ community. Terms like “physically challenged” or "differently abled" attempt to be more respectful; nevertheless, Berger (2013) argues that these terms often fall short, serving as well-intentioned but inadequate substitutes. Even the term "special education" illustrates this complexity, as the word "special" attempts to legitimise educational practices but inadvertently underscores society's lack of genuine interest in either education or the students (Barnes and Mercer, 2010; Berger, 2013).

1.4 Models of Disability

In the context of my research, which aimed to explore the lived experiences of PLwPDs in North-western Nigeria using an adapted narrative research approach, the examination of disability models took on heightened significance. These models provided essential frameworks for comprehending the origins of disability, influencing societal attitudes and actions, and impacting psychological, political, and economic outcomes (Shakespeare, 2004; 2007; Berghs et al., 2016; Dirth and Branscombe, 2017).

The complexity of these disability models became evident as they intersected with the focal point of my study. While an array of diverse definitions and models tailored to various organisational objectives exists (Bennett and Volpe, 2018), a pivotal dichotomy emerged: the medical model; and the social model of disability (Marks, 1997; Shakespeare, 2004; 2007; Shakespeare and Officer, 2011). Therefore, when trying to understand the lives of PwDs or disability in general, these two models play an important role. As a result, I examined medical and social models alongside other models in the context of this research and where it can be situated.

Furthermore, as I explored the medical model, I recognised its emphasis on medical diagnosis and intervention, particularly in the realm of healthcare practices for PwDs (Marks, 1997; Retief and Letšosa, 2018; Berghs et al., 2019a; Ware and Schuelka, 2019). This model's focus on medical needs aligned with the experiences of PwPDs who navigated their physical challenges within healthcare systems while seeking fuller participation in society and ways to reduce the challenges they face.

However, in much of the Global South, disability is often seen through the lens of the charity model, which portrays PwDs as recipients of support due to their affliction (Ware and Schuelka, 2019).

This view is especially reinforced in places like Nigeria, where practices such as almsgiving are deeply ingrained in cultural and religious traditions (Haruna, 2017; Ware and Schuelka, 2019), hence, resulting in PwDs begging on the streets for almsgiving and sustenance as I discuss in detail in Chapter Three and Seven respectively. Nevertheless, in contrast to the charity model, the medical model posits disability as inherent, arising from impairments and necessitating medical intervention (Retief and Letšosa, 2018; Ware and Schuelka, 2019; Disability World, 2020). This perspective historically justifies segregating PwDs, supposedly for their well-being (Ware and Schuelka, 2019).

While these models were effective, they have also attracted criticism. The medical model's prioritisation of normalcy and the notion of an idealised body could marginalise PwDs, branding them as deviations from societal norms (Berghs et al., 2016; 2019a; Ware and Schuelka, 2019). My study's focus on narratives allowed for a nuanced understanding of PwPDs' experiences that challenged such oversimplified views. Interestingly, while some bioethicists and healthcare practitioners leaned toward the medical model, its application proved contentious. For example, discussions on cochlear implants led to divergent opinions within the deaf community, where such interventions were not universally seen as advantageous (Bennett, 2017; Bennett and Volpe, 2018).

My research also intersected with the social model, which attributes disablement to societal barriers rather than inherent impairments (Ware and Schuelka, 2019; Disability World, 2020). This viewpoint particularly resonated with my study's goal of unravelling the social fabric influencing PwPDs' experiences in North-western Nigeria. The establishment of the Organisation of People with Disabilities (OPDs) and Global Disability Rights Policies, such as the United Nations Convention on the Rights of Persons with Disabilities (CRPDs), underscored the significance of the social model (Berghs et al., 2019a; Human Rights Watch, 2019).

However, I acknowledge the ongoing debate over the universal applicability of the social model. Critics have argued that the model's origins and principles might not encompass the diverse cultural and socioeconomic contexts found in the Global South, especially in North-western Nigeria (Shakespeare, 2004; 2007; Dirth and Branscombe, 2017; Ware and Schuelka, 2019). This recognition prompted me to explore the unique sociocultural, religious, and political environments shaping disability experiences in these regions more deeply (Berghs et al., 2019b; Ware and Schuelka, 2019).

In this pursuit, my investigation into disability models converged with the central aim of my research – to explore the lived experiences of PwPDs in North-western Nigeria. By comprehending and critically engaging with these models, I aimed to provide a more comprehensive perspective on how these theoretical frameworks intersected with individuals' realities. Through narratives, I sought to explain the intricacies, complexities, and interplay between these models and the day-to-day experiences of PwDs within a distinct cultural context.

1.5 Towards Inclusivity: A Reflective Exploration of Intersectionality in Disability Studies Research

Disability studies research has long aimed to give a voice to individuals with disabilities, who are often marginalised in society and frequently lack decision-making agency. However, upon closer examination, a significant flaw emerges within this field: despite its professed inclusivity, conventional disability studies research tends to oversimplify the experiences of those with disabilities (Shaw, 2012; Goethals, 2015). There is a tendency to homogenise PwDs, neglecting the influence of factors such as gender, age, cultural background, sexual orientation, socioeconomic status, and religion. Consequently, the focus on “disability” often obscures the intricate interplay between various determinants, raising questions about who truly benefits from such research and which segments of the disabled community are overlooked.

In response to these shortcomings, an increasing number of disability studies scholars have embraced intersectionality, recognising the importance of considering multiple dimensions of identity. Scholars such as Shaw (2012) and Goethals (2015) have urged researchers to explore the diverse experiences within the disabled community. It is crucial to acknowledge that individuals occupy multiple social positions simultaneously, experiencing both privilege and oppression. By adopting an intersectional approach that examines disability alongside other social categories such as gender, religion, income, and cultural background, the intricate power dynamics and complexities of identity become more apparent.

Intersectionality offers a nuanced perspective, highlighting how different social categories intersect and influence one another. Rather than simply aggregating categories, intersectionality seeks to understand how they interact and shape individuals' experiences. Additionally, it sheds light on how power dynamics are perpetuated, often at the expense of marginalised groups whose voices are frequently unheard.

Disability is not a monolithic identity; it encompasses a multitude of experiences and perspectives (Goethals, 2015). These understandings challenge the notion proposed by the social model of disability (Shaw, 2012), emphasising the need for a more comprehensive perspective that recognises individual experiences and the variability of disability over time and in different contexts (Shaw, 2012; Goethals, 2015; Wickenden, 2023).

Lived experience approaches have increasingly gained traction in disability studies research, aiming to amplify the voices of individuals with disabilities and provide a platform for marginalised perspectives (Shaw, 2012; Goethals, 2015; Wickenden, 2023). Central to this approach is the recognition of researchers' reflexivity, acknowledging how their own narratives shape both the research process and the subjects under study. This reflexive approach has prompted critical reflection on traditional positivistic research models (Rinaldi, 2013; Crooks, Owen and Stone, 2012).

Scholars such as Goethals (2015) and Shaw (2012) have argued that lived experiences disrupt dominant narratives surrounding disability, offering insights into the embodied realities and complexities of the disabled experience. Wickenden (2023) suggests starting from embodied realities and experiences rather than preconceived subject positions, echoing the need to centre personal experiences in research endeavours.

In this research, I was not able to delve extensively into intersectionality as it is not the main aim of the study. Instead, the thesis concluded by drawing from the lived experiences of PwPDs and how their experiences intersect with gender, age, ethnicity, socio-economic background and religion. Additionally, as intersectionality is still an emerging aspect of disability studies, with limited research addressing its intersection with disability in the context of lived experiences, the conclusion offers my reflective perspective on intersectionality in connection with the findings of this research.

1.6 Brief context of the regions under study

Studying the lives of PLwPDs in North-western Nigeria requires a holistic understanding of the region's demographic background, healthcare and educational systems, and the consequences of insurgency, as these contextual factors collectively shape the experiences, challenges faced by, and opportunities available to PwDs in the region (Almu, Adesina and Kanmodi, 2019).

Nigeria is ranked as the 14th largest African nation. United Nations data highlights Nigeria's rapid population growth due to high birth rates, making it the seventh most populous country globally, with a population of approximately 195 million people and a 2.43% annual population growth rate (United Nations: Division for Social Policy and Development (DSPD), 2017; United Nations Development Programme, 2018; United Nations, 2022). This trajectory is projected to continue, with the figure estimated to have risen to 398 million people by 2050. Notably, males comprise 51% of the population, while females account for 49%, and there is a high dependency ratio of 88%.

Nigeria has a diverse population consisting of 371 ethnic groups, which can be divided into Hausa, Igbo, and Yoruba, along with various religious affiliations—50% Muslim, 40% Christian, and 10% indigenous beliefs (Sango, 2017; Nigeria Country report, 2018). The regional division between the Christian South and Muslim North has historical and economic implications, with densely populated states like Kano and Lagos contrasting with less populated areas like Bayelsa (United Nations Development Programme, 2018; Almu, Adesina and Kanmodi, 2019). Nigeria's youthful population, with 43% of people under 14 years old and a median age of 18, underscores the importance of its 51% rural population and rural-urban disparities.

Despite a robust economy driven by abundant resources, including crude oil, Nigeria faces vulnerabilities due to oil dependence. Its nominal GDP surpasses $500 billion, but fluctuations in oil prices have led to volatile GDP growth, ranging from 8% in 2006 to 1.5% in 2016 (Mayah et al., 2017; Archibong, 2018). Regional disparities are evident, with the oil-rich South contrasting with the challenged North, marked by limited access to education. Agriculture, which contributes a fifth of the country's GDP, faces obstacles such as outdated equipment and inadequate infrastructure (Almu, Adesina and Kanmodi, 2019). Nigeria's ranking of 152 in the Human Development Index in 2016 highlights the need for progress, despite improvements in life expectancy, income per capita, and education. Understanding Nigeria's demographics, economics, and social dynamics lays the foundations for a nuanced examination of PwPDs in the North-western Nigeria. This contextual understanding is paramount, as it enables a comprehensive exploration of their lives within the broader societal fabric.

The geographical context of Northern Nigeria further enriches this narrative. Spanning latitudes of 4° to 14° east of the Greenwich Meridian, the region is flanked by the Benin Republic, the Gulf of Guinea, the Niger Republic, and Cameroon (Sango, 2017; Nigeria Country report, 2018). Highlighting its precise location at 11.330° N latitude and 6.890° E longitude (Figure 1), this vibrant depiction on the map of Nigeria captures the region's essence.

Figure 1: Northern Nigeria on a map

Source: Premium Times Nigeria.

Northern Nigeria flourishes as a diverse and dynamic enclave, boasting abundant natural resources, a vibrant cultural tapestry, and a conducive climate for prosperity. With roots anchored in agriculture prior to the era of colonisation, this foundation captivated foreign investors and played a pivotal role not only in Nigeria's colonisation but also in the broader African context. Blessed with rich agricultural and mineral wealth, the region has earned the country its nickname, "the giant and heart of Africa". Despite intermittent inter-tribal tensions, the allure of Northern Nigeria as a sought-after tourist destination endures. The region beckons enthusiasts and explorers worldwide to partake in its traditional festivals, such as the Arugungu Fishing Festival in Kebbi State and the magnificent Yankari Game Reserve in Bauchi State.

1.7 Public Health within the Nigerian Context

In Nigeria, approximately 6.9% of adults aged 15 and above encounter varying levels of difficulty in performing everyday tasks due to health-related issues. These challenges can range from mild to severe. Among these adults, approximately 4.6% experience some degree of difficulty, while 2.3% face more substantial obstacles (Üstün, 2010; Disability Data Initiative, 2022; World Health Organization, 2023). Notably, women tend to experience these challenges more frequently, with 7.5% of them affected compared to 6.3% of men. Additionally, age plays a significant role – as individuals grow older, the percentage of those facing difficulties increases dramatically, ranging from 1.9% for those aged 15 to 29, to a substantial 38.8% for those aged 65 and above. The most prevalent challenges include difficulties with mobility (4%) and vision problems (2.8%), among other aspects of daily life (Disability Data Initiative, 2022; World Health Organization, 2023).

Around 18.2% of households have at least one member facing some form of difficulty with daily activities (Disability Data Initiative, 2022). This can be broken down into 11.7% dealing with moderate difficulties and 6.5% facing more significant challenges. Interestingly, rural areas report higher rates of difficulty compared to urban areas – 7.4% in rural regions versus 5.8% in urban areas among adults, and 19.4% versus 15.6% among households, respectively (Üstün, 2010; Adeloye et al., 2018; World Health Organization, 2023).

Regarding education, clear disparities exist between individuals facing difficulties and those who are not. People with moderate or significant difficulties are more likely to have educational levels of lower than primary school education (57% and 62%, respectively), compared to those without difficulties (34%). This translates to a substantial gap of 23% to 28% between individuals facing some level of difficulty and those without any difficulties (Disability Data Initiative, 2022; World Health Organization, 2023).

With regards to employment, individuals with significant difficulties face lower employment rates (38%) compared to those without any difficulties (60%) (Disability Data Initiative, 2022). For individuals with moderate difficulties, the employment rate is 57%, which is not notably different from those without difficulties.

In terms of health, individuals without some significant difficulty have better access to clean drinking water compared to those with difficulties. However, this discrepancy is only significant for those facing some difficulty. Access to sanitary facilities also differs notably between those with some degree of difficulty and those without (44% versus 36%) (Üstün, 2010; Disability Data Initiative, 2022; World Health Organization, 2023).

In terms of living conditions, individuals with some or significant mobility issues also have less access to clean water compared to those without any difficulties. This distinction is particularly pronounced for those with significant difficulties, such as physical disability. Rates of access to electricity and adequate housing are relatively consistent across different disability groups (Adeloye et al., 2018; Asakitikpi, 2019). Ownership of assets displays some differences, with lower ownership rates among individuals with some or significant mobility challenges compared to those without any difficulty (Disability Data Initiative, 2022; World Health Organisation, 2023). These findings underscore the various ways in which challenges regarding daily activities intersect with different aspects of people's lives.

Shifting the focus to the healthcare system, Nigeria's Federal Ministry of Health oversees the Human Resources for Health Unit. This unit is responsible for planning, producing, and managing the national health workforce. In collaboration with the WHO, they have developed a National Human Resources Health Policy and are working on its implementation (World Health Organization, 2023). Training is provided for medical, pharmacy, nursing, radiography, and health technology professionals. However, disparities persist in the distribution of healthcare professionals between urban and rural areas, as well as shortages in specific fields (World Health Organization, 2011; 2022; 2023; Adeloye et al., 2018; Disability Data Initiative, 2022). The WHO contributes by analysing the workforce, devising plans, and bolstering the healthcare system, including initiatives at the state level (World Health Organization, 2023)

In Nigeria, many individuals must bear the cost of their medicines themselves. This is due to the lack of proper healthcare insurance and government subsidies for medications. The National Agency for Food and Drug Administration and Control (NAFDAC), which regulates drugs, is responsible for addressing issues related to the distribution of medicine and counterfeit drugs (World Health Organization, 2023). They have established a National Drug

Policy and plan, with the WHO's support. Efforts are also underway to integrate traditional medicine, aligning with the African Regional Strategy (World Health Organization, 2023). The WHO is helping to enhance health financing capabilities and utilising health expenditure data to formulate more effective policies and plans (Akanji, Ogunniyi and Baiyewu, 2002; Asakitikpi, 2019; DesRoches, 2020; World Health Organization, 2023). The significance of National Health Accounts is highlighted for informed decision-making.

The WHO is also actively contributing to the establishment of a robust National Health Information System (NHIS). It is mapping the availability of services in certain states which aids the NHIS. It also advocates for a standardised classification of health concerns and assistance in coordinating health research policies and plans at both national and state levels. Research plays a crucial role in identifying ways to enhance healthcare systems and overall development while optimising resource utilisation.

Nevertheless, the historical context reveals that colonisation introduced monetised Western medicine, resulting in standardised fees. Western medicine gained prominence post-independence, particularly in urban areas (DesRoches, 2020). Government investment in healthcare, education abroad for medical students, and the construction of modern Western hospitals were key contributors (Akanji, Ogunniyi and Baiyewu, 2002; Swartz and Bantjes, 2016; The Federal Republic of Nigeria, 2019). However, the welfare-oriented approach of the First Republic waned due to economic challenges and corruption, neglecting rural areas, and hastening the decline of traditional medicine.

Nigeria’s current government-funded healthcare system encompasses federal medical centres, state general hospitals, and local government health facilities, with Primary Health Care (PHC) playing a vital role in cost-effective treatment and preventive measures (Adeloye et al., 2018; Asakitikpi, 2019). The National Primary Health Care Development Authority coordinates PHC efforts with regional governments to ensure seamless referrals to higher-level care.

This detailed understanding sets the groundwork for studying the experiences of PwPDs in North-western Nigeria. Their stories reveal the challenges they face and their ability to overcome them in a complex environment shaped by factors including population, location, and culture (Adeloye et al., 2017; 2018).

1.8 Educational Disparities in Northern Nigeria: Challenges and Pathways

Formal education in Northern Nigeria, often referred to as Western education, faces significant disparities that hinder its accessibility. Almu, Adesina, and Kanmodi (2019) emphasise the stark reality of inadequate access to quality education in Northern Nigeria. Common challenges include limited participation in important entrance exams, leading to low enrolment rates in both secondary and tertiary institutions. This situation persists despite government-sponsored primary and secondary education, which remains underutilised in Northern Nigeria, contributing to a lower regional literacy rate.

Gender inequality further compounds the education divide in Northern Nigeria. Cultural norms dictate that males are prioritised over females in terms of education. This often results in early marriages for girls and limited educational opportunities for both genders. Even in cattle-rearing areas, where formal education should be accessible for males, the cultural expectation that children inherit the family trade hinders their schooling. This underscores the complex interplay of cultural factors that perpetuate educational disparities in Northern Nigeria (Almu, Adesina and Kanmodi, 2019).

Adding to these challenges is the disruptive presence of the insurgent group “Boko Haram”, which translates to “No to Western education”. Awojobi (2014), Almu, Adesina, and Kanmodi (2019), and Ozoigbo (2019) have documented the group's actions that instil fear among parents and hinder children's access to schools. Boko Haram’s activities are strategically aimed at undermining formal education in Northern Nigeria, particularly in rural areas. This climate of fear further deepens the existing educational barriers, making it a complex struggle to enhance access and quality (Awojobi, 2014; Almu, Adesina and Kanmodi, 2019). It is worth noting that these insecurity challenges are not just peculiar to Northern Nigeria alone but extend across the entire country; however, they are more severe in the North compared to the Southern part of the country.

The educational landscape in Nigeria is a public endeavour that requires active government intervention. Amaghionyeodiwe and Osinubi (2006) emphasise that education is vital for national development and positive transformation. The Nigerian educational system has evolved over time, with policy changes such as the introduction of the Universal Basic Education Scheme (UBES) in 1999, aimed at tackling illiteracy and enhancing adult literacy rates (Aluede, 2006; Amaghionyeodiwe and Osinubi, 2006; Odia and Omofonmwan, 2007; Kano State Ministry of Education, 2019; Federal Ministry of Budget and National Planning, 2020). Despite efforts to increase funding, the education budget has been inconsistent, falling short of the United Nations Educational, Scientific and Cultural Organization's (UNESCO) recommended allocation. The Nigerian government's commitment to investing in education is crucial to address the pressing challenges within the nation's educational system (Kano State Ministry of Education, 2019; Federal Ministry of Budget and National Planning, 2020).

As Nigeria's population continues to grow, the need to allocate and invest in education becomes even more critical to meet global demands and development goals (Federal Ministry of Budget and National Planning, 2020). The substantial number of out-of-school children, coupled with low literacy rates, underscores the urgency of prioritising education. Elevating the budget allocation for education presents an opportunity to transform the nation's literacy landscape and ensure a brighter future for its citizens (Aluede, 2006; Fafunwa and Fafunwa, 2018; Federal Ministry of Budget and National Planning, 2020).

1.9 Thesis Summary

This chapter presents the underlying reasons for the study, briefly outlining my role in this research, and explaining how different models of disability relate to the study's design. Additionally, it offers clear definitions of the terms used in the research while highlighting how researchers from both developed and developing regions view disability. To provide context, it presents an overview of Nigeria and the general region being studied.

The structure of this thesis is organised to guide the reader and myself through the study's timeline, leading to the final conclusions and recommendations. This structure aligns with the chosen methodological approach – an adapted narrative design – intended to allow participants to share their stories about living with physical disabilities with minimal interference. Nevertheless, the results are presented thematically, mirroring the flow of the participants' stories. The goal was to immerse readers in the lived experiences of PwPDs, thereby fostering a comprehensive understanding of the challenges they face.

The thesis is comprised of eight chapters, and it commences by introducing the main topic, detailing the motivations, defining key terms, and offering an overview of disability and its linguistic aspects. I also establish my position within the research and explain why I focused on PwDs. Additionally, geographical context is provided, along with the political and cultural backdrop to the study location, specifically the northern part of Nigeria.

In Chapter Two**,** I examine my personal experiences of living with a physical disability. I also explain the rationale behind my decision to explore the lives of PwPDs. Chapter Three involves a scoping review, initially conducted before the data collection, and subsequently refined afterwards. Guided by established frameworks (Arksey, and O'Malley, 2005; Levac, Colquhoun, and O'Brien, 2010; and Daudt, van Mossel, and Scott, 2013), the rationale for the scoping review is detailed, the research questions are outlined, and relevant studies are identified.

Chapter Four delves into the research methodology, detailing the data analysis methods and triangulation techniques. The inclusion of photographs and video diaries is designed to pave the way for enriching the participants' stories. The nuances of Labov narrative analysis are explained, along with the process of extracting themes. Pre-determined codes are used to analyse visual content, aligning it with thematic elements of the narratives.

Chapter Five illuminates the pilot study, a precursor to the main data collection effort. Stories from five participants (3 men and 2 women) informed subsequent data collection, thus enhancing the authenticity of the main study's findings. Chapter Six presents the core findings, revealing participants' socio-demographic profiles and themes emerging from the data analysis. This chapter concludes with a concise synthesis of the central themes.

Chapter Seven contextualises the study's findings within existing literature. The reflective discussion intertwines the researcher's observations with the participants' stories. Models of disability are linked to the research findings, and the limitations are candidly acknowledged.

Chapter Eight concludes the thesis by emphasising the methodological intricacies and limitations observed during the research process. The value of storytelling is underscored, and implications for public health, research, policy, and education are highlighted as the thesis reaches its conclusion.

Chapter Two

Researcher's Reflexivity

2.0 Chapter Overview

This chapter continues the trajectory established in the preceding chapter. After clarifying key terms and providing regional context, a deeper investigation into disability research is conducted. Specifically, it examines the concept of reflexivity, framed by my personal experiences and heightened self-awareness as an individual with a physical disability.

The chapter unfolds in two key segments. Firstly, it explores the relevance of reflexivity to the research journey. By openly recognising my inherent subjectivity and weaving my personal experiences into academic discussions, a connection is forged between theoretical concepts and the real-life challenges experienced by people with disabilities. This personal dimension enriches the scholarly discourse and invites readers to connect on a more empathetic level. Secondly, the chapter turns inward to examine potential biases that might arise due to my unique perspective. This introspective examination underscores my commitment to maintaining academic rigour and transparency. In essence, this chapter serves as a bridge between the foundational elements of the thesis and the personal insights I contribute, amplifying both the depth and resonance of the overall discourse.

2.1 Introduction

At the start of my doctoral research, I reflected on my personal experience as an individual with a physical disability studying a group of people with similar disabilities in North-western Nigeria. This introspection was intended to identify any potential biases I might have due to my personal experience and upbringing in the region. Despite being both an insider in terms of having a physical disability and being from North-western Nigeria, I also had an outsider perspective as I grew up in a high-income household, unlike my research participants who are from low- and middle-income households. This is explained further in the chapter.

Biases can arise when there is an overlap between an individual’s experiences and beliefs and the subject being studied, such as a physical disability in this case. These biases can occur at any stage of the research process, be it at the beginning, during data analysis, or at the interpretation stage. To ensure transparency and rigour in this study, I conducted a reflective account of my position, beliefs, and thoughts concerning physical disabilities, using a reflective approach, as suggested by Lear, Eboh and Diack (2018).

Reflexivity in research refers to the process of reflecting on the researcher’s role during the study. Although there are different interpretations of reflexivity, its purpose is to provide researchers with a deeper understanding of their own biases and assumptions. In qualitative research, where storytelling interviews are used, reflexivity is particularly important to help researchers understand speech acts and language choices made by participants (Mann, 2016). Professionals in various fields are also required to reflect on their language choices, starting with induction or training processes and continuing throughout their careers to develop sensitivity and understanding. This sensitivity involves both the language choices of the storyteller and the listener’s contribution during storytelling (Larkin, Pearson and Aarvold, 2013).

Reflexivity involves the process of recollecting, contemplating, and evaluating one's knowledge, which is crucial for learning (Mann, 2016). However, reflexivity can also serve as a data collection tool to enhance understanding of the researcher's influence and position within the study (Lear, Eboh and Diack, 2018). Researchers are expected to minimise bias in their work, and reflexivity is one method that can be used to achieve this. Despite its importance, reflexivity is not well-known among researchers due to its limited presence in the literature (Larkin, Pearson and Aarvold, 2013; Lear, Eboh and Diack, 2018).

Due to its varying interpretations in existing research, it is necessary to provide a brief overview of what reflexivity means in healthcare research and its use in this study. While there is no specific method for writing a reflexive account, previous studies that have explored reflective interviews and the definition of reflexivity were used as a guide (Larkin, Pearson and Aarvold, 2013; Mann, 2016). By using a reflexive evaluation method, researchers can identify potential biases early on in their research. In this chapter, I share my personal story and use storytelling techniques, which have a beginning, middle, and an end, to guide both myself and the reader (Youngstedt, 2004; Edosomwan and Peterson, 2016; McCall et al., 2019). Before delving into my own story, I review the literature on reflexivity in qualitative research to better understand its role.

2.2 Literature on reflexivity

Reflexivity is a fundamental concept in modern qualitative research that highlights the role of personal values in the analysis process (Yang, 2015). It acknowledges that personal beliefs are inevitable in social sciences research (Yang, 2015; Mann, 2016). Rather than eliminating biases, researchers aim to incorporate subjectivity by critically reflecting on themselves as research instruments (Lincoln, Lynham and Guba, 2011). Etherington (2004) defines reflexivity as the ability to observe one's responses to the world and use that knowledge to inform actions, thereby enhancing academic rigour and ethical conduct (Yang, 2015).

Qualitative and quantitative researchers approach reflexivity differently. Qualitative researchers use reflexive interviews to leverage their biases, while quantitative researchers may view reflexivity as hindering scientific inquiry (Yang, 2015). Reflexivity involves self-awareness and examining the relationship between the researcher and the researched, thus aiming for a deeper understanding of the social context (Ibrahim and Edgley, 2015; Yang, 2015; Arsel, 2017).

Yang (2015) describes reflexivity as a continuum, with benign introspection at one end. Benign introspection involves reflecting on what researchers are doing and emphasises the distinction between illustration and realism. Reflexivity, as proposed by various scholars, investigates how researchers' assumptions, behaviour, and social background influence the study process and the relationship between researchers and participants.

Positional reflexivity, practiced by researchers studying experiences across the world, maintains a sceptical and analytical approach to achieving methodological consistency (Ibrahim and Edgley, 2015). Reflexivity uncovers the relationship between the researcher and the participants, thus acknowledging the inevitability of bias.

Reflexivity, driven by subjective and intersubjective ontologies, involves questioning assumptions, studying what is said and unsaid, and examining their effects on the research process (Fatien and Nizet, 2019). It encompasses self-reflexivity, whereby researchers engage in a dialogue with themselves about their values and beliefs, and critical reflexivity, which scrutinises organisational practices and encourages alternative ways of organising research.

Reflexivity involves reflecting on the participant's account and enhancing reliability by voicing the listener's understanding (Pessoa et al., 2019). Self-reflective storytelling provides comprehensive data about the researcher and is not limited by the interviewer's approach.

In brief, researchers should identify and explain the type of reflexivity used to reduce bias. This study employs self-reflection (Mann, 2016) throughout the research (Fatien and Nizet, 2019).

2.3 Reflective Account

Becoming Disabled and Finding Independence: Overcoming Challenges and Embracing my Identity

At the age of two, I was diagnosed with polio. However, its recognition was initially hindered by the presence of my sickle cell disease. Despite the greater emphasis on addressing my sickle cell condition, the treatments I received inadvertently led to complications in my leg function. As a result, I lost the ability to utilise my left leg. My parents pursued diverse treatments, encompassing physical therapy and other traditional methods. Subsequently, my mother came to acknowledge polio as the underlying cause, and it became an integral facet of my life. It is noteworthy that, although I mention my sickle cell condition, the core of this reflection aims to underscore the rationale behind my deliberate focus on the study of physical disabilities within the scope of this research.

When I was about six years old, my father obtained special crutches made of wood for me. With my family’s help, I learned to walk using them. It was tough and tiring, but I went from crawling to walking with crutches. Later, I received a tricycle, which helped me move around more easily, even though it was uncomfortable for long rides. Over time, I got stronger. I switched to better crutches and learned how to use them well.

As I got better with my crutches, I started using just one. I then received a bike with training wheels. With my family's support, I learned to ride a bike without the training wheels in six months. This changed how I saw myself. Instead of thinking of my disability as something holding me back, I realised it was a part of who I am.

Overcoming Mobility Challenges: A Journey of Perseverance and Adaptation

At the age of 8, I joined an Islamic school, one year behind my siblings. My journey to the faraway school was made difficult by my need for crutches, but my parents managed to give me a tricycle. My siblings would push the tricycle while I pedalled. At school, I left the tricycle outside and crawled to class because using crutches was hard for me. However, crawling was not without its challenges due to steps and uneven floors. During breaks and when I needed to use the bathroom, I would go home to avoid unsanitary conditions.

In 2001, I started primary school with my siblings, but it was about half a mile from home. The drive there took about 30 minutes. The school did not have paved grounds. Despite the difficulties, my friends and siblings helped me to get around. A friend would wait at the school gate and carry me to class, even if we were running late, until we graduated.

The challenges I faced led me to seek surgery at one of the federal orthopaedic hospitals. The doctors recommended weights to correct my leg’s position, but the prosthetic shoe they suggested was delayed. I ended up not getting the shoe due to the time I missed from school. With my family's support, I continued my studies at the hospital, ensuring that I did not fall behind.

In 2007, I finished primary school and moved on to junior secondary school. While getting around the new school grounds in the mornings was not a big issue as the gate remained open until 8:00 am, things were trickier during breaks. Moving between different sections of the school became a challenge when the gate was closed. There was only a small door available for students and staff to move between sections.

Navigating the school was difficult due to my limited mobility. Climbing the stairs with crutches was tiring and physically demanding. I even fell once, resulting in a deep cut on my leg. The principal suggested I use a different set of stairs with more steps but a gentler slope, and I adjusted to that over time.

Walking on the uneven paths in the school compound was also a challenge. I stumbled and fell a few times while going to class or the restroom. Although these paths were less slippery than the tiled hallways, the elevated buildings and doorsteps presented difficulties. To avoid falling, I stopped leaving my classroom during breaks. The school toilets were more accessible compared to those at my previous school.

The classrooms had elevated doorsteps of about 5 inches. Initially, I tripped over these, but I learned to lift my crutches higher to clear them. The hallways had different types of flooring, with some areas becoming slippery due to frequent mopping. This required careful manoeuvring with my crutches. Inside the classrooms, things were easier to manage.

Despite being careful, I had a significant accident whereby I slipped and hit my chest on the edge of a table. While seeking medical attention, I found out I had fluid accumulation in my chest, which resulted in minor surgery.

These challenges made me more aware of my environment and taught me to be cautious about where I placed my crutches while walking. Over time, I became more attuned to my surroundings and learned which paths were better suited for me to navigate with crutches. I could identify staircases that were easier for me to manage and those that posed potential challenges to my well-being.

At one point, I discussed with the school owner the possibility of moving our classroom to the ground floor for better accessibility and to avoid slipping and falling on stairs and wet floors. He agreed to the move, initially keeping the reason undisclosed to prevent potential mockery. However, when other students eventually found out, some started making fun of me and blaming me for the move. In response, I asked to return to the upstairs classroom, reassuring the director of the school that I could handle the stairs. In 2013, I successfully graduated from the school, avoiding the prolonged hospital stays that marked my primary school experience. I immediately enrolled at a university to study electronics.

In the university setting, I encountered similar challenges to those I had been confronted with in high school, but I had become more skilful at climbing stairs and avoiding obstacles. My father provided me with a car, which was helpful because it allowed me to park close to lecture halls and minimise the distance that I had to walk. Whenever possible, I chose a front-row seat during lectures to avoid using the slippery stairs in the lecture hall.

Teasing and bullying were less common at university, partly because I spent limited time on campus. The university was around 3 kilometres from my home, so I often went back home after classes to assist my parents with their business. In my second year, a strike at the university led my parents to consider sending me abroad to complete my degree. This was a tough decision, as they were worried about how I could survive in a colder environment due to my sickle cell condition.

Navigating Childhood Challenges with a Physical Disability

Growing up with a physical disability posed significant challenges for me. The community that I lived in subjected me to daily bullying, using hurtful terms like "Gurgu" (cripple). Even at a young age, I understood the negative meaning of these words, which left me feeling demeaned and disrespected. The taunting was not limited to children; even adults joined in with the name-calling. Strangely, if I expressed my unhappiness or stood up against the bullying, it seemed to get worse. So, I developed a strategy of ignoring it and pretending to find it funny, even though it hurt inside. This approach eventually reduced the name-calling from children, but some adults still use it to this day. While they may use the term playfully, it is a reminder that such derogatory language still exists.

While gathering research data and reflecting on these experiences, I recalled that a relative referred to me as "cripple", which brought back those hurtful memories. Instead of reacting angrily, I responded with humour and said, "In a few years, I will have a doctorate. Maybe you can show some respect and call me 'Dr. Cripple' instead of just 'cripple'". The sarcasm struck a chord, and he expressed regret and later apologised. Interestingly, my family members never engaged in bullying or teasing; it was mostly the wider community and certain close relatives.

Beyond the hurtful words, another significant challenge was feeling isolated. During my early years, I could not take part in activities that my brothers and friends enjoyed, like football and various other games. Over time, I pushed myself to participate, insisting on playing football as a goalkeeper despite their initial doubts. I also tried playing other games with them. However, when they planned activities outside our community and I asked to join in, the response was often, “We are in a hurry, maybe next time”. This essentially meant that my slower pace with crutches might hold them back. While this saddened me, I always responded with a polite “Okay, no problem,” even though I had no intention of asking again. As they consistently left without me, I would smile and say, “Okay, see you later,” and they would reply in the same manner.

Gradually, they realised how I felt about being excluded and stopped leaving me out. They started inviting me to join them outside our community, acknowledging my preference for not tagging along. This change in how things worked made me feel less like a burden and more like a valued participant. Over time, they even included me in activities like watching football matches. Despite these obstacles, my connections within the community remained strong, and overall, I had a positive relationship with the people around me.

Pursuing Education Abroad: Overcoming Doubts and Embracing Accessibility

Convincing my parents to allow me to study abroad was a gradual process, given their concerns about my sickle cell disease and disability impacting my independence. They were genuinely worried that I might lack support during illness or everyday tasks like shopping. After much discussion and persuasion, they finally agreed, especially as my brothers were already studying in the UK and could assist when needed. With their approval, I began my journey towards obtaining a public health degree in the UK.

Upon my arrival, I was struck by the impressive level of accessibility in the country, from buildings and roads to transportation. While I initially stuck to using stairs, as I was accustomed to them, I eventually embraced the use of elevators and ramps that the university provided. Although these changes came with their own set of challenges, I adapted quickly and gained more confidence with each instance.

The university's commitment to accessibility went beyond just the physical infrastructure. They had a special needs and adaptation scheme in place, which allowed me to take 15-minute breaks during exams and accounted for my health-related delays. Furthermore, they automatically considered extenuating circumstances for missed deadlines or exams due to my health conditions. Unlike in Nigeria, where such accommodations are scarce, these provisions greatly alleviated my anxiety and depression. Consequently, my overall well-being improved during my studies in the UK.

During the research for my BSc dissertation, I explored the experiences of PwPDs in Africa. This undertaking unveiled the significant challenges they encounter, which spanned issues related to accessibility and healthcare, among other concerns. This newfound insight encouraged me to pursue the current study. By seeking to understand their narratives, my goal was to highlight their resilience and illuminate the strategies they employ to navigate the intricacies of life.

2.4 Reflective Examination of Potential Bias in the Study

This reflexive study explored my personal journey with a physical disability while conscientiously acknowledging the potential biases that could have impacted the research. A noteworthy challenge I encountered involved the hurtful utilisation of discriminatory terms and proverbs such as "cripple" and "Gurgu yafi me kafa Iya shege". It was imperative for me to maintain objectivity and refrain from allowing my own experiences to influence my interactions with participants. I had to exercise caution when participants shared instances of discrimination within their communities or families, as my natural empathy could potentially have led me to concur without subjecting the situation to critical examination.

Another facet of bias pertains to the discourse on educational accessibility. Due to my own encounters with similar impediments, such as injuries, the potential existed for me not to scrutinise participant narratives adequately. To address this concern, I incorporated visual aids such as photographs and video diaries to corroborate and validate their experiences.

Furthermore, certain domains such as public transportation and hospital accessibility might have been underrepresented due to my specific personal circumstances. My reliance on private services could have inadvertently caused me to overlook potential challenges in these areas. Additionally, I omitted discussions regarding the healthcare challenges I confronted during my childhood and teenage years, a gap that could have led to oversights when investigating difficulties related to hospitals.

In essence, this reflexive analysis underscored the paramount significance of self-awareness and the diligent examination of my own experiences and biases throughout the research process. The primary objective was to ensure that the participant narratives remained authentic, unbiased, and profoundly respectful of their distinct perspectives.

2.5 Chapter Summary

The account I presented provided an insightful perspective into my personal journey of coping with a physical disability in North-western Nigeria. Throughout the narrative, I addressed various aspects of my experiences, intentionally omitting childhood healthcare encounters due to my limited recollection. I primarily relied on private healthcare services, and the relatively minimal presence of accessibility challenges influenced the extent of my involvement with this subject matter. Notably, my medical attention predominantly revolved around concerns related to sickle cell disease rather than solely focusing on the disability itself. These episodes often required sedation, leading to my awakening after treatment once the crisis had subsided.

Recognising the uniqueness of my viewpoint, it became evident that my experiences diverged from the broader encounters of most PwPDs. Benefiting from a high-income background, I recounted my educational journey within private institutions, culminating in the achievement of a university degree – an esteemed subset among PwPDs. However, a recurring theme underscored the individualistic nature of each narrative, serving as a reminder that my portrayal might not universally reflect the broader collective.

This chapter not only introduced the rationale that underpinned reflexive qualitative research but also engaged with relevant literature, setting the stage for a comprehensive exploration of my own experiences as an individual with a physical disability. It examined the origins of my disability and elaborated on my parents' interventions during those critical moments. Furthermore, insights were shared across various dimensions of my life with a disability, encompassing educational pursuits, social dynamics, and community integration. This reflective account concluded by communicating the driving forces that motivated my pursuit of a PhD centred around the theme of physical disability.

The ensuing chapter (Scoping Review) focuses on an extensive review of existing literature, shedding light on the complex lives of PwPDs in the context of Nigeria.

Chapter Three

Scoping Review

3.0 Chapter Overview

In the preceding chapter, I examined how our individual experiences as researchers can enhance the quality of our work. I also shared my personal perspectives on the realities of living with a physical disability. This explains why I am particularly drawn to exploring this subject matter. In this chapter, I employ the framework developed by Arksey and O'Malley to execute a scoping review centred around physical disabilities in Nigeria. This framework offers a systematic approach to scrutinising all the existing research pertaining to disabilities in Nigeria.

Furthermore, the scoping review also adhered to the guidelines provided by Levac, Colquhoun, and O'Brien (2010) to ensure a comprehensive and exhaustive assessment of the literature. This framework was employed to evaluate studies that examined the experiences of PwPDs in Nigeria. I expound extensively on the rationale behind selecting this framework. At the conclusion of the review, I offer a succinct summary of the discoveries I made, which address the research inquiry concerning the experiences of PLwPDs in Nigeria in terms of healthcare, accessibility to resources, community involvement, education, and employment. This summary also elucidates how the findings lent support to and harmonised with the reasons for undertaking the study.

3.1 Rationale for the scoping review

The reason that I used a scoping review to address the aim of the research is due to the scarcity of studies that have examined the lives of PwPDs in Nigeria and Africa as a whole. Disability studies is an interdisciplinary field that is growing rapidly, and which encompasses various disciplines such as social sciences, medicine, humanities, rehabilitation, and education worldwide (Berger, 2013; Burman, Greenstein, and Kumar, 2015; Mubaraq et al., 2021).

However, there is a lack of introductory materials and studies available for novice researchers and in college courses. Moreover, there is a significant absence of materials written from a sociological perspective, as noted by Berger (2013). According to Berger (2013), the limited involvement in disability studies, or disability in general, can be attributed to personal relationships or interest in this field. It can be argued that individuals who become involved or interested in disability studies often have a personal connection, such as having a disability themselves or a family member or close friend with a disability (Mubaraq et al., 2021). This is an experience that Berger and I share. As a result, research on disability in developing and even developed countries is rare and limited.

To obtain sufficient and in-depth data to support the need for this research, a scoping review was chosen as the most suitable method to identify and examine existing research on physical disability in Nigeria from multiple sources of information. The primary aim was to evaluate the extent, nature, and range of physical disabilities and their impact on the lives of PwPDs in Nigeria and identify gaps in the literature. It is important to emphasise that this aim is independent of the main aim of this research which is to justify the rationale behind the use of a scoping review. Nevertheless, to achieve this aim, the framework created by Arksey and O'Malley (2005) was used to evaluate relevant studies. However, to address the limitations of Arksey and O'Malley's framework as highlighted by Levac, Colquhoun, and O'Brien (2010) and Daudt, van Mossel and Scott (2013), the guidelines and suggestions provided by Daudt, and Levac were followed to ensure a more comprehensive review of the literature.

According to Arksey and O'Malley (2005), a scoping review is a rapid method for identifying the main concepts, key sources, and types of evidence available in a research area. It can be conducted as a standalone review, particularly in cases where the area has not been comprehensively reviewed before or is complex. However, Daudt, Van Mossel and Scott (2013) challenged this definition, arguing that it lacks a detailed methodology. Based on their findings and those of Levac, Colquhoun and O'Brien (2010), they propose an amended definition and posit that a scoping review aims to map the literature on a particular topic or research area, identifying key concepts, gaps in the research, and types and sources of evidence that can inform practice, policymaking, and research.

A scoping review is useful for fields in which there is limited evidence, such as disability studies, as it allows researchers to integrate various study designs from published and grey literature. It can also address questions beyond challenges, stigma, and discrimination, providing complementary or clear findings regarding people with physical disabilities. In contrast, systematic reviews focus on confirming or refuting existing practices and establishing the quality of available evidence. While systematic reviews are essential for justifying research needs, they only deal with the best available evidence that is publicly accessible (Levac, Colquhoun, and O'Brien, 2010; Daudt, Van Mossel and Scott, 2013; Munn et al., 2018).

Conducting research in countries like Nigeria presents unique challenges, as data and studies are often not publicly available, and even when they are, they may not be easily accessible via standard health databases such as Medline or PubMed. Instead, researchers in Nigeria often publish their studies on their organisations' websites, news websites, or university websites. It is common practice among some Nigerian researchers to use websites like African Journal Online or ResearchGate to publish their work. Additionally, many Nigerian researchers may only make their papers available as hardcopies in university libraries.

The aforementioned websites, including African Journal Online and ResearchGate, are publicly accessible, but the studies published there may not be peer-reviewed, and their quality may be questionable. There are also limited research works published in international databases like PubMed and Medline, among others. Therefore, a systematic review may not be appropriate for research conducted in Nigeria which relies heavily on such sources to justify the need for the research. Instead, a scoping review would be more suitable, as it aims to identify the available evidence on a topic without limiting the type of data that can be used. It also clarifies key concepts in the literature and identifies the main characteristics or factors related to a particular topic, such as physical disability. Scoping reviews examine how research is conducted in each field and identify knowledge gaps (Arksey and O'Malley, 2005; Levac, Colquhoun and O'Brien, 2010)

For this review, Arksey and O'Malley's (2005) framework was used, along with guides and suggestions from Daudt, Van Mossel, and Scott (2013) and Levac, Colquhoun, and O'Brien (2010). The framework consists of six stages, with the last stage being optional. The first stage involves identifying a broad research question. The second stage entails identifying relevant studies using a comprehensive method. The third stage involves the selection of studies, together with the setting of inclusion/exclusion criteria based on familiarity with the literature. The fourth stage involves charting the data, including sorting, and sifting it according to key themes and problems. The fifth stage comprises organising, summarising, and writing up the results, providing both a numerical and descriptive summary of the information, as well as a thematic analysis. The last stage, a consultation exercise with key stakeholders with the purpose of reviewing and validating the research findings, is not included in this review as it is part of a PhD research project, and the researcher was under supervision throughout the process (Arksey and O'Malley, 2005; Levac, Colquhoun, and O'Brien, 2010; Daudt, Van Mossel and Scott, 2013).

3.1.1 First Stage: Identification of Research Questions

A scoping review aims to summarise a range of research evidence through comprehensive research questions, but the initial research question that was created for this scoping review was narrow, namely: "What are the experiences of people living with physical disability in Nigeria?". This question lacked clarity, focus, and direction, which hindered subsequent stages of the research process such as study selection and the identification of relevant studies, and therefore did not comply with Arksey and O'Malley's definition of a broad research question. Consequently, the initial question was revised to: "What are the experiences of people with physical disabilities in Nigeria concerning healthcare, resource accessibility, community engagement, education, and work?", utilising the PEO (Population Exposure, and Outcome) framework. This structured the question, which aimed to express the scope of the review, as suggested by Lavac et al. (2010). Hence, defining the concept, target population, and focus of the scoping review helped to enable an effective search strategy.

It is crucial to acknowledge that research on physical disability is scarce in Nigeria and disability studies is an emerging field, as emphasised by Berger (2013). Without broadening the research question, the possibility of obtaining sufficient studies to conduct a scoping review would be considerably lower. Moreover, it is important to note that most African researchers do not publish their work in high-impact Journals like PubMed, Medline, or

ScienceDirect, as previously mentioned. One of the reasons why Nigerian researchers rarely publish in high-impact journals is the high cost of publication compared to other journals with less impact. If a systematic review were to be conducted, there is a high chance of insufficient evidence being found to justify the need for the study. This is because, in systematic reviews, researchers are often advised against using grey literature, including non-peer-reviewed studies, conference proceedings, and news websites, among other non-standard sources. By excluding these types of data sources, the available options for obtaining data may be limited. However, a scoping review provides the flexibility to conduct a search strategy and data extraction more broadly. When conducting research in countries like Nigeria, it is essential to include grey literature in the study to obtain enough data to support or justify the rationale for the study, particularly for PhD research.

3.1.2 Second Stage: Identification of Relevant Studies

The search for relevant studies was conducted using electronic databases and a Google search, including Google Scholar. Eight electronic databases (CINAHL Plus, Cochrane Library, Medline, PubMed, ScienceDirect, PsycINFO, PsycARTICLES, and Wiley Online Library) were systematically searched. These databases were in the English language and included other selected language articles on allied health, nursing, healthcare, and biomedicine. They are considered to meet the acceptable standard for quality and peer review compared to local databases such as African Journal Online, which is why they were chosen.

Two of the selected databases (PsycINFO and PsycArticles) specialise in psychology literature and were included to broaden the search. However, it is important to note that some journals may not be indexed in these databases. Therefore, an additional search was conducted for journals such as *African Health Sciences, Journal of Social Development in Africa, African Journal of Health Sciences,* and *African Research Review*.

The *African Health Sciences Journal* was chosen for its focus on clinical practice and public health policies relevant to Africa. This was designed to identify policies in Nigeria for PwPDs based on articles by Nigerian scholars that were published in the journal. The *Journal of Social Development in Africa* focuses on social development issues affecting marginalised and poor people in sub-Saharan Africa. It was selected to acquire studies on the issues that PwPDs face in Nigeria published in the journal, which is peer-reviewed and published biannually. The *African Journal of Health Sciences* covers research and policy issues in health sciences and related disciplines. Like *African Health Sciences*, it can provide information on physical disability policies and health issues related to the target population. Lastly, *African Research Review* was chosen to acquire studies and reviews on PwPDs in Nigeria. All of these are peer-reviewed journals that publish studies conducted in Africa by African researchers and academics.

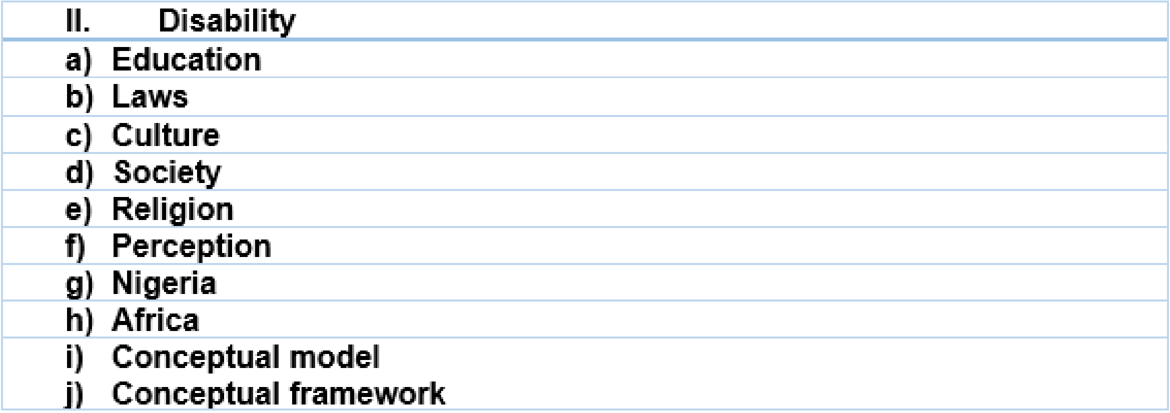
The search words used in each database included 'physical disability' in combination with 'Africa', 'experience', 'perspective', 'Northern Nigeria', 'North-western Nigeria', 'policies', 'education', 'inclusion', 'education in Nigeria', and 'Nigeria' (Table 1 summarises the search words). Additionally, the keyword 'disability' was searched in combination with 'Nigeria', 'education', 'laws', 'culture', 'society', 'religion,', 'perception', and 'Africa' (Table 2 summarises the keywords). Formal substitute terms for physical disability, including 'handicap', 'cripple', 'disadvantaged', and 'physically challenged' were used. Although the terms 'cripple' and 'handicap' may be considered discriminatory in developed countries like the UK, this is not the case in countries like Nigeria, where they are still commonly used. Researchers and academics in Nigeria still use these terms in their research, which is why they were used in this study to broaden the literature search. However, it is worth noting that these terms are not used anywhere in the research, but only for the purpose of obtaining published studies that include these keywords.

During the search for studies on disability, synonyms such as 'defect' and 'impairment' were used, along with Boolean operators like 'AND' and 'OR' to combine and separate search terms. 'OR' was used to broaden the search by connecting multiple synonyms, such as 'physical disability' OR 'physically challenged' OR 'handicap' OR 'cripple'. 'AND' was used to narrow the search by combining different terms, such as 'physical disability' AND 'Nigeria' or 'physical disability' AND 'North-western Nigeria'. Table 3 displays the combined keywords used in the search. The search was limited to 2010 – 2020 to obtain the most recent and manageable data on physical disabilities in Nigeria.

Table 1: First search term combined with relevant keywords.

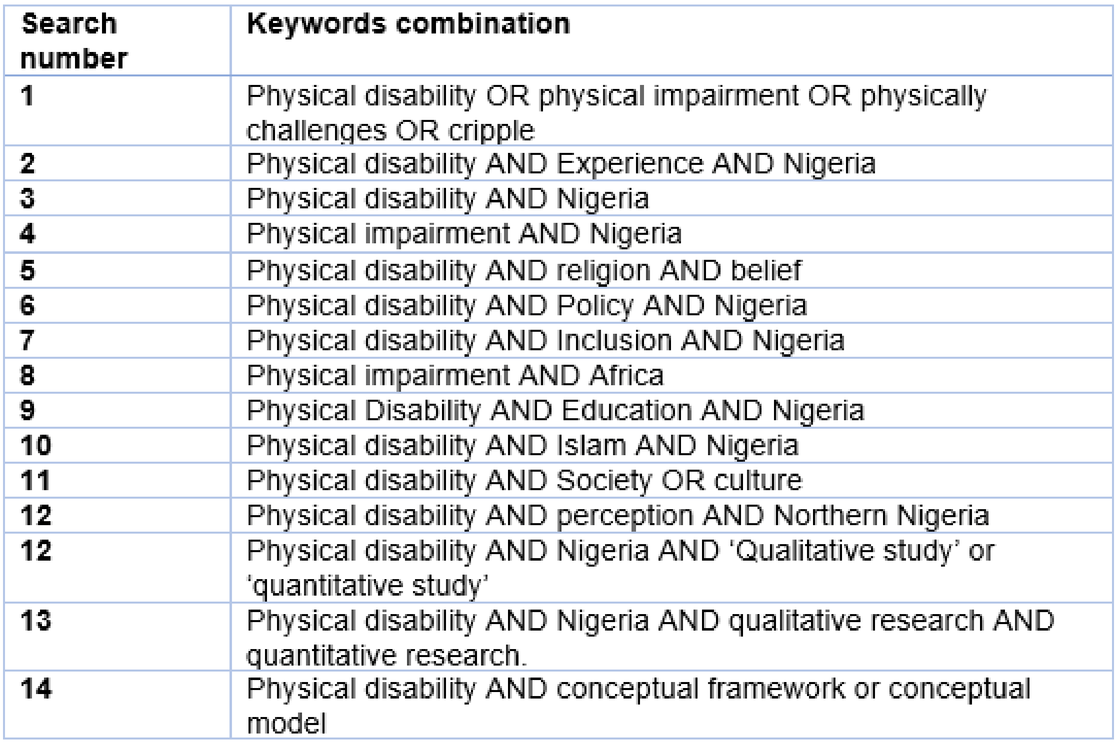
Search term
I. Physical disability in combination with
a) Experience
b) Perspective
c) Northern Nigeria
d) North-west Nigeria
e) Policies
f) Inclusion
g) Education in Nigeria
h) Africa
i) Nigeria.
j) Qualitative study
k) Quantitative study
l) Islam
m) Conceptual framework n) Conceptual model

Table 2: Second search term combined with relevant keywords.



II. Disability
a) Education
b) Laws
c) Culture
d) Society
e) Religion
f) Perception
g) Nigeria
h) Africa
i) Conceptual model j) Conceptual framework

Table 3: Boolean operators combined with search keywords.



Search number	Keywords combination
1	Physical disability OR physical impairment OR physically challenges OR cripple
2	Physical disability AND Experience AND Nigeria
3	Physical disability AND Nigeria
4	Physical impairment AND Nigeria
5	Physical disability AND religion AND belief
6	Physical disability AND Policy AND Nigeria
7	Physical disability AND Inclusion AND Nigeria
8	Physical impairment AND Africa
9	Physical Disability AND Education AND Nigeria
10	Physical disability AND Islam AND Nigeria
11	Physical disability AND Society OR culture
12	Physical disability AND perception AND Northern Nigeria
12	Physical disability AND Nigeria AND 'Qualitative study' or 'quantitative study'
13	Physical disability AND Nigeria AND qualitative research AND quantitative research.
14	Physical disability AND conceptual framework or conceptual model

In addition to searching journals and databases, other methods were used to find relevant literature. These included a grey literature search, which involved reviewing relevant websites such as Human Rights Watch and the World Health Organization (WHO). Similarly, reference harvesting was also conducted, which involved scanning through the reference lists of selected articles. Moreover, citation searching was used to identify websites on which previous articles were published. Lastly, subject index searching involved searching through journal indexes, library shelves, and bibliography descriptions of titles, authors, and abstracts.

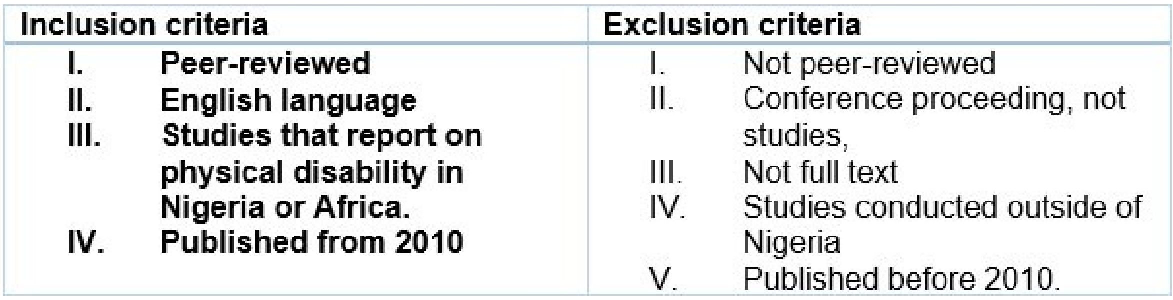
The grey literature search was conducted separately from the journals and databases search. Google, Google Scholar, ResearchGate, government websites, the WHO, The Heritage Foundation, Emerald Insight, Intech Open, the National Development Programme, and Demographic and Health Survey were searched to find relevant grey literature on physical disabilities and demographic data. These sources were deemed relevant to the research. General Google was used because some articles are not available in gold standard databases, and Nigerian researchers often publish their articles on local websites and databases like *African Journal Online*. Thus, the use of Google was crucial in directing the researcher to these kinds of websites and databases where Nigerian articles are posted. Additionally, some articles were obtained from ResearchGate. Despite conducting extensive searches, there was found to be limited information available on the demography of North-western Nigeria, disability prevalence, healthcare, education, and culture in the region. To bridge these gaps, formal requests were submitted to universities in North-western Nigeria to acquire the necessary data. As online sources did not provide information regarding the prevalence of disabilities in the region, supplementary requests were extended to disability centres across all the states in North-western Nigeria.

Additionally, Arksey and O'Malley (2005) stress the importance of reflexivity throughout the research process, including in the data identification stage. Therefore, I repeated this stage to ensure that all relevant literature was included in this comprehensive study. The literature search produced a significant number of references, and I am confident that I have covered the topic of physical disability in Nigeria as comprehensively as possible. To manage the references, I used Mendeley, an online citation manager. This tool allowed me to cross-check and organise my data and remove any duplicates.

3.1.3 Third Stage: Study Selection

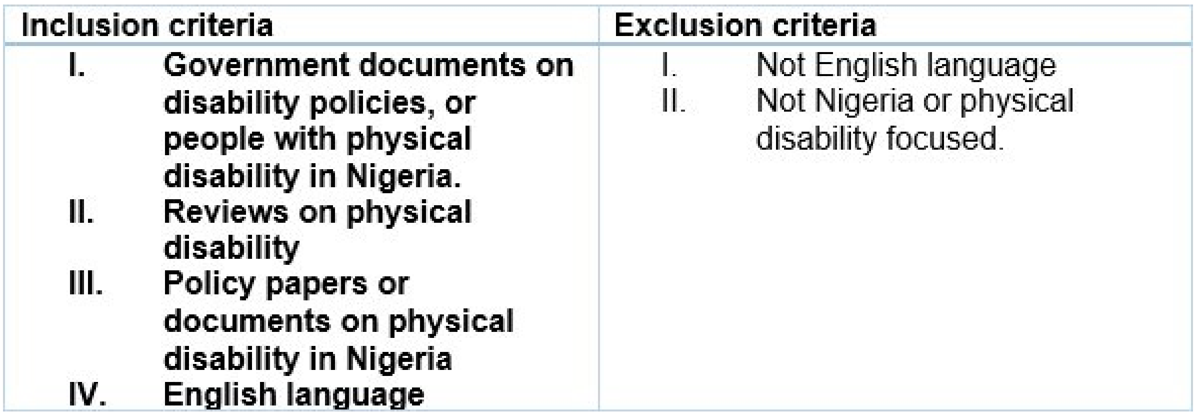
After identifying relevant studies, I applied inclusion and exclusion criteria to them. Studies that met the inclusion criteria (detailed in Table 4 and Table 5) were considered for screening, with priority given to studies conducted in Nigeria, as it is the country of focus for this research. I carefully set exclusion parameters around studies, such as excluding those that focused on intellectual or developmental disabilities. Table 4 displays the exclusion and inclusion criteria used to select and filter relevant studies. Additionally, Table 5 shows the inclusion criteria for the selection of grey literature.

Table 4: Inclusion and exclusion criteria for databases and journals search.



Inclusion criteria	Exclusion criteria
I. Peer-reviewed **II. English language** **III. Studies that report on physical disability in Nigeria or Africa.** **IV. Published from 2010**	I. Not peer-reviewed II. Conference proceeding, not studies, III. Not full text IV. Studies conducted outside of Nigeria V. Published before 2010.

Table 5: Inclusion and exclusion criteria for the grey literature section

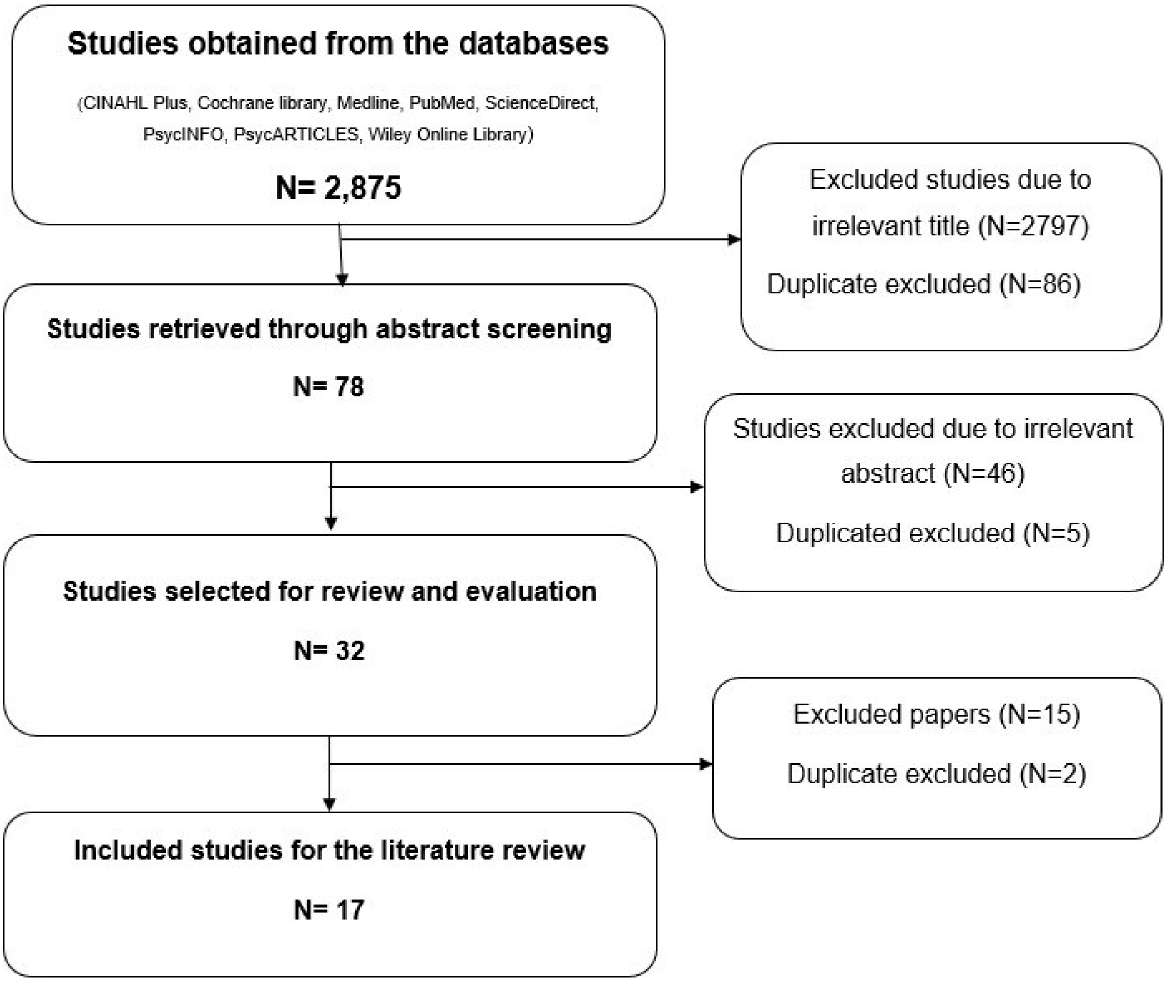


Inclusion criteria	Exclusion criteria
I. Government documents on disability policies, or people with physical disability in Nigeria. **II. Reviews on physical disability** **III. Policy papers or documents on physical disability in Nigeria** **IV. English language**	I. Not English language II. Not Nigeria or physical disability focused.

Articles that met the inclusion criteria from each database underwent manual filtering involving three steps. Firstly, the articles were filtered by their titles. Secondly, the articles that were included based on the first screening were then filtered by their abstracts to assess their applicability, and only abstracts with relevant information were included in this research. The last step involved the selection and examination of full-text studies only. Additionally, I reviewed the reference lists of relevant studies to collect any important literature. As a result, more articles were added to the selection pool for screening.

The results of the literature searches were narrowed down using the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA), as shown in Figure 2 below (Liberati et al., 2009). Articles that were not accessible through my university were excluded, as well as those related to developmental and intellectual disabilities. Duplicate studies that appeared in multiple databases were also screened, and only one copy of each study was included. In total, 32 articles were initially selected for review and evaluation, and ultimately, 17 articles were chosen for the scoping literature review.

Figure 2: PRISMA Chart of included studies.



Out of 17 selected studies, 4 (Smith, 2011; Oladunni, 2012; Wolffe, Ajuwon and Kelly, 2013a; 2013b; Ogu, Umunnah and Nwosu, 2016) were quantitative, 1 (Nwokorie and Devlieger, 2019) was an ethnographic study, 2 (Cramm et al., 2013; Balarabe, 2014) were cross-sectional, 4 (Wolffe, Ajuwon and Kelly, 2013b; Nel et al., 2015; Brydges and Mkandawire, 2017; Charles and Chinaza, 2018) were qualitative, 4 (Kelly, Ajuwon and Wolffe, 2015; Oladunni, Lyoka and Goon, 2015; Bombom and Abdullahi, 2016; Ijadunola et al., 2019) were mixed, and 2 (Abdu et al., 2013; Haruna, 2017) were descriptive. Table 6 summarises these studies. It is worth noting that the earlier search of psychology databases

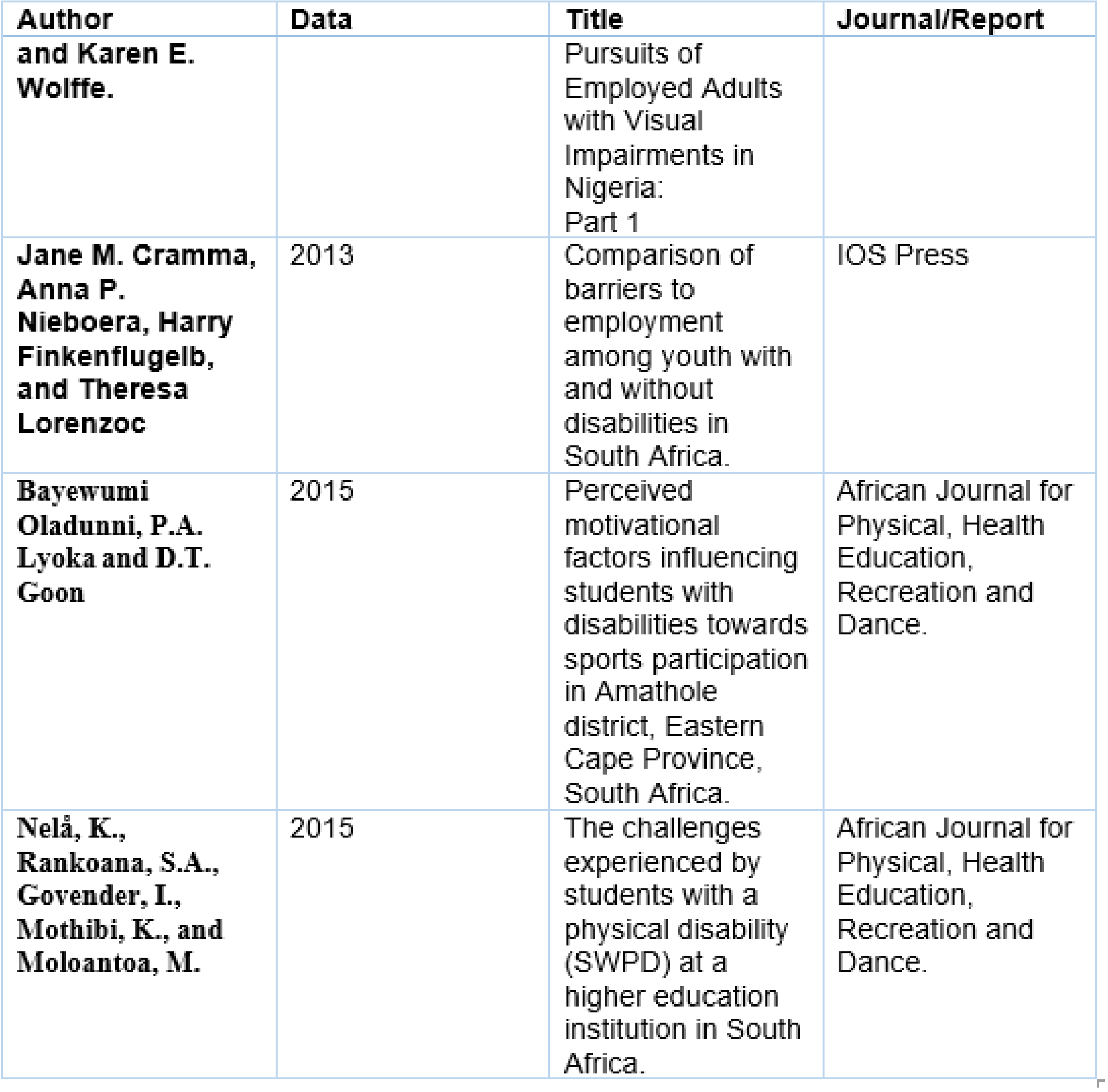
(PsycINFO and PsycARTICLES) yielded few to no results, probably because this study did not focus on psychology or mental health, as evidenced in Appendix 1.

Despite conducting journal searches using the journals, no new results were obtained. The inclusion and exclusion criteria outlined in Table 4 were used to search for articles related to physical disabilities in Nigeria. Unfortunately, no articles were extracted from these databases. Although these journals aim to publish and disseminate studies conducted in Africa, they contain limited studies on disability. Therefore, no articles were selected from the *Journal of African Health Sciences, Journal of Social Development in Africa, African Journal of Health Sciences,* and *African Research Review*.

Table 6: Studies included in the literature.

Author	Data	Title	Journal/Report
Okechukwu V. Nwokorie, Patrick J., Devlieger	2019	'We only got Coca-Cola': Disability and paradox of (dis)employment in southeast Nigeria	African Journal of Disability.
Karen E. Wolffe, Paul M. Ajuwon, and Stacy M. Kelly	2013a	A Quantitative Analysis of the Work Experiences of Adults with Visual Impairments in Nigeria	Journal of Visual Impairment & Blindness.
Ogu Okey Charles and Nwosu Kingsley Chinaza	2018	Barriers and Facilitators of Physical Activity Participation Among Youth with Visual and Hearing Impairments in Nigeria: A Qualitative Study	Palaestra Journal.
Aliyu Hamza Balarabe	2014	Contribution of corneal blindness to visual disability among street blind beggars in a local government area of a state in Northern Nigeria	Sahel Medical Journal.
Colton Brydges & Paul Mkandawire	2016	Perceptions and Concerns about Inclusive Education among Students with Visual Impairments in Lagos, Nigeria.	International Journal of Disability, Development and Education.
Macellina Y. Ijadunola, Temitope O. Ojo, Florence O. Akintan, Ayoade O. Adeyemo,	2018	Engendering a conducive environment for university students with physical disabilities:	Disability and Rehabilitation: Assistive Technology.

Author	Date	Theme	Joumal Report
Adiemola S. Afolayan & **O1,akl.iinle G,. Akanji**		assessing availabillity of assisltive facilities in Nigeria	
Lawan Abdu, James Withers, Abdura.zaq G. Habib, Muhammad S. Mijinyawa and Shetm IM. Yusef	2013	Disease Pattern and Social Needs of Street People in the Racecourse Area of Kano, Nigeria	Journal of Health Care for the Poor and Underserved.
Okey Chanles Ogu, Kingsfey Chirnaza Nwosu, and **Joseph Ornuwa Urmunnatil**	2016	Disability types, self e fficacy, and attitude to participate in physical activity in children with disabilities: a pilot study	Palaesnra Journal.
Mohamrmed Awaisu Harnma	2017	The Problems of Living with Disability in Nigeria.	Journal of Law, Policy, and G lobalization.
Taiwo **Modupe Oladunni**	2012	Sexual Behaviour and Practices Among Adolescents with Disabilities in Southwest Nigeria	Sexuality and disability_
Natalie Smith	2011	The Face of Disability in Nigeria: A Disability Survey in Kogi and Niger States	**Disability**, **CIBR** and Inclusive Development.
Karen E. Wolffe, Paul **M. Ajuwon,** **and Stacy** M. **Kelly**	2013b	Working with Visual Impairment in Nigeria: A Qualitative Look at Employment Status.	Journal of Visual Impairment & Blindness.
Leonard Sitji Bombom and Ibrahim Abidullahi	2016	Travel patterns and challenges of physically disabled in Nigeria.	GeoJournal.
Stacy M. Kelly. Paul **M.** Ajuwon,	2015	The Recreation and Leisure	Journal of Visual Impairment & Blindness.



Author	Data	Title	Journal/Report
and Karen E. Wolffe.		Pursuits of Employed Adults with Visual Impairments in Nigeria: Part 1	
Jane M. Cramma, Anna P. Nieboera, Harry Finkenflugelb, and Theresa Lorenzoc	2013	Comparison of barriers to employment among youth with and without disabilities in South Africa.	IOS Press
Bayewumi Oladunni, P.A. Lyoka and D.T. Goon	2015	Perceived motivational factors influencing students with disabilities towards sports participation in Amathole district, Eastern Cape Province, South Africa.	African Journal for Physical, Health Education, Recreation and Dance.
Nelå, K., Rankoana, S.A., Govender, I., Mothibi, K., and Moloantoa, M.	2015	The challenges experienced by students with a physical disability (SWPD) at a higher education institution in South Africa.	African Journal for Physical, Health Education, Recreation and Dance.

Arksey and O’Malley did not mention or recommend using assessment tools to evaluate the quality of literature in their framework. Some social science researchers have expressed concern that this may result in poor-quality literature being included in their review (Levac, Colquhoun and O’Brien, 2010; Daudt, Van Mossel and Scott, 2013). Daudt et al. (2013) argued that it is essential to assess the quality of studies, even in a scoping review, to ensure that the research can be disseminated in a way that is useful for policymaking and/or practice. This study aims to inform healthcare practices and assist the Nigerian government in making policy decisions regarding individuals with physical disabilities. Therefore, I followed Daudt et al.'s recommendation to assess the quality of the selected studies.

The quality of the selected studies was evaluated using two appraisal tools, the Critical Appraisal Skill Programme (CASP) (Holland and Rees, 2016; Higgins and Thomas, 2019) and the Holland and Rees (2010) critiquing framework. The CASP tool assesses the principles of study design, specifically the robustness of research, while the Holland and Rees critiquing framework evaluates studies by asking questions at each stage to check their rigour and quality. I chose the Holland and Rees critiquing framework because it includes a guide for critiquing both quantitative and qualitative studies, unlike the CASP appraisal tool. Appendix 2 (A&B) provides a summary of the critiquing process, while a table of the included reviews and grey literature is provided in the next stage of the review.

3.1.4 Fourth Stage: Charting the Data.

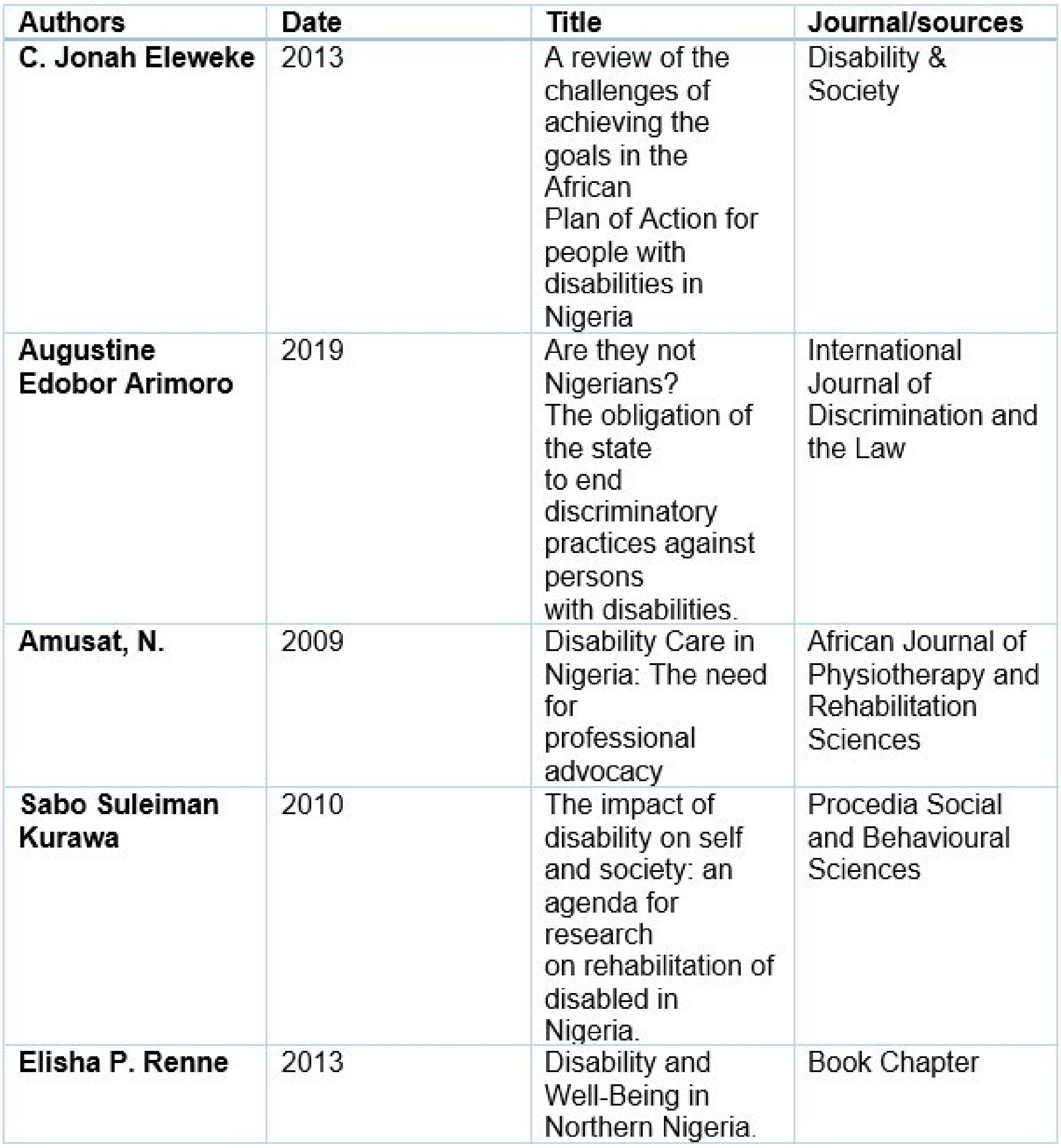
To organise the data, Arksey and O'Malley recommended sorting and charting it based on key issues and themes. They suggested that the data should include general information about the selected studies as well as specific information related to the study aim. In their review, they charted seven sections of information for each article, including general information such as the aim of the study, citation data, methodology, important results, and outcome measures, as well as specific information on the study population and intervention type. However, researchers can choose which categories to chart for their individual study (Levac, Colquhoun, and O'Brien, 2010).

A total of 2,875 studies were initially retrieved from both the databases and the manual search conducted. However, only 17 studies met the inclusion criteria. The first search was conducted using the term “physical disability” and its synonyms (as shown in Table 1 above), while the second search used “disability” in combination with related words (as mentioned in Table 2 above). The third search focused on disability models and frameworks. Each search was conducted separately via the aforementioned databases, and the same inclusion and exclusion criteria were used for all searches. Appendix 3 provides a summary of the data extraction findings. To obtain manageable and relevant data, the Boolean operator “OR” was used along with the synonyms for physical disability. The data acquired from the databases were evaluated individually to maximise the outcome of the literature search and obtain enough literature for the research. The study used resources from both the university library and a public library.

Evaluating source quality was essential, which is why multiple sources were used, and only peer-reviewed articles from reputable journals were selected. Studies on physical disability in Nigeria specifically and Africa in general are limited, making it challenging to find relevant literature for this research. Only a few studies (Smith, 2011; Oladunni, 2012; Abdu et al., 2013; Wolffe, Ajuwon and Kelly, 2013a; 2013b; Balarabe, 2014; Kelly, Ajuwon and Wolffe, 2015; Bombom and Abdullahi, 2016; Ogu, Umunnah and Nwosu, 2016; Brydges and Mkandawire, 2017; Haruna, 2017; Charles and Chinaza, 2018; Ijadunola et al., 2019; Nwokorie and Devlieger, 2019) have been conducted on physical disability in Nigeria, and these were considered relevant to the study. To ensure high quality, all the articles obtained from the databases were evaluated and appraised individually using the CASP appraisal tool and the Holland and Rees critiquing framework (Holland and Rees, 2016; CASP tool, 2019).

The fact that there is limited research on the geographical context of Nigeria, particularly the northern region, prompted the use of additional sources such as government websites, news media, and historical magazines, in addition to the existing literature (Table 7). Information on the cultures, ethnic groups, and religious ideology of North-western Nigeria was also acquired using the same method (as shown in Table 8). Articles of mediocre quality, outdated information (before 2010), and those with insufficient evidence-based data were excluded. While these articles described some issues and challenges faced by PwPDs, they lacked detailed engagement. The scarcity of research on physical disabilities in Nigeria suggests a need for more rigorous and in-depth investigations.

Table 7: Included reviews.



Authors	Date	Title	Journal/sources
C. Jonah Eleweke	2013	A review of the challenges of achieving the goals in the African Plan of Action for people with disabilities in Nigeria	Disability & Society
Augustine Edobor Arimoro	2019	Are they not Nigerians? The obligation of the state to end discriminatory practices against persons with disabilities.	International Journal of Discrimination and the Law
Amusat, N.	2009	Disability Care in Nigeria: The need for professional advocacy	African Journal of Physiotherapy and Rehabilitation Sciences
Sabo Suleiman Kurawa	2010	The impact of disability on self and society: an agenda for research on rehabilitation of disabled in Nigeria.	Procedia Social and Behavioural Sciences
Elisha P. Renne	2013	Disability and Well-Being in Northern Nigeria.	Book Chapter

Table 8: Grey literature search

Authors/website name	**Title**	**Data searched**	**Sources**
Almu Bello, Miracle A., Adesina, and Kehinde K Kanmodi.	Northern Nigeria: An overview.	April 2020	ResearchGate
DRAF Grant making Committee Meeting	Nigeria Country Report	April 2020	World Health Organisation
Noah Echa Attah	Contesting exclusion in a multi-ethnic state: rethinking ethnic nationalism in Nigeria.	May 2020	Taylor and Francis Online
Terry Miller Anthony B. Kim James M. Roberts with Patrick Tyrrell	2020 index of economic freedom	March 2020	The heritage foundation
Precious Nonye Sango	Country profile: intellectual and developmental disability in Nigeria	June 2020	Emerald insight
Zain Agu	Cultural similarities in Nigeria and their differences.	April 2020	Legit
Alex E. Asakitikpi	Healthcare Coverage and Affordability in Nigeria: An Alternative Model to Equitable Healthcare Delivery	May 2020	Intech Open
Davies Adeloye, Rotimi Adedeji David, Adenike Ayobola Olaogun, Asa Auta, Adedapo Adesokan, Muktar Gadanya, Jacob Kehinde Opele, Oluwafemi Owagbemi and Alexander Iseolorunkanmi	Health workforce and governance: the crisis in Nigeria.	May 2020	National library of medicine

Authors/website name	Title	Date searched	Sources
Justin J.W. Powell	from exclusion and segregation to inclusion Disability-based inequalities in the education systems of Germany and Nigeria: International Comparisons	April 2020	ResearchGate
Macellina Y. Ijadunola, Temitope O. Ojo, Florence O. Akintan, Ayoade O. Adeyemo. Ademola S. Afolayan & Olakunle G. Akanji	Engendlering a conducive environment for university students with physical disabilities: assessing availability of assistive facilities in Nigeria	May 2020	Taylor and Francis Online
Bola O. Akanji, **Adesola Ogunniyi,** and **O. Baiyewu,**	Healthcare for Older Persons, A Country Profile: Nigeria	April 2020	Wiley Library
Samuel **Malik**	Country profile: Nigeria	April 2020	New Internationalist
Belinda Archibong	Historical origins of persistent inequality in Nigeria	May 2020	Taylor and Francis Online
Emmanuel Mayah, Chiara Mariotti, Evelyn Mere, Celestine Okwudili Odo	Inequality in Nigeria: exploring the drivers	June 2020	Oxfam International
Human Development Report	National Human Development Report 2018	June 2020	United Nations Development Programme
City **population**	NIGERIA: States & Cities.	May 2020	City population
Jenny Birchall	Overview of social exclusion in Nigeria	April 2020	Helpdesk report
Federal Republic of Nigeria	Nigeria Demographic and Health survey	May 2020	Demographic and Health survey programme

Authors/Website name	Title	**Date searched**	**Sources**
	2018		
Okey Charles Ogu, Kingsley Chinaza Nwosu, Joseph Onuwa Omunnah and Iloka Chidinma Glonia	Perception of Physical Educators Toward Teaching Students with Disabilities in an Inclusive Class setting in Nigeria	March 2020	Palaetra Joumal
WorldoMeter	Nigeria Population	June 2020	Worldometer
Sabo Suleiman Kurawa	The impact of disability on self and society: an agenda for research on rehabilitation of disabled in Nigeria	May 2020	ScienceDirect
Natalie Smith	The Face or Disability in Nigeria: A Disability Survey in Kogi and Niger States	May 2020	**Disability**, CBR and Inclusion development
Ofojebe, W.N. and Ezugoh., Theodorah Chinello	Teachers' Motivation and its Influence on Quality Assurance in the Nigerian Educational System	June 2020	African Joumal online
Elisha P Renne	Disability and Well-Being in Northern Nigeria		
Judith McKenzie and Chioma Ogochukwu Ohajunwa	Understanding disability in Nigeria: A commentary on "country profile: Intellectual andl developmental **disability** in Nigeria"	May 2020	Emerald Insight
Amaghonyeodiwe, L.A. Osinubi, T.S.	The Nigerian Educational System And Returns to Education	June 2020	Ideas

Authors/website name	Title	Data searched	Sources
Ngozi M. Nwakeze and Ngianga-Bakwin Kandala.	The spatial distribution of health establishments in Nigeria.	April 2020	African Population Studies
Mohammed Awaisu Haruna	The Problems of Living with Disability in Nigeria.	May 2020	International knowledge sharing platform
Inclusive friends (charity organisation)6	What Violence Means to Us: Women with Disabilities Speak	June 2020	Nigeria Stability and Reconciliation programme

After analysing the selected articles for relevance, many commonalities were found between the articles, reviews, and grey literature regarding challenges, stigma, discrimination, inequality, and mobility issues. The themes extracted from the articles that met the inclusion criteria were separated into several sections. However, there were only a limited number of articles addressing violence and abuse towards PwPDs in North-western Nigeria and very few that addressed these issues in Nigeria as a whole. Despite some regional differences between Northern and Southern Nigeria, many of the health issues, violence, and abuse experienced by people with disabilities are similar across regions.

As a result, some of the issues and challenges discussed in the literature are not limited to the Northern part of Nigeria alone but apply to Nigeria as a whole. These were then compared to other studies that address similar matters across Africa. The themes extracted from the articles, which were read and re-read, include: living with physical disability in Nigeria; health-related challenges faced by PwPDs; educational inclusion and the availability of assistive technology; obstacles to PwPDs' participation in physical activities in Nigeria; challenges faced by PwPDs in the workplace; and the lack of accessible transport and buildings.

3.1.5 Fifth stage: Collating, Summarising, and Reporting the Results.

After conducting a thematic analysis and appraisal of the selected studies that met the inclusion criteria (as indicated in Tables 7 & 8), the following themes were extracted: the challenge of living with physical disability in Nigeria; health issues related to the challenges faced by PwDs; educational inclusion and the availability of assistive technology; challenges and barriers faced by PwPDs when participating in physical activities in Nigeria; and challenges PwPDs face in their workplaces and due to lack of accessible transport and buildings.

These steps were based on Levac et al.'s recommendation of adding a stage that resembles a thematic analysis or a qualitative data analysis technique. This approach proved useful as the analysis and appraisal enabled a clear link between the findings and the aim of the study, which was to better understand the lives of PwPDs in North-western Nigeria.

3.2 Overview of the Included Studies.

The reviewed studies were conducted in various regions of Nigeria. 6 studies (Oladunni, 2012; Ogu, Umunnah, and Nwosu, 2016; Brydges and Mkandawire, 2017; Charles and Chinaza, 2018; Ijadunola et al., 2019; Nwokorie and Devlieger, 2019) were set in southern Nigeria, 3 (Abdu et al., 2013; Balarabe, 2014; Bombom and Abdullahi, 2016) in the north, 1 (Smith, 2011) was set in both the north and south, and 4 (Wolffe, Ajuwon, and Kelly, 2013a; 2013b; Kelly, Ajuwon, and Wolffe, 2015; Haruna, 2017) across the entire country.

In all the selected studies mentioned (Smith, 2011; Oladunni, 2012; Abdu et al., 2013; Balarabe, 2014; Ogu, Umunnah and Nwosu, 2016; Charles and Chinaza, 2018; Ijadunola et al., 2019) ethical approval was obtained from their respective communities. However, some studies raised ethical concerns. Wolffe, Ajuwon, and Kelly (2013a); Wolffe, Ajuwon, and Kelly (2013b); and Kelly, Ajuwon, and Wolffe (2015) obtained approval from a U.S. board for Nigerian research, raising questions about credibility and ethics. Similarly, Brydges and Mkandawire (2016) did not obtain Nigerian ethical approval, casting doubt on the reliability and ethics of their research.

Nwokorie and Devlieger's (2019) self-funded research did not require external ethical clearance but did adhere to ethical guidelines. Bombom and Abdullahi (2016) did not mention ethical approval but ensured that no personal data was collected. Haruna (2017) relied on secondary data and thus did not need ethical approval.

Furthermore, participant selection varied between studies. Some focused on visually impaired individuals, while others included a diverse sample, including hearing and visually impaired individuals. Nevertheless, Smith's (2011) study spanned south and north Nigeria, examining over 1,000 people with disabilities. Haruna (2017) relied on secondary data from various sources. However, the approach and methodology used in Wolffe, Ajuwon, and Kelly's studies raised questions, as the alignment between their research aims and methods was not clear.

Kelly, Ajuwon, and Wolffe (2015) used the same questionnaire as in previous studies but added questions on assistive technology and workplace accommodations. They increased the sample size to 200 participants, using purposive sampling to ensure diversity in terms of personal characteristics. They conducted thematic analysis and provided detailed methodological information, thus enhancing the study's credibility.

Charles and Chinaza (2018) employed a mixture of data collection methods, including interviews, focus groups, and visual tools such as photos and videos to ensure a comprehensive understanding of the conditions faced by students with visual and hearing impairments. Collaboration with sign language experts improved the data quality and validity, while inter-coder reliability minimised bias and errors.

Nwokorie and Devlieger's (2019) qualitative study used fieldwork grounded in anthropology, featuring interviews with officials and constant data reflection within the field. Balarabe (2014) conducted cross-sectional research, utilising a pre-evaluated questionnaire and Chi-square analysis. Ogun, Nwosu, and Umunnah (2016) employed correlational research and developed self-efficacy tools and ensured methodological clarity by using a CATPAI questionnaire. Abdu et al (2013) produced a descriptive report with a multidisciplinary team, following medical protocols. Ijadunola et al. (2019) used mixed methods, with qualitative and quantitative data triangulation. Brydges and Mkandawire (2016) opted for small-scale qualitative interviews to gain in-depth insights and conducted thematic content analysis.

Additionally, Bombom and Abdullahi (2016) adopted a mixed-methods approach, using questionnaires and focus group discussions for data collection. Their questionnaires gathered demographic and travel-related information. They removed certain questions due to data concerns. Focus group discussions supplemented the data, although they encountered challenges with regard to focusing on mobility issues. The specific analytical tools used for data analysis were not mentioned.

Smith (2011) conducted a survey for The Leprosy Mission Nigeria using a 29-item questionnaire. Bilingual assistants facilitated communication for non-English-speaking participants. Quantitative data were analysed using Epi-Info 2003, by applying statistical tests, while details of the interview analysis were not provided.

Similarly, Oladunni (2012) employed a quantitative approach by means of a 37-item questionnaire adapted from the World Health Organization's standards. It covered various aspects of sexual knowledge and practices among teenagers with physical disabilities. Data analysis was conducted using SPSS version 16, although the specific process was not detailed.

However, Haruna (2017) relied on secondary data, combining empirical and theoretical information on living with disability in Nigeria. The data came from diverse sources, including government records, publications, journal articles, books, and newspapers. After categorising the data into major and sub-themes, Haruna used thematic narrative analysis for interpretation.

3.3 Challenges of Living with Physical Disability in Nigeria.

PwDs in Nigeria, particularly those with visible physical debilities, face numerous challenges. Despite some people’s positive outlook toward PwPDs, it is undeniable that most non-disabled people hold negative attitudes toward them. These individuals are often viewed as a liability, leading to their isolation and rejection from society (Haruna, 2017). Unfortunately, this is not a new phenomenon in Nigeria, as it has been prevalent since ancient and mid-level medieval periods. Traditional beliefs regarding the cause of disabilities in many Nigerian cultures heavily influence people’s attitudes and reactions toward those with disabilities, particularly children with special needs.

Additionally, disabilities such as blindness, deafness, retardation, and orthopaedic impairment were once viewed in traditional settings as a punishment from vengeful gods for misdemeanors in past or present incarnations, such as infidelity or murder (Haruna, 2017). Similarly, Nwokorie and Devlieger (2019) noted that according to the Igbo view, a disability is considered a ‘misfortune,’ particularly when it has a spiritual origin. However, there is no explicit discrimination against disabilities, although differing values are placed on those with and without disabilities. In extreme cases, the Igbo worldview associates people with disabilities and their possessions, including their speech, as “dented”, like a car after an accident (Haruna, 2017; Nwokorie and Devlieger, 2019). Therefore, even if they are wealthy, an individual with a disability cannot be envied.

According to Haruna (2017), there is a widespread belief that evil spirits and witchcraft cause disabilities in those who ignore their warnings, leading people with disabilities to be viewed as deviants and sinners and to experience social exclusion. This social separation and exclusion also affects children and adolescents who are often teased and isolated by their non-disabled peers in their neighbourhoods, communities, and schools (Smith, 2011; Brydges and Mkandawire, 2017; Haruna, 2017).

Parents of children with physical disabilities hold mixed attitudes towards their children, with fathers in North-western Nigeria showing more positive attitudes towards their disabled children than mothers, who may hold high expectations of an 'ideal child' (Haruna, 2017). This discrepancy may be due to the healthcare system in Nigeria, which places exclusive responsibility on mothers for the health and well-being of their children, leading to maternal fatigue and burnout and resulting in negative attitudes toward their disabled children. Additionally, Nigerian mothers tend to be more emotionally dependent on their children than fathers, making their disappointment with a disabled child even more profound (Haruna, 2017).

In Nigeria, PwPDs are subjected to daily discrimination and stigmatisation. Haruna (2017) emphasised the damaging impact of stigmatising attitudes, stating that negative behaviours towards this population serve to emphasise their ‘difference’, leading to prejudice and discrimination in their interactions with non-disabled individuals. This discrimination and prejudice result in their exclusion from society and the benefits it offers, including access to education, social support, housing, and healthcare. Therefore, discrimination is yet another form of social exclusion experienced by PwPDs and other vulnerable groups (Smith, 2011; Haruna, 2017).

Stigma and social exclusion have a devastating impact on PwPDs, particularly children and adolescents, leading to poor social relationships, low self-esteem, depression, isolation, and self-harm. In Nigeria, a child who experiences stigmatisation may suffer from identity crises, with a profound impact on their sense of self and social identity. They are no longer seen as “Child A” but rather “Child A, the deaf or the blind”, thus reducing them to their disability and resulting in discrimination in various aspects of life: socially, educationally, politically, and economically (Haruna, 2017; Nwokorie and Devlieger, 2019).

Furthermore, PwPDs face discriminatory attitudes from the government and the public in relation to decision-making, policy implementation, and other areas affecting their lives (Smith, 2011; Haruna, 2017; Nwokorie and Devlieger, 2019). In Anambra state for example, one of the most populous regions in Eastern Nigeria, an estimated 5,000 PwDs protested on ‘World Disability Day’ due to experiences of humiliation and neglect by the government. For example, one protester explained that they did not want to be portrayed as beggars and requested that the government avoid making them feel less than human (Haruna, 2017). This kind of behaviour by the government and its officials is common, and PwDs are now making efforts to resist oppression and assert themselves in everyday life (Nwokorie and Devlieger, 2019).

PwPDs often face economic and social exclusion, harassment, and intimidation within society. Women with physical disabilities face a triple disadvantage due to discrimination based on disability, poverty, and gender (Haruna, 2017). In Nigeria, women with permanent Vesicovaginal Fistula (VVF) disability suffer rejection from their husbands, communities, and even their own parents. According to Haruna (2017), 95.53% of women with VVF were rejected by their husbands, 90.55% were shunned by their communities, and 66.17% were rejected by their parents in Katsina and Kano states, both of which are in North-western Nigeria. Due to the lack of reliable government policies on financial assistance and training, PwDs are left with no option but to beg for survival and endure various forms of adversity

(Abdu et al., 2013; Haruna, 2017).

Additionally, the lack of disability and unemployment benefits has resulted in PwDs resorting to begging on the streets while holding prescription cards to purchase medicine for themselves or their loved ones. They are often denied medical treatment due to their inability to pay their medical bills, forcing them to rely on public assistance to survive and avoid further suffering (Haruna, 2017). This problem is particularly severe among disabled children who miss out on necessary treatment or vaccinations for easily treatable illnesses like diarrhoea or fever. Lack of accessible primary healthcare facilities in some rural parts of Nigeria further exacerbates the situation, and children with severe disabilities often do not survive and reach adulthood (Abdu et al., 2013; Haruna, 2017).

Nevertheless, some empowerment programmes have been established to address the challenges faced by PwDs in the country (Smith, 2011). However, these programmes have been exploited by politicians to promote their political agendas and gain re-election, as noted by Nwokorie and Devlieger (2019). According to Nwokorie and Devlieger (2019), wealthy political elites often sponsor promising individuals, including young people, into elective offices to protect their interests. These elites also organise and finance empowerment programmes for the public and the disability community, especially during election periods.

However, while some educated individuals see these empowerment programmes as a way for politicians to exploit the disability community for electoral gain, many disabled people who are illiterate, desperate for support, and unemployed see these programmes as their only option. They are often left with no choice but to beg on the streets or accept the money and resources offered by politicians and wealthy elites in exchange for their votes during elections (Smith, 2011; Nwokorie and Devlieger, 2019). Without a reliable source of income to support their families, they are willing to do anything to survive. According to Nwokorie and Devlieger (2019), the empowerment programmes are viewed as a win-win solution for politicians and the recipients of the supplies given by them.

The support provided by politicians and their empowerment programmes has mostly benefited a select few individuals who have close ties to the politicians or leaders of the programmes. Those without connections or ties are often neglected (Nwokorie and Devlieger, 2019). This exclusion is often because they do not belong to the organised disability movement and choose to isolate themselves from it due to the financial demands placed on its members. As a result, they are often cut off from information about empowerment events and resource distribution. However, according to a participant in Nwokorie and Devlieger's (2019) study, these events are not the primary source of income or livelihood for most disabled people, but rather an additional source of support to supplement their regular income.

At the state level, empowerment programmes serve as an opportunity for the government to label the disability community as “less privileged” and showcase their supposed concern for their well-being. This was confirmed by a civil servant in Nwokorie and Devlieger's (2019) study, who stated that the government publicises such events on social media, invites disability community leaders, and even provides transportation for attendees.

After receiving approval from the governor for the empowerment event, the ministry responsible for disability affairs contacts the disability community, while the accountant general releases funds to ministry officials for materials. These materials may include grinding machines, wheelchairs, cooking stoves, and crutches. Unfortunately, the disability community is rarely consulted during the planning stage, resulting in substandard purchases (Nwokorie and Devlieger, 2019). Additionally, the commissioner in charge of the ministry creates a list of recipients before the event, although the ministry already has a file of applicants. Ultimately, some individuals who already have wheelchairs may receive another, which they can then resell to those who were not able to receive them initially.

3.4 Health Issues Related to Challenges Faced by PwPDs.

PwPDs in countries such as Nigeria are at a high risk of acquiring various health problems (Oladunni, 2012; Abdu et al., 2013; Balarabe, 2014), with physical disability being caused by different factors. It may be congenital, occurring at birth due to genetic problems or injuries, or progressive health issues such as motor neurone disease, multiple sclerosis, and muscular dystrophy, which worsen over time and affect daily living. In Nigeria, the most common causes of physical disability are accidents, infections, and insecurity (Smith, 2011; Oladunni, 2012; Abdu et al., 2013; Balarabe, 2014).

Abdu et al. (2013) found that in countries such as Nigeria, epidemics of cholera, cerebrospinal meningitis, and other infectious diseases are common and disproportionately affect vulnerable groups such as the displaced and homeless. Their study of people living on the streets of Kano state (North-western Nigeria) revealed that most participants were visually impaired, with glaucoma and cataracts being the leading causes of avoidable blindness. The lack of suitable intervention programmes for these preventable health problems was highlighted. Additionally, PwPDs who beg on the streets in Nigeria are at a higher risk of being involved in road traffic accidents, which can lead to injuries, as was the case for 68.4% of patients examined in Sagamu, in Ogun state, Nigeria. However, there is no data regarding the risk or prevalence of road traffic accidents in North-western Nigeria.

Moreover, Abdul et al. (2013) found that most of their participants had no regular accommodation, and one-fifth were homeless. Similarly, PwPDs living on the streets of Northern Nigeria often lack standard accommodation or a place to call home, resulting in open defecation and urination in residential premises and public spaces, as noted by Abdu et al. (2013). This lack of proper facilities promotes the spread of diseases and provides a breeding ground for pests such as mosquitoes, which can lead to malaria, typhoid fever, and cholera. Despite numerous policy statements and provisions related to housing in Nigeria, there is still a shortage of both urban and rural housing, as noted by Abdu et al. (2013) and Asakitikpi (2019).

Apart from the health issues faced by adolescents with physical disabilities, they also encounter other challenges, with sexuality and sexual development being one of the most common. This multidimensional process is closely linked to basic human needs, such as being accepted and liked, receiving and displaying affection, feeling valued and attractive, and sharing feelings and thoughts. However, many teenagers, particularly in Nigeria, lack understanding of sexual development due to the absence of sex education in most schools (Oladunni, 2012). This is more apparent in the Northern part of Nigeria where sexual education is restricted. Sexual development encompasses not only physiological and anatomical functioning but also sexual knowledge, attitudes, beliefs, and values, as noted by Oladunni (2012). Oladunni (2012) also found that sexuality should be viewed within the broader context of physical maturation, gender-role socialisation, social relationships, body image, and social aspirations.

Oladunni's 2012 study offers a deep exploration of the sexual behaviour, reproductive health, and vulnerabilities experienced by adolescents with physical disabilities in Nigeria, specifically in the Northern region. The study concentrated on participants aged 10 to 19, shedding light on various aspects of their sexual experiences and contraceptive practices.

Particularly noteworthy is the early age at which participants engaged in their first sexual experiences: typically around 15 years old. This highlights a critical need for tailored sexual education that directly addresses the unique concerns of adolescents with physical disabilities. It is equally important to highlight that while the participants displayed awareness of contraceptive methods, particularly condom usage, these practices seemed to be shaped more by peer behaviour than a comprehensive understanding of sexual health.

Perhaps the most important finding was the prevalence of sexual abuse and exploitation among women and adolescents with physical disabilities. The fact that perpetrators ranged from strangers to caregivers indicates a systemic issue that requires immediate attention. The study’s finding that female adolescents were more likely to exchange sex for gifts underscores their increased vulnerability to exploitation.

A significant concern that Oladunni's study raised is the lack of adequate sexual health knowledge, both among the adolescents themselves and their parents. This knowledge gap can be attributed to factors such as poor social skills, low self-esteem, and learning difficulties. This lack of accessibility to key information puts these individuals at a higher risk of contracting Sexually Transmitted Infections (STIs), including HIV/AIDS. The study's revelation about some participants' misconceptions regarding HIV/AIDS and their belief that it only affects others highlights the importance of targeted awareness campaigns to address these misunderstandings.

The findings of the study underscore the validity of my decision to focus my research on this topic in North-western Nigeria. By focusing on the challenges faced by this vulnerable group, I hope to contribute to the development of informed policies and effective programmes that can positively impact the sexual and reproductive health outcomes of adolescents with physical disabilities in the North-western part of Nigeria.

3.5 Educational Inclusion and the Availability of Assistive Technology

3.5.1 Inclusion of People with Disabilities in the Mainstream Education in Nigeria

Generally, students with disabilities in Nigeria encounter numerous challenges within the formal education system in terms of accessibility and engagement. Although there is increased awareness and international pressure for inclusive education in Sub-Saharan Africa, progress remains uneven (Brydges and Mkandawire, 2017). Brydges and Mkandawire (2017) highlight challenges faced by students with disabilities in Nigeria and the varied perceptions of inclusive education among children with visual impairments. Inclusive education was seen as a positive opportunity for gaining new social skills and understanding the wider world. While some participants had attended special educational schools before integrating into mainstream education, they faced challenges during the transition (Brydges and Mkandawire, 2017; Fafunwa and Fafunwa, 2018).

Brydges and Mkandawire (2017) identify limited attention and instructional support as a significant challenge for students with disabilities in inclusive classrooms. While teachers may give some individual attention to disabled students, they often rely on their non-disabled classmates to explain concepts, take notes, or navigate the school environment. Although students with disabilities appreciate their friends' assistance, relying on peers without disabilities for supplementary instruction presents several issues.

Brydges and Mkandawire's (2017) participants gave examples of some of these problems, with the main issue being academic performance and competitiveness. It is challenging for students with disabilities to rely on their classmates' assistance, despite their appreciation of it. The participants highlighted that their non-disabled classmates would sometimes dismiss requests or not address their assistance requests on time, thereby undermining their ability to keep up with their schoolwork.

This highlights the gaps in the support systems for students with physical disabilities, as there is a lack of clarity and consistency. Depending on their peers for education puts students with physical disabilities in a difficult position (Brydges and Mkandawire, 2017; Ijadunola et al., 2019), creating a barrier to success. Another major challenge is bullying, as students with disabilities are often subjected to mockery and harassment by classmates in inclusive classrooms (Brydges and Mkandawire, 2017).

Generally, in Nigerian schools, PwDs, especially those with physical impairments, often face mistreatment, as noted in studies by Brydges and Mkandawire (2017) and Arimoro (2019). Even students without disabilities are not exempt from being the targets of practical jokes by their peers (Brydges and Mkandawire, 2017). Although bullying and teasing at school are global issues, it is disheartening to learn that students' disabilities are exploited due to personal grudges. It is even more troubling when peers without disabilities openly exhibit and exploit this prejudice. Brydges and Mkandawire's (2017) research participants reported being disrespected and their opinions disregarded. For disabled students, demonstrating competence in an unsupportive learning environment is particularly challenging. This challenge is compounded by attitudes that undermine their self-esteem.

PwPDs also face challenges due to a lack of specialised training and insufficient classroom support. Despite receiving assistance from peers, disabled students often lack adequate supplementary tutoring. In Brydges and Mkandawire's (2017) study, visually impaired participants reported having difficulty learning mathematics in an inclusive classroom compared to other subjects. This is because mathematics involves a specialised vocabulary and system of symbols that is integral to mathematical thinking, which cannot be easily learned without additional specialised attention from teachers. Without assistance, these students find it challenging to understand or master the concepts. Participants in the study recommended that school authorities should employ special teachers to teach those with special needs and provide extra lessons after classes. However, personal experience shows that public schools in Nigeria do not typically offer additional lessons or provide attention to students with disabilities, leaving them primarily dependent on their classmates and friends for extra support and assistance, as also highlighted in Brydges and Mkandawire's (2017) study.

Moreover, students with disabilities require specialised classroom technology to address their unique needs in addition to inadequate training and supplementary instruction. In a study by Brydges and Mkandawire (2017), participants expressed a need for Job Action with Speech (JAWS) software to enable them to use computers independently. The absence of this software necessitated assistance from non-disabled peers, hindering the use of school computers by students with disabilities.

The students had drawn attention to the need for the software, but the school authorities had repeatedly delayed its purchase, citing cost as a reason. Despite the students' repeated requests stressing the software's importance, the school officials kept pushing back the timeline until the students eventually gave up. Unfortunately, such disregard for assistive technology is not uncommon, with many schools and institutions providing only the bare minimum for the inclusion of PwDs (Brydges and Mkandawire, 2017; Ijadunola et al., 2019). Schools and institutions frequently fail to provide accessible equipment to students with physical disabilities, especially if the required equipment is expensive (Brydges and Mkandawire, 2017). As a result, students often have to purchase the necessary equipment themselves, thus placing a financial burden on their families.

3.5.2 Accessibility of Facilities Across Nigerian Institutions

Both people with and without disabilities require university education as a means of achieving self-actualisation. For PwDs, university education is essential in enabling them to learn in the least restrictive manner possible and contribute to national development (Ijadunola et al., 2019). However, to achieve this aim and enable these students to contribute to the nation's development, special facilities must be put in place. These facilities include assistive infrastructure designs such as equipping lecture halls and accommodation with ramps and railings to aid students using crutches, wheelchairs, and braces. Additionally, assistive technologies such as low vision aids and hearing aids are necessary for students with visual and hearing impairments, respectively. Specialised library facilities, including braille textbooks, are also crucial. Developed countries generally have more of these facilities, which enables the education of students with special needs.

Ijadunola et al. (2019) highlighted the challenges faced by university students with physical disabilities in Nigeria regarding the accessibility of university facilities. In terms of awareness of assistive facilities, almost all the participants in the study were unaware of facilities that aid learning, accessible buildings on campus, and accessible facilities for library use by disabled students. Only 23% of the participants were aware of both front seats and extra time for examinations as special considerations for disabled students, while half of the participants were unaware of any special considerations.

Based on personal experience, it is not surprising that students with disabilities are often unaware of the special arrangements or considerations put in place for them by universities, as these institutions do not advertise them. Additionally, most university staff members are not aware of the number of students with disabilities in their departments or faculties. While some staff may be aware of the presence of students with disabilities on their campus and the accommodations put in place for these students, interactions with students with disabilities are rare, except in the case of the lecturers who teach these students (Ijadunola et al., 2019).

Ijadunola et al. (2019) highlighted that although certain residential halls had registered students with disabilities, no such record existed at the Division of Students Affairs, Admission Office, and Directorate of Planning, Budgeting, Monitoring/Information Management. A staff member at the university (OAU) where Ijadunola et al. (2019) conducted their study mentioned that the accommodation used for students with disabilities was selected based on its proximity to the entrance of the hostels and wheelchair accessibility, rather than any other special facilities.

Ijadunola et al (2019) revealed that many universities in Nigeria do not have official policies regarding students with disabilities, leading to a lack of special academic considerations for them. As a result, it is not surprising that many students with disabilities are unaware of the special arrangements and facilities available to them on campus. This lack of policy also affects the decision-making process for accommodating their academic needs, as the decision is left to the discretion of lecturers and invigilators, as reported by Ijadunola et al (2019).

Students with disabilities face various challenges in relation to education, such as difficulty accessing library materials, lecture venues and buildings, lecture material, and following lectures, as well as accessing toilets and water. According to Ijadunola et al. (2019), physically disabled students reported that fetching water was the most challenging aspect of their student life. However, support groups and counselling services for students with disabilities are lacking in most Nigerian universities, as shown by Ijadunola et al. (2019). The accessibility of facilities for physically disabled students in Nigerian universities is also inadequate, with many assistive facilities not purpose-built for disabled students (Ahmed et al., 2014; Ijadunola et al., 2019). Similar findings were reported by Morley and Croft (2011) in their study on the quality and availability of assistive facilities in Ghanaian and Tanzanian universities.

3.6 Challenges and Barriers to participating in Physical Activities for PwPDs in Nigeria.

Regular participation in physical activities, sports, and recreational activities is a fundamental element of achieving a healthy lifestyle, as supported by Shakespeare and Officer (2011). Physical activities have numerous health benefits, such as reducing the risk of type 2 diabetes, improving physical functioning, and enhancing cardiovascular function (Charles and Chinaza, 2018). This positive influence also applies to PwDs, as regular participation in physical activities can help to offset lifestyle-related diseases, including diabetes, heart disease, and certain types of cancer (Charles and Chinaza, 2018).

Children and adolescents with disabilities are at a higher risk of obesity and associated health conditions due to their tendency to be inactive or not participate in physical exercise, as noted by Ogun, Nwosu, and Umunnah (2016). This is further supported by Charles and Chinaza (2018), who found that people with disabilities have limited options for physical activities and sports due to the numerous barriers they face, such as self-efficacy, motivation, and inaccessible equipment, programmes, and services available in community recreation facilities. These barriers can significantly inhibit participation in active and healthy lifestyles, particularly for those with physical disabilities, and prevent people with sensory disabilities, such as visual and hearing impairments, from engaging in physical activities (Charles and Chinaza, 2018).

Although people with visual and hearing impairments face barriers to participation in physical activities, some still express a love of running and playing football. Charles and Chinaza (2018) reported that these activities bring happiness and joy to participants with disabilities. For instance, one visually impaired participant stated, "*Whenever I play football, I feel happy,*" while another expressed a desire to play professional football. Similarly, a hearing- impaired participant stated, "*I derive joy from participating*".

A study conducted in South Africa examined the perceived motivational factors influencing students with disabilities to participate in sports and found that high self-esteem in relation to physical activities was a key factor (Oladunni, Lyoka and Goon, 2015). More than half of the participants strongly agreed that they enjoy participating in sports and physical activities. Furthermore, over half of male students and more than one-third of female students agreed that their motive for participating in sport was enjoyment/to have fun (Oladunni, Lyoka and Goon, 2015). These findings suggest that people with disabilities enjoy and want to participate in sports, just like their non-disabled peers.

This shows that PwPDs are willing to participate in physical activities when accessible equipment is available. Participants in Charles and Chinaza's (2018) study, as well as that of Ogun, Nwosu, and Umunnah (2016), indicated that children and adolescents with disabilities have positive attitudes and a sense of self-efficacy towards physical activity. A positive outlook towards physical activities in childhood may lead to continued participation into adulthood (Ogu, Umunnah and Nwosu, 2016). However, negative attitudes associated with physical activity in children and adolescents with disabilities were found to be due to beliefs that it is unpleasant or has negative consequences, such as being time-consuming (Kelly, Ajuwon and Wolffe, 2015; Ogu, Umunnah and Nwosu, 2016). These negative beliefs serve as barriers to participation in physical activities, especially when fear of bodily pain is present, which is common among PwDs, particularly those with physical disabilities (Ogu, Umunnah and Nwosu, 2016; Charles and Chinaza, 2018).

Participants in the study also expressed fear of getting injured while participating in sports or other physical activities. For instance, a hearing-impaired participant mentioned that "*injuries sustained by friends prevent me from participating*". Similarly, Kelly, Ajuwon, and Wolffe

(2015) identified low motivation and physical limitations as the reasons why PwPDs do not participate in physical activities. Unlike Charles and Chinaza’s (2018) study, which identified fear of injuries and pain, Kelly, Ajuwon, and Wolffe's (2015) study found a lack of self-confidence and little interest in recreational activities to be the main reasons for non-participation. It is worth noting that these two studies looked at different age groups: Charles and Chinaza’s (2018) participants were school children while Kelly, Ajuwon, and Wolffe's (2015) participants were employed adults with visual impairments. Nevertheless, both studies show that PwPDs are less likely to engage in physical activity due to fear of injuries, bodily pain, lack of self-confidence, and interest in physical activities.

To overcome the barriers and challenges discussed above, physical educators need to find ways to motivate and encourage PwPDs to participate in physical activities. It is also their responsibility to reinforce participation in health-related physical activities outside of school and assist students in adopting a healthy lifestyle throughout their lives. The quality of the school’s physical education programme can be measured by the number of students who learn and acquire sports skills, which can contribute to their personal development (Ogu, Umunnah and Nwosu, 2016). Lack of expert assistance is another significant barrier identified by PwPDs in their attempts to participate in physical activities (Charles and Chinaza, 2018). Participants emphasised the need for more experts in the field of physical education, as well as for more accessible sports centres and gyms (Kelly, Ajuwon and Wolffe, 2015; Charles and Chinaza, 2018).

Kelly, Ajuwon, and Wolffe’s (2015) research participants emphasised the lack of trained human support and inadequate assistance for people with visual impairments who want to participate in recreational activities. They highlighted the need for more volunteers and qualified coaches to facilitate recreational opportunities for these individuals, who often lack support from non-disabled friends, guides, and support groups. Additionally, the study found that there is often a shortage of coaches, volunteers, or trainers available when people with disabilities have the time and motivation to exercise or play sports. The participants attributed these challenges to poor training and a lack of adapted equipment for recreation.

The shortage of trained exercise experts and volunteers is another significant barrier highlighted by Kelly, Ajuwon, and Wolffe's (2015) research participants. There simply are not enough qualified individuals to help people with visual impairments who want to exercise or participate in physical activities. This is one of the challenges identified in the study, which is similar to those raised by Charles and Chinaza (2018). In addition to the lack of expert support, Charles and Chinaza also noted that a good physical environment is essential for engaging in physical activities, particularly for PwPDs with visual impairments.

Aside from environmental barriers, individuals with physical disabilities in Nigeria also face a lack of adaptive equipment which hinders their participation in physical activities and exercise, according to Kelly, Ajuwon, and Wolffe (2015). Their study participants noted insufficient sporting and exercise equipment, as well as a shortage of adapted materials for both outdoor and indoor activities, as significant barriers. In addition, an inconsistent supply of reading aids such as magnification devices and books, and the absence of computers with accessibility features like text-to-speech assistance also hinder their participation in recreational or leisure activities, as reported by the study participants.

Despite the challenges faced by PwPDs, they generally have a positive outlook towards physical activities, as expressed by some of the participants in Charles and Chinaza's (2018) study. One visually impaired participant stated that he "*can perform a physical activity; my disability is not a problem for that*". However, another participant who had acquired a visual impairment later in life lacked confidence in participating in physical activities due to his disability. This suggests that PwPDs' attitudes towards physical activity may be influenced by the timing of their disability, with those born with the condition having a more positive outlook and finding it easier to overcome barriers and challenges to participating in physical activities in Nigeria (Kelly, Ajuwon and Wolffe, 2015; Oladunni, Lyoka and Goon, 2015; Charles and Chinaza, 2018).

3.7 Workplace Challenges for PwPDs

Unemployment rates for PwDs are higher in both the Global North and South compared to those without disabilities. Wolffe, Ajuwon, and Kelly (2013a) note that high rates of unemployment are the norm for individuals with visual impairments in both developing and developed countries. In Nigeria, particularly in rural areas, the estimated unemployment rate for PwPDs ranges from 90% to 100% (Wolffe, Ajuwon and Kelly, 2013a; 2013b).

In the study conducted by Wolffe, Ajuwon, and Kelly (2013a), participants identified a range of barriers to effective employment, including inaccessible or outdated materials and equipment, inadequate assistance, environmental and transportation challenges, discrimination, poor remuneration and motivation, lack of time and funds, limited training opportunities, obsolescence, and a lack of suitable housing. Participants expressed frustration with workplaces that lacked specialised equipment, particularly computers with assistive technology. The absence of assistive materials and adapted tools also hindered individuals with a visual impairment from effectively performing their job tasks. Furthermore, participants noted that the support offered by workers or volunteers was infrequent and insufficient to compensate for the lack of accessible materials and equipment.

Like those in Haruna (2017) and Bombom and Abdullahi's (2016) studies, participants in the study conducted by Wolffe, Ajuwon, and Kelly (2013a) noted that transportation and environmental challenges hindered or limited their movement at their workplaces or when traveling to see clients. They cited a lack of access to company-operated buses or transportation options available to non-disabled workers. Participants also mentioned environmental challenges that impeded their mobility, such as a lack of traffic control, pavements, unpredictable traffic conditions (particularly motorcycles), and unplanned pedestrian environments, which they had to negotiate on a daily basis (Bombom and Abdullahi, 2016; Haruna, 2017).

Although many PwPDs have jobs, they face multiple challenges that impede their ability to work effectively. Wolffe, Ajuwon, and Kelly (2013a) found that inadequate compensation, lack of job security, discrimination, negative attitudes, and insufficient government funding are among the challenges faced by PwPDs in the workplace. Participants in the study also identified environmental and transportation challenges, such as lack of accessible transportation and pavements, as major barriers to their mobility. Furthermore, the participants noted that they often lack the time to socialise or complete administrative tasks due to the pressure they are under to perform the duties of their job. These challenges contribute to the high rate of unemployment among PwPDs in Nigeria.

PwPDs who work as telephone operators or craftspeople are worried about job losses due to automation. Participants in a study by Wolffe, Ajuwon, and Kelly (2013a) expressed concerns about phone operators becoming secondary to cell phones, the threat of mobile phones eliminating their jobs, job uncertainty due to market forces, and the negative impact of petroleum by-products in the handicraft trade. Additionally, PwPDs face the challenge of limited training opportunities, which affects their chances of promotion. They attribute this lack of training to the country's severe economic challenges (Wolffe, Ajuwon and Kelly, 2013a).

The lack of training or workshops puts PwPDs at a disadvantage because it reduces their chances of obtaining higher positions and negatively impacts their job prospects (Wolffe, Ajuwon, and Kelly, 2013a; 2013b). Additionally, PwPDs mentioned a lack of pre-employment or employability skills training. A similar finding was observed in a study conducted in South Africa by Cramm et al. (2013), who found that a lack of skills and local job opportunities affected the ability of PwPDs to secure employment. This highlights the importance of obtaining work skills or training, as it increases the chances of job security for PwPDs compared to those without such skills or training.

In addition to training challenges, Wolffe, Ajuwon, and Kelly (2013a) highlighted a lack of suitable and affordable housing near their workplaces as an issue. Participants in the study cited poor and unsuitable housing arrangements, as well as a lack of suitable housing due to their disabilities, as factors that limited their job opportunities. Wolffe, Ajuwon, and Kelly (2013b) also found that employment was particularly important to PwPDs, as it improved their quality of life. Those who were visually impaired emphasised the importance of working to an even greater extent. This suggests that, despite the challenges they face, PwPDs prefer to persevere and overcome obstacles rather than lose their jobs or quit. Based on personal experience, PwPDs in Nigeria are rarely employed by local organisations. As a result, they often have to adapt to the discrimination and obstacles they face in their workplaces because finding a new job is difficult.

3.8 Lack of Accessible Transport and Buildings

PwPDs in Nigeria face various obstacles, including physical barriers to accessing public and private buildings, as well as transportation (Haruna, 2017). Accessible transportation is crucial to providing disabled individuals with access to basic facilities, services, and goods necessary to regulate their everyday lives and improve the quality of their lives. However, in Nigeria, disabled individuals are often denied these basic welfare services due to the lack of adequate infrastructure to meet their needs (Kelly, Ajuwon and Wolffe, 2015; Bombom and Abdullahi, 2016; Haruna, 2017). According to Haruna (2017), disabled individuals in Nigerian cities have limited access to transportation facilities, which hinders their daily activities and participation in urban life. Furthermore, the poor or inaccessible transportation system for disabled individuals in Nigeria, often leads them to incur extra expenses as they may need to hire a professional caregiver for transportation (Bombom and Abdullahi, 2016; Haruna, 2017).

Moreover, due to the lack of accessible public transportation, disabled individuals in Nigeria are often excluded from participating in social and economic activities, as they are unable to access job opportunities, education, and healthcare (Kelly, Ajuwon and Wolffe, 2015; Haruna, 2017). This further perpetuates their poverty and social exclusion, creating a vicious cycle of suffering that is difficult to break and making it difficult to address the needs and concerns of PwDs.

Although there are policies and laws that protect the rights of PwDs, implementation and enforcement are often inadequate (Haruna, 2017). This underscores not only the need for a comprehensive approach to address the challenges faced by disabled individuals in Nigeria, including accessible transportation, affordable housing, and job training and opportunities, but also demands the effective and efficient implementation of the existing legal frameworks.

Many public transport drivers in Nigerian cities such as Kano and Lagos do not allocate sufficient time for PwPDs to board and sit safely. As a result, people who use mobility aids such as crutches, wheelchairs, and walking frames are unable to use public transportation in most cities across the country (Bombom and Abdullahi, 2016; Haruna, 2017). In Enugu state, PwPDs rely on public taxis, buses, commercial motorcycles, and tricycles to move around, as there are no special transportation arrangements for them. This puts them in competition with non-disabled individuals, making it difficult for them to access available public transport. These methods of transportation are energy-draining and dehumanising, exposing PwPDs to the risk of road and traffic accidents (Haruna, 2017).

According to Bombom and Abdullahi (2016), PwPDs in Nigeria face significant mobility challenges such as high transportation costs and safety concerns. Furthermore, obstacles on the roads and uneven surfaces pose difficulties for visually impaired individuals and wheelchair users. These challenges are not limited to roads but also extend to facilities such as buildings with uneven floors. Haruna (2017) noted that there are no facilities for wheelchair access to street crossings or public buildings, and affordable and practical mobility aids are rare and expensive. Consequently, many PwPDs do not leave their homes due to transportation challenges and fear of getting run over by reckless drivers on Nigerian streets. Road accidents are prevalent in Nigerian cities, and drivers often ignore pedestrian crossings and exhibit road rage, creating constant fear and danger for physically disabled people (Kelly, Ajuwon and Wolffe, 2015; Bombom and Abdullahi, 2016). For instance, in the final quarter of 2021, Ogun state recorded the highest number of road traffic accidents at 286, closely trailed by the Federal Capital Territory with 280 accidents; meanwhile, Bayelsa and Katsina had the fewest incidents, and most accidents in Nigeria were categorised as severe (Federal Road Safety Corps, 2021).

Unsuitable housing facilities are common in Nigeria, with ramps that are too steep for PwPDs to use and even challenging for non-disabled people, toilets that are inaccessible to wheelchair users, and a lack of amenities like disability parking (Haruna, 2017). In addition, factors such as the lack of wheelchair accessible pedestrian bridges and facilities, open drainages or other openings in premises, the presence of stairs/steps without complementary ramps, unpaved, rough and uneven floor surfaces, the absence of lifts in multi-storey buildings, the presence of curbs, undulating and hilly terrain, and the absence of sidewalks prevent or make it difficult for PwDs to participate in social and economic activities in Nigerian society (Kelly, Ajuwon and Wolffe, 2015; Bombom and Abdullahi, 2016; Haruna, 2017).

Although people with visual impairments tend to employ human guides (family members) to help them move around their communities, this does not alleviate their fear of road and traffic accidents (Bombom and Abdullahi, 2016). Many of the guides are adolescents who get distracted easily (putting the person with the impairment in danger) and can be negligent at times, leading to persistent fears among visually impaired individuals (Bombom and Abdullahi, 2016). The guides are often family members, relatives, or paid child laborers, working long hours sometimes against their will on a begging mission to earn money for themselves and their benefactors (Bombom and Abdullahi, 2016; Haruna, 2017). This is done to contribute to their own upkeep as well as that of their relatives.

PwPDs often struggle to find compassionate commercial bus and taxi drivers who are willing to give them the space, time, and the help they need to board vehicles. According to Bombom and Abdullahi (2016), cultural taboos and stigmas surrounding leprosy are the most pressing challenges faced by PwPDs in their communities. While a small number of taxi drivers and commercial motorcyclists do address the traveling needs of disabled individuals, they charge exorbitant amounts of money. As a result, PwPDs often resort to slow and painful walking to access most of their destinations, which is very costly in terms of energy and time. Interestingly, some PwPDs consider these time and monetary costs to be minor mobility issues.

Generally, in Nigerian communities, the isolation and exclusion of PwPDs is palpable, as highlighted by Bombom and Abdullahi (2016) and Haruna (2017). Non-disabled individuals often intentionally withhold essential assistance required to address the travel needs of the physically disabled. The provision of suitable physical infrastructure could help to alleviate transportation challenges, improve accessibility, and to some extent, affordability, so long as adequate funding is allocated to physically disabled communities.

3.9 Conclusion

To conclude, it is evident from the studies discussed above that PwPDs face extreme challenges across Nigeria. It has also been shown that there were limited studies on the lives of PwPDs in North-western Nigeria. Thus, to establish a foundation for this research, a scoping review was conducted to gather relevant existing studies, literature, documents, and policy papers.

While other methods of literature review, such as systematic reviews, were considered, they were deemed unsuitable due to the limited studies on physical disability in Africa, particularly in Nigeria; and even more so when narrowed down to North-western Nigeria. The scoping review provided critical insights into physical disability across Nigeria and highlighted the need for more studies on disability not just in North-western Nigeria but across the country.

This review highlighted the significant challenges faced by PwPDs, particularly those with visual impairments, in Nigerian societies. It also showed that there was little understanding of PwPDs in North-western Nigeria beyond street begging and homelessness. Furthermore, these studies showed that PwPDs were often excluded from community activities and experienced isolation. Children and adolescents with physical disabilities were at a higher risk of sexual abuse, bullying, discrimination, and stigmatisation, both in schools and their communities. They were also more likely to be homeless, uneducated, and vulnerable to preventable diseases, which could lead to death. In addition, they were likely to face unemployment and hardship.

These studies, however, identified some of the challenges faced by PwPDs, but they did not address the aim of my research, which was to explore the lived experiences of PLwPDs in North-western Nigeria. As a result, the study addresses the following aim:

I. To understand the lives of PLwPDs in North-western Nigeria. While these studies highlighted the challenges experienced by PwPDs, they were mostly carried out in the Southern part of the country. Although there may be transferable findings, it needs to be borne in mind that Nigeria is a vast country with distinct cultural differences between the Southern and Northern regions (Mckenzie and Ohajunwa, 2017; Sango, 2017). They mostly focused on people with visual impairments, and only a couple of studies examined physical disabilities across Nigeria. Apart from Haruna (2017) and Abdu et al. (2013), the remaining studies were conducted in Southern Nigeria, thus highlighting the significant research gap that exists concerning the lives of PLwPDs in North-western Nigeria. Importantly, these studies did not look at the lived experiences of these people, but rather selected issues and challenges associated with disability such as unemployment and mainstream education. This research aims to fill these gaps and provide PwPDs in North-western Nigeria with the opportunity to share their lived experiences, not only regarding employment and education but also in relation to how they negotiated their daily lives and sustained themselves.

II. Additionally, while these studies highlighted the lack of resources available to PwPDs, they focused mainly on the Southern part of Nigeria, and there was no data about those in North-western Nigeria. In addition, most of the studies investigated the limited resources available to people with visual impairments, but they did not highlight anything specific regarding those with mobility difficulties. This research also explores the availability and accessibility of resources to PwPDs in North-western Nigeria.

III. Lastly, these studies did not explore the relationships between PLwPDs and their community lives. They only explored their views on physical activities and work experiences and did not address their relationships with people in their communities and societies. The studies were conducted in southern Nigeria, while none of them explored the situation for PwPDs in North-western Nigeria, as became evident in the review. As a result, this study attempts to understand the relationship between PwPDs and their communities and societies within North-western Nigeria.

Nevertheless, a few studies on physical disabilities in Northern Nigeria focused on street beggars and their impact on society (Balarabe, 2014; Bombom and Abdullahi, 2016; Haruna, 2017), but they did not investigate how PLwPDs sustained their lives in their communities in North-western Nigeria. The studies focusing on challenges faced by PwPDs in Southern Nigeria revealed specific issues, but their applicability to the Northern part of Nigeria, especially the North-western region, was limited. This underscores the importance of this study in these regions. While there is potential for identifying transferable findings, it is crucial to recognise Nigeria's vastness and the presence of distinct cultural differences, as illustrated by regional disparities in cultural mores, particularly between the Southern and Northern regions (McKenzie and Ohajunwa, 2017; Sango, 2017).

All the studies obtained focused on visually and hearing-impaired individuals, with no inclusion of wheelchair or crutch users or amputees. This study therefore aims to explore the experiences of these groups through storytelling, providing them with a platform to share their personal accounts of living with physical disabilities in North-western Nigeria.

3.10 Chapter Summary

In this chapter, I illustrated the approach employed in conducting the scoping review, and I explained the rationale for selecting this methodology. This choice was informed by the scarcity of studies concerning the lives of PwPDs in North-western Nigeria. The scoping review has shed light on the array of challenges that PwDs encounter within their homes, communities, and society at large.

For instance, issues such as self-imposed isolation stemming from apprehension about road accidents, alongside the absence of pedestrian crossings and pavements, pose significant difficulties for wheelchair users when navigating their surroundings. I also highlighted the existing gaps within the current body of literature, underscoring the urgency of this research. It is imperative to keep in mind why findings from studies conducted in southern Nigeria cannot be readily extrapolated to the Northern region.

Moving forward, the subsequent chapter offers an explanation of the methodology deployed for data collection in this study.

Chapter Four

Research Methodology

4.0 Overview

In the previous chapter, I explored the realm of physical disabilities in Nigeria. I discussed the challenges that individuals with disabilities encounter in the country and highlighted the gaps present in the existing research. Additionally, I elucidated how I embarked on exploring the real-life experiences of PwPDs in North-western Nigeria.

Commencing with a concise overview, I explained the focal points of my study and its aim, as well as the purpose of the study. Additionally, I expanded upon my role as the researcher and elucidated the rationale behind my selection of a storytelling approach for information gathering.

Prior to going into further details, it is imperative to note that I first obtained formal authorisation to conduct the study. Ethical endorsement was secured from the National Health Research Ethics Committee (NHREC) in Abuja, Nigeria, as well as the Ethics Committee at the University of Essex. Furthermore, I addressed the ethical concerns that I anticipated during my research as well as the ones that later materialised.

Subsequently, I detail the methodology employed to identify and choose participants for the study, along with the strategies I used to gain access to the research location. I guide the reader through the techniques I employed to collect and analyse the data, while also sharing insights into how I overcame challenges that arose during my fieldwork. I enquire into the reliability of my study and elucidate the measures that I undertook to ensure the credibility of my findings within the framework of storytelling. I provide a detailed explanation of my analytical process and how the themes were extracted.

4.1 Purpose of the Study

This (adapted) narrative research used a storytelling approach through which to examine the lives of PLwPDs in North-western Nigeria.

The study aims to:

Gain a comprehensive understanding of the lived experiences of PLwPDs in North-western Nigeria, with a specific focus on how they navigate their daily lives, sustain themselves, utilise available resources, and foster relationships within the local community and society.

4.2 Philosophical Worldview

According to Creswell et al. (2007) and Creswell and Creswell, (2018), researchers need to consider the philosophical worldview assumptions that may underpin their study, the specific procedures or methods, and the research design that relates to this worldview. Creswell and Creswell (2018) identified four main philosophical worldviews postpositivist, pragmatic, transformative and constructivist.

The first philosophical worldview on the list is postpositivist, which is commonly used in quantitative research. Postpositivist assumptions represent the traditional form of research, and its assumptions hold truer for quantitative than qualitative research. According to Creswell and Creswell (2018) and Lee (2012), the postpositivist worldview is known as the scientific method or 'doing science' research. Some researchers have referred to it as postpositivist/positivist research, postpositivism, and empirical science. Postpositivists hold the view that causes (probably) determine the outcome or effect. In order words, postpositivism goes hand in hand with deterministic philosophy. For this reason, postpositivists believe that there is a need to identify and assess the causes that influence the outcome of the problems under study (Lee, 2012; Creswell and Creswell, 2018; Thyer, 2019); for example, this can be seen in experiments and clinical trials. Creswell and Creswell (2018) further argue that this can be seen as reductionistic in the sense that it reduces ideas into small, discrete sets to test; for example, variables that consist of research questions and hypotheses. After carefully considering postpositivism, I decided that it was not suitable for this research, because my research involves examining the experience of a group of people rather than the cause and outcome of a particular problem within the target group.

The next philosophical worldview is pragmatism. Pragmatism is not committed to a single system of reality and philosophy. This applies to mixed methods research in which inquirers draw abundantly from both qualitative and quantitative assumptions while conducting their research. The pragmatic worldview arises out of situations, actions, and consequences rather than antecedent conditions (i.e., postpositivist). Researchers who adopt this philosophical worldview mostly focus on the research problem and question and then use all approaches to gain insights into the issue under study. This approach is mostly utilised by mixed method researchers, as highlighted by Creswell and Creswell (2018) and supported by Roberts (2004). As I do not have a particular research problem or question but rather an aim, which focuses on understanding the lives of PwPDs, this philosophical worldview was deemed unsuitable. It was also methodologically unsuitable as this research is based on a purely qualitative research approach, rather than mixed methods.

4.2.1 Constructivists/Naturalistic Worldview

Constructivism or social constructivism is another worldview that qualitative researchers use in trying to better understand the world. According to Creswell and Creswell (2018), social constructivists believe that people seek an understanding of the world in which they work and live. For this reason, people develop subjective meanings regarding their experiences, and therefore meanings are directed toward certain things or objects (Lee, 2012; Creswell and Creswell, 2018). Lee (2012), mentions that these meanings are multiple and varied, thus prompting researchers to seek out a complexity of views instead of narrowing meanings down to a few ideas or limited categories. From their point of view, the goal of the research is to rely as much as possible on participants' understandings of the setting under study. As a result, the questions become more general and broader in order for the participants to ascribe meaning to a situation, and are usually constructed through interactions or consultations with people in their respective communities. Furthermore, Lee (2012) and Creswell and Creswell (2018) stated that the more open-ended the questioning, the better, because it gives the researcher chance to observe or listen carefully to what individuals (participants) do or say in their life settings (Spector-Mersel, 2010). This provides an opportunity to understand what people say they do and what they do in their everyday life. In other words, it sheds light on the saying and doing of the people under study, which is underpinned by both their communal and subjective understandings.

These subjective meanings are negotiated historically and socially to some extent. They are not imprinted on people but created through cultural and historical norms that are present in people's lives and through interaction with others (thus social constructivism) (Spector-Mersel, 2010; Lee, 2012). Therefore, constructivist researchers mostly examine the manners in which people interact with each other in both particular and general contexts, considering their cultural and historical settings. Social researchers acknowledge that it is their backgrounds that shape their interpretation, and they position themselves within the research in order to recognise how their interpretation flows from their cultural, historical, and individual experiences. The intention is to make sense of (or interpret) the meanings that others ascribe to the world while keeping their individual opinions in check, through reflexivity (Creswell et al., 2007; Lee, 2012; Creswell and Creswell, 2018). In my research, I adopted this philosophical worldview alongside naturalistic inquiry.

I took a constructivist and naturalistic approach because this research aims to explore the lives of PLwPDs through the understanding of how they view their world and create meanings in their daily lives at work and in their communities. This was achieved by allowing participants to tell their stories regarding their physical disabilities and make sense of the meanings they create about the world they live in, instead of theorising about their lives (as in postpositivism), whereby researchers inductively develop a pattern or theory of meanings.

However, constructivism is associated with naturalistic inquiry, something that was highlighted by Creswell and Creswell (2018) and supported by Lee (2012). It is a type of inquiry that also fits well with this research, as it explores the construction of reality and makes sense of the way people constructed their reality within their social context. The notion of naturalistic inquiry was created based on this assumption, as pointed out by Miles and Hernandez (2019). From an epistemological viewpoint, a naturalistic inquirer views reality as a unified whole which can be understood through individual experiences. Ontologically, a naturalistic inquirer is a contingent. The assumption is that there are no natural laws for social interaction; instead, reality is defined as a multifaceted construction based on harmony between pertinent participants. The relationship between the knower (researcher) and the known (participant) is seen as interrelated, and any findings are considered a result of the process of inquiry involving both participant and researcher. Naturalistic methodologies emphasise meaning-making and lived experiences, as highlighted by Miles and Hernandez (2019) and Spector-Mersel (2010). A similar viewpoint was expressed by Given (2012) who stated that naturalistic inquiry pays attention to research endeavours regarding how individuals behave in their natural settings while engaging in life experiences. She claimed that this kind of investigation comes from a naturalistic inquiry that situates itself against the positivist paradigm.

Therefore, considering the statements made by Miles and Hernandez (2019) and Given (2012), my research also fits better with the notion of naturalistic inquiry as data was collected from the participants while they were in their natural setting (workplace, disability centre). Furthermore, my research lends itself to naturalistic inquiry because it is based on one central value: the belief that reality is socially constructed and there are multiple realities, instead of only one. This concept resists the belief that the truth of human experience is out there waiting to be discovered by researchers. Given (2012) and Lee (2012) highlighted that reality is subjective, and unfolding such subjectivities will provide holistic understanding about the phenomena under study. The existence of multiple realities is possible as knowledge is socially constructed, hence making reality subjective, something that was also highlighted by Creswell and Creswell (2018). Given (2012) states that human interaction is significant, and the concept of social construction is dependent on it. Similarly, the context in which those [human] interactions occur provides the foundation for how one comes to understand or know the situation. Therefore, through storytelling, I was able to better understand the lives of this target population.

Given (2012) claims that researchers cannot understand human behaviour outside of its context or natural environments, for example organisation, village, classroom, or workplace. Additionally, the participants, the researcher, and the setting [disability centre] influence each other; therefore, no explicit differences exist between the researcher and participants (Spector-Mersel, 2010; Given, 2012; Lee, 2012). The lack of a distinct boundary between the researcher and participants indicates the explicit and implicit influence that researchers have on the setting. This means that the relationships between the researcher and the participants, and the contexts, are interdependent; therefore, they influence the findings and the observations made. To address some of the concerns about my own potential research biases, I conducted a reflexive account of my experience of living with a physical disability (see Chapter Two: Researcher's reflexivity).

4.2.2 Transformative Worldview

The transformative worldview is another research paradigm that I selected for my research. This worldview was created by philosophical researchers who felt that postpositivist assumptions forced structural theory and laws which did not fit marginalised people in our society or problems of social justice and power, oppression and discrimination that needed to be addressed. Ahmed and Ahmed (2014) and Creswell and Creswell (2018) pointed out that there is no constant form of literature that embodies this worldview; instead, it consists of groups of academics who are participatory action researchers; critical theorists; feminists; indigenous and postcolonial individuals; racial and ethnic minorities; members of the lesbian, gay, bisexual, transsexual, and queer communities, and PwPDs.

I did not consider a constructivist and naturalistic worldview alone as it did not go into depth in terms of encouraging an action agenda to help marginalised individuals. As identified by Creswell and Creswell (2018) and supported by Maher and Dertadian (2008), a transformative worldview believes that a research study needs to be interwoven with a political change agenda and politics to challenge social oppression at any level on which it occurs. Thus, the research encompasses an action agenda for change that may improve the lives of participants, the institutions in which people live or work, and the researcher's life (Creswell et al., 2007; Lee, 2012; Creswell and Creswell, 2018). Additionally, certain problems need to be tackled such as those that voice important social problems of the day; problems such as inequality, domination, oppression, alienation, empowerment, suppression, inaccessibility, and discrimination. In other words, transformative research provides a voice for participants to raise and advance an agenda for change that will improve their lives (Lee, 2012) and provide a united call for change and reform. As a result, I believe this philosophical (transformative) worldview to be suitable for my research when used alongside constructionism/naturalistic inquiry.

4.3 Philosophical and Ontological Positions of the Researcher

An explanation of my philosophical and ontological position in the following section is designed to help readers to better understand my study. The aim is to highlight the process that this study followed, which strengthened the judgment made regarding the design of the research.

Researchers have characterised research paradigms into three proponents' basic responses to questions (Spector-Mersel, 2010). These three questions aim to understand the reality that we live in (Ontology), how we acquire the knowledge of the world (Epistemology), and the strategy involved in solving a particular problem; dilemmas and questions that researchers, academics, and philosophers have been concerned with for many years. In summary, these questions were formulated in the following way by De-Gialdino (2011): 'how can reality be known?' Or ontological; 'the relationship between the knower and what is known?' Or epistemological; 'the principles, the characteristics, the assumptions that guide the process of knowing and the achievement of findings; and the possibility of that process being repeated and shared by others to assess the quality of findings and the reliability of those findings or methodological procedures' (De-Gialdino, 2011).

Ontology is primarily based on the key principle that everything is comprised of reality or there is a reality in everything (Slevitch, 2011). Ontological positions state which entities exist or can be said to exist and the kind of relationship that exists between basic categories of being (De-Gialdino, 2011; Slevitch, 2011). The ontological position determines the knowledge of the researcher during or throughout their research process. Meanwhile, epistemology is a theory of knowledge; it relates to the scope and nature of knowledge. According to Slevitch (2011), epistemology addresses these kinds of fundamental questions: 'how do we know what we know?'; 'what is the legitimate knowledge?'; 'what is the truth?'; 'what is the nature and relationship between the researcher and what can be known?' This epistemological assumption led to the question: how can someone research whatever he or she believes to know? To answer this question in my thesis, I looked at my methodology, as suggested by Slevitch (2011), to be underpinned by research not only to make it methodologically rigorous but also theoretically informed. Slevitch (2011) stated that 'each methodology is based on a particular system of theories, which specify the belief of what is important to study; assumptions about reality, human nature, and society; and assumptions about what constitutes meaningful data and legitimate knowledge'.

To this end, my decision to focus on the lives of PwPDs in North-western Nigeria was due to limited or a lack of empirical evidence regarding the lives of these groups of people. As stated earlier, in the Introduction (Chapter One) and the Reflexivity chapter of this thesis (Chapter Two), I was born and raised in the same geographical area where the research was conducted. This made me an insider, in the sense that I have good knowledge of the setting where the research took place, as well as being physically disabled. However, I am also an outsider because I come from a high-income household in comparison to the target population who are mostly from low-income households, as was highlighted in detail in the Scoping Review chapter (Chapter Three). Because of my insight into the target population, I have gained some experience of what it is like to live with a physical disability in Nigeria. Apart from my personal experience, I also gained some knowledge of physical disabilities through reading research papers, theories, and models (Marks, 1997; Akhidenor, 2007; Ahmed et al., 2014; Awojobi, 2014; Ogaji, 2015; Mayah et al., 2017; Almu, Adesina and Kanmodi, 2019; Berghs et al., 2019a). Similarly, some of the understandings I possess were acquired through my individual experiences of living with a physical disability, as highlighted in the Reflexive chapter. The key findings were also generated from my thesis because I grew up in a similar context in Nigeria.

In order to acquire rich information about the lives of PLwPDs in the North-western part of Nigeria, I selected a qualitative research approach with more of a focus on narrative analysis of the lived experiences of PLwPDs and adopted storytelling as a primary method. As highlighted by Slevitch (2011), researchers of the social world can achieve an enhanced understanding of that world only through a process of describing the constituent properties of an entity. She stated that human expression is context-bound and it is not possible to separate it from the context. If researchers are to derive meaning from a context, then there is no such thing as an objective or correct understanding. Hence, qualitative research aims to obtain a better understanding of an experience from the viewpoint of research participants (De-Gialdino, 2011; Slevitch, 2011).

Within the realm of research methodologies, qualitative research occupies a distinctive place by virtue of its emphasis on exploring the intricate dimensions of experience. It emphasises the significance of meanings, interpretations, context, and processes, thereby facilitating a profound and holistic comprehension of the subject under study. This approach differs from the traditional pursuit of generalisability and objective detachment. It arises from the recognition that achieving these viewpoints is often unsustainable within the epistemological and ontological frameworks that inform qualitative research. As perceptively underscored by Slevitch (2011), these philosophical underpinnings highlight the unique nature of qualitative research, allowing researchers like me to capture the depth and complexity of human experiences through an apprehensive lens.

To provide an alternative to the notion of generalisability, qualitative methodology emphasises ‘transferability’, the degree to which readers can transfer/use to describe experiences of events in their settings based on the richness and depth of the description (Slevitch, 2011; Ahmed and Ahmed, 2014; Lather, 2016).

4.4 Decolonisation and African Storytelling

4.4.1 Storytelling: De-colonisation of Social Research Methodologies and the “Indigenous Paradigm”.

According to Kuokkanen (2000), the narrative knowledge of contemporary indigenous people has become part of the decolonisation process which is taking place within all indigenous communities. A similar claim was made by Tuwe (2016), who mentioned in his study that Western academic research notions, methodologies, and epistemologies have been challenged since the end of the 1960s by indigenous researchers. This criticism of Western theoretical and philosophical bases has served as the foundation of the indigenous paradigm as it shares similar objectives with poststructuralist theories, for example, anti-universalism and the dismantling of the Grand Narrative contradictions, among others (Kuokkanen, 2000; Tuwe, 2016).

Nonetheless, oral traditions have long been and remain in people's memories, encompassing all aspects of their lives that are regarded as important within their culture. This oral tradition still exists across Africa, and Hausa people continue to embrace this method of knowledge sharing and transferring of cultural and knowledge to the next generation, as is discussed later in this chapter. Indigenous people believe that through stories, 'we' are able to express and tell people about ourselves. This includes stories of ancestors and origins, values, world views, and knowledge about daily survival (Kuokkanen, 2000). The indigenous paradigm is linked in here because oral tradition and literature related to storytelling reflects the worldview and values of this culture. As highlighted by Kuokkanen (2000), black, indigenous, and 'Global South' researchers, writers and critics have stressed that storytelling is still part of their form of analytical thinking, conceptualisation, and theorisation. Kuokkanen argues that contemporary writing and stories are referred to as "fictionalising theory" or "theorising fiction".

According to Kuokkanen (2000) and supported by Tuwe (2016), epistemological truth is created and restored by discussions, storytelling, memorised experiences, and the evaluation of previous activities and phenomena, as well as through intuition. Indigenous people's literature is largely based on oral traditions both in terms of content and form. Kuokkanen (2000) pointed out that due to different values, worldviews, and literary conventions as well as pure ethnocentrism and ignorance, Western literary critics have repeatedly dismissed indigenous people's literature as 'primitive', 'childish', 'having too many characters' or 'having no plot'. However, there is an active movement referred to as postmodernism which publicised the rejection of Western supremacist ideologies and this can be seen through the lens of the termination of five centuries of Western dominance and expansion, as highlighted by Tuwe (2016). Additionally, Kuokkanen (2000) urged indigenous people, and researchers from countries in 'the Global South', to go beyond postmodern and poststructuralist objectives and decline to remain apolitical about the dominance of Western research paradigms, ideologies and methodologies and seek to decolonise and deconstruct these processes. Tuwe (2016) agreed with this suggestion and added that there is still a need for true indigenous self-determination which should be intensified in the decolonisation process. Kuokkanen (2000) and Tuwe (2016) both stressed that indigenous people must become independent from Western intellectual structures as a significant part of colonialism is dependent on the structures, modes, methodologies, epistemologies, and approaches of the West. After all, the main goals of the indigenous paradigm incorporate the continuation of the criticism of Western dualistic metaphysics, Eurocentrism, and biased benefits of Western systems of knowledge.

Kuokkanen (2000) and Tuwe (2016) agreed that the ‘Indigenous paradigm’ needs to be fully accepted and indigenous epistemologies and methodologies recognised as being identical to Western systems of knowledge within academia. If inequality exists, indigenous methodologies and epistemologies cannot be classified or viewed in the same manner as Eurocentric epistemologies, and indigenous researchers and scholars will continue to remain in a marginal, colonial position within academic institutions.

Furthermore, both indigenous and non-indigenous scholars need to recognise that indigenous epistemologies have a value in their own right. As Tuwe (2016) points out, there is no need to reshape indigenous epistemologies into Eurocentric frameworks and provide definitions of indigenous science as this would allow Western dominance and thinking to structure and disempower indigenous knowledge and ways of being. Tuwe (2016) suggested that instead of demanding that indigenous people should give definitions that satisfy the Western paradigm, their researchers should challenge minds that are conditioned by Eurocentric ways of knowing objectivity by seeking to recognise and welcome the narrative nature of indigenous people’s existence and perceptions.

To this end, the “Indigenous paradigm” has a clear political and social agenda that is aimed at the complete decolonisation of indigenous communities. Tuwe (2016) mentions in his study that the indigenous paradigm maintained a critical stance towards Western metaphysical dualism which still informs much of current patterns of thinking and research practices. The indigenous paradigm is built on the basis of striving to achieve a balance between the various aspects of life, in which the political, social, intellectual, economic, spiritual, and psychological forms of human life are not separated from each other. Kuokkanen (2000) and Tuwe (2016) point out that within the indigenous paradigm, researchers establish a clear connection between their research and culture. In order words, cultural practices and forms of expression are reflected in the research style, language, structure, and methods as well as assumptions of knowledge and the role of the scholar.

Indigenous oral traditions are seen as primitive stories by some Western researchers. This kind of dismissive attitude is based on a self-serving colonial cultural myth that Europeans are more “civilised” than native people (Tuwe, 2016). For this reason, Kuokkanen (2000) and Tuwe (2016) highlighted that there is a need for an urgent reconsideration of the appropriateness of Western practices and theories in analysing indigenous people’s literature. As a result, many indigenous critics and writers have emphasised the importance of the historical and socio-cultural contexts of oral tradition. Tuwe (2016) pointed out that stories tend to lose their meanings and become merely “dead voices” if they are decontextualised.

Nonetheless, according to Tuwe (2016), African research methodologies and methods are as old as our nations and ceremonies. Before the colonisation of Africa, its culture was rich, with several suitable ways of discovering, gathering, and uncovering knowledge (for example, through generational storytelling) (Elabor-Idemudia, 2002). Another claim made by Elabor-Idemudia (2002) and supported by Tuwe (2016) is that these ways of knowing were sidelined and invalidated by Western ways of knowing. The main aim of this strategy was to impose an inferior/superior relationship regarding the knowledge of African people and to enforce Western methodologies, paradigms, and ideologies about how the knowledge had to be passed on (Elabor-Idemudia, 2002; Tuwe, 2016). It is important to decolonise social science research in Africa in order to guarantee that African people’s worldviews are not constructed through Western ideologies and commands. Tuwe (2016) highlighted that it is vital to present and acknowledge African research methodologies and methods that echo the beliefs, rituals, and values embedded in African communities. The use of storytelling as a methodology is befitting and culturally appropriate for this research as it is set in Africa and the participants’ main method of communication and knowledge sharing is through storytelling.

4.4.2 African Storytelling as a Methodology

In this research, the African oral tradition of storytelling was used to share PLwPDs’ stories and information about how they carry out their daily activities. Tuwe (2016) highlighted that the history of people is re-created through cultural and oral testimonies and data provided by communities or individuals, which are the foundations for future creation, using oral means of communication (Youngstedt, 2004). An illustrative example can be seen in Tuwe's study in which he explains that using storytelling as an African paradigm, benefits and empowers Africans in their communities in New Zealand, as they share their collective and personal employment-related experiences as well as their proposed solutions to associated challenges. Through storytelling, I aim to empower PwPDs to share their stories with others, particularly their peers without disabilities.

The African oral tradition of storytelling is a type of knowledge and thought which was created out of experience rooted in the interests and cultural image of African ancestors (Tuwe, 2016). The foundation of this framework/tradition is grounded in how Africans view the world around them. Their values and worldviews also play an essential role in storytelling in African societies as they narrate their experiences regarding their disabilities. According to Tuwe (2016), some of the dimensions of the African-centred worldview are oral tradition, spirituality, harmony, stylistic expressiveness, rhythm communalism, and interpersonal orientation. By using these dimensions, PwPDs were able to share their testimonies and stories of their lived experiences regarding physical disabilities. Storytelling was selected as it is the most suitable means of organising diverse types of information and plays an essential role in the way that Africans communicate, particularly in Northern Nigeria. This gave PwDs the ability and opportunity to express themselves, their feelings, and their thoughts regarding their disabilities.

4.5 Research Designs

When conducting research, researchers can choose between different methods, namely quantitative, qualitative, and mixed methods. Research designs are types of inquiries within quantitative, qualitative, and mixed methods approaches that provide directions for conducting a research study (Azungah, 2018; Creswell and Creswell, 2018).

In a quantitative design, strategic inquiry is associated with a postpositivist worldview and originated mainly in psychology, as highlighted by Creswell and Creswell (2018). It involves ‘true experiments’ and ‘less rigorous experiments’ known as quasi-experiments. There are also some non-experimental quantitative research designs; for example, casual-comparative research, whereby researchers compare two or more groups regarding a particular cause (or non-independent variables) that has already occurred. Another example is correlational design, which involves researchers using correlation statistics to measure and describe the association (or relationship) or degree between two or more sets of variable scores (Creswell, 2014; Creswell and Creswell, 2018).

Surveys and experimental research are some of the main designs associated with a quantitative study. Survey research provides a numeric or quantitative description of attitudes, trends, or opinions of a populace by studying a sample of that population (Creswell et al., 2007; Creswell and Creswell, 2018). This includes longitudinal and cross-sectional studies using structured interviews or questionnaires for data collection. This approach utilises generalisability to ensure the rigour of a study. However, experimental research seeks to determine whether a specific treatment influenced an outcome (Creswell and Creswell, 2018). This is achieved through the provision of treatment to one (trial) group and withholding it from another (control) group to determine the outcome for both groups.

However, I realised that this research design does not fit the aim of my research and, as highlighted earlier in this chapter and Chapter Three (Scoping Review), many studies have already explored the prevalence and number of PLwPDs in Nigeria (Abdulraheem, Oladipo and Amodu, 2011; Smith, 2011; World Health Organization, 2011; The Federal Republic of Nigeria, 2019; World Bank, 2020).

On the other hand, qualitative research originated from sociology, anthropology, and the humanities. According to Creswell and Creswell (2018), there are several ways of conducting qualitative research, and the narrative approach is one of these methods. Others are grounded theory and ethnography; grounded theory is a design of inquiry used in sociology whereby researchers develop a general action abstract theory of a process, or an interaction grounded in the interpretations of the participants (Omona, 2013; Creswell and Creswell, 2018). In contrast, ethnography is a design that originated in sociology and anthropology whereby researchers study the behavioural patterns, actions, and language of an intact cultural group in a natural setting over a prolonged period. Observations and interviews are mostly used to collect data (Creswell and Creswell, 2018).

However, grounded theory and ethnography were not considered because my research involves looking at the lived experiences of PwPDs regarding their daily lives. Ethnography was also not feasible due to time constraints, because it is time-consuming to immerse oneself in an environment and group of people. As a result, the narrative approach is better suited to the aim of the research. The aim is not about creating or generating a theory from PwPDs' experiences, nor is it about their behavioural patterns or actions concerning their culture. Furthermore, another design that was not considered is phenomenological research, because it stems from psychology and philosophy and involves researchers describing the lived experiences of people concerning a phenomenon, as portrayed by the participants.

According to Creswell and Creswell (2018), this description ends at the core of the experiences of several people who have experienced the phenomenon. I did not consider this design because I was investigating the personal lived experiences of PwPDs, based on their life stories and not a phenomenon that they have experienced. Another reason that this methodology was not considered was the approach that I used to collect the data. Storytelling was used because it allows participants to speak freely in their own words, unlike in the case of phenomenology.

For these reasons, narrative research was adopted because it is a design whereby researchers study the lives of people and ask one or more persons to provide stories about their lives. This is contrary to phenomenological research whereby researchers undertake multiple sessions of interviews with participants, and it encourages them to work with the participants to create meaning for the phenomenon under study (Riessman, 2005; Creswell and Creswell, 2018). The participants' stories were then [briefly] re-storied or retold by the researcher descriptively before key narratives were extracted and presented in a thematic format.

4.5.1 The Rationale for the Chosen Research Design and Method

According to Spector-Mersel (2010), narrative thinking has become a practice in major professions including social work, education, medicine, conflict resolution, and occupational therapy. Notably, it has also entered popular discourses. It is common knowledge that the narrative method has become tremendously widespread, and it is said that every family, individual, and group 'have their narratives'. Historically, stories have been used in the social sciences for centuries (Spector-Mersel, 2010; Berros, 2012). Narratives reflect essentials, objectives, and actual realities, and the narrative method proposes relativist and subjective realities, which are invented by narratives. Through storytelling, we impart meaning to the world and ourselves, which, in turn, forms our identities (Spector-Mersel, 2010). According to Spector-Mersel (2010), individuals can create their familial, organisational, and national identity through stories common to the groups that they belong to. To this end, our culture's 'grand stories' show us what a "worthy" life is, what we should avoid and what we should aspire to, what is evil and what is good, and what is permitted and what is forbidden.

This idea highlights the immense power that narratives have in terms of shaping reality. By narrating ourselves as active proxies, we put ourselves into the "real world" which is different from when we base our life stories on victimhood (Spector-Mersel, 2010). One example is the perception that people with disabilities are possessed by an evil spirit or cursed by the gods, which limits the possibilities open to them, such as equality and inclusion in community activities; this also casts a shadow over their self-esteem. Spector-Mersel (2010) highlighted that the aforementioned view has complicated the relationship between life history (the factual events that comprise the chronicle of our lives) and life story (the way in which we represent our past in a narrative). In Spector-Mersel's words 'historical truth' and 'narrative truth' are not identical; narrative truth expresses historical truth partially but also re-establishes it repeatedly.

Like Spector-Mersel (2010), Robert (2004) claims that there are various instances where narratives are used and implemented. He elaborated that narratives comprise a field of multiple and connected terms, incorporating storytelling techniques, and collected stories. The process of crafting one's life story and immersing oneself in it, transforming oneself from a mere "individual" into a distinct persona, influences one's ethical decisions and establishes a committed obligation to others within the narrative (Roberts, 2004). Robert (2004) stated that narrative shapes a person's actions, in a way that is consistent with the common centre and mission, whereas the undesirable alternative would be to base those actions on an egotistical impulse of emotivism. Narratives offer direction, where one would instead be susceptible to vigorous rhetoric (Spector-Mersel, 2010; Lewis, 2011). According to Robert (2004), both informal and formal communication can be perfectly encompassed by the metaphor of the story as it is comprehended in everyday, normal rapport. Robert further explained the notion that a narrative approach can ring true and hang together with humans: storytelling is, after all, a collective phenomenon. By understanding what narrative ‘authoring’ involves, the paradigm can be enriched (Rowland, 1987; Spector-Mersel, 2010).

Nonetheless, according to Lewis (2011), stories and storytelling are concurrently intellectual products and processes of reasoning. A story is both quotidian and art, centrifugal and centripetal, running wide and deep through the human psyche, as highlighted by Lewis (2011). Building on this idea, Tuwe (2016) claimed that storytelling is a method of expressing and recording feelings, responses, and attitudes toward one’s lived environment and experiences. McCall et al. (2019) concurred with both Lewis (2011) and Tuwe (2016), suggesting that storytelling helps us to make sense of our experiences and thoughts, and our interactions with the environment and each other, in order to formulate our identities, our beliefs, and our values.

Consequently, I find significance in Tuwe’s (2016) perspective on the role of storytelling. He emphasised that storytelling serves as a powerful tool for transmitting and mediating knowledge and information across generations. This notion aligns perfectly with my approach of using narratives to better understand the experiences of PwDs. McCall et al. (2019) further expand on this, highlighting how storytelling facilitates the transfer of cultural values, norms, and worldviews to younger generations.

In addition, Lewis’s (2011) insights add a profound layer to this concept. He pointed out that stories inherently acknowledge and validate our existence. This idea closely parallels Tuwe’s thoughts on the subject. As I explore the narratives of individuals with disabilities, Lewis's assertion that life itself is a treasure trove of stories takes on special significance. The connection between Tuwe’s and Lewis’ viewpoints underscores my aim of exploring and sharing the stories of those living with disabilities in North-western Nigeria. In this sense, storytelling is a way of transferring and sharing or preserving ancient traditions and knowledge from one generation to the other, as pointed out by Youngstedt (2004), and Edosomwan and Peterson, (2016). According to Lewis (2011), storytelling may be the principal way of understanding the world in which we live; stories are central to human understanding. They make life liveable because, without a story, there is no self, no identity, and no order (Lewis, 2011).

The fundamental premise of storytelling is that it seeks to express an experience in a way that seems more real. There is a plea in storytelling because it often presents information combined within a private account that involves the reader and which may validate their own experiences (McCall et al., 2019). According to McCall et al. (2019) and Lewis (2011), a story is something with a beginning, a middle, and an end, with a character (frequently human), a practice, an objective, or an idea, followed by a form of conflict or transformation.

According to Edosomwan and Peterson (2016), storytelling is the oldest means of communication and interaction in human history. Before the introduction of written words, historical events were shared with future generations through captivating stories. A significant element of human capacity was the power to preserve its historical tradition through stories. Edosomwan and Peterson (2016) pointed out that every civilisation has a cultural and historical heritage that individuals hold dear, transmitting culture and historical heritage through the verbal tradition of storytelling which is a common aspect of human practice. A similar claim was made by Tuwe (2016) who suggested that Africans use storytelling as a way of preserving their history, ritual ceremonies, and traditional cultures. Storytelling is one of the oldest traditions within African culture, across the entire continent (Edosomwan and Peterson, 2016).

Just as African communities have used storytelling to pass down wisdom, cultural norms, and experiences, my exploration of personal stories strived to foreground the challenges, aspirations, and achievements of those with disabilities in North-western Nigeria. In weaving the narratives of these individuals, I am essentially continuing the legacy of storytelling that Edosomwan and Peterson highlighted, and adapting it to shed light on the unique journeys of PLwPDs.

Furthermore, as an instructional method, storytelling has a comprehensive applicability within human learning, both for adults and children (Edosomwan and Peterson, 2016; Tuwe, 2016). The keen sense of personal experience and emotional appeal that is incorporated into storytelling makes it an appealing method for use in adult instruction and learning. According to Edosomwan and Peterson (2016), storytelling motivates learners as well as helping them to express, access, and retain knowledge and information. This promotes brain-based reflective thinking and learning. People and societies around the world learn, develop a code of behaviour, and formulate meaning making in their lives by utilising storytelling (Lewis, 2011; Edosomwan and Peterson, 2016; Tuwe, 2016).

In Africa, storytelling is rooted in oral traditions and cultures, with Africans having a high regard for telling good stories and being vibrant storytellers (Tuwe, 2016). Even though historically, written traditions exist on the African continent, most contemporary Africans, just like in the past, are primarily oral people and their art forms and stories are verbal instead of written. To reiterate the previous statement made by Tuwe (2016), Africans have been using storytelling to pass on their culture, traditions, codes, and values of acceptable behaviour, as well as to preserve and uphold a good social order. The traditions of oral stories by Africans are woven out of human struggles, experiences with the land and the elements of migration and movement, conflict over pasture and waterholes, wars between kingdoms, wrestling with the mysteries of existence, and life or death (Youngstedt, 2004; Tuwe, 2016). As Tuwe (2016) highlighted, those African stories reflect relationships between humans, men and women, and humans and the animal world. This is enshrined in the African model of Ubuntu. According to Tuwe (2016), Ubuntu means "*I am what I am because of you*". This whole concept is centred on humanity or people. The African storytelling approach offers explanations of natural phenomena, provides African people with a sense of identity, tradition, and morality, and is entertaining as well as instructive (Edosomwan and Peterson, 2016; Tuwe, 2016).

The African storytelling approach is unique; it is protected by its distinctive ability to provide entertainment, satisfy the curiosity of Africans, and teach them essential lessons about everyday life (Tuwe, 2016). In Africa, language, gesture, and rhythm are important characteristics of African oral storytelling and Africans still hold onto this repetition. In storytelling, words, gestures, phrases, and verses or stanzas are always repeated to emphasise the importance of a story or statement (Edosomwan and Peterson, 2016; Tuwe, 2016). The technique of repetition is also used to make the story easily understandable and enable the listeners to recall the story from memory. When the listeners are familiar with the stories, they actively engage with the storyteller as they learn about an important aspect of their culture (Tuwe, 2016).

As pointed out by Tuwe (2016), oral African storytelling is a communal participatory phenomenon and experience because it involves the participation and engagement of both the listeners and the storyteller. In this sense, people congregate together, participating in and listening to the stories being told. These stories can be about past deeds, wisdom, beliefs, counsel, taboos, morals, and myths (Tuwe, 2016; Edosomwan and Peterson, 2016). African storytelling takes place in an environment where the listeners and the storyteller interact, and both parties have obligations and rights. Tuwe equated this to the present-day Western focus group set-up. In most traditional African communities, people participate in informal or formal storytelling as interactive oral performances. This kind of participation is an important part of traditional African communal life and basic training in a particular culture's oral skills and arts. It is an essential part of children's traditional Indigenous education on their journey towards full humanity (Edosomwan and Peterson, 2016; Tuwe, 2016).

In Nigeria, storytelling has been used by educators, professional narrators, and parents to teach moral instruction, respect, norms, social values, and the preservation of cultural, and historical customs (Edosomwan and Peterson, 2016; Tuwe, 2016). In simple terms, storytelling is used to preserve people's identity. Among Nigerian youth, storytelling is also used to promote listening skills. As Edosomwan and Peterson (2016) stated, in traditional African communities, particularly in Nigeria, young adults were told stories in the form of an oral narrative by grandparents, parents, aunts, and uncles. Through storytelling, young people were able to learn how to follow and obey instructions from their elders and parents by practising learning and listening skills about their heritage (Edosomwan and Peterson, 2016). Among adult listeners, stories were used to depict the knowledge, wisdom, and power of elders. In these stories, the narrator always incorporates short proverbs and memorable sayings that express a piece of advice or belief. Edosomwan and Peterson (2016) explained that these proverbs are exported from a continuum that stretches from the ancestors to the elders in the community. Edosomwan and Peterson (2016) added that these words are the intellectual property of the ancestors. In the Nigerian storytelling tradition, proverbs are used to caution people, to warn about looming danger, or for encouragement and counselling, depending on the context.

4.5.2 Storytelling in the Context of Northern Nigeria

Across northern Nigeria, storytelling is still a key method of communication and transfer of knowledge, beliefs, values, and morals, and is seen as a way of preserving people's historical heritage. According to Youngstedt (2004), Hausa people (people that live in the northern part of Nigeria and speak the Hausa language) cherish the vibrant sociability, leisure, dignity, and intellectual stimulation of participation in daily Hira (storytelling). Youngstedt (2004) explained in his research that the Hausa people's appreciation of their method of sharing their lived experiences through storytelling is expressed in the popular proverb "Magana jari ce", which translates to "speech is wealth". Drawing upon the previous statements, the Hausa people have created their modernity, which is nonetheless contested, provisional or ambivalent. Youngstedt (2004) emphasised five significant aspects of storytelling in the lives of the Hausa populace.

First, Hausa people use Hira and Islamic prayer to structure their sense of time and to adjust to and reflect on other modern concepts of time. For example, in his research on creating modernity through conversation groups, Youngstedt (2004) explained that Hausa people in Niamey spent most of their free time telling stories to their friends and family about their day or an event that they have witnessed at work.

Second, Hausa people use Hira to negotiate, in a practical sense. For example, Youngstedt (2004) mentioned in his study that whenever a Hausa person finds himself in a new environment, the first thing they do is to find a fellow Hausa person or group to secure or at least get informed advice about jobs or lodging; to "learn the ropes" about life in the community; and to integrate themselves in the communication networks linking that new environment and their "home" (Youngstedt, 2004; Edosomwan and Peterson, 2016). This advice comes in the form of a story based on the individual experiences of the Hausa people living in the community. Youngstedt (2004) pointed out that the best way for new Hausa migrants to maintain and establish an effective social network is through frequent engagement with Hira groups.

Third, Hausa people use storytelling groups to mediate the instructions of other understandings of modernity in a space where they can retain some sense of respect and autonomy in the face of a proliferating vision of modernity by insisting upon certain traditional morals (articulate leisure, speech, and male social interaction that is appropriate within Islam) that are unappreciated in Western culture (Youngstedt, 2004; Edosomwan and Peterson, 2016). For example, Youngstedt (2004) noted that Hira groups continue to address key Hausa concerns in the production of urban space in Niamey.

Fourth, Hausa people use storytelling as a means of debating and defining their not-so-traditional modernity, from taking universal popular culture to testing different methods of thinking about what is and is not allowed in Islam, to reflecting upon their country's place in the international economy by discussing television, radio, and video programmes. These kinds of debates are drawn from an expanding pool of symbolic resources (Youngstedt, 2004; Edosomwan and Peterson, 2016).

Finally, Hausa people are actively trying to retain their tradition of Hira which they view as a space of social distinction, an arena of performance in which Hausa people make their mark in the social world (Youngstedt, 2004). This pursuit of respect is based on knowledge of the world, verbal skills, and character, as highlighted in Youngstedt's (2004) research. Youngstedt (2004) also explained that both employed and unemployed Hausa migrants considered Hira groups to be the best and sometimes the only, genuine way to achieve distinction. To summarise these five steps, Hausa people have strong ties to storytelling as it is part of the fabric of their culture and tradition.

Thus, this research aims to take advantage of this method of interaction with the people in northern Nigeria to better understand the lived experiences of those with physical disabilities in the North-western part of the country. Conducting this research through storytelling gave the participants a sense of autonomy and respect as it allowed them to speak and tell their stories in their own way and in their native language. However, to make sure the participants did not go off-topic during the storytelling, prompted questions were used to keep them on track and prevent digression, in order to achieve the aim of the study. The use of storytelling gave participants the freedom to express their own experiences without limiting them to a particular form of expression or response, which would have been the case in quantitative research where standardisation for the sake of validity and reliability is crucial (Morse et al., 2002; Tariq and Woodman, 2013).

4.6 Data Collection

Individual storytelling sessions were conducted with 15 participants living with physical disabilities in one of the North-western states to comprehend more about their lived experiences. This sample size is larger than that typically used in conventional narrative research. I opted for this sample size to ensure the acquisition of ample data and a more extensive collection of diverse personal experiences. As previously mentioned, I regard storytelling as the most effective approach to data collection for this population due to its role as their primary means of communication. Utilising any other qualitative approach to gather data might not yield comprehensive information about the participants' lives, as would be obtained through methods such as group discussions or in-depth interviews. Thus, the narrative design provided an approach that the participants were familiar with and that facilitated rich in-depth data, because of the lack of acceptance of the interview approach by the target population and the reasons identified earlier (Youngstedt, 2004; Edosomwan and Peterson, 2016; Lewis, 2011).

Additionally, in traditional narrative research, the sample size would be smaller but for the purpose of my study, I wanted to capture the diversity of participants with different physical disabilities and socio-economic backgrounds to gain access to a good depth and breadth of PwPDs' experiences in North-western Nigeria. Therefore, I decided to use a larger sample size (n=15). Moreover, environmental factors (i.e. car accidents and illness, among others) are one of the main causes of acquiring a physical disability; additionally, I wanted to capture as many voices as possible.

4.6.1 Gaining Access to the Study Site

The research site was a disability centre located in the heart of North-western Nigeria. The participants were selected from this centre because it was not possible to support PwPDs who are homeless and living on the streets, as highlighted in the exclusion criteria.

Northern Nigeria is known for its high number of PLwPDs and most of them are from low- and middle-income families which means that they are often seen begging on the streets (Abdulraheem, Oladipo and Amodu, 2011). Only a fraction of this target population can be observed in schools, employment, or similar settings (Abdulraheem, Oladipo and Amodu, 2011). However, given my study protocol, I assessed this population through the selected disability centre. For this reason, PwPDs living in extreme poverty were not included.

Before the commencement of the storytelling sessions, I explained my research and the reasons for conducting it to the chairperson and some of the members of staff at the disability centre, through a discussion session. The main reason for holding the discussion was to explain the purpose of and procedures used for the study, as well as the role of the staff in the recruitment and storytelling sessions. The discussion allowed the chairperson and some of the members of the disability centre to ask questions and seek clarification on certain matters. The chairperson of the disability centre helped with recruiting and contacting potential participants. The chairperson and members of staff at the disability centre maintained a record of the study and provided links to those needing further information.

4.6.2 Recruitment of Participants

Potential participants were approached by workers in the selected disability centre on my behalf. These workers distributed the Participant Information Sheets (PIS) to potential participants and they were encouraged to read the information sheets carefully before deciding whether to participate in the study. As potential participants were Hausa (they speak the Hausa language), the PIS and consent form was translated into Hausa before being distributed, and I made sure that the PIS and consent form was an exact copy of the English versions, and no meanings were changed or altered. This was achieved by a direct translation of the English version of the PIS and consent form into Hausa, which was done by a professional translator who worked with me during the data collection period. This professional translator has an undergraduate and a master’s degree and was undertaking his PhD studies in the Hausa language at one of the prestigious universities in North-western Nigeria, at the time that the data was collected. For those potential participants who were unable to read, the workers in the disability centre volunteered to read the information and explain the aim of the study.

A purposive sample was used to select participants. This sampling method was used because it involves selecting and identifying people who are especially knowledgeable and experienced regarding physical disability (Palinkas et al., 2015). There is no accurate record of the number of people registered with the disability centre. However, a partial record of people registered with the disability centre was obtained, which showed that 199 people are registered with the centre. Nonetheless, this sampling method was selected because it was the best method for collecting rich data from people who fit the inclusion criteria for this study (Jennings et al., 2010).

All the participants who were included in this study were selected from the disability centre in North-western Nigeria. They were all asked to tell their stories in an isolated open space in the disability centre, except for one who told his story outside of the disability centre. This was due to security reasons and the COVID-19 pandemic. I ensured that the storytelling space was secure and safe for participants to tell their stories regarding their disabilities.

4.6.3 Recruitment and Storytelling Sessions

One location (one participant’s home) was accessed prior to the storytelling session, and I made sure that the location was safe and well-ventilated, and that the maintenance of social distance was possible. The participant told his story at his home as he was unable to physically go to the disability centre due to ill-health. The researcher accepted this participant's request to tell his story at his house as his reason for doing so was valid. All the storytelling sessions took place in a well-ventilated area and all COVID-19 and risk assessment measures were followed. The sessions were conducted individually. The participants were asked to tell their stories individually even when they were part of a couple. I used this approach because some people may not feel comfortable sharing aspects of their stories with their partners or relatives present. This approach also made some couples feel more comfortable sharing information about the challenges and barriers they face without the fear of interference. Some participants were excited and interested in the research to the point that they started suggesting other people who might like to share their own stories about their disabilities.

The storytelling sessions were determined by participants' needs and requests; they suggested times and dates for the sessions. However, to avoid the Hawthorne effect, I did not provide the exact date and time when the photographs and video diaries would be taken, so as to capture the real situation most accurately. Nevertheless, it meant that there was not always sufficient work at the time when the data was collected (McCambridge, Witton and Elbourne, 2014; Sedgwick and Greenwood, 2015).

4.6.4 Research Participants

All the participants included in this study have been disabled for a minimum of 2 years. This criterion was used as it allowed me to obtain rich data from those who had more experience of living with disabilities. The demographic data were gathered when consent was obtained, before the storytelling session started. Among the data collected before the sessions were: age, status (e.g., employed, student, self-employed, unemployed), and marital status. However, personal information such as name and date of birth were excluded during the analysis.

4.6.5 Inclusivity in the Sample Selection

As one of the key reasons behind the selection of qualitative research is the acquisition of rich data, I followed an inclusive approach to selecting participants. I observed that there were more males registered with the disability centre than females, and the chances of recruiting male participants were therefore higher. This was evident after I visited the disability centre. A partial record of registered PwPDs also showed that the number of men using the disability centre was doubled that of women. However, due to cultural and religious practices, men and women are not allowed to interact with each other, except in certain circumstances such as education, family relations, seeking support, etc. (Mason, 2010; Turner, 2012). As a result, I informed the chairperson of the disability centre that I needed to include female participants in the study. The rationale behind this was that people have different experiences regarding physical disabilities and therefore it is important to hear from both genders.

Furthermore, apart from gender inclusivity, I also wanted a mixed age range of participants. The age range for this study was 18 years and above. I noticed that most of the people at the disability centre were older adults and only a few adolescents were involved in the activities. As a result, I selected some adolescents to participate in the research, because the stories and experiences varied between these two age groups: older adults (aged 26 and above); and adolescents (18-25 years old). Thus, listening to stories from participants of different age groups provided rich data regarding their lives and disabilities. Overall, the sample consisted of PLwPDs who were working, at school, self-employed, unemployed, and/or retired.

4.6.6 Inclusion and Exclusion Criteria

Given my study's protocol, I was only able to select participants from one disability centre in North-western Nigeria. Therefore, I was unable to gain access to those who are living in extreme poverty. The table below displays the inclusion and exclusion criteria for this study.

Table 9: Inclusion and exclusion criteria

Inclusion	**Exclusion**
Wheelchair users	Hearing-impaired
Crutches users	Speech impaired
Reduced limb function	Intellectually impaired
Absent of limb	Mentally impaired
	Those who are homeless
	Visual impairment
	Paraplegia
	Leprosy and hemiplegia
	Cerebral palsy
	Dystrophy

For this research, I could only approach participants who attend the disability centre to invite them to take part in the study. However, I excluded those people who were hearing, speech, intellectually, and mentally impaired on the grounds that the resources needed to support these groups during and after the research were lacking. I also excluded people with visual impairments, paraplegia, leprosy and hemiplegia, cerebral palsy, and dystrophy because there are separate centres to support these groups and I chose to only work with this designated centre due to resource limitations. Lastly, I excluded those who are homeless and/or begging on the streets, because it would not be possible to follow up with these groups.

4.6.7 Travel Expenses for Participants.

The participants were all happy to come to the disability centre by themselves. They were not paid to take part in the study as this would be against the ethical approval agreement for this research. However, I provided food and refreshment as an acknowledgement of them giving their time to the study. The food was brought out at the end of the storytelling sessions. No signs of distress were identified during and after each session, which helped both the researcher and participants to complete the sessions without interruption.

4.6.8 Recording the Sessions

Like interviews, storytelling sessions can be captured in three ways: audio recording, in written form, and on videotape (Rubin and Rubin, 2005). In this study, a mobile phone (iPhone 12pro) was used to record the storytelling sessions and the video diaries, and the recordings were then transferred to the study computer. I decided to use a mobile phone because the recording quality was better than the standard audio recorder as there was a built-in noise reduction mechanism. The mobile phone also made the session more seamless because the phone could be placed on a table (and checked occasionally to make sure it was recording) between me and the participants. The video recordings were then transferred to a computer at the end of the recording sessions. I took photographs of the surrounding environment as these photos depict the kind of environments in which the participants live. The photographs of the environment consist of schools, workplaces, and disability centres rather than the participants’ residences and immediate surroundings, in order to maintain their privacy.

4.7 Ensuring the Trustworthiness of the Research

The trustworthiness of qualitative research is often questioned by quantitative researchers because their concepts of reliability and validity cannot be addressed in the same manner as naturalistic study, as highlighted by Shenton (2004). However, researchers such as Silverman (2001) and Creswell and Creswell (2018) have shown how qualitative researchers can include certain measures designed to address these issues. Shenton tried to respond to the issues of reliability and validity in qualitative studies and suggested four criteria that qualitative researchers should consider in order to distance themselves from the positivist paradigm. These criteria corresponded with those of quantitative researchers (Silverman, 2001; Shenton, 2004; Creswell and Creswell, 2018; Daniel, 2019):

I. Credibility (instead of internal validity)
II. Transferability (instead of generalisability/external validity)
III. Dependability (instead of reliability)
IV. Confirmability (instead of objectivity)

I adhered to these four criteria to ensure the trustworthiness and rigour of this research.

4.7.1 Credibility

Positivist researchers use internal validity as one of the key criteria for ensuring the quality of their study; they achieve this by ensuring that their study tests or measures the intended outcome (Silverman, 2001; Shenton, 2004). The equivalent concept used in qualitative research is credibility which addresses the question, “How congruent are the findings with reality?”. Shenton (2004) claimed that ensuring credibility is among the most crucial factors in achieving trustworthiness, and suggested that researchers should consider using research methods (narrative research) that are well established in qualitative studies. Furthermore, Shenton (2004) advised that the specific procedures used in gathering and analysing the data should be stated clearly. To address this inquiry, I have provided well-defined steps that I followed to collect and analyse the data for this research. Another Shenton and Silverman suggestion that was considered involves gaining familiarity with the culture of the participants at an early stage. In this regard, I came from the same cultural background as the participants, and the storytelling approach is and remains part of the Hausa culture, as highlighted earlier. My familiarity with the culture of the participants was explained in Chapter Two (Reflexivity).

Furthermore, credibility can be achieved by triangulation of the data. Triangulation involves the use of different methods, particularly observation, individual interviews and focus groups which form the key data collection strategies for most qualitative data (Silverman, 2001; Shenton, 2004). In this research, triangulation was achieved through photography and video diaries of participants' lived environments, and I explain how this was achieved later in this chapter. However, as well as triangulation, regular debriefing sessions between myself and my supervisors were held throughout the research process and more frequently during the data analysis period. Through discussion, I was able to broaden my approaches to gathering rich data, while making sure that credibility was achieved. For instance, I was able to pilot the data collection approach that I had chosen with five participants which helped to improve the prompted questions used to obtain the narratives about participants' life stories. I came up with this idea through constant discussion with my supervisors before and during the data collection. These discussions made a significant impact on the data collection and analysis of this research. The changes and improvements made during the data collection stage are explained in Chapter Five.

Lastly, member checking was conducted to improve the credibility of the research. According to Shenton (2004) and Silverman (2001), member checking is the most essential way of ensuring the credibility of a study. This can be achieved during or at the end of the data collection period. However, some researchers (Harper and Thompson, 2011; Harper and Cole, 2012; Thomas, 2017; Motulsky, 2021) have indicated that there is no evidence to show the effectiveness of member checking in qualitative research. Thomas (2016) argued that routine member checking does not enhance the credibility or trustworthiness of qualitative research. Nonetheless, I conducted member checking after the data had been transcribed and analysed, before writing up the results of the study. The participants were given the transcript and the analysed stories which they had told for verification. This allowed the participants to verify the stories they had told and whether the stories matched what they had intended to convey, as an audio recorder was used and the vocalisations were accurately captured (Silverman, 2001; Shenton, 2004; Creswell and Creswell, 2018; Daniel, 2019).

4.7.2 Transferability

Shelton (2004) pointed out that external validity is concerned with the degree to which the findings of a study can be applied to other situations or settings. In quantitative research, this is determined based on the ability of the research to be used among other populations with similar characteristics. However, as a qualitative study is specific to a small number of individuals and environments, it is not possible to demonstrate that the results and conclusions can be applied to other populations or settings (Silverman, 2001; Shenton, 2004; Creswell and Creswell, 2018; Daniel, 2019). Shelton (2004) acknowledged that naturalistic researchers believe that even conventional generalisability is impossible to achieve in practice as all observations are defined by the specific context in which they occur, a view that was supported by Silverman (2001) and Creswell and Creswell (2014). Shelton (2004) suggested that it is the responsibility of the researcher to ensure that enough contextual data about the fieldwork sites is provided to allow the reader to make an accurate transfer. He further emphasised that it is essential that sufficient description of the experience being studied is provided to allow readers to attain a good understanding of it, thus allowing them to equate the occurrences of the experience described in the study report with what they have observed to transpire within their settings. I provide a full account of the participants' experiences using a timeline format, for example, detailing what their lives were like at an early age (when they acquired the disability) up to the present day (the time the data was collected). The results were presented in a manner that allows the readers to understand the context of the specific characteristics of the society and geographical area where the research was conducted.

4.7.3 Dependability

To address reliability in a quantitative study, researchers use certain techniques to demonstrate that if the study is repeated, in the same context, with similar participants and the same methods, similar outcomes would be achieved (Shenton, 2004; Cope, 2014). However, qualitative researchers believed this approach to be inappropriate, as qualitative studies vary in nature, particularly those examining lived experiences. In a naturalistic study, though, there are close ties between dependability and credibility. As argued by Shelton (2004) and supported by Silverman (2001), demonstrating credibility ensures the dependability of a study. This is achieved using "interrelating methods", for example individual interviews and focus groups. In this study, individual storytelling sessions, photographs, and video diaries were the mechanisms used to collect the data. The latter two (photographs and video diaries) were used for triangulation rather than being the main methods of data collection.

To address dependability issues, Cope (2014) and Sheldon (2004) suggested that the research process should be reported in detail, thus allowing future researchers to repeat the work, if not necessarily to achieve a similar outcome (Creswell and Creswell, 2018; Daniel, 2019). This in-depth coverage [of methods] permits the reader to evaluate the degree to which appropriate research practices have been followed. It also enables readers of the study report to develop a better understanding of the procedures used and how successful they were (Creswell and Creswell, 2014; Daniel, 2019). In this research, dependability was achieved through the provision of detailed procedures used to collect, analyse, and present the data under study.

4.7.4 Confirmability

Shelton (2004) claimed that objectivity in science is like using tools that are not dependent on human perception and skill. Nevertheless, it is impossible to confirm real objectivity, as questionnaires and tests are created by humans, and they will inevitably contain some element of the researcher's biases (Cope, 2014; Creswell and Creswell, 2018; Daniel, 2019). This issue is comparable to confirmability in a qualitative study where bias is inevitable (Shenton, 2004). Cope (2014) detailed steps that need to be taken to help ensure that the findings of the study are the result of the participants' experiences, instead of the preferences and characteristics of the researcher. Shelton emphasised the importance of triangulation in a qualitative study to help achieve confirmability, and thus reduce the impact of the researcher's bias (Cope, 2014; Creswell and Creswell, 2018; Daniel, 2019). The table below summarises how these four criteria were achieved.

Table 10: Strategies used in this study to establish trustworthiness.

Trustworthiness criteria	**Description of criteria**	**The methods used in this study to establish trustworthiness**
Credibility	Checking the authenticity of the research findings	• Triangulation • Member-checking • Pilot study
Transferability	Providing adequate information to show the study findings apply to other settings	• Detailed description • Purposive sampling • Environmental and population to be similar to that of the research participants
Dependability	Evidence that the choices taken about the approaches are suitable.	• Individual storytelling sessions • Video diaries • Photographs
Confirmability	Confidence that the outcomes have not been subjective to the researcher's opinions.	• Reflexivity • Triangulation • Audit

4.8 Ethical Considerations

4.8.1 The National Health Research Ethics Committee (NHREC).

The study participants were in good physical health and were part of a Polio Victim Trust Association (PVA) which comes under the umbrella of the disability centre where the study was carried out. Some of the participants were considered vulnerable from an ethical perspective due to their physical disabilities. Therefore, compassion and care were paramount to avoid any harm to the participants. I achieved this by allowing the participants to set a time and date of their choosing to share their stories. Breaks were also provided during the storytelling sessions. The sessions were conducted in a place that they were familiar with and felt comfortable in (the disability centre). Ethical approval was obtained from the NHREC (Appendix 5) and the University of Essex Ethics Committee (Appendix 4). The NHREC is the committee that oversees research being conducted in Nigeria. Similarly, I consulted the head of the disability centre before carrying out the fieldwork. After undertaking ethical research training run by the Nigerian government, I was issued with electronic certificates upon completion. The certificates were then submitted alongside the ethics application form, and two weeks later approval was issued by the committee.

The same process was followed at the University of Essex. The University's ethics application form was extensive. This was mostly due to the COVID-19 pandemic that started a few months after I had commenced my study. In March 2020, the UK government introduced the first official nationwide lockdown to curb the spread of the virus. As a result, universities and schools were closed and learning became virtual through social platforms like ZOOM and Microsoft Teams (Gov.uk, 2020). The pandemic had some impact on my study as I had to consider the risk of infection not just to myself but to the participants too. As part of the university's ethical application process, I completed the following three online training courses: basic travel security awareness; avoiding bribery and corruption when travelling; and kidnapping for ransom. All of these courses were relevant and important as security in Nigeria was problematic at the time of data collection (Drum Cussac, 2021).

In terms of the effect that COVID-19 had on my ethical approval process, the university suggested that I should obtain health insurance, and conduct a risk assessment (Appendix 6a & 6c) and a COVID-19 contingency plan for the research (Appendix 6b). It is worth noting that the risk assessment was not a new element of the ethics application process. However, because of the pandemic, COVID-19 prevention was added to the risk assessment criteria. After all the university's ethical requirements had been met, the university ethics committee issued approval for the research and gave me permission to travel for data collection.

4.8.2 COVID-19 Measures Taken.

At the time of the data collection, the prevalence of COVID-19 infection in Nigeria was low with North-western Nigeria reporting few to no cases every month. For this reason, my study was not affected significantly, as the region where the research took place was not drastically affected. However, I followed the Nigerian government guidelines which were to maintain social distancing and wear face masks (Centre for Disease Control, 2020). I provided face masks and hand sanitisers to the participants throughout the data collection period. However, as there was no policy mandating face-covering in North-western Nigeria, the participants declined to wear the masks and to use hand sanitisers, but social distancing was maintained. The disability centre had already implemented and was following the Nigerian government guidelines on COVID-19 prevention before the commencement of the data gathering. The storytelling was carried out in an open space and a distance of 6 feet between me and the participants was maintained (Centre for Disease Control, 2020).

4.8.3 Risk Measures Taken.

At the time of conducting the risk assessment, Nigeria was labelled among the countries with a high-security risk (Drum Cussac, 2021). For this reason, I decided to limit the research to one state in which I reside, instead of the whole North-western region. I lived 30-minutes away from the state's international airport. My proximity to the centre helped to minimise the security risk, as long-distance travel was not required. I captured and video-recorded the participants' daily activities (work) myself; this was possible because COVID-19 restrictions were removed in the state prior to the data collection. There were no security issues throughout the data collection period.

4.8.4 Addressing Research Ethical Issues

As the research involves human participants and is a qualitative study, the key ethical issues addressed were as follows: informed consent, minimising emotional harm during data collection; and maintaining confidentiality during and after the storytelling sessions. The measures used to achieve these are explained later in the chapter. Ethical issues concerning post-data collection and publication of research findings were also addressed.

4.8.5 Cultural Dilemma

The target population has strong cultural and religious beliefs. In Hausa culture, an individual is not allowed to talk to or interject with an elder or someone older than them (the listener). If the listener “ya katsar” (interrupts) the elder while he/she is talking, they would perceive it as “rashin kunya” (rudeness) and they would stop talking or engaging with that individual. For this reason, and in order to “girmama” (respect) their culture, I did not interrupt the participants while they were speaking but waited until they had finished. I used prompt questions to encourage the participants to reiterate some of the points I needed them to clarify. This is the reason why I decided to collect the data in person as I have vast knowledge about their culture and practices.

4.8.6 Religious Dilemma

The religious dilemma I anticipated facing was that some Muslim women cannot sit with me one-to-one to share their stories without a male companion present. In addition, questions that relate to their religious beliefs may not be answered. However, this was not the case in practice: the female participants did not observe this practice and they agreed to share their stories regarding their disabilities in the absence of a companion. The participants were able to tell their stories and answer follow-up questions regardless of whether they were of a sensitive nature, for example, discussing childbirth, and prenatal and postnatal experiences.

4.8.7 Freedom to Participate.

Most of the participants came from low-and-middle-income households and were identified as physically disabled, according to the inclusion criteria. They were informed that they had a choice about whether or not to participate in the study. Additionally, participants were told that they could withdraw from the study at any time. It was reiterated that withdrawal and/or non-participation from the study would not affect them or the services provided to them in any way.

In the PIS, I highlighted that participants could inform me, even after the storytelling session, if they did not wish their story to be included in the analysis. I also informed the participants that their stories could only be excluded from the analysis before it was anonymised as it would not be possible to remove the participant's story after anonymisation. This also applied to the photographs as people's faces were not included and there was no way for me to identify the participants.

4.8.8 Informed Consent

Everyone who considered participating in the study was given a PIS and consent form. Participants were required to read the PIS and ask questions if they need further clarification/explanation. For those unable to read, qualified workers (workers who were able to read and write) at the disability centre were asked to read and explain the research aim. Once informed, the participants consented to take part in the study; for those unable to give written consent, verbal consent was collected through audio recording. Each participant signed or gave verbal consent before the storytelling session.

4.8.9 Confidentiality

For this study, the potential for confidentiality to be breached and the identity of participants revealed was minimised by the consent forms, and recordings that contained the identities of research participants were securely stored in an encrypted hard drive with a backup on the university's cloud, known as Box. All the information was converted into electronic form; the papers were then shredded. As the researcher, I have sole access to these documents. All the participants were advised not to mention their names during their storytelling sessions. Nonetheless, some participants did so, and some specified their state of origin. This confidential information was not included in the transcribed data. Moreover, the transcribed data were encrypted and pseudonymised using alphanumeric form to hide participant identities. Identifiers were removed from all the associated literature, thus ensuring that participants could never be identified at any stage of the process.

4.8.10 Handling Storytelling-Related Distress

Participants were asked to narrate their lived experiences regarding their physical disabilities, with prompts such as "Can you tell me how you acquired your disability?"; "tell me about your life from childhood to now?" and "can you tell me a story about your school experience? To minimise any potential for distress, participants were told that the storytelling session would be stopped, and debriefing sessions would follow for anyone who became distressed during the session. I provided support to the participants in collaboration with the disability centre. The disability centre has a health adviser who was on standby to offer help if needed. However, none of the participants complained of feeling distressed, and they did not accept debriefing when offered. The participants were informed about free psychological and health advice support if they needed it, including at the end of the study. Similarly, they were advised that a complaint procedure was in place regarding any aspect of the study, for example, harm or misconduct that was incurred during participation.

4.8.11 Ethical Dilemmas During the Storytelling Session

Before the participants consented to the storytelling sessions, they were advised that if they discussed or revealed information concerning dangerous practices, a criminal offence or harm to others, an appropriate authority would be informed. This enabled support to be provided for people involved in harmful or dangerous practices. Such support could be psychological or mental. None of the participants disclosed any kind of dangerous practices during and after the storytelling sessions.

4.9 Triangulation: Stories, Photographs, and Video Diaries

The assertion "*seeing is believing*" has been challenged by Spencer (2011, p.12). He argues that seeing is not a biological process but a culturally and socially learned one. Group agreements hold enduring value, and verbal reassurances are powerful. People believe in language, which can either exclude or unite. In various situations, people see what is socially expedient and ignore less socially acceptable things. Spencer's argument was supported by an experiment he conducted.

Both Spencer (2011) and Stanczak (2007) agree that images operate at a fundamental level of human perception. However, there remains a significant gap in knowledge regarding the process of attribution and recognition of meanings. Spencer (2011) noted that pictures, whether in our minds or as illustrations in art or photography, can at times influence us like misleading tools. This concept is reflected in Wittgenstein's statement, "*A picture held us captive. And we could not get inside of it, for it lay in our language and language seems to* *repeat itself to us inexorably*" (Spencer, 2011).

Stanczak (2007) emphasised that images convey, but this simple statement becomes more intricate when we consider what an image conveys, how it conveys it, and to whom. This complexity turns a declarative statement into a position or stance about thinking with images. He also pointed out that methodological and epistemological issues are often overlooked outside philosophy and the social and natural sciences. This is due to the semantic resonance of philosophical and scientific language (Stanczak, 2007; Spencer, 2011).

Stanczak (2007) suggested that anyone making claims about the world inherently takes an epistemological position when selecting one type of evidence over another. This could be in the form of stories, spreadsheets, news reports, photographs, surveys, or personal experiences. Additionally, Stanczak's (2007) research was inspired by Howard Becker and John Collier Jr., who advocated using photography as a research method to create lasting visual records of social life and culture. In my study, I used the photographs I took to either support or challenge the narratives shared by the participants, as illustrated in Figure 3. These photos also provide insights into the participants' living environments and daily activities.

Stanczak (2007) underscored the importance of a well-defined research design in determining how an album of photographs can contribute to empirical inquiry. I applied this notion by using photographs and video diaries to triangulate the data collected from the participants. This approach enhanced the validity, trustworthiness, and credibility of the stories that they shared.

The data triangulation involved three steps. First, participants' stories were categorised into sections, each representing a facet of their lives, such as disability diagnosis, education, and community relationships. These stories were supported by photographs and video diaries. For example, if a participant mentioned crawling from home to school, I could provide visual evidence of the school and its surroundings to corroborate or dispute their challenges. Second, the collected photographs and video diaries were linked to participants' narratives to augment, challenge, or expand upon their stories. The figure below illustrates how the stories, photographs, and video diaries were utilised.

Figure 3: Triangulation of the data collected.

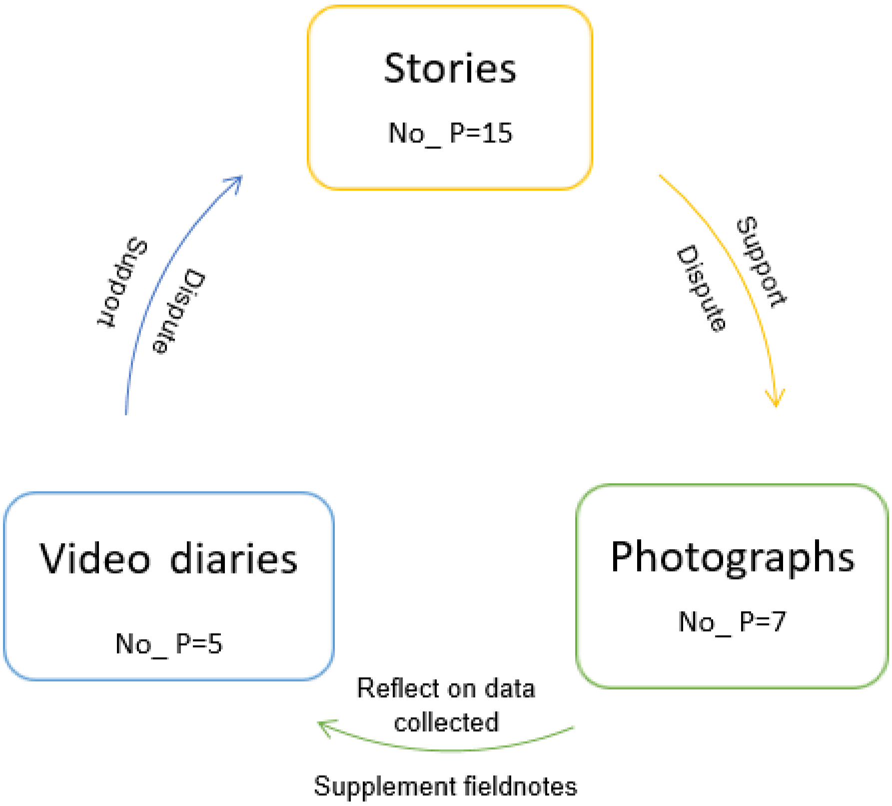


Diagram key:

No_P = Number of participants

Source: owner's design.

Lastly, in the realm of qualitative research, the utilisation of photographs and video diaries has proved to be a valuable tool for gaining insights into various subjects, especially in the context of disability-related research. This thesis draws inspiration from the works of Stanczak (2007), Spencer (2011), and Basil (2011) in order to explore the multifaceted applications of photography in research.

Photography, as suggested by Basil (2011), offers a versatile platform that can cater to both subjective and objective philosophical underpinnings. It can serve as a medium for documenting events or as a framework for understanding target groups' experiences regarding their disabilities (Stanczak, 2007; Basil, 2011; Spencer, 2011). In this study, photographs were used to illustrate the experiences of PLwPDs in North-western Nigeria, complementing the stories gathered during data collection.

Basil (2011) emphasised the importance of acknowledging one's epistemological and methodological assumptions when integrating photographs into qualitative research, including photo-elicitation. Although photography and video are less commonly used in sociology (Basil, 2011), they offer a unique perspective within the field of nursing and medicine. Riley and Manias (2004) highlighted the role of photography as evidence, categorising its use in therapeutic intervention, documentation, learning, teaching, and research method. This aligns with Basil's (2011) observation of videos being employed in the study of post- traumatic stress symptoms among retired veterans, emphasising their valuable contribution to the field.

Furthermore, Frith and Harcourt (2007) demonstrated how photo-elicitation could provide insights into chemotherapy experiences. The approach was used in this research to enable the researcher to triangulate the stories provided by the participants about their experiences, guided by glimpses of the past, present and future captured in photographs and video diaries. The use of photographs and videos diaries for triangulation greatly enhanced the understanding of the target group's lives.

Photographs and video diaries also supplement field notes, serving as reminders of behaviours and situations encountered during the research (Basil, 2011). In this study, photographs were used to catalogue participants' environments, shedding light on accessibility issues faced by PwPDs in North-western Nigeria.

One of the key benefits of employing photographs and video diaries is their ability to record and analyse behavior in its situational context, facilitating reflection, coding, and communication with others (Stanczak, 2007; Basil, 2011; Spencer, 2011). Expanding on Basil's insights, this research explored novel applications of photographs and video diaries, such as providing reference points for observations made during data collection.

Lastly, photographs and video diaries have emerged as powerful tools for qualitative research, offering opportunities for reflection, analysis, and a deeper understanding of participants' experiences. By drawing from the rich literature on this topic and exploring new applications, this study showcases the potential of visual media to enhance storytelling research in the context of disability-related studies (Basil, 2011; Spencer, 2011).

4.10 Data Analysis

4.10.1 Transcribing Storytelling Sessions

The recordings of the storytelling sessions were transcribed verbatim (from Hausa to English) into Word documents and stored on NVivo. Themes (based on Labov narrative analysis) were extracted during the transcribing and analysis process, and NVivo was used to confirm these themes through coding and cases. NVivo is a type of qualitative data analysis computer software used to organise, analyse, and gain insights into unstructured or qualitative data such as narratives.

4.10.2 The Approach to Transcription

I transcribed a total of 15 storytelling sessions. By doing so, I ensured that rich information was acquired to allow me to gain a good understanding of the data through sorting, coding, and analysis (Thoha, 2009). All 15 sessions were transcribed in Microsoft Word and typed in a single space format. The length of the sessions varied from six to fifteen pages. The texts were managed using the latest NVivo version 12 as a text management system. Before importing the transcripts into NVivo, I took a couple of steps designed to make the transcription process more transparent and detailed. This was done by explaining all the steps I took during the transcription and analysis process.

4.10.3 Visual Data

I observed non-verbal interactions made by the participants, which helped me to notice when participants were tired or not happy with the prompted questions used. I did not select what to include or exclude during the transcribing process. Each piece of data was considered and treated as important when transcribing it, for example, body orientation, gestures and facial expressions were recorded and included. This approach was adopted so as to give me and my supervisors a full account of each session.

As Bailey (2008) highlighted, it is difficult to process virtual data as it takes a lengthy period to transcribe. As my main aim was to share the stories of PLwPDs; I decided to put these observations (field notes) into a separate section on NVivo.

4.10.4 Capturing How Things were Said.

As the data was collected in Hausa, transcribing it into English took some time. This was in order to make sure that stories narrated by participants in their native language were not altered but were translated exactly as they had been told (Halai, 2007). Likewise, I made sure that the transcribed stories made sense, and no meanings were changed or altered in the process (Halai, 2007; Thoha, 2009). I started by listening to the recording to familiarise myself with the data, after which I listened to each recording attentively and started transcribing them. I listened and re-listened to the recording multiple times to make sure the whole recording was captured verbatim (Thoha, 2009). At the end of each transcription session, I listened to the recording while following the transcript to ensure the whole recording was captured in the transcript. This process was adapted from Bailey (2008), who pointed out that transcription should be detailed to capture the features of speech, for example speed, emphasis, tone of voice, pauses and timing. These elements are essential during data interpretation. I achieved this by listening to the recordings several times and using transcription keys (see Table 11 below) to indicate where there were pauses and emphasis, as suggested by Bailey (2008).

There were words, statements, and proverbs that could not be translated into English from Hausa directly. To address these challenges, they were written in Hausa in the transcripts. I then defined the meaning of the words, while statements and proverbs were explained using square brackets.

In addition, adapted from Bailey's (2008) paper on "*first steps in qualitative analysis*" I used "[]" to define words, statements and/or proverbs in English. This approach was chosen to reduce confusion about the pause annotation indicated by "()" (see Table 11 below).

Table 11: Transcription keys

Annotations	**Meanings**
(?)	Talk too obscure to transcribe
Hhhhh	Audible out-breath
. hhh	In-breath
[	Translation of meaning begins
]	Translation of meaning ends
(.)	Silence, less than half a second
(..)	Silence, less than one second
::::	lengthening of a sound
Becau-	cut off, interruption of a sound
he speaks.	Emphasis
=	no silence at all between sounds
LOUD	sounds
?	rising intonation
(Left hand on the neck)	body conduct

Sources: Adapted from Bailey (2008)

The table was altered to suit the data collection approach used for this research. Some of the adjustments that were made in the above table were: "["means the definition or explanation from Hausa to English has started, while "]" means the definition or explanation from Hausa to English has ended. These annotations were altered as the storytelling sessions were conducted individually and there was no overlapping talk. It is also worth noting that some of the transcription keys were not applied to this research. Some of the transcription keys that were excluded were 'LOUD', '=', and '::::', because 'sounds', 'lengthening of a sound' and 'no silences at all between sound' do not apply to this research. This is because no sounds outside of normal vocal speech were made by me or the participants during the sessions, unlike in the Bailey's (2008) case.

4.11 Narrative Analysis

In the field of human sciences, narrative analysis pertains to a collection of methodologies applied to diverse textual materials, united by their shared characteristic of adopting a narrative structure (Riessman, 2005; Baker, 2017). Riessman (2005) pointed out that just as governments and nations create desired narratives about history, the same is done by organisations, social movements, ethnic/racial groups, scientists, other professionals, and people through stories of experience. The sequence and consequences make narrative texts diverse; activities are selected, connected, organised, and evaluated as consequential for a certain listener. Riessman (2005) explained that storytellers interpret the world and experience it. At times, they construct moral tales about how the world should be. In other words, narratives represent historied ways of communicating and knowing. In this study, I focus on stories that were told by participants concerning their physical disabilities.

As Riessman (2005) emphasised in her study, individuals' narratives encompass long sessions of talks and extended accounts of their lives in a situation that develops throughout multiple or single interviews (storytelling sessions) (Baker, 2017). Additionally, in other fields such as sociolinguistics, the concept of narrative is limited, denoting belief, and topically specific stories are organised around characters, settings, and plots (narratives that answer a single interview question).

There are several models of narrative analysis that can be used to explore oral narratives of personal experience. Riessman (2005) proposed that different approaches to narrative analysis can be used in a practice, either individually or combined, as they are not mutually exclusive (Baker, 2017). This is possible as the boundaries of all the typologies are ambiguous. These narrative analysis models include Structural, Interactional, Thematic and Performative analyses.

However, looking at these models individually, in terms of interactional analysis, the emphasis is on the dialogic process between the listener and speaker, unlike in structural analysis where the emphasis is on what was told. An interactional analysis is based on a narrative of experiences that is motivated by specific settings, such as social services, medical and court situations where the questioner and storyteller jointly participate in a conversation

(Riessman, 2005; Baker, 2017). Like in structural analysis, attention to narrative structure and thematic content is not abandoned but the interest shifts to storytelling as a process of co-construction, in which listener and teller create meanings collaboratively. This (interactional) approach to analysis was not considered for this research because I did not work with the participants to create meanings for their stories, as suggested by Riessman (2005), and Baker (2017).

Likewise, performative analysis is an extension of the interactional approach whereby interest extends beyond the spoken words and, as the name implies, storytelling is seen as a performance between oneself and one's past. This involves persuading, and moving listeners through gesture and language, "*doing instead of telling alone"* (Riessman, 2005). This approach was ruled out because there was no performance involved in the research, either by the participants or me as the researcher. The data was collected in the form of a storytelling session between individual participants and the researcher, as mentioned earlier. No dancing or performance was carried out during any of the storytelling sessions.

Another model of analysis that I considered was thematic analysis. This places emphasis on the content of the text: "what" is said more than "how" it is said; the "told" rather than the "telling". As mentioned by Riessman (2005), it is underpinned by an unacknowledged philosophy of language; language is an unambiguous and direct route to meanings (Baker, 2017). Like grounded theory scholars, researchers collect multiple stories and inductively generate theoretical categories from the data. Thematic analysis is useful for theorising across several cases, finding commonality (themes) in a story element within participants' accounts and the activities they report (Riessman, 2005; Baker, 2017). According to Riessman (2005), researchers can create a typology to explain a developing theory, which Baker (2017) concurred with. Unlike in structural analysis, the context of a statement in an interview, cultural or intuitional discourse is not usually studied. As Riessman (2005) pointed out, researchers must assume that when multiple narratives are grouped into a related thematic classification, everyone in the group means the same thing by what they say (Baker, 2017). As a result, I concluded that thematic analysis was not the best method to use to analyse the data collected. From the transcripts, it became clear that no two stories were the same and categorising the participants' stories into themes was not suitable and nor does it fit with the aim of this research. As Riessman (2005) and Baker (2017) asked, what happens to 'deviant' responses that do not fit into the typology, to the ambiguities, and unspoken? For these reasons, I ruled out thematic analysis as a method for analysing the data.

This research was intended to gain insight into the lived experiences of PwPDs regarding their physical disabilities by allowing them to tell their life stories. The stories they shared cannot be categorised based on similarities, as everyone lives a different life. At the time of the data collection, the participants were the authors of their stories, and I was the audience to the stories. Therefore, my role was to listen with little to no input during the storytelling sessions. The only contribution I made was acknowledgement (showing interest) and asking follow-up questions such as "you mentioned that you attended secondary school, can you tell me a story about that?". For this reason, structural analysis was selected as the most suitable approach for analysing the data. A structural analysis emphasises the act of telling; the way in which a story is told. However, the thematic content is not lost, and the focus is equally on form, concerning how the teller makes a story credible by selecting specific narrative approaches. Unlike the thematic method, language is considered significant; something that needs to be investigated, beyond and over its referential content (Riessman, 2005; Baker, 2017).

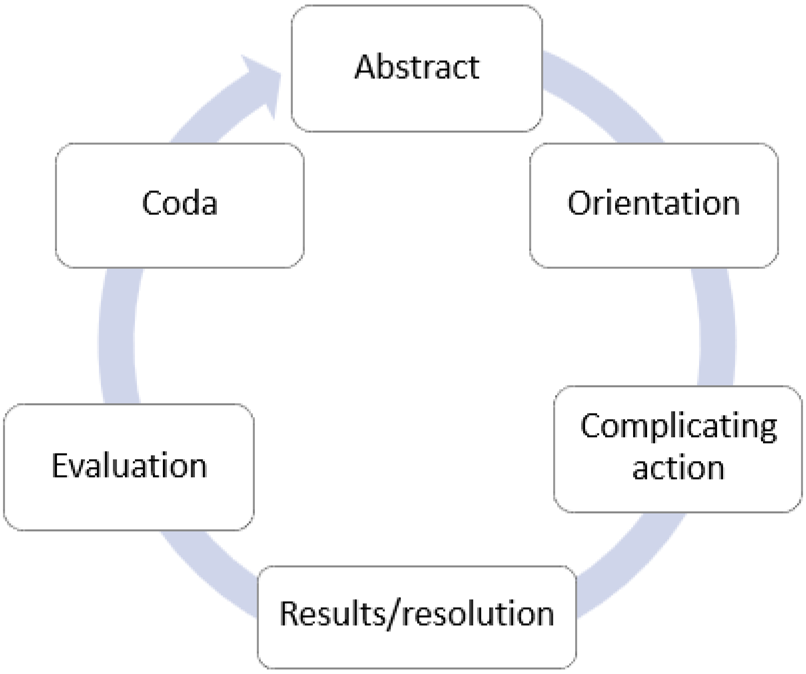
According to Riessman (2005), the first narrative analysis was developed by William Labov and colleagues more than three decades ago. This structural method examines the function of clauses in the complete narrative, and the unrestrained work that it achieves (Baker, 2017). Later, Labov modified the method to analyse first-person accounts of violence (Riessman, 2005); brief, temporally ordered and topically-centred stories. However, he maintained the main elements of the narrative structure. These narrative structures are abstract (the point of the story and/or summary); orientation (place, time, characters and situations); complicating action (the plot, or the event sequence, usually with a turning point and a crisis); evaluation (the time the narrator took a step back from the action to communicate emotion and comment on the meaning, the "soul" of the narrative); resolution (the result of the plot); and coda (ending the story to bring the action back to the present), as explained by Riessman (2005) and (Baker, 2017). Not every story contains all the narrative structural elements, and the elements can occur in varying orders.

4.12 Labov Narrative Analysis

According to Johnstone (2016), in their article '*Narrative analysis: Oral version of personal experience*', Labov and Waletzky proposed a method for personal experience narrative that would be '*functional*' in the sense that these structural units would be described concerning what personal experience narrative must accomplish. It needs to be 'normal' and 'formal' in the way that it would utilise clause-by-clause linguistics analysis to depict the 'invariant structural unit' of personal experience narrative.

A clause in a personal experience narrative can help for one of two reasons: evaluative or referential, as highlighted by Johnstone (2016). Evaluative clauses look at the reason why the storyteller is telling the story and why the listener (interviewer) should listen or pay attention to it. Referential clauses consider what the story is about, such as characters, events, and settings. Evaluative material also highlights the reason for telling the story. Johnstone (2016) explains that any narrative, by description, consists of at least two '*Narrative clauses*'. A narrative clause is a clause that cannot be moved regarding any other narrative clause without altering how the signified events must be taken to have ensued (Özyildirim, 2009). According to Johnstone (2009), a 'complete' narrative can consist of clauses or sets of clauses with several functions. He added that each functional element serves a double purpose, referencing it to events, feelings, characters and so on that are known to have existed or taken place outside of the current interaction, and at the same time shaping the interaction in which the story is being told by directing the storyteller and the listener (audience) through the events, and guaranteeing that they are worth telling and understandable (Özyildirim, 2009; Johnstone, 2016). As Johnstone, (2009), and Patterson (2011) point out, a classic form of structural narrative analysis should consist of the six parts of Labov's narrative analysis model (as shown in Figure 4 below), although some narratives may lack one or more components, as mentioned earlier with reference to Johnstone (2016).

Figure 4: Labov's Narrative Analysis Model



Source: self-created – Illustration informed by Labov's Narrative analysis

4.12.1 Abstract

This first part is optional as not every story has an abstract. As Patterson (2011) highlighted, the narrator may or may not provide a summary of the story to come, depending on the context in which the story is told. For example, in the current research, I explore the lived experiences of PLwPDs, which means I was aiming to obtain their whole life stories concerning their disability. This means that an abstract is optional because the participants were describing an ongoing experience. They have also experienced several events and it could be difficult for them to summarise live events that are currently going through. Nonetheless, some of them (Patterson, 2011; Johnstone, 2016) provided an abstract of their lives at the start of their stories, while others provided multiple abstracts throughout their stories. These abstracts were mostly event-based, highlighting events that happened in their lives which relate to their disabilities. According to Patterson (2011) and Johnstone (2016), an interview or prompted questions used to elicit narrative can serve as abstracts, thus negating the need for the narrator to create one. For example, the prompt question '*Can you* *tell me your story regarding your disability from birth to date?*' was used to elicit a personal experience narrative from the participants. This question serves as an abstract to the narrative provided by the participant because most of them tended to summarise their lives by relating the key events that took place from their childhood (from the earliest time they can remember) to the present day (the time they told their stories). This made it easy to prompt a question that could lead to a story from the abstracts they provided.

4.12.2 Orientation

According to Patterson (2011), the function of orientation clauses is to answer the questions, '*Who is the story about?*', '*when did it happen?*', and '*Where did it happen?*', in a personal experience narrative. This provides the setting in which the events of the story will be told. Even though orientation clauses normally occur early in the narrative text, it is not unusual for storytellers to insert extra background information at some point in the story. Patterson's (2011) claim is supported by Johnstone (2016), who states that orientation in a narrative announces the activities and characters involved in the story. It also tells the listener about the setting, and the temporal and spatial nature of the activities that took place. Patterson (2011) and Johnstone (2016) concurred that orientation is more likely to happen near the start but can be interjected at other points in the narrative. For example, in this research, I observed that some participants always provided the orientation of the events they have experienced in their lives. Some even told me about the school they attended, the community in which the school is located, the distance from their home to the school and the name of the school. Some of the participants provided this information at the beginning of their story while others provided the orientation at some point during the story.

4.12.3 Complicating Action/Skeleton Plot

Patterson (2011) explained that 'complicating action' is sometimes referred to as the '*spine*' or the '*skeleton plot*' of the narrative. Complicating action clauses tell the story and normally follow a 'then and then' structure which offers a direct statement of the time and permits an open-ended chain of actions to be connected. The chain of actions can be added to, open-endedly, as if in reaction to 'and then what happened?', if the actions are connected chronologically. In a similar vein, Johnstone (2016) suggested that complicating clauses are narrative clauses (frequently in the simple past tense) that summarise a sequence of activities leading up to the peak, a point at which the uncertainty is resolved. These clauses are seen as activities within the world of the story, and, in the world of the telling, they create tension that maintains the interest of the listener.

4.12.4 Resolution or Result

This tells the listener how the story ended (Patterson, 2011). Johnstone (2016) explained that the result/resolution releases the suspense and expresses the outcome, but, throughout, the narrative elements serve as the evaluation.

4.12.5 Evaluation

According to Patterson (2011), evaluation is possibly the most significant element in addition to the basic narrative clause and one which has been ignored by other versions of the narrative. In Labov's terms, evaluation mediates a significant 'point' of the story, thus validating its telling, and discloses the storyteller's perspective on the events being conveyed. However, Johnstone (2016) explained that evaluation underscores or states what is unusual or interesting about a story, providing a reason for an audience to keep listening while allowing the storyteller to keep talking. Furthermore, Patterson (2011) highlighted that the 'so what' question, could be used to dismiss a story as not worthy of telling. This question tended to be answered by the inclusion of evaluation clauses that inform the listener of the point of the story by conveying the narrator's experience of events at the time they happened and his/her feelings about the experience at the time of the narration.

According to Patterson (2011), there are three main types of evaluation: external, embedded, and evaluative action. *External evaluation* is explicit. The storyteller stops the 'complicating action' and positions themselves away from the story and tells the listener what the point is, for instance, by expressing sadness or happiness regarding the event. *Embedded evaluation* preserves the dramatic continuity of the story as the teller expresses how he/she felt at the time of the events. Lastly, *evaluative action* is when the storyteller stays firmly within the story by reporting movements that reveal emotion without the use of communication. Apart from these three evaluation categories, Patterson (2011) mentioned that Labov further categorised the evaluative elements of a story text into several types of elements. These comprise: *intensifiers*, which involve expressive phonology, repetition, and quantifiers; *explicative*, which sometimes involve causality and explain the reason why something happened; *comparators*, which compare what happened to what did not, but could have done. Patterson concluded his evaluation section by stating that evaluation is '*the soul of narrative*', crucially expressing both how the storyteller wants to be understood and the point of the story.

4.12.6 Coda

If it occurs, a coda happens at the end of the story when the storyteller returns to the present time of the narrative, openly signifying that the narrative is over (Patterson, 2011; Johnstone, 2016). Patterson (2011) explained that the coda connects the past world with the present world of the story and serves to 'sign off' the narrative and offer the floor to the listener. Similarly, Johnstone (2016) reiterated that the storyteller announces that the story is over through a coda, sometimes offering a quick summary of it or connecting the world of the story with the present.

Many of the stories collected have used some, if not all of the six parts of the Labov model. This makes the model suitable for analysing the narratives in this research. Each transcript was analysed individually, clause-by-clause and these clauses were then arranged according to the six elements of Labov's model.

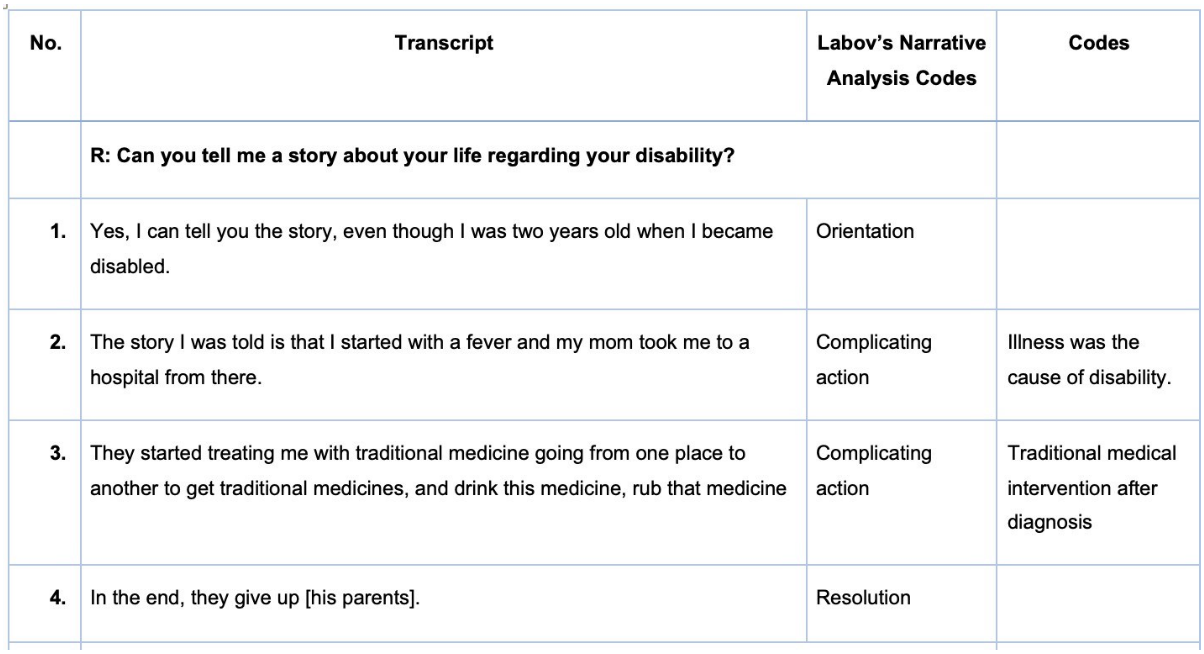
4.13 Data Extraction

In order to analyse the data using Labov's narrative analysis approach, each transcript of the participants' stories was broken down into sections, following the six elements (abstract, orientation, complicating actions, resolution or result, evaluation, and coda) of the Labov narrative analysis process.

Prompted questions were used as abstracts where an abstract was not identified in the narratives, as suggested by Patterson (2011) and Johnstone (2016). Narratives that do not have clear complicating actions were excluded from the analysis; however, complicating actions were identified in all the stories provided by the participants.

The first stage of the analysis was conducted using Microsoft Word, using a four-row table. The figure below provides a representation of the analysis table for each transcript.

Figure 5: Layout of data analysis



No.	Transcript	Labov's Narrative Analysis Codes	Codes
	R: Can you tell me a story about your life regarding your disability?		
1.	Yes, I can tell you the story, even though I was two years old when I became disabled.	Orientation	
2.	The story I was told is that I started with a fever and my mom took me to a hospital from there.	Complicating action	Illness was the cause of disability.
3.	They started treating me with traditional medicine going from one place to another to get traditional medicines, and drink this medicine, rub that medicine	Complicating action	Traditional medical intervention after diagnosis
4.	In the end, they give up [his parents].	Resolution	

A sample of the analysed transcript is provided in Appendix 9 (stage 1 of data analysis). In each transcript, Labov's six elements were identified before a code was assigned to a section of the narrative. After all the transcripts had been coded and Labov's elements assigned, I exported the coded transcripts into NVivo to manage the data and categorised the codes for further analysis.

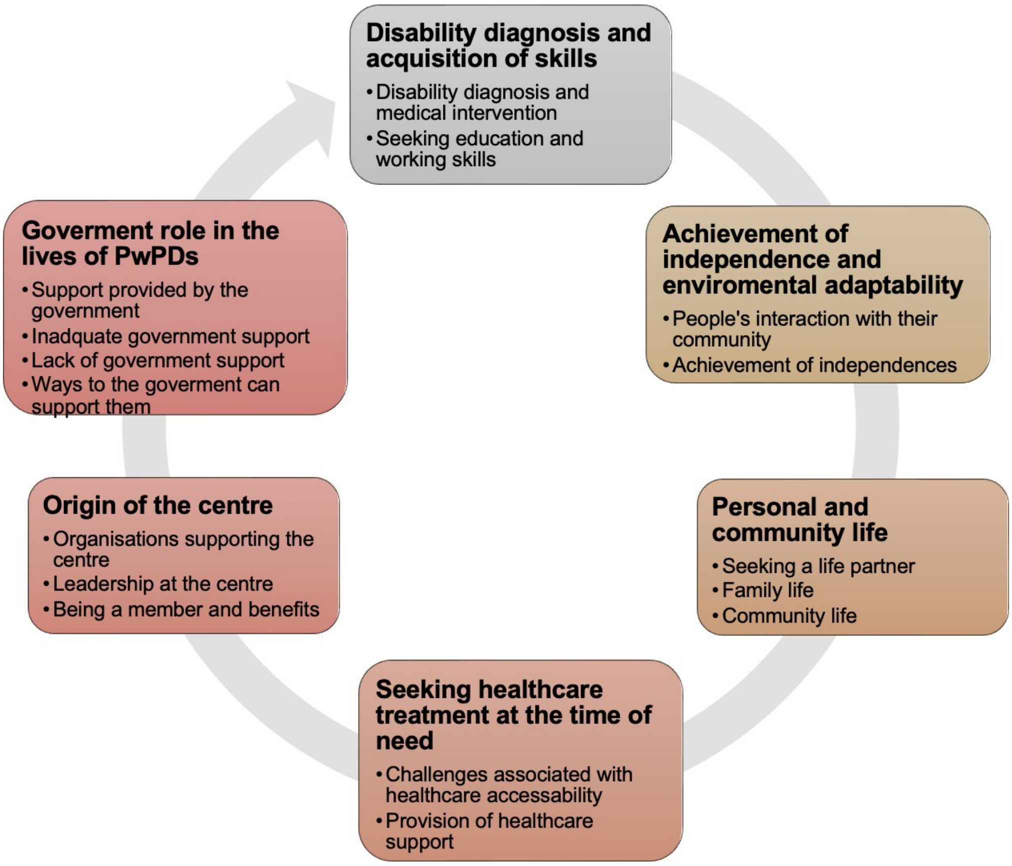
In stage two, the codes were categorised based on similarities and the content of the story provided by the participants. For example, codes that referred to the disability centre were put together under a "section of stories about disability centres". The coding categorisation process was followed for the rest of the codes. Overall, thirteen [story] categories were identified. These categories were: becoming disabled, community relationships, disability centres, education, family relationships, government, healthcare, inaccessibility issues, street begging, mobility, personal relationships, para-soccer, sustainability, and transportation. Appendix 10a & 10b (stage two of data analysis) show a table of the categories extracted from the codes.

4.13.1 Theme Extraction

After the categorisation of the codes, each code within a category was then arranged/merged to derive a theme. After putting the codes together to elicit themes from each category, each theme was noted to identify any commonality between them, and those themes that were common were then collated into a sub-theme (Riessman, 2005; Baker, 2017). This process was repeated for each category and next, following Patterson's suggestion, each category was then re-categorised according to the narrative provided by each sub-theme to create the main theme of that narrative. In the end, a whole narrative about the lives of PLwPDs was created without missing relevant narratives in the process. This was done in accordance with structural analysis which Labov's narrative analysis forms part of, as highlighted by Riessman (2005) and Baker (2017).

Altogether, eight preliminary themes were identified, and of the eight themes that were extracted, four of them were each divided into two sub-themes, and the other four into three sub-themes. Appendix 10c & 10d (theme extraction process) show the process used to extract preliminary themes. After I had reviewed the eight themes and their sub-themes, I felt that a further breakdown of the themes would be possible without the removal of key narratives. I decided to look at the themes again to see if there were any that could be merged for a better presentation of the narratives. As a result, theme one and theme two were merged to create one key theme with two sub-themes. Themes three and four were merged into one key theme with two sub-themes (as shown in Figure 6 below). A summary of this process is shown in Appendix 11a & 11b (theme extraction for process – part three).

Figure 6: Preliminary themes



Source: Owner’s design

In the next step of the analysis, the six themes that were extracted from the narratives were further analysed alongside the photographs and videos that were collected. The UN Sustainable Development Goals 2030 was used as a framework to inform the analysis. This helped to underpin the findings of this research with the public health issues that the UN is trying to address by 2030.

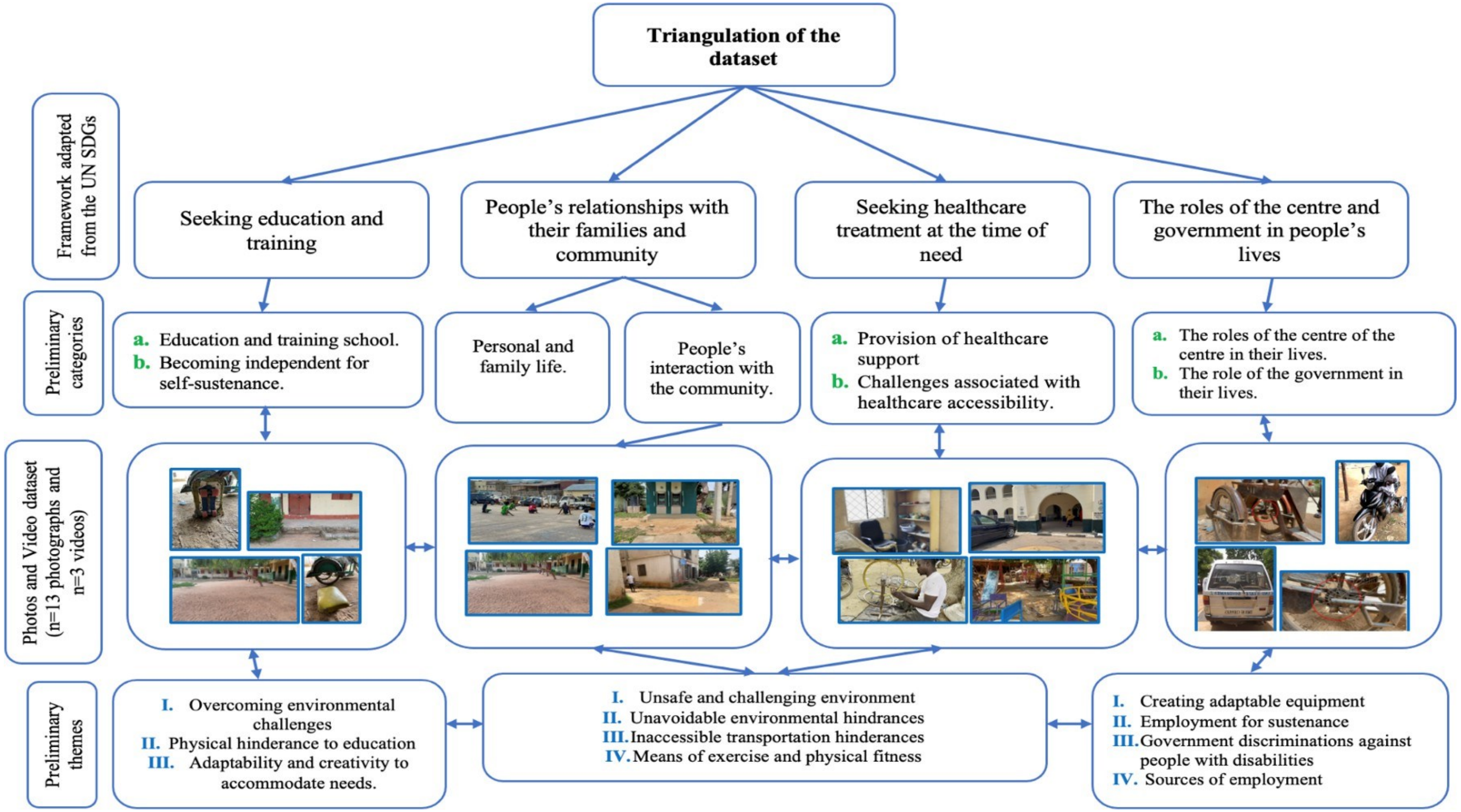
4.13.2 Photographs and Videos Analysis

According to Jewitt (2012), there is a methodological question regarding the transcription of video data in social research, namely, how do researchers transcribe gestures, for example, a gaze, and how can they demonstrate to the readers of their transcripts how such modes operate in social interactions alongside speech? Jewitt also asked the question, should researchers trouble themselves with transcribing these modes of communication at all? He concluded that videos could be transcribed using multimodal methods of transcription, and offered a framework that could account for transcripts to be treated as artefacts, considering them as practical materials through which transcription becomes a social, meaning-making practice. Nevertheless, for this research, the visual data was collected from the participants' environment rather than the participants themselves (video interviews). The videos and photographs show how people with disabilities interact with their environments as well as providing a visual representation of their environments and communities. For these reasons, the need for video transcribing was negated.

However, to keep within the concept of triangulation, the videos and photographs were coded to triangulate them against the themes that emerged from the narrative analysis, and were then analysed using pre-established coding schemes. These coding schemes are based on the analysis of the storytelling transcripts and the UN 2030 SDGs; namely goals 4, 5 and 11, respectively. According to Jewitt (2012) and supported by Knoblauch (2012), one way of looking at video and photographic data across the datasets is to code them. Jewitt explained that coding is a fundamentally theoretical process and is associated with practices of observations that are embedded in concepts associated with scientific procedures. The ways and extent to which researchers code their video and photographic data vary considerably. Some researchers stay at the case level and use descriptive analysis without coding, while other researchers undertake systematic coding of their visual data using pre-established coding schemes drawn from theoretical disciplines and approaches, and yet others build codes from their data or literature on a specific area (Jewitt, 2012; Knoblauch, 2012; Heath, Hindmarsh, and Luff, 2017). The latter were used in this research to code and analyse the visual data collected. The photographs and videos were analysed using pre-existing coding schemes. This was done using codes that were extracted from the stories (primary data – storytelling sessions) provided by the participants and the 2030 SDGs, as mentioned earlier.

Moreover, a framework was adapted from the SDGs, in order to gain a better understanding of participants' lived experiences. Goals 4, 5, and 11 were used to help in the triangulation of the stories provided by the participants. Furthermore, after coding the photographs and videos, I extracted the themes that emerged from the visual data and categorised the themes in tabular form (Appendix 12) alongside the preliminary themes (Figure 7 above). After categorising all the preliminary themes in tabular format, I re-evaluated the preliminary themes and merged those which had similarities. The photographs (N=13) and videos (N=3) were then categorised according to the narratives provided by the participants (Figure 7).

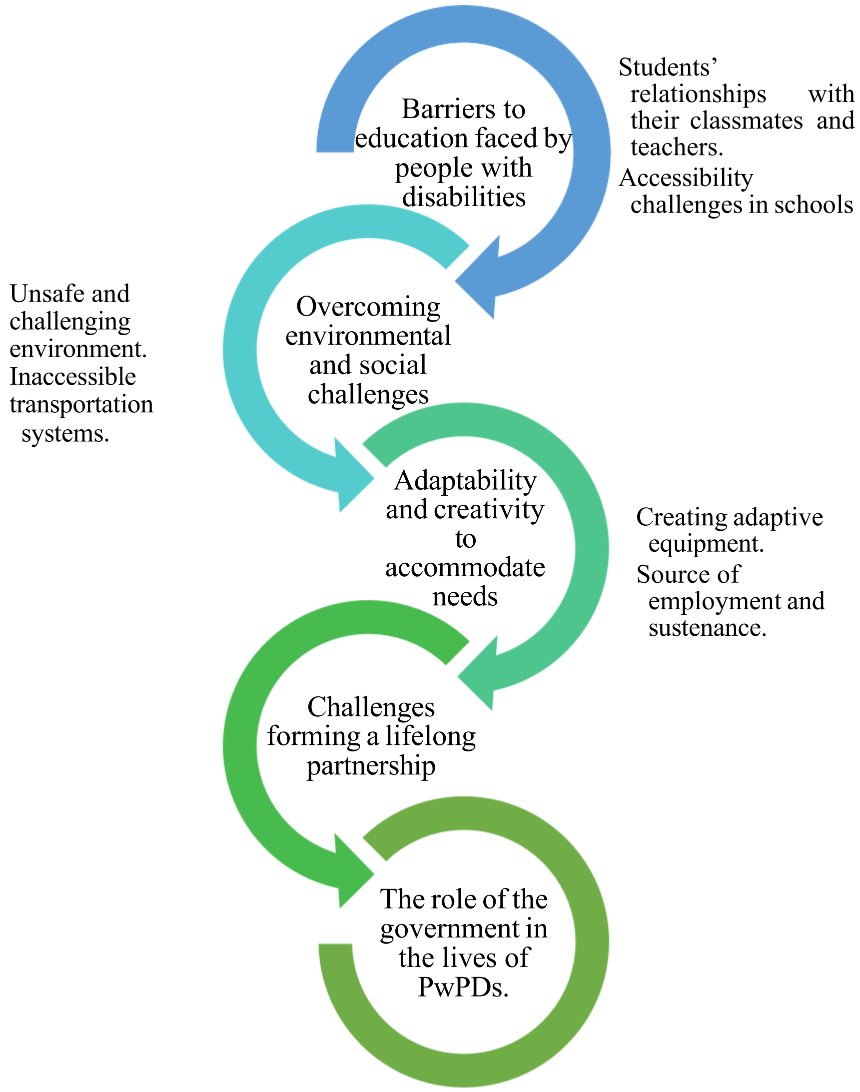
Figure 7: Triangulation of dataset



Source: Owner's design

After compiling all the datasets together, final themes were extracted from both the narratives and visual data. A total of five themes were extracted from the overall datasets, namely: barriers to education faced by people with disabilities; overcoming environmental and social challenges; adaptability and creativity to accommodate needs; challenges in forming lifelong partnerships; and the role of the government in the lives of PwPDs. For the first three themes, two subthemes emerged, and these were added to the narratives provided by the key themes (Figure 8). Additionally, the narratives of seven participants were triangulated using thirteen photographs, while three videos were used to triangulate five of the stories provided by the participants.

Figure 8: Final themes



Source: Owner’s design

As Labov did not provide clear guidelines on how to present narrative data and there are no universally accepted methods for doing so, researchers have had to rely on their own discretion (Butina, 2015). As a result, I presented the themes according to the structure of the narratives provided by the participants. This approach was chosen because it is not possible to present the lived experiences of all 15 participants (which is the traditional way of presenting narratives) in this thesis due to writing and presentation limitations.

4.14 Chapter Summary

This chapter has explained the rationale behind the study, and examined literature about storytelling as a method. I explained my ontological and epistemological position as a researcher. I have discussed the reasons behind the use of storytelling as a method and approach used to collect data from the target population. The ethical procedures followed throughout the research and the process of obtaining ethical approval from the Nigerian government and the university were described. The framework used to analyse the data was provided, as well as the rationale for choosing it. Lastly, the procedures used to code, extract and identify themes were explained.

Chapter Five

Pilot Study

5.0 Chapter Overview

In the previous chapter, I explained the method that I utilised for data collection. The analytical framework used to analyse the data and triangulate the collected photographs and video diaries was also provided. In this chapter, the rationale for conducting the Pilot Study (PS) is elaborated, along with the methods employed for data collection and analysis. The process of extracting themes from the narratives is outlined as well.

Furthermore, I include observations made during the data collection process for the PS and explain their relevance to the main research data. The adjustments made to enhance the quality and richness of the collected data for the main study are detailed. To strengthen the participant narratives, a selection of photographs and video diaries is incorporated.

5.1 Introduction

According to In (2017), novice researchers should consider carrying out a PS before conducting a large-scale study, in order to ensure that the research study has a relevant methodological design, precise presentation, and high-quality outcomes. Malmqvist et al. (2019) further explained that a PS can be carried out as a smaller version of the main study or as a pre-test of a research instrument. In social science research, a PS is referred to as a feasibility study and is a small-scale version of the main study (Gilbert, 2001). This approach is also supported by Malmqvist et al. (2019).

For this study, a PS was conducted to confirm the methodological and analytical design used in the study and to explain some of the adjustments made during the data collection process. The PS aimed to assess the acceptability of the observation or interview protocol and to determine the methodology and epistemology of the research, as suggested by Janghorban, Roudsari, and Taghipour (2013).

A PS also provides an opportunity to improve the skills of a qualitative researcher by conducting a semi-structured interview. In this case, a storytelling approach was used to collect data, allowing participants to tell their stories about their experiences of living with a physical disability. Conducting a PS helped the researcher to adjust the prompted questions and how participants told their stories, thereby improving their skills in the selection of appropriate venues for storytelling sessions, dealing with participants, and probing emerging topics (Gilbert, 2001; Janghorban, Roudsari and Taghipour, 2013). Moreover, conducting a PS can enhance the credibility of the research and promote transparency. Therefore, the PS was conducted to ensure the credibility and transparency of the overall research.

I conducted this PS to improve my overall storytelling skills. This helped in terms of adjusting the prompted questions that were developed earlier while drafting the research proposal and data collection protocol. The adjustments that I made are explained in detail later. The action I took is in accordance with Janghorban, Roudsari, and Taghipour's (2013) suggestion that conducting a PS can help improve and strengthen the interview [prompted] questions. It also helps to ensure that the researcher obtains sufficient and rich data to answer the research question or fulfil the research aim in this case.

Janghorban, Roudsari, and Taghipour (2013) took the view that the transcendental phenomenology method, which emphasises the centrality of a period of time within research, plays a role in a PS. It is the commencement of a systematic effort to eliminate the researcher's bias concerning the participants' experiences. However, it is not possible to completely eliminate such bias because of the close relationship between the researcher and their experience. Nonetheless, Janghorban, Roudsari, and Taghipour (2013) further suggested that researchers use their experience to take advantage of a PS to write a journal log and document their thoughts, ideas, and feelings in order to maintain the significance of the period and establish an unbiased evaluation of the phenomenon. By repeating this in a PS, I was able to identify my personal biases and feelings and prepare them for entering the participants' world. It was more challenging to separate my vision from the participants' experience as someone with a lot of things in common with them. To manage this, weekly debriefing sessions with my supervisors were held during the data collection period and throughout the transcribing and analysis process.

However, even though it is necessary to design the PS to demonstrate the method used to adjust the prompted questions used during the storytelling sessions, there are limited available research publications on ways to conduct an effective PS (Gilbert, 2001; Janghorban, Roudsari and Taghipour, 2013; Malmqvist et al., 2019). By conducting this PS, I was able to adjust the prompted questions I used during the storytelling sessions with the rest of the participants. This made me more flexible in the manner in which I followed up on statements made by participants while at the same time maintaining cultural and religious sensitivity. This was my first time conducting qualitative research that used storytelling [narrative] to collect data. For this reason, I found the PS helpful and it prevented me from overlooking some of the key aspects in the subsequent [storytelling] sessions; the PS served as an educational tool and a way of testing some of the approaches used in data analysis in NVivo. Through this PS, I was able to obtain valuable feedback from my supervisors on things I had missed and things I had done right. This helped improve the rigour of the overall research. Lastly, I used this PS as a form of data validation method for the data I collected for the main study. I also used it as a guide during the main storytelling sessions.

5.2 Methods

In this PS, as in the main study, a qualitative approach was used to collect data. The rationale for selecting storytelling as the method of data collection was explained in detail in Chapter Four. To summarise, storytelling was chosen because it is the primary means of communication among the target population and is deeply ingrained in their culture and tradition. The target population uses storytelling as a means of day-to-day communication and to transfer knowledge from one generation to the next (Youngstedt, 2004; Edosomwan and Peterson, 2016).

5.2.1 Selection of Participants

The participants for this study were selected as part of the main research. All the participants were identified as having physical disabilities and were members of the disability centre. A total of five participants (2 women and 3 men) were selected from the main study to serve as the pilot group. One participant (Amina) was 20 years old; two participants (Rahman and Bahijja) were 37 and 40 years old, respectively, and another participant (Haruna) was 35 years old. The final participant (Suleiman) was 47 years old. Table 12 provides a summary of the participants' demographic characteristics. All the participants were given the PIS to read, and workers at the centre helped those who were unable to read it. Participants were allowed to ask questions before consenting to take part in the study.

Table 12: Participant Demographic Data

Code Name	Age	Cause of Disability	Educational Attainment	Employment status	Gender	Kind of Disability	Marital status	Mobility aid	Period of Disability
Rahman	37	Polio	Secondary school	Employed with side work	Male	Leg deformity	Married	Motorbike	1 – 5
Haruna	35	Accident	Primary	Employed	Male	Amputation	Married	Crutches	Age 16 and above
Bahijja	40	Illness	Islamiyah/Islamic school	Self-employed	Female	Leg deformity	Married	Tricycle	Less than a year
Suleiman	47	Polio	Secondary school	Employed	Male	Leg deformity	Married	Crutches	6 – 10
Amina	20	Illness	Secondary school	Self-employed	Female	Leg Deformity	Single	None	1 – 5

5.3 Data Collection

The data used for this PS was not collected separately from the main data. However, the data collected from the first five participants was used for this PS. I made this decision because I was not convinced that the data I collected from them was rich enough, or that the aim of the research could be attained if the storytelling session approach was not evaluated and adjusted. This was the first time I had collected qualitative data and the first time I had sat with participants to listen to their life stories regarding their physical disabilities. As there were no actual questions to guide the storytelling sessions apart from the prompted questions that were formulated before the data collection, I decided to listen and transcribe some of the data that I had collected to gain a better understanding of how the storytelling session went. After listening to and transcribing some of the data, I was not satisfied with the information I had collected and felt that the data were not rich enough, as some of the stories were short and lacked sufficient information. All the data that were collected were in Hausa (my native language and that of the participants), except for one participant who told his story in English. This is because I had mentioned to the people in the centre that I needed one person to tell his life story in English. Unfortunately, he was not fluent in English, and it was hard to communicate with him. As a result, his data was only partly used as some of the narratives he provided were important.

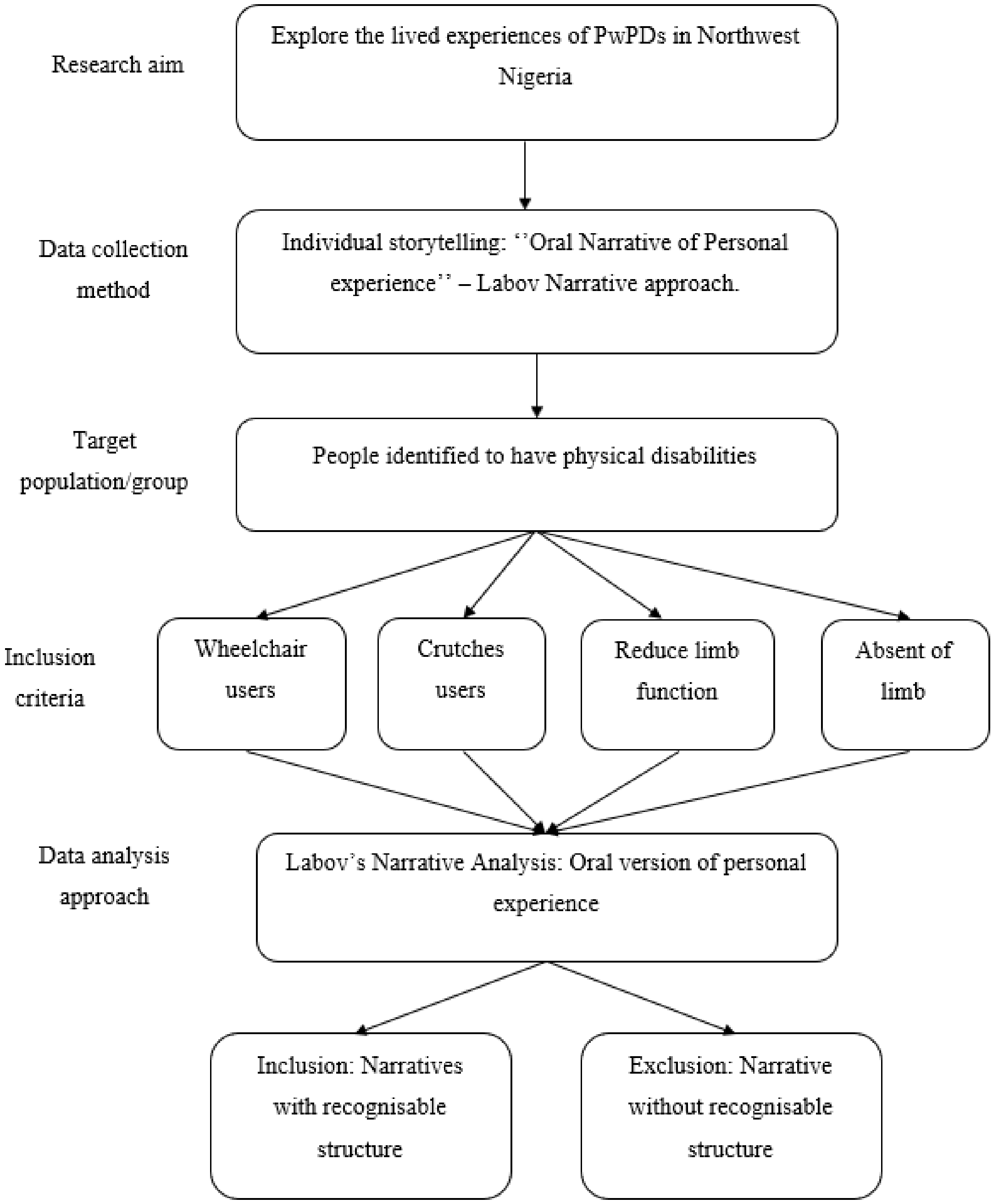
5.3.1 Transcribing the Data

The data that were collected were transcribed verbatim. This was done in three steps. The first step involved listening to the audio recording carefully without transcribing it. I wanted to make sense of the recording and decide on the best way to approach the transcription process. The second step entailed listening to the recording and transcribing it verbatim. As the sessions were all conducted in Hausa except for one, the process was somewhat complicated but also clear at the same time; it was complicated because I had generated bilingual data. I am fluent in Hausa and English, and for this reason, transcribing the data verbatim while at the same time translating it into English was easy but time-consuming.

Some Hausa words and proverbs that do not exist in English, and therefore a literal or direct translation of the words into English would not make sense. For this reason, I decided to define or explain their meaning in English. This was done by putting the definition or meaning of the proverb or word in square brackets “[]”. I took this approach because I did not want the participants’ stories to lose meaning or relevance. Similarly, Halai (2007) collected most of his data in Urdu and some parts in English. His data was transcribed verbatim, but the data that was collected in Urdu was transcribed into Arabic script, and the English part was left in English.

Lastly, after the transcribing was completed, I listened to the recording again while following the transcript carefully to ensure that no words or statements were missed due to constant playing and pausing. Listening to the recordings again was one of the ways to guarantee that no meanings were lost when transcribing the data and that participants’ stories had been transcribed into English without any loss in translation or meaning (Halai, 2007; Thoha, 2009). As I continued transcribing the data, I formulated rules that made the data collection and transcription better and richer. After I finished transcribing the data I had chosen for the PS, I exported it to NVivo for analysis and management. A more detailed explanation of the transcribing process is provided in the Methodological chapter.

Figure 9: Study design flowchart, adapted from Niemela et al., 2010.



5.4 Data Analysis

The data for this PS and the main study were analysed using Labov and Waletsky's narrative analysis, based on the Oral Version of Personal Experience, developed by the aforementioned. The main goal of the narrative analysis is to construct a recognisable design consisting of six parts: Abstracts, Orientation, Complicating Actions, Resolution, Evaluation, and Coda (Niemelä and Rauniomaa, 2010). The Abstract comprises a summary of the story provided by the teller before starting the story. In this PS, where there was no clear Abstract, the prompted questions were used as the Abstract for the story, as suggested by Patterson (2011) and Johnstone (2016). Orientation provides the setting, time, and actors in the story. Complicating Action comprises the main body of the story, describing what happened, and it is a major part of the narrative. The Resolution comes at the end of the story, telling the listener how the situation was handled or resolved. The Evaluation explains the reason behind the story and the emotional and personal feelings experienced by the storyteller. The last part is the Coda which involves the teller bringing the story into the present. Sometimes the Coda provides a summary of the story while bringing the story back to the present (Niemelä and Rauniomaa, 2010; Patterson, 2011; Johnstone, 2016). A more detailed explanation of Labov and Waletsky's narrative analysis was provided in the previous chapter (Chapter Four)

Any story that did not have a Complicating Action based on Labov and Waletsky's narrative principle, was excluded from further analysis. In this PS, all the stories told by the participants had Complicating Actions. However, no Abstract was identified in any of the stories. This is not unusual, as Labov and Waletsky acknowledged that not every story can have an Abstract, and the lack of it does not invalidate the narrative told (Patterson, 2011; Johnstone, 2016).

5.5 Results

During my analysis of the transcripts, I noticed a clear pattern in the way in which participants shared their stories. This pattern included the sequence of events related to acquiring a disability, receiving medical help when it happened, their educational journey, personal activities, interactions with people in their community, experiences with disability-focused organisations, and the role the government played in their lives. I summarised these narratives in a table, as shown in Appendix 12.

From these story patterns, I identified key elements and organised the narratives following Labov and Waletsky's narrative structure. I categorised these narratives into six main themes that emerged while studying the data:

- Dealing with Diagnosis and Adapting to the Environment
- Navigating Education as a Physically Disabled Person
- Challenges Accessing Healthcare Services.
- Living with a Physical Disability in Unfriendly Environments.
- The Role of Disability Centres in Connections and Networking
- Governmental Support.

5.6 Dealing with Diagnosis and Adapting to the Environment

Each participant shared their unique experiences of acquiring a physical disability. However, one participant (Haruna) provided limited information about the origin of his disability. He mentioned that his disability resulted from an accident that occurred when he was 12 years old but did not specify the nature of the accident, such as whether it was a car crash or another incident. Haruna's reluctance to go into detail may stem from his desire to avoid revisiting the traumatic event that led to his disability.

In contrast, four other participants (Amina, Bahijja, Rahman, and Suleiman) provided more detailed narratives about how they became physically disabled. Interestingly, these four participants have no personal recollection of the events that led to their disabilities. Instead, their parents shared with them the causes of and circumstances surrounding their disabilities. Notably, these disabilities were acquired during their early years. For instance, Bahijja was diagnosed with a physical disability at just 9 months old, while Amina and Rahman received their diagnoses at the age of two. Haruna and Suleiman, by contrast, became disabled at ages 12 and 10, respectively. It is important to note that Amina, Bahijja, Rahman, and Suleiman developed disabilities due to illnesses, which differs from Haruna's case, as his disability was attributed to an accident.

Intriguingly, except for Haruna, all the participants exhibited a consistent pattern of crawling on their hands and knees as they grew up. Amina recounted that, after undergoing intensive physiotherapy, she successfully transitioned from crawling on her hands and knees to limping unaided. In contrast, Haruna, Suleiman, and Bahijja relied on crutches for mobility, and Rahman used his hands for movement. This diversity in terms of mobility methods underscores the unique paths each participant took in adapting to their disabilities.

All the participants emphasised the pivotal role that their parents, particularly their fathers, played in facilitating their education. Amina, for example, managed to complete primary and junior secondary school before her father's passing. However, due to financial constraints, her education came to a halt at senior secondary school (grade 11). She explained that she switched from a private to a government school before eventually discontinuing her education because her mother could not afford the school fees. To contribute to her family's financial stability, she started selling a traditional snack called "wainar fulawa", [like a pancake], outside her house. Despite struggling to make significant profits, her earnings contributed to supporting her family.

Amina's mother served as the primary provider for the family, and both Amina and her siblings depended on her and the income from Amina's snack business. Amina and her older brothers had supported the family financially, but their ability to provide dwindled due to unemployment and Nigeria's economic challenges. Even though Amina was unemployed during the study, she still felt responsible for assisting her mother in caring for her siblings and maintaining the family's livelihood. She mentioned receiving ₦5,000 (£5) from a disability centre as initial capital for a small business after being trained in how to make shoes and handbags. However, due to the considerable expenses required for the business, Amina decided to give the money to her mother to contribute to supporting the family instead.

> *[...] I took that five thousand and gave it to my mom. She bought us food materials that we will be using and stored them; we use them to feed ourselves. (Amina)*

Like Amina, Bahijja who is a widow, was also experiencing some financial challenges. Her account highlighted the complexities of her situation. Living in a rented shared house, Bahijja managed the dual responsibilities of covering her rent and providing for her family. This was possible due to her small home-based business and the proceeds collected from street begging. However, her depiction of her predicament revealed that her business earnings fell short of meeting her needs:

> *[…] I embarked on this business because, previously, I used to prepare nuts. For instance, during the nut season, I would roast about three to four bowls of them. Occasionally, I would generate a profit of 400 – 500 naira (£0.40p - £0.50p) from these endeavours. Additionally, I sold items like tomatoes, red pepper, and seasonings. Unfortunately, the profitability of these ventures has diminished […] (Bahijja).*

Given her insufficient business profits and role as the family bread winner, Bahijja found herself compelled to resort to street begging as a means of survival. Her narrative conveyed the rhythm of her daily struggle: each morning, in the absence of funds, she embarked on a journey to beg for financial assistance on the streets.

> *[...] When I wake up in the morning, there is nothing I can do [lack of money] due to the situation we find ourselves in. But I come out and get some money [beg on the streets], then I will go back and buy some food for the family. (Bahijja)*

In contrast to the women, the men did not explicitly share accounts of their financial struggles. However, they did elaborate on their roles regarding their families.
Suleiman, for instance, recounted his father's pivotal role in introducing him to the world of work, despite scepticism from others. His father's guidance in the realm of construction

work instilled proficiency in Suleiman, enabling him to embark on a career as a construction worker. Rahman, on the other hand, did not delve into his relationship with his father, but he did emphasise his own role as a parent, highlighting his four children. His wife's occupation as a primary school teacher in a government school proved instrumental in bolstering the family's welfare. Rahman underscored the collaborative nature of their approach to family care.

> *[…] With four children, the resources we acquire are pooled together. My wife, who is employed as a government primary school teacher, and I contribute jointly to support our children […] (Rahman)*

It is noteworthy that all the participants recounted positive and nurturing relationships with their parents and families. Amidst challenging circumstances, their parents showed them care and affection, engendering admiration, and respect from those around them. Nevertheless, for some participants, engaging in shared activities during their upbringing fostered strong bonds.

Suleiman's involvement in farming, encouraged by his father's involvement and trips to the farm with his siblings, played a pivotal role in his acceptance of his physical disability. This attested to the profound impact of familial interactions on shaping personal resilience and outlook.

> *"[...] It reached a point where my disability has become part of me. It reached a point where I was able to help my relatives and family. At that time, I even engaged in farming just like everyone else. My father would take me and my relatives to the farm. I engaged in farming alongside my relatives, I continued to farm until I moved to the city." (Suleiman)*

5.7 Navigating Education as a physically disabled person

In this study, the participants had achieved various levels of school certificates. Notably, Rahman was the sole participant who possessed a secondary school certificate. In contrast, Amina's pursuit of the same credential was halted a year before its attainment due to circumstances beyond her control. Both Rahman and Amina were forced to prematurely end their educational journeys due to the convergence of financial constraints and the untimely demise of their fathers. It is worth highlighting that Amina experienced an interruption in her educational path, as she had to miss a school term to observe the mourning period for her late father before resuming her studies.

Bahijja's educational experience primarily centered around attending an Islamic school. Emotionally, she added, "*I had to crawl painstakingly to get to school during that time, without any form of mobility aid*". This situation, combined with the absence of proper paving on the streets and grounds (as depicted in Image 1), underscores the significant challenges faced by individuals with disabilities as they navigate their surroundings. The lack of adequate infrastructure exacerbates the discomfort and difficulty endured by these individuals on their journey to school.

Image 1: An entrance to a government school

The above image serves as a representative depiction of a government school and its surrounding terrain. This visual also symbolically reflects the challenges Bahijja faced during her daily commute to her Islamic school.

In contrast to other participants in this study, Bahijja was the sole contributor who shared her experiences relating to mobility. Nevertheless, Amina provided a significant insight into her own schooling experiences. She pointed out that her peers treated her differently due to her disability, unlike her sister who did not face such challenges. In Amina's own words:

> *[...] The way people interact with my sister greatly differs from their interactions with me. While my sister is not affected by a disability, I am. Unfortunately, not everyone in our community and school possesses a comprehensive understanding of disabilities [...]*

Amina's disability led her to experience a sense of social isolation. Both her schoolmates and members of her community lack awareness when it comes to disabilities. This lack of awareness contributed to their hesitance in engaging with and supporting individuals with disabilities.

> *[...] some people will associate with me, and some people will not associate with me. People will think, how can I associate myself with someone with a disability, that is how they view me [...] (Amina)*

5.8 Challenges Accessing Healthcare Services.

All the participants in the study shared their experiences related to accessing healthcare services. As previously discussed in Chapter One, the predominant healthcare system in the country operates on an out-of-pocket basis, requiring individuals to make significant payments before receiving medical care. This particularly applies to private healthcare services, while government facilities mostly offer free services but require an admission fee. In practice, all the participants mentioned that they often visit pharmacies to purchase medications without consulting a doctor, especially for common ailments like fever, headaches, and malaria.

Amina recalled a critical moment in her healthcare journey when her parents initially took her to a pharmacy during a bout of fever, which ultimately led to her developing a physical disability. When the prescribed medication failed to alleviate her condition, she was subsequently admitted to one of the general hospitals in the city, leading to her parents spending a substantial amount of money to ensure that she received treatment. Haruna expressed a similar sentiment, stating, "*When I am sick, I start by going to a pharmacy*".

This preference for pharmacies over hospitals primarily arises from the significant admission fees and medical costs associated with government hospitals. Nonetheless, Amina and Bahijja mentioned that accessing healthcare services in government facilities is relatively straightforward; they only need to acquire a doctor's card (along with the admission fee) and wait in a queue for a consultation. Bahijja added that the healthcare system operates on a first-come, first-served basis, as scheduled doctor appointments are not the norm in government facilities.

Amina echoed that the quality of service delivery is generally commendable, with doctors making earnest efforts to support and assist them while they are in hospital. Amina also shared her positive experience of a treatment called "*Gashin Kashi*", which involves applying heat to the leg muscles. This therapy significantly improved her condition to the extent that she no longer relies on mobility aids and can walk with a limp.

However, it is important to note that individuals like Suleiman, Haruna, and Bahijja must adhere to the queuing system in order to receive a consultation from a doctor, as special services were not provided to them. In some instances, fellow queue members may choose to allow them to be seen first or expedite their access to medical care. Nevertheless, Bahijja and Amina mentioned that there were occasions when they were not allowed to jump the queue or receive support.

> *[...] If we went and there is a long queue, even though we have been told [by the centre] that we should not wait in the queue due to our disability.*
> *Sometimes we face that kind of problem [...] sometimes as soon as the doctors come out and see us, they ask us to come in to be seen and get out of the queue [...] (Bahijja).*

Doctors taking them out of the queue is not a policy but rather due to the kindness and willingness on the part of doctors to support individuals like Amina and Bahijja. Nevertheless, despite the relatively low costs associated with healthcare services at government hospitals, Rahman and Haruna explained that they are required to cover their own expenses for medications without any subsidies. Haruna succinctly stated, *"I am the one that takes care of my medical bills. I take care of myself and my responsibilities*". All the participants expressed their preference for government hospitals due to the cost-effectiveness of the prescriptions they receive compared to private medical facilities. As Suleiman articulated,

> *[...] I mostly go to the government hospital because, there, you can find doctors who prescribe more affordable medications for you to purchase [...].*

Similarly to healthcare services, medications are not provided free of charge. Consequently, Rahman and Suleiman stated that they are responsible for paying for their prescriptions. Each participant detailed their method of covering medical expenses, with many relying on the profits generated from their small businesses. Notably, Amina, the youngest of the participants, has allowed her mother to oversee her health and well-being, and her mother utilises funds from her business to cover Amina's medical bills. None of the participants reported receiving any external financial assistance for their medical care.

Bahijja, for instance, finances her medical expenses and those of her children through the proceeds from her business activities, as well as the income derived from occasional street begging, as illustrated in the following excerpt, "*Honestly, we are the ones to pay for our medical bills [...] I pay with the little business I am running; from there, I can manage."*

In response to inquiries about her street begging activities, Bahijja explained that she does engage in occasional street begging. However, she clarified her approach to street begging, emphasising that she does not remain stationary by the roadside but rather moves around with a specific timeframe in mind before returning home. Bahijja attributes her street begging to the challenging economic conditions and the limited profitability of her small home-based business, explaining:

> *[...] The way life is, to be honest, I did not beg before; it is because of the changes in life that I do so now [...]*

Haruna echoed Bahijja's sentiments and provided a similar perspective on healthcare and family responsibilities. He asserted that he takes full responsibility for his family's needs, just like non-disabled individuals: *"I provide everything they need; I take care of my family just like everyone else, both in terms of healthcare and other aspects".*

Nevertheless, Suleiman recounted that there was a period when he used to receive medical assistance from compassionate individuals who would generously cover his medical expenses because he could not afford them. However, he lamented that this kind of support is no longer readily available, highlighting the evolving nature of his circumstances.

5.9 Living with Physical Disability in Unfriendly Environments

All the participants in the study shared their experiences of grappling with the multitude of challenges embedded within their respective communities and environments, which have profound implications for their daily routines and social interactions. Amina and Bahijja provided narratives that shed light on their encounters within their communities and how they navigate their environments. A major challenge highlighted by both Amina and Bahijja was the lack of essential mobility aids during their formative years. Many participants mentioned that they did not acquire their mobility aids until they reached their teenage years. An eye-opening anecdote was shared by Bahijja, who only gained access to a tricycle for mobility after getting married.

Even for those who did not require mobility aids, like Amina, the ordeal of using public transport presented its own set of challenges. Disturbingly, some public transport operators exhibited reluctance to accommodate individuals like Amina, often subjecting them to endless waits by the roadside. Amina emotionally conveyed her ordeal, illustrating how the simple act of flagging down a three-wheeled motorcycle proved to be difficult:

> *[...] When you go out to stop a three-wheeled motorcycle, the way you stop them and the way someone without a disability will stop them is different. If you stop them, they will not stop; you will be standing in the sun until a God-fearing one comes along and picks you up [...] (Amina)*

However, for those fortunate enough to possess a means of mobility or access to a tricycle, another grim reality unfolded – a perpetual battle for road safety. Bahijja's harrowing accounts of cars and three-wheeled motorbikes dangerously encroaching on her tricycle's path paint a bleak picture of the challenges faced by the participants in their society. She added that the insensitivity of some drivers, unwilling to exercise patience towards her and others trying to cross the roads or make turns, further compounds the reasons why she does not like going out of her house.

> *[...] Sometimes, if you are riding your tricycle, someone can come along as if they want to run over you. As we are coming towards them, and they are coming towards us, they will not stop for us, as people with special needs, and wait for us to pass. They will just try to run us over, sometimes they will do it as if they want to hit you and pass.*

Bahijja's grievances find legitimacy in the deplorable condition of numerous roads in North-western Nigeria, especially within communities and government premises, including hospitals and commercial centres. The accompanying photograph starkly illustrates the deteriorating condition of one such road in an active commercial area of North-western Nigeria, riddled with treacherous potholes. These road hazards compel tricycle riders and other road users to veer dangerously off the path, amplifying the risks and discomfort faced by individuals like Bahijja and Suleiman.

Image 2: A commercial area road with several potholes and stagnant water

Indeed, Bahijja's account highlights yet another critical issue plaguing her community: insufficient street accessibility exacerbated by poorly designed and often uncovered drainages. This problem poses a formidable obstacle, particularly for individuals like Bahijja who rely on tricycles for their mobility.

Bahijja's candid observation resonates with the reality faced by participants like Suleiman, Haruna, and Rahman. The impracticality of navigating streets with narrow or uncovered drainages is a pervasive challenge that significantly hampers mobility. It often forces individuals such as Rahman, Bahijja, and Suleiman to wait for others to pass before they can proceed, causing unnecessary delays and inconvenience.

The photograph shown below underscores the severity of this issue, illustrating how these drainage crossings are often too narrow to accommodate the passage of tricycles. Such conditions not only impede the daily lives of the participants but also compromise their safety and independence.

Image 3: A drainage ditch with a single concrete slab on top

Despite the challenges they face, individuals like Bahijja, Haruna, and Suleiman find ways to carry out their daily activities and sustain themselves. Haruna, for instance, shared that he used to collect metal scraps and sell them for a profit before becoming a painter at the disability centre. Before his painting job, Haruna faced challenges trying to find work in his community, and he believed that having a job is a means of achieving independence.

> *[…] I faced a lot of problems, like regarding my job before I became independent. I have faced some challenges because sometimes you will leave your home and come to work, you will walk [using crutches] to work. If you walk to work from home, you may spend the whole day without getting support. […] (Haruna)*

Working at the disability centre comes with its own challenges, such as the lack of customers to buy the products created by the people there. Sometimes, they can go a whole day or week without selling any of their products:

> *[…] You will not have the money to buy food or even water; you will spend the whole day at work and go back home without getting anything [making a sale]. Today, I will come and get something [money], and tomorrow I may*

> *not get anything; that is how things go, and that is how we live our day-to-day life. (Haruna)*

While narrating his experience of working at the disability centre, Haruna mentioned that getting to the centre was not easy due to the poor state of the pathways. To avoid the crumbling pathways, he would have to go through other communities that have better pathways or use the main road to get public transport to take him to work.

> *[…] Every day, as you can see, regarding pathways. We do not have good pathways; I must go through other communities and enter here and there until I find a means of transport, whether good or bad.*

Most of the streets in the community are muddy, and even people without disabilities tend to find it hard to move around without being cautious of where they place their feet. For instance, the premises of the disability centre are not paved, resulting in potholes filling with stagnant water every time it rains, as shown in the photograph below.

Image 4: A parking area at the disability centre

Suleiman concurred with Haruna’s narrative about the transportation challenges he faced when going to work. Although he did not specifically mention any struggles with navigating the pathways in his community, he talked about how difficult it was to get to work without transport:

> *[…] I have faced a lot of challenges, one of the challenges I am facing is sometimes, I find it hard and saddening how can I find transport to take me to my workplace in the morning? I do not have a means of transportation of my own. […]*

Suleiman also found it hard to take care of himself whenever he was unable to sell his product or make any profit at his workplace. Because of the challenges Suleiman had faced before getting a job at the centre, he disclosed that he used to beg on the streets for money to take care of his needs. He travelled across the country in search of a better life by begging on the streets. He later realised that street begging was not helping his financial situation in the long term. His motivation to help people who had suffered from polio, like himself, also made him move back to his city in the hope of finding a way to accomplish his goals.

> *[…] I told myself it was better to come back and start learning about business, so that I will be able to help myself and the rest of the*

> *population. This has made me think about what I wanted to do. I started to think about ways to help myself; I moved to my city and joined a polio association [branch of the disability centre].*

After he moved back to his city, he got involved in para-soccer, a game created by PwPDs which they play by sitting on a roller (Image 5 & 6), using their hands to move the ball around and against opponents.

Image 5: A photograph of a roller used by PwPDs - top view.

Image 6: A photograph of the bottom of the roller

Individuals with disabilities employ these rollers alongside tricycles for mobility within their communities. These rollers are suitable for use on both sand and asphalt surfaces, although they are notably easier to manoeuvre on asphalt and paved areas compared to sandy environments. Rahman, who serves as the para-soccer coach for the PwPDs (as depicted in Image 7), utilises these rollers on a tennis court during the game.

Image 7: A photograph of people with disabilities playing para-soccer.

Rahman shared his experiences, telling me about his involvement in para-soccer, a sport tailored for individuals with disabilities that has similarities to traditional football but with unique adaptations. He proudly serves as the coach for the para-soccer team and continues to actively participate in the game up to the present day.

The para-soccer matches are typically held during the participants' leisure time, specifically on Thursdays and weekends. Notably, a significant proportion of the members at the disability centre actively take part in this sporting activity, which is administratively overseen and organised by the centre itself. A video that shows Rahman and other members of the disability centre playing para-soccer can be accessed by clicking on the following link (https://vimeo.com/838274062?share=copy).

5.10 The Role of Disability Centres in Connections and Networking

Amina, Bahijja, Suleiman and Haruna explained that the disability centre serves as a vital community for them, and those who suffered from polio. Haruna and Suleiman recounted that the centre plays a crucial role in fostering connections among its members and providing essential support in their daily lives.

Two participants, Amina and Bahijja, shared their journeys to becoming part of the disability centre. Amina's introduction to the centre was facilitated by a close friend who was already a member. Initially, Amina required a guardian to accompany her to the centre for meetings and events due to her youthfulness. However, as time passed, her father entrusted her friend with her care, particularly as his own health deteriorated. Amina's friend became her guardian and ensured she could attend activities at the centre regularly. At the time of the data collection, she was 20 years old, and she has become more independent. By contrast, Bahijja took a different path to joining the centre. She encountered fellow individuals with disabilities in her daily life who introduced her to the centre and its work. Recognising the potential benefits it offered, Bahijja decided to join the centre spontaneously.

One notable aspect of the disability centre is its commitment to empowering its members. Haruna and Suleiman mentioned that it provides training and job opportunities to enhance their independence. Amina and Bahijja were taught the necessary entrepreneurial skills to start and manage successful businesses. The centre even covers transportation costs for those who are interested in attending these training programmes. Upon completion of their training, Amina and Bahijja received capital to kickstart their own businesses, as mentioned earlier.

Additionally, the centre offers vocational training, as was the case for Haruna, who learned painting and now works as a painter within the centre's operations (as depicted in Image 8). This multi-faceted approach ensures that the disability centre not only serves as a support network but also equips its members, such as Suleiman and Haruna, with valuable skills and opportunities for financial independence:

> *[…] My work is painting, the person that taught me how to paint was [name removed] […] I went to someone that knows how to paint, I went to him myself and I told him I want to learn this business. (Haruna)*

The image shown below is of Haruna painting a part of a swing. A video that shows him painting can be accessed via this link (https://vimeo.com/744282772).

Image 8: Haruna painting a part of a swing.

On the other hand, Rahman's journey to joining the disability centre followed a unique path. He received training in welding and was coached in playing para-soccer. At the time of the research, Rahman had taken on the role of a coach for the para-soccer team. In his own words, he described the invaluable support he received at the centre: "*They taught me how to work, how to weld, and how to play sports; that is the help they are giving me*".

Similarly, Suleiman found a meaningful role at the centre as a rode fabricator. His work involves creating swings and tricycles, which are then displayed for sale (as shown in Images 9 & 10). This work not only provides Suleiman with a source of income but also contributes to the centre's activities, hence benefiting other members with access to these mobility aids.

Image 9: A photograph showing a swing that was created by PwPDs at the centre.

Image 10: A photograph showing the kind of tricycle that PwPDs create and use at the centre.

> *"[…] We make things and put them by the side of the road for people to buy. Businessmen will come and buy and give us our money and we use that money to buy materials and make the same thing we have sold and put it by the side of the road for sale again. That is how we take care of ourselves and maintain our day-to-day life." (Suleiman)*

The disability centre's commitment to skills training and job opportunities is evident in the diverse roles taken on by its members like Rahman and Suleiman. This approach not only enhances their financial independence but also contributes to the centre's sustainability and its mission of supporting individuals with disabilities in various ways.

5.11 Governmental Support

The responses from the participants regarding government support were quite revealing. None of the participants reported receiving any form of assistance from the government. Amina emphasised that she has never received any government support in any capacity. Bahijja's perspective shed light on the challenges faced by PwDs, especially those who resorted to begging on the streets. She expressed a sense of neglect resulting from the government's failure to provide support for this vulnerable group, highlighting that the lack of alternative income sources and means to support themselves and their families often compels individuals to continue begging.

Bahijja's view on government intervention was clear – she believed that if the government was more proactive in providing comprehensive support to PwDs, including education, vocational training, and employment opportunities, street begging among this group would have significantly decreased. Haruna echoed the sentiments expressed by his fellow participants, stating that people with special needs, including himself, do not receive any support from the government. He did offer a glimmer of hope when discussing the occasional purchase of products created at the centre by state governors. For instance, tricycles crafted at the centre were sometimes bought by state authorities, although he noted that this was a rare occurrence in the case of his city's government.

> *[…] Except sometimes other States' governors normally come to buy our materials and pay. We will either send it to them, or they will come and take it themselves but even the materials we make, our government, [name removed], they rarely buy our products […] (Haruna)*

In addition, Suleiman highlighted that individuals with disabilities often receive support from one another, with occasional assistance from charitable groups, organisations, and affluent members of the society. Regrettably, government support is notably absent. These communities mainly rely on self-support, and occasionally receive aid from compassionate individuals.

After sharing their experiences of government support deficiencies, Bahijja, Haruna and Rahman discussed ways in which the government could enhance their lives. Bahijja, for instance, suggested that constructing paved sidewalks and designated pathways for people with disabilities would greatly facilitate their daily commutes:

> *[…] If the government were to create dedicated pathways for individuals with special needs, it would significantly improve our mobility and daily lives […]*

In contrast, Haruna expressed a simpler requirement – mobility assistance. He sought a means to move around more easily, such as a motorbike, or the financial means to acquire one through improved employment or financial support. Similarly, Suleiman shared Haruna's need for enhanced mobility. He proposed that government support in the form of capital or assistance to initiate a business venture could empower him to obtain a better mobility aid, such as a motorbike or tricycle.

> *[…] to be given capital or something to help me start a business. So that I can support my life, from that, I will get a means of transportation [buy a tricycle or motorbike], I can pay for my transportation and go anywhere I want to go. (Haruna).*

Suleiman further emphasised that government support could lead to significant improvements in the lives of PwPDs. He suggested that the government could provide them with projects, such as producing school materials like doors and windows, instead of outsourcing such projects to others.

5.12 Discussion

An analysis of the participants' stories has shed light on the uniqueness of their lives. While there were similarities in their stories, they also displayed distinct individuality. Notably, Haruna stood out as he became disabled during his teenage years due to an unfortunate accident. In contrast, the other participants acquired their physical disabilities at a young age during the polio epidemic. Rahman and Suleiman attributed their disabilities to polio, while Bahijja and Amina attributed theirs to illness. Interestingly, the symptoms leading to their disabilities closely resembled those of polio. However, when questioned directly, all of them denied having had polio, and out of respect, I refrained from pressing the issue. Due to the prevalence of individuals with physical disabilities, the disability centre established the Polio Victims Trust Association, which provides support to those who suffered from polio. Suleiman is a member of this association.

Apart from Haruna, who is an amputee, Rahman, Bahijja, and Suleiman all had severe leg deformities, and require mobility aids for walking. However, despite her leg deformity, Amina managed to walk without assistance, although with a noticeable limp. It was truly remarkable how all the participants navigated their non-disability-friendly environment (see Images 5 & 6). While their working and living conditions seemed challenging, only Bahijja openly mentioned the difficulties she faced in regard to accessing her environment.

While there appeared to be no obvious reason for the participants to withhold their life stories, I did notice some reluctance, possibly stemming from a hesitancy to reveal their private lives to a stranger. This was particularly evident in the case of Haruna, who exhibited discomfort in his body language when discussing the circumstances of his disability. In response, I adapted my approach to encourage the participants to share their stories. I began offering breaks when I sensed fatigue or irritation, and I engaged in informal, unrecorded conversations before and after the formal storytelling sessions. These adjustments led to interesting discoveries. For instance, it became clear that Haruna was generally reserved and introverted, even at the centre.

Another significant observation pertaining to Amina's emotions was when she was recounting her reasons for leaving school due to financial difficulties and the loss of her father. In one of our casual conversations, she mentioned that nobody had ever inquired about her feelings after her father's passing, which explained her emotional response during the interview. When I offered to discontinue the session, she declined, and expressed her willingness to continue sharing her stories.

Although the participants' stories had already offered valuable insights into their daily lives, I believed that a deeper and more comprehensive understanding could be gained, especially regarding their strategies for sustaining their lives and caring for their families, particularly given that some had large families. As a result, I made further adjustments to my approach, including careful observation of their body language and crafting prompted questions to align more naturally with their narratives. These modifications proved effective during the primary data collection phase. Several adjustments were made to enhance the data collection approach in the main study, building on the insights gained from this preliminary study:

- **Using Prompted Questions**: I included more prompted questions tailored to each participant's story. For example, if a participant mentioned begging earlier, I would follow up with a question like, "Have you ever begged before?" This approach facilitated in-depth exploration of specific aspects of their experiences.
- **Rephrasing Questions**: I refined the wording of questions to ensure they were culturally relevant and relatable. Instead of asking, "Can you tell me about your relationship with the people in your community?" I rephrased it as, "How do you interact with the people in your area (which also means community in Hausa)?" This made the questions more accessible to the participants.
- **Returning to Questions Later**: When a participant digressed into a related topic while answering a question, I allowed them to finish their narrative before rephrasing or repeating the original question. This encouraged participants to provide more detailed responses and share additional details spontaneously.
- **Pre- and Post-Storytelling Discussions**: I introduced pre-storytelling discussions with participants to establish rapport and build trust. This approach fostered openness and improved the quality of the sessions. Additionally, post-storytelling discussions

were conducted, during which participants often shared more about their experiences of living with physical disabilities. Any new information provided during these discussions was recorded and incorporated into the data, thus enhancing the depth of the study.

- **Scheduled Breaks**: I incorporated the practice of giving participants breaks when signs of exhaustion were evident. These breaks allowed participants to recharge, often leading to more extensive storytelling as they felt more relaxed and willing to elaborate on their experiences without prompting.

Collectively, these adjustments significantly enriched the data collection process, providing a deeper understanding of how participants sustain their lives and support their families while living with physical disabilities.

5.13 Chapter Summary

This chapter serves as an exposition of the rationale underpinning the use of the adapted narrative approach for this study. It detailed the analytical approach employed for evaluating the data gathered through the PS and elucidated the process of generating themes from the collected stories. Additionally, the chapter explained the presentation of the PS findings, complete with quotations extracted from participants' narratives. To enhance the credibility and robustness of the PS data, photographs and videos were thoughtfully integrated to complement and authenticate the participants' accounts. These visual elements were strategically employed to illustrate and fortify the narratives shared by the participants.

Furthermore, this chapter provided a space for the inclusion of pertinent observations stemming from interactions with the participants. It also outlined the alterations and refinements made to enhance the overall quality of data collected in preparation for the principal study. These adjustments encompassed strategies such as using more probing questions, rephrasing inquiries to align with the participants' cultural context, returning to questions at opportune moments, initiating both pre- and post-storytelling discussions, and incorporating scheduled breaks during the data collection sessions. These methodological enhancements collectively contributed to a more comprehensive understanding of how participants navigate their lives and provide for their families while coping with physical disabilities.

Chapter Six

Main Findings

6.0 Chapter Overview

In the previous chapter, I meticulously outlined the preliminary structure that laid the foundation for my research approach. This set the stage for refining how I collected the data, a crucial step that prepared me for unveiling the main findings that come next. Shifting my focus, this chapter weaves together five key themes that emerged from the stories, photos, and videos that I gathered from PLwPDs in North-western Nigeria. These themes encapsulate the essence of their experiences, offering me profound insights into the challenges they face and the resilience they exhibit.

As I navigate through this study, presenting the data takes centre stage. The strategic use of footnotes adds depth, providing clear context for what the participants are expressing. Additionally, using participants' verbatim quotes in their socio-demographic profiles infuses it with authenticity, shedding light not only on the causes of disabilities, but also on the intricate web of beliefs that surround them. With this solid groundwork laid, the next step is to present the essential findings of my research.

6.1 Socio-Demographic Profile of Participants

Demographic data was collected from the participants while they were giving their consent to participate in the study. Additionally, to ensure anonymity, pseudonyms were given to each participant.

As the participants have various forms of physical disabilities, I organised them into three categories based on their means of mobility for to facilitate an easier understanding of their capability for mobilising in their environment. The first category is for those with both leg deformities that have no function. Out of the 15 participants, 10 (Aliyu, Adnan, Jamila, Nazifi, Mahmud, Habu, Firdausi, Hannah, Ibro, and Labaran) belonged to this category. They all used tricycles, rollers, and/or crutches to move around their environments. Among these

10 participants, six (Aliyu, Adnan, Jamila, Nazifi, Mahmud, and Habu) became physically disabled due to polio, three (Firdausi, Hannah, and Ibro) acquired their disability due to an unknown illness, while one (Labaran) stated that he did not know the cause of his disability.

Participants with partial or incomplete leg deformity were placed in the second category, unlike participants in the first category, two participants (Adam and Isma'il) had one non-functional leg which was deformed. They used crutches to mobilise and did not use tricycles or rollers as a means of mobility. Adam's cause of disability was polio, while Isma'il acquired his disability due to an unknown illness.

The last category of participants was those with physical disabilities who do not use any means of mobility aid to mobilise and had functioning legs, even though they were deformed. Aisha, Maryam, and Salisu belonged to this group. Salisu walked unaided even though his right foot was twisted in appearance; Aisha and Maryam had deformed legs but were able to walk unaided, although with a noticeable limp. Aisha's cause of disability was polio, while Maryam and Salisu's were unknown illnesses.

Additionally, five of the participants (Adnan, Jamila, Habu, Labaran, and Mahmud) acquired their physical disabilities at around the age of 2 years old; four participants (Firdausi, Nazifi, Aisha, and Isma'il) acquired their disabilities when they were about 3 years old; three participants (Aliyu, Adam, and Salisu) acquired their disabilities at the age of 5; two participants (Maryam and Ibro) at around the age of 7, and lastly, one (Hannah) participant acquired her disability at the age of 10.

However, while most of the participants talked about becoming disabled because of illnesses and experiencing symptoms like fever and headaches (these are some of the symptoms of polio), Maryam narrated that the events that led to her disability were different. She started experiencing fever and bone pains and divulged that every time someone carried her, she would break a bone.

> *I fell sick with a fever and my parents' thought, it was 'da huwar kashi' [Bone pains] as time goes on, I was still sick and suddenly, my body*

> *became stiff as I was told. The moment anyone touches me, I will start crying, I was healthy when I was born before the fever started and after my body has become stiff if anyone tries to carry me, I would break a bone. (Maryam, P12).*

Maryam also recounted that because she constantly broke her bones, her body structure was significantly affected, particularly her legs and hands. This was mostly due to the traditional healers her parents invited to treat her fractures whenever she broke a bone.

> *You see [showing her body] my hands are not like that of the dwarf people. Because of the illness and because I keep breaking my bones, that is why my legs started to contract, if you look at my body [she is showing me her hands and legs] it is not like that of dwarf people. (Maryam, P12)*

Moreover, the participants' ages ranged from 18 to 62 years old. Three of the participants (Firdausi, Jamila, and Maryam) were between 36 and 40 years old. Six (Aliyu, Habu, Hannah Labaran, Mahmud, and Nazifi) were over 46 years old. Two (Adnan and Ibro) were between 41 and 45 years old. A further two (Adam and Salisu) participants were 25 and 22 years old, respectively; one (Aisha) was 35 years old; and another (Isma'il) was 28 years old. Appendix 13 shows a summary of the participants' demographic data.

Regarding education, all the participants mentioned acquiring one form of education or another. Thirteen (Adam, Adnan, Aisha, Aliyu, Habu, Hannah, Ibro, Isma'il, Jamila, Labaran, Mahmud, Nazifi and Salisu) had attended Western schools, while two (Firdausi and Maryam) attended Islamic schools. Furthermore, four of the women in this study were self- employed, while one was unemployed. However, out of the ten male participants, eight were employed by the centre, and two were retired at the time of the data collection.

In terms of personal relationships, ten of the participants (Adam, Adnan, Aisha, Aliyu, Habu, Ibro, Labaran, Maryam, Mahmud, and Nazifi) were married, two (Firdausi and Hannah) were divorced, two (Jamila and Salisu) were single, and one (Isma'il) was engaged.

However, most of the participants were taken to the hospital for treatment after they became ill, and they were later diagnosed with disabilities. However, this was mainly those participants whose parents were able to afford medical treatment for their children. Those who could not afford Western medical intervention due to financial constraints opted for traditional treatment.

As a result, some of the participants' parents sought traditional treatment after their children were diagnosed with physical disabilities. Hannah stated that her conditions worsened while she was receiving Western treatment. She was unable to sit down or move on her arms and knees at the hospital. However, the moment her parents took her home from the hospital and started traditional treatment, they noticed an improvement in her condition:

> *Later, as they were doing these things [praying], they noticed that I was able to crawl on my stomach. I kept crawling, one day, they saw me crawling on my knees and come out of our room. Since then, they have not done anything for me [praying] and Allah kept me the way I am. (Hannah, P6)*

Apart from religious prayers, such as in Hannah's case, some parents sought the support of native/witch doctors (as referred to by the participants) for the treatment of their children's conditions. For instance, Maryam's mother and relatives believed that her disability was caused by an evil spirit and that seeking Western medication would not be effective. For this reason, Maryam's parents opted for traditional treatment.

> *[…] my mother's younger brother was asleep, the people in my head [spirit] strangle me, they said [spirits] if I was not carried and returned home [from hospital]. They would transfer my illness to him, but I would feel better. (Maryam, P12).*

6.2 Presentation of Findings

From the narratives provided by the participants, themes were extracted and analysed in conjunction with the pictures and videos captured during the data collection process to corroborate their stories, as explained in the Methodology chapter (section 4.9). Five themes emerged from this analysis, which are as follows:

- Barriers to Education Faced by PwPDs.

- Overcoming Social and Environmental Challenges
- Adaptability and Creativity to Accommodate Needs
- Challenges in Forming a Lifelong Partnership
- The Role of the Government in the Lives of PwPDs

The table below shows an overview of the themes and the sub-themes that emerged during the analysis of the stories provided by the participants.

Table 13: Themes and sub-themes

Themes	**Sub-themes**
Barriers to Education faced by PwPDs	I. Relationships with Study Colleagues and Teachers II. Accessibility Challenges in Schools
Overcoming Social and Environmental Challenges	I. Unsafe and Challenging Environments II. Inaccessible Transportation Systems
Adaptability and Creativity to Accommodate Needs	I. Creating Adaptive Equipment II. Source of Employment and Sustenance
Challenges in Forming a Lifelong Partnership	None
The Role of the Government in the Lives of PwPDs	None

6.3 Barriers to Education Faced by PwPDs.

All the participants narrated stories about their educational experiences and some of the challenges they experienced while seeking both Western and religious education[1]. They also all mentioned that their parents were hesitant to enrol them in school due to their disabilities. Labaran, Mahmud, and Aliyu recounted that their parents did not enrol them in school because they believed that doing so was a waste of resources because they would be incapable of achieving their aspirations. Additionally, Aliyu and Labaran recalled that their parents had told them that the reason why they could not enrol them in school was due to inaccessibility, limited mobility support, and lack of proximity to a school. The schools in their communities were far away from their houses, and their parents did not want them to suffer by walking on their arms and knees to school.

> *[…] They enrolled all my friends and brothers in primary school, but not me. There is a very long distance between our house and the school. They did not enrol me. They said that walking would be difficult for me. Who would carry me every day? As a result, I did not do it [was not enrolled]. (Labaran, P11)*

However, not all of the participants' parents were reluctant to send their disabled children to school. Hannah, Jamila, and Aisha disclosed that their parents enrolled them in school with their siblings, who took on the responsibility of taking them to school and providing support for their needs. Even though the siblings tried their best to support their disabled relatives, Maryam and Jamila recounted that providing continuous physical support became challenging due to physical growth, development, and aging. As a result, Maryam and Jamila had no choice but to stop their education because of reduced or lack of physical support from their siblings. While Aisha, Jamila, and Hannah were able to acquire some level of Western education, unlike some of the female participants in this study, Firdausi, Maryam, and Hannah acquired Islamic education because their parents did not believe in Western education

---

[1] As elucidated in the introductory chapter, Western education is the norm in Nigeria, while religious education is an integral aspect of the participants' lives, culture, and tradition.

for women[2][3]. However, Hannah's parents stopped her education a few years after she had enrolled at school.

> *[…] They [parents] say we are going to be disrespecting men. That is why they did not want to educate us. But all the male children have been taught how to read the Qur'an, but us girls none of us were taught how to read the Qur'an, when they started, they stopped. (Hannah, P6)*

After Hannah became an adult, she enrolled herself in an adult education course where she learned to read and write. Firdausi's experience was similar, as she enrolled herself back into the Islamic school after she got married. She went to the school both at weekends and during the week.

> *[…] But now that I have a means of mobility. Even though now I am of age (old), unlike before. However, I did not give up on school. I am still going to school. Now, I go to school every Saturday and Sunday in the morning and then every Monday and Tuesday in the afternoon. (Firdausi, P10)*

Educational self-enrolment was not limited to the female participants. The male participants also shared their experiences of enrolling themselves in primary and secondary schools due to their parents' reluctance to send them to school. Adam, Adnan, Aliyu, Mahmud, Labaran and Salisu all enrolled themselves in primary schools, and explained that observing their non-disabled friends attending school every day motivated them to pursue education. Labaran stated that his decision to enrol was only because the headmaster of the school in his community was helpful and supportive of his decision to attend school despite his mobility issues.

> *[…] After growing up, I started to think for myself. I started taking myself to primary school, on my own. I would crawl to school since I was not officially enrolled in the school […]. (Labaran, P11)*

---

[2] This is more prevalent among people living in the villages rather than the cities.

[3] The reluctance to educate women stemmed from cultural beliefs that educated women were disrespectful

toward their husbands when married, especially when they were more educated than the men they married.

Although some of the participants enrolled themselves in schools, their educational journey was short-lived, not only due to physical growth and ageing but also because of a lack of mobility aids. However, those who were enrolled in school by their parents managed to obtain a secondary school certificate before discontinuing their education. Aisha recounted that the only reason she stopped her education at the secondary school level was due to a lack of role models who could provide support and encouragement to pursue higher education. She was discouraged from continuing her education by her siblings and relatives, who instead encouraged her to focus on her Islamic education. Habu had a similar experience, as his parents urged him to continue with his Islamic education and cease his Western education at the primary school level. They sent him to another village in the hope that he would learn the Qur'an.

> *[…] I started studying with my mother's elder sister. I learned 3 chapters from her [there are 60 chapters in Qur'an] they sent me to another village nearby called "Taura" [a village in Jigawa state, whose name was changed] where I spent about seven years learning. I learned about 27 chapters there in "Taura". (Habu, P5)*

Habu was not the only participant who recounted going to another city for educational purposes. Aisha also shared a similar experience as she attended a boarding school. Unlike Habu, her boarding school was not focused on Islamic education but rather on Western education[4]. Nevertheless, it was uncommon for women to attend school, and only a few educated individuals who desired education for their daughters were willing to send them to school, as Maryam recounted from her own experience.

> *[…] my grandfather, may his soul rest in peace, said why do they [her parents] not let her stop going to school and stay at home. Because, if I go to school, I face a lot of problems. So, my father, may his soul rest in peace, said, we cannot let her stay at home, education is an essential tool in life […] (Maryam, P12)*

---

[4] Children in Northern Nigeria are mostly enrolled in two types of schools, namely Islamic education, and standard [Western] education. It is up to their parents whether to enrol them in one or both of these schools.

Although the participants’ parents were initially unwilling to send their disabled children to receive Western education, Aliyu shared that, due to the efforts of the disability centre and the wider disability community, the state government had made primary and secondary school education free for everyone. However, Aliyu noted that parents remained reluctant to send their disabled children to school, despite the availability of free education. Salisu provided a similar account, adding that even though education was free, he struggled to afford school materials such as books. Additionally, he described how teachers were frequently absent from the classroom for a significant proportion of the school day.

> *[…] You see, you must buy books and other materials, this free education – it is better to even remove the free education and ask us to pay. They [teachers] will be able to teach us better but sometimes a teacher will come once and teach before another teacher comes in to teach again, the school will be over [...] (Salisu, P9)*

Salisu was still going to school at the time that he shared his story. He was also struggling to go to school due to the lack of a proper mobility aid. He missed some of his examinations because his tricycle broke down and he did not have the means to fix it. Even before Salisu’s tricycle broke down, he had been having some financial challenges which prevented him from being able to properly look after himself. Salisu found it hard to get money to feed himself and pay for transport fares to school.

> *... Last week, I only took three exams and for the rest of the exams, I did not take them. The only reason why I did not take the exams was, I have a tricycle, but I do not have the money to fix it. (Salisu, P9)*

6.3.1 Relationships with Study Colleagues and Teachers

Most of the participants discussed their relationships with fellow students and teachers during their educational journey. Firdausi, Jamila, and Aisha recalled their relationships with classmates and staff in a positive light. Non-disabled students sometimes helped them run their school errands. Habu added to Firdausi and Jamila’s narrative by stating that his non-disabled friends sometimes offered to collect his money to go and buy him food or anything he wanted while he was in Islamic school. When he was unable to go out to beg for food due to the extreme afternoon heat, his non-disabled friends were inclined to share their food with him and the money they earned from the work they had done that day. Firdausi's classmates provided similar support to Habu's peers by carrying her to school.

> *[…] I have no problem with fellow students. Because sometimes I am unable to go to school. They will ask me to come with them to school, and if I tell them that my leg is paining me, they will say let's go, we will carry you on our backs. They will carry me to school and bring me home when school is over. If my friends are not going to school that day. I will have to stay at home too. (Firdausi, P10)*

Among the male participants, Adnan, Adam, and Isma'il both talked about the good relationships they had with their classmates, like Firdausi. They received similar treatment to Firdausi from their non-disabled peers, and this kind of support is common among those who attended mainstream education, as highlighted by Adam. However, in addition to the support they received from their classmates, the school staff also provided them with support. Jamila's principal was supportive of her education, ensuring that she had everything she needed to succeed. The support provided by the staff was based on personal interest rather than school policy or regulation, as recounted by Jamila.

> *[…] I cannot forget our principal, where I did my junior secondary school. During the examination, we normally pay 300 Naira for the exam. It is the fee for the foolscap we use to write the examinations in, she [the principal] told me not to pay that money [...] Every time I am absent from school she will come and ask, what happened that I was absent from school [...] (Jamila, P14)*

This support was not limited to those who, like Jamila and Firdausi, attended day school. Aisha was provided with similar support at the boarding school. She had a good relationship with the school's non-academic staff, and they tried their best to support her in any way possible. It is worth noting that Aisha had a good relationship not just with the staff but also with her fellow students, but she showed more appreciation toward the school's non-academic staff as they made her daily school life better.

> *[…] But even washing clothes or showering, normally people take a bath with cold water. I showered with hot water. I already have my bucket in the kitchen. The moment they [cooking staff] finish cooking, they will say to make "Yar mama" [nickname of participant changed] hot water for her shower. They will bring a full bucket of hot water for me to shower. I did not experience any problems in school. (Aisha, P1).*

The participants recounted that they still had good relationships with their former classmates as of the time of the data collection. Isma'il still met and played with his former classmates in his community, and they celebrated each other's achievements such as marriages and naming ceremonies. While their relationships with fellow students lasted for a long time, the support they received from them did not last. It started to be reduced close to the end of their primary education, and some participants like Aisha and Jamila stopped receiving support at secondary school. This reduction in support was mostly due to physical growth and development, and because of the lack of proper mobility aids, which meant they were forced to stop their education, as highlighted earlier.

6.3.2 Accessibility Challenges in Schools.

While most of the participants discussed their relationships with their fellow classmates and school staff, they also reported accessibility challenges that prevented them from fully engaging in their educational journey. These accessibility issues were mostly physical, such as getting in and out of classrooms and navigating the school environments, among other learning facilities. As a result of these accessibility challenges, the participants were forced to adapt to the learning environment and found ways to access their classrooms and other school facilities. Jamila and Isma'il described the environmental and mobility challenges they faced; they were forced to leave their homes early and crawl on their arms and knees to school, in order to arrive on time. Accessing schools proved particularly challenging when there was no support from their classmates and/or siblings.

> *[…] If there is no one to carry me to school that day, by crawling little by little Inshallah [By the grace of God] if someone [another student] is passing by, they will carry me and take me to the school. (Isma'il, P7)*

The accessibility challenges became more difficult when they reached the entrance of the school. The school environment did not have any pavements; instead, they were covered with gravel and small stones, making it even more difficult to move around on their hands and feet. Image 11 below depicts a typical government school facility which shows patches of grass and sandy areas.

Image 11: Government school compound.

Furthermore, the accessibility issues were not limited to those who mobilise using their hands and knees; individuals using crutches faced difficulties mobilising in the sandy environment too. The presence of small rocks and holes throughout the school grounds presented a trip hazard for them. Additionally, when it rained, the environment became very wet and muddy, making it impossible for those crawling along the ground to access the school grounds. Isma'il recounted his experience of dealing with these challenges.

> *[…] I was crawling at that time, there are places that I cannot pass through because of the rainfall and the fact that I was crawling. Among those friends of mine, one of them will carry me on their back, if he is tired, another person will carry me […] (Ibro, P8).*

Furthermore, individuals who use tricycles such as Jamila, Habu, and Salisu, struggle to ride them on the school grounds due to the rough gravel surface. This challenge became even more difficult when it was muddy. They were forced to park their tricycles at a distance and rely on the support of their friends to assist them to the classrooms, as shown in Image 12 below.

The accessibility issues did not end at the school entrance. The classrooms themselves were inaccessible for those using any mobility aid such as tricycles, rollers, or wheelchairs. Salisu, Aisha, Jamila, and Hannah disclosed that they would park their tricycles outside the classrooms and mobilise on their hands and knees into the classroom. The classrooms were not easily accessible because the entire building was elevated from the ground level by approximately a foot. Additionally, some of the classrooms have raised doorsteps and platforms with two or three steps leading to the base of the classrooms, as shown in the image below (Image 12). As a result, disabled pupils like Nazifi, Habu, and Ibro faced many issues entering the classrooms. However, individuals with crutches like Isma'il and Adam found it more challenging to navigate the small steps, and the stairs and doorsteps presented a trip hazard for them, thus increasing their chances of falling.

Image 12: Classroom entrance of a government school.

Individuals who used tricycles for mobility (Hannah, Adnan, and Jamila), were compelled to park their tricycles elsewhere and navigate the challenging environments by their usual alternative ways of mobilising to access the classroom. The school lacked ramps or any disability-friendly entrances to areas which were not at ground level. As a result, Jamila and Isma'il reported that the inaccessibility of the classrooms forced them to park their tricycles away from the teaching space and be carried into the classes by their classmates.

> *[…] If the school closes, they will come and carry my backpack and take it to where I parked my tricycle […] (Jamila, P14)*

In addition to the challenges of accessing school facilities, Salisu, Jamila, Adnan, Ibro, and Hannah also encountered difficulties using the chairs in the classrooms. They found it hard to sit on the chairs as they are positioned at a height above the ground (as depicted in Image 13). This made it even more challenging for those with complete lower limb disabilities.

Image 13: An inside view of a government school classroom.

Furthermore, some of the classroom floors are covered with marble stones, which become slippery when wet, posing a hazard for individuals using crutches (an example of the flooring is shown in Image 13).

Those participants who crawled, such as Salisu, Jamila, Adnan, Ibro, and Hannah, often encountered challenges related to the cleanliness and sanitation of the classrooms, toilets, and other facilities, resulting in their clothing getting dirty. It is important to note that the accessibility and environmental challenges they faced were not confined to the school settings but extended to their communities and society in general.

6.4 Overcoming Social and Environmental Challenges.

After the participants narrated the accessibility challenges they experienced at school, they also recounted the challenges they experienced in their communities and while trying to seek medical treatment at the time of need. Like their school environments, Mahmud, Aliyu, Isma'il, and Habu recited that their community settings were also covered in sand and unpaved, and the drainages were only partially covered, making it challenging for them to travel and move around their communities. This was in addition to the discriminatory attitude they experienced from the people within their immediate community, as Mahmud and Ibro explained.

> *[…] I started hearing people with their small talk. People are saying he is the son of this cripple, this, and that, I said okay, if I do not handle this person [the photographer] things are going to escalate and since I would not be able to protect myself, I called the police […] (Mahmud, P13)*

Apart from the discrimination that Mahmud and other participants experienced, those who used less common mobility aids were teased and mocked. Again, Mahmud, who used a wheelchair as his means of mobility, was a case in point. However, the teasing and discrimination towards those using marginalised means of mobility was reduced due to the increase in awareness and familiarity with wheelchairs. This reduction in mockery and teasing was advantageous for individuals who had transitioned from crawling to using a wheelchair or roller to navigate through their challenging environments.

> *[…] I have realised that it [a wheelchair] is more useful to me compared to before. I was walking with my hands on the ground [he is demonstrating it by putting his hands toward the ground] but since I got the wheelchair, I*

> *have prevented my body from getting dirty and it [wheelchair] has become more popular, and people will not be looking at me [discriminatorily]. Unlike before when people did not know about it. (Mahmud, P13)*

However, communities were not the only places where these participants faced challenges; they also did so in hospitals when trying to obtain medical treatment. Aisha, Mahmud, Aliyu, Maryam, Firdausi, and Salisu recounted being treated poorly by healthcare workers while seeking medical attention. Firdausi described how nurses at the hospital disregarded her needs whenever she tried to see a doctor, which led her to avoid going to the hospital unless it was absolutely necessary. As a result, Maryam and Firdausi sought alternative means of treatment when they were sick, such as traditional medicines or visiting the pharmacy to obtain medication instead of going to the hospital for examination and prescribed medications. Their decision was not without merit, as Maryam and Firdausi narrated their experiences of maltreatment by nurses at the hospital. Firdausi and Aisha even experienced miscarriages due to neglect from nurses, which prompted them to opt for home births with the assistance of traditional midwives instead.

> *[…] But the baby did not cry but suffered and before the nurse came, the baby died. That is why the child crying could not call their attention [nurses] and I call them. They did not care to come and check up on me if they even heard me [...] (Firdausi, P10)*

Due to the poor quality of healthcare services, those who could afford it often sought treatment from private healthcare providers. Aisha recounted that whenever she needed medical treatment, she would prepare to go to a private hospital by drawing on her savings. While private healthcare services were more easily accessible physically, they were expensive for most people. However, Aisha and Labaran utilised private treatment because the quality of services provided was better than that of government-run facilities, and they did not have to wait in long queues to see a doctor, as was often the case with government-run facilities.

Ibro, Labaran, Aliyu, and Mahmud all disclosed that the major challenge they faced when seeking healthcare treatment was the long queues in hospitals, which could be particularly exhausting for them. Additionally, they mentioned that non-disabled individuals often did not allow them to jump the queues, showing a lack of empathy from both community members and medical staff. Maryam recounted her own hospital experience when she sought medical care during her pregnancy.

> *[…] So, when I went to the hospital I got up from where I was sitting to go and collect the card [to see a doctor] from the person giving out the cards – All the women come to me – that I must follow the queue. They would not allow me to skip the queue, I told them wallah [swear to God] I will not follow the queue, as we are fighting [verbally] and they are saying, they will carry me and drop me somewhere else […]*

Furthermore, Maryam, Labaran, and Aliyu were not provided with designated sections in hospital queues and were often forced to endure the same difficulties as their non- disabled peers. Nevertheless, Maryam, Habu, and Mahmud mentioned that other patients managed to show them sympathy and allow them to go ahead of them in the queue.

Aisha, Maryam, and Firdausi recounted that the government did attempt to support them by providing free healthcare treatment through health insurance. However, not everyone was aware of this insurance, including Jamila, Salisu, and Habu. Even those who were aware of it found it difficult to access health insurance because of the complicated application process, as was the case with Ibro who gave up on the application due to its complexity. Additionally, Aliyu recounted that this lack of awareness was due to the government's failure to publicise the insurance, and those who were aware of it did not spread the information to those who could benefit from it.

Regarding the health insurance, Aisha recounted that she could see a doctor for free and receive medication at a subsidised price, with discounts of up to 90% on most medications at pharmacies within government hospitals. However, obtaining these discounts was extremely challenging for PwDs, such as Aisha.

> *[…] You will go and see the doctor for free, but if people are paying 100% of their medical treatment, you will be paying 10%. But before you clear that 10% you will already be in a difficult situation. Because from where*

> *you go and get a signature and come back to the counter and get the prescribed medication. After that they write the price of the medication, you have to go back and to another place. You would be moving up and down like 6 times in a day; that is why I said, they should have allowed us to use our own money to pay for the medical treatment. (Aisha, P1)*

Due to the challenges that they faced while attempting to utilise their health insurance, many people with disabilities resorted to paying for their medication, including Aisha. Only those who lacked the financial means to cover their medical expenses were compelled to endure the tedious process of obtaining a medical discount.

6.4.1 Unsafe and Challenging Environments

In addition to the discriminatory attitudes Mahmud and Jamila experienced because of their mobility aids, as previously mentioned, Mahmud described the difficulty of navigating his environment, particularly during the rainy season when the ground became muddy due to potholes caused by erosion. Mahmud and Ibro explained that they had to find ways to traverse the muddy terrain without getting their clothes dirty (see Image 14). This task was even more challenging for Aliyu and Nazifi, who had to crawl on their arms and knees along the ground or use a wheelchair, as in Mahmud’s case.

Image 14: Muddy environment with stagnant water

> *[…] For example, if you look at that stagnant water [pointing at a pothole] it is not clean water. It is not purified because of that I will have to think about how to approach it, If I am going to pass through it […]*

As depicted in the image above, navigating the muddy and potholed environment posed significant challenges and hazards for individuals like Mahmud, Aliyu, and Nazifi who used crutches and/or crawled as their mode of mobility. Mahmud narrated that he had to rely on the assistance of his able-bodied son to help him navigate his surroundings.

Another challenge faced by people with disabilities like Mahmud, Aliyu, and Nazifi was the inaccessibility of government buildings and facilities, such as banks and Automated Teller Machines (ATM). As a result, Nazifi, Mahmud, and Aliyu were inclined to give their ATM cards to someone else to withdraw money for them. Additionally, most banks had narrow security doors that prevented those with mobility aids from entering the building, except through the fire exit. Consequently, Nazifi explained that he had to crawl into the bank or send someone else to deposit or make transactions on his behalf. This reliance on others in financial matters made the participants vulnerable to bank fraud, as some of the people they entrusted with their ATM cards may have been strangers.

> *[…] Whether you are on a roller or wheelchair/tricycle, there is supposed to be a ramp, but we do not have that. Even at the ATM, there is no place where you will go and put your card and withdraw your money, you will have to ask someone to help you to withdraw money. (Nazifi, P15)*

The ATMs in the community were constructed on a platform with several stairs leading up to them. Before reaching the machines, the grounds were sandy, making it challenging for those who used crutches, such as Aliyu, Isma'il, and Salisu, and impossible for those who used rollers and tricycles, like Ibro and Jamila, to access the area. Only individuals like Aisha, Ismail, and Salisu, who crawled or did not use mobility aids, could reach the ATM, but they were unable to use the machines as they were positioned too high from the ground (see Image 15). This lack of accessibility to financial services further exacerbated the challenges they faced in their community and environment.

Image 15: ATM in the community

The photograph above clearly shows that participants who used rollers, tricycles, and wheelchairs might not be able to access the ATM, thus perpetuating their exclusion from financial services.

Moreover, Nazifi, Aisha, and Hannah recounted that government facilities such as hospitals were also not disability-friendly, lacking ramps and accessible entrances to wards and offices. Additionally, they explained that most hospital wards were not located in the same building, and they were forced to go up and down the hospital from one ward to another for medical tests and examinations. This lack of accessibility within healthcare facilities further highlighted the challenges they faced in accessing essential services.

> *[…] And some places your mobility aid cannot go through [the tricycle cannot pass through some doors] and some they made it very hilly which makes it difficult. By the time you go there, you will be asked to go to another place, and they cannot do anything for you. The moment you go there they will tell you to come in. The problem is going in and out of these places. (Hannah, P6)*

The absence of ramps in hospitals made it difficult for participants like Hannah, Jamila, and Maryam to move around the hospital environment easily, sometimes forcing them to leave their mobility aids at the entrance of the ward and crawl on their hands and knees to go inside. Nazifi and Aisha told me that accessible facilities such as ramps and wheelchairs were only available in a few hospitals, mostly in general hospitals (as depicted in Image 16). This further highlighted the challenges they had to face because of the lack of accessible healthcare facilities.

Image 16: Entrance to one of the government general hospitals in Northwest Nigeria.

It is important to note that not every general hospital has accessible entrances, as demonstrated in the image above. The entrance to the hospital in the image was blocked by small bricks, preventing wheelchair and roller users from using the main entrance and forcing them to find an alternative means of accessing the hospital.

> *There is no sloping [ramp] to make it easier, it is a small step that you use to pass – for me and other disabled people who use crutches or crawl, we will be able to pass. But someone in a wheelchair cannot pass, there are people with a motorbike that is operated by hand, and some will come with those things. (Nazifi, P15)*

In addition to the challenges Nazifi and other participants faced in terms of accessing buildings and government facilities, they also encountered difficulties in accessing public transportation.

6.4.2 Inaccessible Transportation Systems

Most of the participants discussed the challenges they faced while trying to use public transport. Jamila, Firdausi, Isma'il, and Hannah recounted that the public transportation systems were not accessible and nor were they disability friendly. However, they further explained that the main challenge was not accessing the vehicle but rather interacting with the drivers. The drivers of these vehicles, popularly known as tuk-tuks (three-wheeled motorbikes used as taxis), did not like picking them up. For instance, every time Jamila tried to stop them, they tended to ignore her. Sometimes, Jamila had to stand on the roadside for hours before a tuk-tuk driver would stop for her. Consequently, Jamila, Maryam, and Firdausi had to endure the stressful and energy-consuming method of transportation that involved using their tricycles, crutches, and rollers.

> *[…] That is why I prepare to go anywhere, regardless of the distance, with my tricycle and have someone to accompany me. Instead of using public transport, it is better for me because of the challenges with public transport. (Jamila, P14)*

However, Ibro stated that several factors influenced the way that drivers viewed them. He gave the example that, because of the high number of PwDs begging on the streets, the drivers assume that most PwPDs in the communities are beggars who cannot afford to pay their fares. Ibro and Aliyu also stated that some drivers judged their customers based on the way they dressed. Those who did not dress well or wore dirty clothes found it difficult to stop a tuk-tuk.

> *[…] If you stop a Keke [tuk-tuk], it is unlikely that he will not stop, but if he keeps seeing you as dirty like the people who are begging on the streets. He will look at you the same way – But if he sees you as clean and maybe you are even dressed cleaner than himself, he will stop and listen to you. (Ibro, P8)*

Individuals like Maryam, Jamila, Ibro, and Hannah, who aimed to avoid discrimination and stigmatisation by public transportation drivers, encountered a different challenge when using their tricycles and other modes of transportation. The main challenge they faced was sharing the road with other drivers, as reckless driving and road accidents were extremely common in the Northern part of Nigeria. Maryam and Jamila both mentioned that vehicle drivers did not give them enough time to cross the road and attempted to push them off the road while they were riding by the roadside. Maryam and Hannah shared their experiences concerning road accidents, particularly those involving them and tuk-tuk and motorbike users. Maryam was one of the participants who had experienced a road accident that resulted in her breaking a leg.

> *[…] I was riding my tricycle and a man riding his motorbike hit me and threw both me and the tricycle. You see this leg of mine [touches her right leg with her hand], it hit a structure that separates the road into two. The moment he hit me and threw me onto that structure, this leg broke [she touches her right leg]. (Maryam, P12)*

This was just one of many accidents Maryam and other participants had experienced while using the roads. There was no designated section for bicycle and tricycle users. Despite these challenges, Ibro, Aliyu, Isma'il, and Adnan had devised a way to accommodate their needs and sustain themselves within their challenging environment.

6.5 Adaptability and Creativity to Accommodate Needs.

As highlighted earlier, the challenges faced by these participants were substantial. Consequently, they became more resourceful in adapting to their demanding environments. Aliyu and Mahmud began brainstorming ways to enhance their mobility while still in primary school, driven by the mobility challenges they encountered during their early educational years. This was a result of the social and environmental factors mentioned earlier. Maryam, Jamila, Firdausi, Hannah, and Mahmud could not start using crutches or tricycles until they could afford them themselves, as their parents were unable to provide these aids.

Most of the male participants enrolled themselves in a training school, after they had completed their primary education and, in some cases, secondary school too. Aliyu and Mahmud explained that the training school had been created by the state government to help them acquire work skills that they could use to support themselves. Mahmud, Aliyu, Labaran, Nazifi, and Aisha had all completed their training school education and went on to learn more work skills from another training school known as the National Directorate of Employment (NDE). Aisha and Aliyu explained that the NDE training was for both disabled and non-disabled individuals, but they found the enrolment process to be challenging. They were referred by family members before being accepted.

> *[…] He [a family friend] brought a form to me. He said, you will be taught how to do business, but you are not going to be given capital to start your own business, at the end of the programme. I said no problem if I am going to learn how to start a business. (Aisha, P1).*

Individuals who did not attend the NDE or Mariri training schools, such as Isma'il and Salisu, were later trained by the disability centre. Aliyu, Mahmud, and Labaran were among the people who created the centre with the aim of supporting individuals like themselves. Aliyu and Mahmud mentioned that the centre was open to everyone, and the only joining requirement was to purchase a 500 naira (£0.50) form (1/4 of their daily earnings). Aliyu added that they trained male participants in welding and creating materials from metal, while the females were trained in running a successful business.

After completing the training, Isma'il and Salisu were given jobs at the centre that involved creating swings and tricycles for sale. Maryam, Aisha, Firdausi, Jamila, and Hannah were also trained by the centre, which helped them to become self-employed. Additionally, the centre supported women by helping them secure jobs outside the centre with the assistance of charity organisations like UNICEF. For example, Firdausi worked with UNICEF during their polio vaccination campaign in North-western Nigeria. She served as an advocate for polio vaccination and engaged with people in communities who were hesitant to vaccinate their children. However, her salary was not sufficient to sustain herself and take care of her children. As a result, she used her salary to run a business and support herself.

> *[…] Before I get my salary, mostly if I said I am going to depend on the salary, I would be in trouble. So, I sell groundnuts and nuts. I bring them out in the morning to the streets – Later, in the afternoon I go back home. This is how I live my life and support myself. I use the money to feed myself and pay the rent for the house I live in [...] (Firdausi, P10)*

The support that Firdausi, Aisha, and others received not only came from UNICEF but also from other charity organisations like the Rotary Club, among others. Aliyu, Mahmud, and Labaran noted that they received more support from charity organisations than from the state or federal government. Aliyu added, *"We got better support from organisations that had no relation to the government".*

In addition to receiving support from charity organisations for training and employment, other PwPDs at the centre, such as Aliyu and Mahmud, helped bring people with disabilities together for in-house workshops to share their skills and experiences. Moreover, Nazifi recounted that members of the centre who had stopped going to school but wished to return were helped by being provided with mobility aids such as tricycles or motorbikes, as well as school uniforms, books, and other materials.

> *The centre has connected us, and it is trying to get people that are not educated, to be educated. The centre is always fighting for people to seek education, not with the hope of getting a job from the government, but for you to benefit from education and being educated […] (Nazifi, P15)*

The leaders of the centre supported and encouraged the members to continue their education through the generosity of individuals in society who gave charity. For example, they bought tricycles to go to school for those who did not have them, as well as books and uniforms. Aliyu and Aisha recounted that charity was mostly given to the centre during Ramadan and Eid[5]. However, Aliyu and Ibro added that some people in the community supported them at any time of the year, regardless of the season.

Despite the support provided by the centre and charity organisations, Maryam, Hannah, Firdausi, Salisu, and Ibro stated that they also begged on the streets to support themselves as the provision provided by the centre were not enough to look after themselves and their families. They disclosed that the motivation to beg on the street stemmed from their upbringing, as they were sent by their parents to beg. Some recounted that they begged because of friends' influence and because it was the easiest way for them to make money.

---

[5] These are religious festive seasons when Muslims give charity for religious and personal reasons.

> *[…] when I met with fellow disabled friends. We started to travel to the south, we went to Benin [name changed], you see we have left our homes. There is no way we can study at that time. So, we go to Benin for the summer and come back with some money and spend it [...] (Ibro, P8)*

Nevertheless, not every parent forced or supported their children to beg on the streets. Aisha, Aliyu, Ibro, and Maryam's parents were against street begging. As a result, Ibro and Maryam stopped begging because of parental disapproval. Additionally, Ibro and Adam highlighted that they had stopped begging on the streets because they wanted to create a better future for their children and did not want them to witness them begging. They considered being seen on the streets begging by their children as shameful, making it difficult to convince their children not to follow in their footsteps.

> *[…] it would not be appropriate for your child to grow up and see his father begging on the street. Because, if someone asks the child, where is your father? what will the child say? – he will not be able to answer the question, but if someone asks the child, what is your father's job? He can now say my father is manufacturing tricycles for people with disabilities or my father is creating swings, or my father is a butcher. (Ibro, P8)*

As a result, Adam, Ibro, Salisu, and Isma'il started to view street begging as a way of disrespecting and diminishing themselves. The fear of coming across their friends on the street and begging for money prevented them from begging. For these reasons, Isma'il and Salisu focused on the jobs provided by the centre to help take care of their families.

Additionally, Hannah, Maryam, and Firdausi used the skills taught by the centre and charity organisations to run their businesses. They made snacks and sweets for sale and displayed them outside their homes for people passing by to buy, particularly students who were going to and from school. Hannah and Firdausi, who had teenage children, gave the products to their children to sell. However, when the products sold out, Hannah and Maryam found it hard to go to the market to buy the materials they needed to make more products.
This was mostly due to the transportation challenges mentioned earlier. Nevertheless, these

mobility challenges did not deter them from doing what they needed to do to sustain themselves.

> *[…] If you are not engaged [with life] you will not be able to do it. It is a must to go [to the market] since you have children and look at how life is now regardless of the suffering. If you suffer now, you will enjoy another day. (Maryam, P12)*

Maryam and Firdausi recalled how they drew inspiration and motivation from their children, who gave them the courage to work hard. They wanted to show their children that having a physical disability does not mean losing the ability to fend for themselves or those they have responsibility for. Additionally, the encouragement from their children and partners (like in Maryam's case) pushed them to be more creative in finding ways to take care of their families.

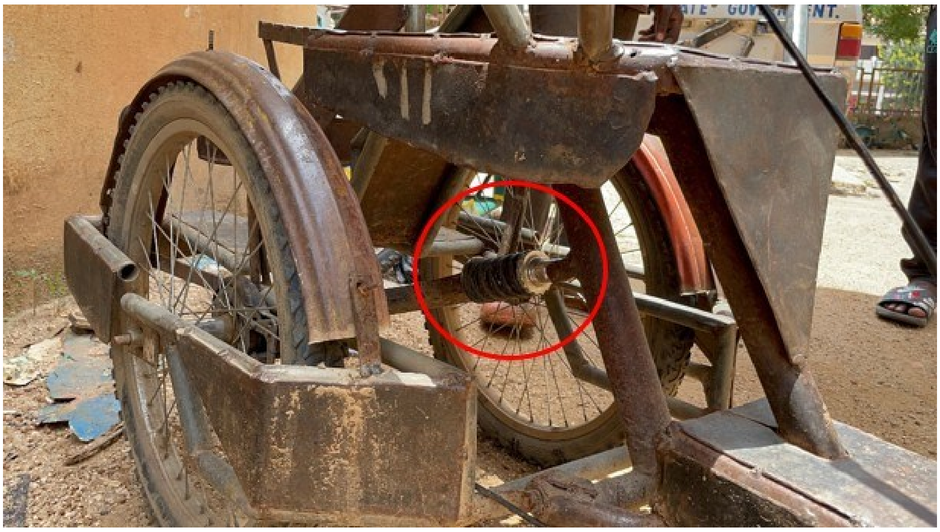
6.5.1 Creating Adaptive Equipment

Adam, Ibro, and other participants used the skills they had learned from the training school and workshops provided by the centre to create and modify their mobility aids. Isma'il had started creating and crafting the kind of mobility aid that he wanted to use while in secondary school, and he was able to do so because of the centre's support. Isma'il, Adam, and Salisu divulged that the centre had provided them with the necessary materials to construct and build tricycles and rollers.

> *[…] I said to myself why can't I just come here [disability centre] and learn how to make it [tricycle]. Even if I do not have the money. I can make my own and use it. (Adam, P4)*

Furthermore, over time, Adam, Ibro, and Adnan started adjusting their mobility aids to suit their ever-changing environment. As shown in Images 1, 2, 3, 14 and 15, the participants' living environment was not conducive to users of mobility aids, which limited their ability to move around unaided. To overcome this challenge, Isma'il, Adam, Ibro, and Adnan improved their mobility aids by creating a new tricycle that was more advanced than the standard tricycles. The new tricycle design was equipped with a shock absorber, which enabled it to pass over potholes and uneven surfaces with ease (Image 17).

Image 17: A new design tricycle.

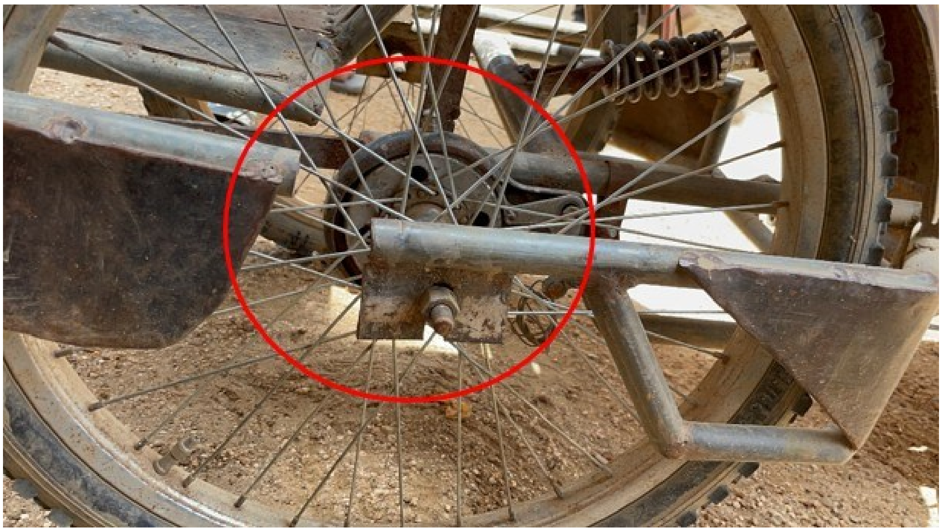


> *[…] I created a new modern tricycle that right now there is one of them here [he points to a corner where the tricycle is parked] – It has a shock absorber; I was using that kind of tricycle before I moved to riding a motorbike and I create wheels for bikes. (Isma'il, P7)*

Additionally, Isma'il stated that the new tricycle had a better braking system than its predecessor, making it safer than the standard tricycle, which had a metal rod that could be pushed against the rear tyre (see Image 18). The advanced tricycle had a drum brake like the ones present on some electric scooters, making it safer and easier to use, as shown in Image 19 below.

Image 18: Standard tricycle brake.

Image 19: Improved braking system on the new tricycle.



Isma'il, Adnan, Jamila, and other participants used tricycles for long-distance travel when they wanted to avoid using public transportation, as highlighted earlier. However, other participants such as Maryam, Adnan, and Firdausi used their tricycles for both short and long-distance travel because they were unable to use a roller. Rollers were another type of mobility aid used by both men and women at the centre. It was a skateboard-like device created by the participants (this is shown in Image 5 & 6 above). Unlike a skateboard, the participants sat on the roller and pushed it with their hands.

The rollers were mostly finished in soft leather to provide comfort. Underneath the roller were four wheels, just like those found on a skateboard, which made it possible to move around. Adnan noted that even though the tyres were small, they were well-lubricated, making them easier to use. Jamila and Adnan also stated that they used rollers mostly to enter confined spaces that their tricycles could not go through, such as bedrooms, classrooms, and hospital wards, and for short-distance travel on a paved pathway. Jamila also used a roller to carry out her household activities, as she explained in the following excerpt:

> *[…] if you, have it [roller], for example at home or if I go somewhere else, like if I want to sweep the floor. Before when I did it, I tended to suffer a little bit, and the distance of the living area is long if the floor is wet or moist – It helped me to navigate. (Jamila, P14)*

Adnan and Ibro shared how the roller had significantly reduced their mobility challenges, allowing them to be less dependent on others and more engaged in the activities taking place in their communities. The benefits were highlighted by Jamila as the roller helped her to participate in naming ceremonies and wedding activities. Furthermore, individuals like Ibro and Adnan were able to afford a motorbike, and they modified the bikes (as demonstrated in Image 20) so that they could ride them using their hands.

Image 20: A participant riding a motorbike.

The controls of the motorbike had been moved from the base to the top, enabling participants to operate it using their hands, as shown in Image 20 above. This was achieved by welding a metal rod that extended to the steering column of the bike. The alteration made to the bike can be seen via this link: (https://vimeo.com/841835271?share=copy).

Moreover, Ibro and Adnan explained that these alterations to their mobility aids were highly beneficial to them as they enhanced the overall quality of their lives and provided them with opportunities to engage in sports and physical activities. Ibro and Adnan also stated that they were able to participate in para-soccer because of the roller. Ibro began using the roller specifically to enable him to take part in para-soccer (Image 7 above shows him playing the game).

As mentioned earlier in Chapter Five (Pilot Study), most of the individuals at the centre participate in para-soccer, a sport played by sitting on a roller and propelling themselves across the field while controlling the ball with their hands. A video representation of the participants playing the game can be seen in section 5.10 above.

As a result of their involvement in para-soccer, Adnan, Ibro, and other participants gained respect from their communities and attracted audiences to their games.

Adnan told me that the sport had earned them recognition from the state government, enabling them to travel across the country to participate in para-soccer competitions. He added that the state government had bestowed multiple awards upon them for their outstanding performance in these competitions.

> *[…] We have won cups and as I am telling you this story now if we were going to play a match now. The government has files and records on us that even if we went and did not win the match. We would be able to come if not second but third place. (Adnan, P3)*

6.5.2 Sources of Employment and Sustenance

Ibro, Adnan, and Adam were able to construct their tricycles and rollers with the help and support of the centre. Upon joining, they were immediately recognised as employees by the centre's leaders, and they received workshops as part of their employment contracts. Unlike conventional workplaces, where employees are paid monthly or weekly, Ibro, Adnan, Adam, and other members of the centre earned money by creating and selling their products. Mahmud and Aliyu divulged that they were entitled to nearly 90% of the profits they earned from selling their products, while the remaining 10% was reinvested into the centre for its maintenance.

Ibro and Mahmud revealed that they were responsible for purchasing the materials needed to create the items they wished to sell. The centre provided welding machines and essential materials needed in the workshop. Ibro added that, as independent workers, they were not restricted in terms of when they could come to the workshop, and they could work at any time without any issues. However, Adam chose to go to the centre early in the morning, leaving his home very early due to his means of mobility.

> *So, if I want to come to this place (disability centre) at 10 am or 9 am. I tend to leave my house at 7 am or 6 am. I start making my way to work. I walk for a few metres and then take a rest. (Adam, P4)*

Adam specialised in fixing and assembling tricycle wheels, and his workstation was located at the entrance of the centre under a tree. He was paid according to the number of tricycle wheels he fixed or assembled. During the study, he showed the researcher how he fixed tricycle wheels and allowed him to record the process on video. The video can be seen via the following link (https://vimeo.com/837915782?share=copy).

Image 21: Adam fixing a tricycle wheel.

Like other participants, Adam used the money he earned from his work to support his family and relatives. However, unlike the female participants (such as Maryam and Firdausi) who often received support from their children, the male participants (like Adam) rarely did so due to cultural beliefs that men were the primary providers for their households[6]. However, not everyone held this belief, and Maryam, Mahmud, and Ibro appreciated and embraced the support they received from their children.

> *[…] My older son is going to be 18 years old; they opened a pharmacy for him to look after. He will go to school and when he comes back, he will open the pharmacy and sell medication – This is how we take care of ourselves. (Maryam, P12)*

---

[6] In some cases, parents receiving support from their children could be seen as a sign that the father is not capable of looking after his children alone.

Adam, Adnan, and other participants used the profits gained from selling and fixing materials to take care of their needs, such as building a house, getting married, and paying for their children's school fees. They were not limited to creating adaptive equipment; their skills extended to making other materials that could be used by everyone. For example, they created doors, windows, and swings for commercial and personal use, as shown in Images 8, 9 and 10 above. With the profit they earned from working at the centre, they bought houses and got married.

It is worth noting that the participants faced some challenges when it came to selling their products. Aliyu and Mahmud explained that due to the economic state of the country, it was difficult for them to sell both the mobility aids and other products they created. Aliyu added that the only time they made significant sales was during election season when politicians bought tricycles to distribute to people with disabilities as part of their campaign. As a result of the lack of sales, Mahmud said that the centre sometimes fell behind in paying its rent.

> *[...] we are paying for it [the place where the centre is], even that small room [office] you have seen, we are paying for it. The good thing is that the landlord is kind. He does not disturb us if we do not pay rent on time, getting a place to rent here is a big deal and difficult to get [...] (Mahmud, P13)*

Despite the challenges of low sales and paying rent, Mahmud and others were still able to support their families through the centre and their personal businesses.

6.6 Challenges in Forming a Lifelong Partnership.

On a more personal level, most of the participants in this study shared the challenges they encountered while seeking life partners. Mahmud and Nazifi explained that they found it difficult to date women without disabilities due to the discrimination and stigmatisation they experienced from society. Nazifi and Ibro recalled that it was even more challenging for the female members of the centre to find a man without disabilities to marry. Nazifi added that this difficulty stemmed from the belief that women with disabilities might not be able to fulfil their marital responsibilities.

Ibro, Isma'il, Adnan, and Nazifi all faced challenges when trying to find life partners, especially individuals without disabilities, when their intention was marriage. Ibro and Nazifi mentioned that the negative attitudes displayed by women were often influenced by their friends. Ibro provided an example, noting that "*women whose friends did not hold discriminatory attitudes toward men with disabilities were more open to dating them".*

Additionally, Mahmud and Nazifi revealed that most people in the community believed that women who married men with disabilities were going to give birth to children with disabilities[7]. Nazifi also said that the belief that PwDs were possessed by evil spirits added to the challenges they faced in trying to find a life partner. Nazifi narrated his dating experience in the following excerpt:

> *[…] This [challenges] happens outside, talk less of going to their house [for a formal introduction], her mother will say of all the men in this city you chose to marry a "cripple". Before, people think if a disabled person marries a non-disabled person, the moment they give birth, the child will be disabled too. They forget that no one among us was born to disabled parents. We were born to non-disabled parents [ha-ha]. (Nazifi, P15)*

However, discrimination and stigmatisation did not deter Nazifi and Adnan from wanting to date non-disabled women with a view to marriage. Nazifi's reason for seeking a non-disabled partner was to find someone who could support him with tasks he could not do himself. Maryam and Firdausi shared a similar reason for marrying men without disabilities; it helped them with tasks they found difficult. Despite these challenges, Nazifi, Adnan, and Adam persevered and married non-disabled women, even when their proposals were rejected by their partners' parents, particularly if the women agreed to marry them regardless of their parents' wishes. Nonetheless, Nazifi and Mahmud narrated that even when a woman agreed to marry someone with a disability, their friends and family would often manage to change their minds by pointing out all the physical flaws of the men. Mahmud added that sometimes the women were discouraged by their friends, who would use discriminatory names when referring to their boyfriends or fiancées. This use of discriminatory language towards the

---

[7] This belief is common mostly in the rural regions of the northern part of Nigeria

men they were planning to marry often led to the breaking off of engagements or calling off the weddings, as they could not bear being called by such derogatory names. Nazifi then proceeded to describe his own dating experience:

> *[…] Since then, they have started to put some doubt into her, that "cripple", that "cripple". If this did not change her mind and if she still loves you by the time you go to introduce yourself to her parents, from your home, your parents will start asking if she is a "cripple" too. Your father will be the one to ask you this question, not someone else, your father not his brother or his friends or someone else. (Nazifi, P15)*

Furthermore, as women faced more challenges while seeking a life partner, Aliyu and Mahmud narrated that the centre had implemented a policy to address the high number of unmarried female members. Mahmud continued by explaining that the policy aimed to raise awareness about disability and encourage individuals without disabilities to marry those with disabilities across the northern states. This policy mandated that all leaders of the centre should marry at least one woman with a disability, either from within the centre or outside of it.

> *[…] the first thing we need to do is for all the members [leaders of the disability centre] – This was when I was still the leader of the centre. Everyone should marry one woman with a physical disability. (Mahmud, P13)*

Additionally, the policy required that individuals like Aliyu and Mahmud, who were already married, were required to take a second wife in support of the policy and to help spread awareness about disability. Aliyu recounted that one of the objectives of the policy was to demonstrate to people in the communities that there is no problem in marrying a woman with a disability. The aim was to encourage those without disabilities to consider marrying women with disabilities, thereby reducing the stigma and discrimination surrounding such marriages.

However, since this policy only applies to leaders of the centre and members who choose to support it, it became difficult to determine its effectiveness in spreading awareness about relationships with disabled individuals. Ibro and Mahmud emphasised that this policy primarily promoted inclusivity within the centre and may not necessarily be applicable to wider society. Mahmud pointed out that it was not feasible to extend the policy to society as a whole because many individuals without disabilities are unwilling to accommodate the needs of those with disabilities. For instance, Mahmud, Ibro, Aliyu, and Isma'il all noted that it can be challenging to accommodate the specific needs of a woman with a disability after marriage. Ibro further explained that some disabled women may experience difficulties in performing household duties such as cleaning or cooking, which are commonly expected of them after marriage. Therefore, Mahmud suggested that men who are married to women with disabilities should be respected and provided with benefits for their efforts to accommodate the needs of their disabled wives.

> *[…] when looking at it; If it is possible, if someone is to marry a woman with a disability, they should be receiving some benefits [from the government] and be respected [by people in society] […] (Mahmud, P13)*

Ibro and Isma'il recounted that women have the greater responsibilities in a relationship and marriage. They are expected to take on tasks such as cleaning the house, cooking meals, doing laundry, taking care of children, and even taking them to the hospital when they are sick, among other duties. Mahmud added to this narrative by sharing his own experience of being in a relationship.

> *[…] You see now, I have gone and married a non-disabled woman. She is healthy, and she is at home taking care of our children. She will cook and do other things; this is the truth […] (Mahmud P13)*

Nevertheless, Aliyu and Mahmud concurred that men are generally expected to provide for their wives and children. However, Aliyu stated that many individuals do not believe in or are not aware of family planning. Consequently, they tend to have large families, sometimes with multiple wives. For example, Ibro recounted, *"I have 10 children with three wives; you see, I am the one with a family (hahaha)."*

For the female participants with several children, such as Maryam and Firdausi, taking care of them was challenging, particularly when it came to looking after young children. Firdausi and Maryam mentioned that despite running their own businesses, the profits they earned were often insufficient to meet their needs.

> *[…] I got married and have given birth 7 times. I have five boys and two girls, that is my life now. Now I am doing business, I will go and buy groundnut oil and palm oil to sell – whatever I got, I will use to take care of my children. (Maryam, P12)*

Even when sick or injured, Maryam and Firdausi were sometimes expected to continue performing their household duties. For those who were divorced and left with children, like Hannah and Firdausi, sickness or injury could be particularly challenging. This was because their relatives and families rarely supported them in looking after their children or providing financial assistance. Hannah explained that, due to the lack of support, she sometimes wished that she was not disabled: "*I used to say if Allah had not made me this way, all these things would not have happened to me. I would have been loved the way everyone is loved."*

However, those who were still married, such as Maryam and Aisha, received support from their husbands, especially those married to non-disabled men. This support took the form of assisting them in selling the materials they created outside of their workplace or mobilising within the communities to find customers for them.

6.7 The Role of the Government in the Lives of PwPDs

Aliyu, Aisha, and Mahmud reported that the government provided the centre with some support, such as health insurance and a 90% discount on prescribed medications, as mentioned in section 6.5. However, Aisha and Maryam noted that there was a lack of awareness regarding the availability of insurance and medical discounts for PwPDs, and there was a significant lack of understanding about the benefits they offered. Moreover, Aisha and Firdausi, who were aware of the insurance, were still unable to benefit from it because the government failed to allocate funds to the hospital. Aisha and Ibro described the complicated process they had to go through to determine whether the government had released the funding, which made it difficult for them to proceed with obtaining the insurance. Furthermore, individuals such as Aisha, Maryam and Firdausi, who had managed to utilise the insurance, were restricted to receiving treatment and medical check-ups solely at the hospital where they were registered, with no access to similar services at other hospitals.

Firdausi explained her understanding of health insurance as follows:

> *[…] There is something they call "Kaciba" [hospital name] it is a place where you will receive free treatment and check-ups. If it is a government worker, they will remove 10% of his/her salary. But since we are not government workers, the government makes it free for people with special needs. (Firdausi, P10)*

Aliyu and Aisha explained that, despite the government's efforts to offer healthcare insurance for PwDs, many of them faced difficulties benefiting from it due to a lack of awareness and the complex insurance application process. Consequently, those like Labaran and Aisha, who could afford private healthcare, opted to seek treatment at private hospitals when needed. Aisha further explained that the government's healthcare services were of poor quality, which discouraged them from considering government healthcare insurance.

Similarly, Salisu shared his experience that the government's provision of free education was ineffective in encouraging people to pursue education, primarily due to the absence of teachers and inadequate infrastructure. Additionally, Aliyu mentioned that the state government only made education free for them upon their request[8].

> *[…] We said we need free education, what is free education? We do not need them to buy us books or look after us. No, we want the opportunity for schools to remove all the receipts they are selling [meaning tuition fees].*

Moreover, Aliyu and Mahmud stated that the government was supportive of them because of the para-soccer they were playing. Ibro and Adnan added that the government pays some of them salaries every month because it recognised the four of them as government players. This is out of the 16 players they have at the centre. Adnan recounted his experience and what he hoped the government could do to properly support them.

---

[8] It is worth noting that free education is now available to all, including people without disabilities, at primary and secondary schools, but not universities, as mentioned in Chapter One.

> *[…] I want the government to see us, we who are playing Para soccer representing North-western Nigeria. Of all the players only four people are recognised as employees. One of the four is an assistant coach and there are about 16 people in the team. We would like the government to add 14 more people as permanent and functioning team members […] (Adnan, P3)*

Ibro added to Adnan's narrative by explaining that the remaining participants who played para-soccer mostly did so for exercise and to improve their physical health rather than because they hoped the government would pay them. However, Ibro and Adnan also revealed that whenever they competed and won, the government sometimes gave them money and perhaps a piece of land, which motivated many of them to continue playing and participating in the sport.

In addition, Aliyu and Adnan mentioned that the government had provided support for them and the centre by giving their leader a car with which to travel around his community more easily as well as across the state. Aliyu explained that the bus had been given to them after years of requests by the centre and the king himself:

> *[…] They have given the king a car, and the car is even a bus like the ones used for commercial transportation. Because the kings do not have means of transportation, the centre asked for it, but we did not get it. It was the formal governor that gave us the bus […] (Aliyu, P2)*

However, Aliyu added that the centre was responsible for maintaining and refuelling the car. Consequently, the car was not functioning at the time of this research due to a lack of proper maintenance (as shown in Image 23), because the centre was not making enough profit from the businesses it was running, even with the help of its members.

Image 22: The bus belonging to the king of the PwPDs.

In addition, Aliyu, Mahmud, and Isma'il reported that whenever the government provided loans to people, the leaders of the centre would sometimes request a loan to maintain and improve their businesses. However, according to Aliyu, their loan requests had never been successful.

> *[…] If the way we hear that the government is giving out loans of 100,000, 500,000, even 1,000,000 […] if it has given us 1,000,000, we will have succeeded. The way the government wants interest from people if it has given us the loan, we would have given them the interest it wanted […]* *(Aliyu, P2).*

Aliyu stated that if they had received proper support from the government, their lives could have significantly improved. In the absence of this, the limited support from charitable organisations and individuals in their communities, the vocational skills and training they received at the centre enabled them to sustain themselves and provide for their families.

6.8 Chapter summary

In this chapter, the five themes that were extracted were discussed extensively with the support of photographs and video diaries, which added to the narratives provided by the participants. Additionally, the chapter provided information about the causes of the participants' disabilities and some of the healthcare interventions undertaken by their parents. Most of the participants had acquired disabilities due to polio, while others cited unknown illnesses as the cause of their physical disabilities. The stories that the participants shared revealed that they led challenging lives due to the barriers encountered when pursuing education, employment, and finding a life partner. Nevertheless, these challenges did not deter their efforts to care for themselves and their families as well as to navigate challenging situations, even with the limited support provided by the government. Furthermore, the findings of the chapter showcased how creative the PwDs were at sustaining themselves and adapting to challenging environments. It highlighted their resilience in the face of adversity and unfavourable living conditions. In the forthcoming chapter, I examine the findings in conjunction with existing research in the field of disability studies and public health. Additionally, I outline the limitations of my own research.

Chapter Seven

Discussion

7.0 Chapter Overview

In this chapter, I examine the study findings of this thesis. I took several approaches to achieve a comprehensive understanding of the lives of PLwPDs, including storytelling sessions, photographs, and video diaries. Additionally, a pilot study was conducted, which provided more transparency to the methodological approaches used to extract rich data from the participants. The findings were discussed in a manner that situated this study amongst other works in this field and organised according to public health challenges. This discussion was organised according to the following five themes identified in the findings:

- Barriers to education faced by PwPDs
- Overcoming social and environmental challenges
- Adaptability and creativity to accommodate needs
- Challenges in forming a lifelong partnership
- The role of the government in the lives of PwPDs

Each theme provided insight into the lived experiences of PLwPDs and implications for public health practice. Similarly, the discussion of the themes was considered through reflective observations and relevant studies. I conclude this chapter by providing a detailed explanation of the limitations of this study.

Before delving into the themes, it is imperative to elaborate on the background of the participants involved in this study. Notably, most of the participants were young when they became disabled, making it challenging for them to recollect the origins of their disabilities. Consequently, the narratives about how they became disabled were recounted to them by their parents, potentially leading to inaccuracies in their recollections. Nonetheless, utilising narratives empowers participants to convey their stories based on their own lived experiences.

The statement presented vividly exemplifies the embodiment of the medical model of disability among the participants' experiences. Primarily attributed to conditions such as polio and other ailments, their disabilities underscore the core principles of the medical model, which places the individual's impairment or medical condition as the primary determinant of disability. This perspective is particularly evident in the narratives, where symptoms associated with polio, including elevated temperature, severe fever, headache, and bodily tenderness, are retrospectively linked to their conditions. The National Health Service (NHS) recognises these symptoms as indicative of polio (National Health Service, 2022), further reinforcing the medical model's emphasis on diagnosing and addressing the underlying medical origins of the disability. However, this approach tends to overlook the broader societal and environmental factors contributing to disability.

Among the study participants, one individual recounted the cause of her disability differently. She described enduring a condition that resulted in multiple bone fractures during infancy. This vulnerability to bone fractures persisted into adulthood. Furthermore, Maryam did not require a mobility aid; nevertheless, she walked with a visibly noticeable limp, and her legs bore deformities due to the condition.

It is interesting to note that from the 1980s to the 2000s, disabilities were often attributed to being possessed by evil spirits or witchcraft. This narrative was shared by some participants who mentioned being taken to see witch doctors, traditional healers, or religious clerics for treatment. The participants' stories concerning the medical interventions their parents had pursued were like my own experience, as highlighted in Chapter Two. Additionally, these medical interventions pursued by the parents show how the medical model of disability has become the norm, encouraging treatment, and linking medical conditions with diagnosis.

In some instances, witch doctors and traditional healers would often provide herbal medicines for individuals suffering from a condition to rub into their skin, shower with, or drink (Mokgobi, 2014). Furthermore, the findings of this study align with those of Haruna (2017), who found that people in the community strongly believed in witchcraft and evil spirits, which were said to cause disabilities as a form of punishment for ignoring their warnings. Consequently, PwPDs were viewed as sinners and deviants (Etieyibo and Omiegbe, 2016).

However, unlike witch doctors, who mostly require the patient to be brought to them before they can provide treatment, religious treatment is different. Those suffering from an illness did not need to be taken to the Imams (religious healers) for prayers (Turner, 2012). The relatives of the patient informed the Imams about the patient's condition, and they prayed for the sick individual. Regarding disabilities and religion, PwPDs were seen as those who had been tested by Allah (S.W.A), and prayers were performed by Imams not with the intention of healing or treatment but to make their condition easier, particularly for those experiencing physical pain and challenges (Turner, 2012; Pierri and Barkindo, 2016).

As an individual with a physical disability, as discussed in Chapter Two, when I acquired my disability, my parents took me to traditional and religious healers for treatment. They did this due to societal norms suggesting that people with physical disabilities were believed to be possessed by spirits, and they hoped that seeking treatment from traditional and religious healers might lead to my healing. Additionally, they pursued these alternative treatments to ensure they had explored every possible avenue of treatment, as my grandparents were pressurising them to do so, even outside of Western medicine. It is customary for grandparents and relatives to pressurise parents of children with disabilities to seek traditional and religious treatments alongside Western treatments. Similarly to the participants in this study, the traditional and religious treatments my parents sought did not yield the desired outcome.

However, the reason why parents of children with physical disabilities often struggled to accept their children’s condition was due to the hopes and dreams they had for them. In North-western Nigeria and indeed most parts of the country, parents rely on their children for care and financial support in their old age or retirement (Akinrolie, Okoh and Kalu, 2020). Consequently, societal pressure left parents of children with disabilities disheartened, leading to a loss of hope for their children’s future. This, in turn, prompted them to seek medical treatment as soon as they became aware of their children’s disabilities, in the hope that they could be treated (Etieyibo and Omiegbe, 2016). As demonstrated by the narratives provided earlier by Hannah and Maryam in the Findings chapter (Chapter Six), both medical, traditional, and religious treatments proved unsuccessful in curing their disabilities.

7.1 Barriers to Education Faced by PwPDs.

Because parents lost hope in the future of their children with disabilities, this resulted in a reluctance to enrol their children in school. They either allowed them to stay at home or send them out on the streets or outside their homes to beg for charity from passers-by.
However, most PwPDs were determined to go to school and, with the support of some of their teachers, headmasters/headmistresses, as well as principals, those children who were interested in studying and whose parents had not officially enrolled them were warmly welcomed. Those with disabilities were especially welcomed in government schools, even without official enrolment, as education was free, and people only needed to buy books and writing materials to learn. The writing materials were mostly provided by the community as a form of charity. In the case of some of the participants (Salisu, Isma'il, and Adam) in this study, the learning materials were provided by the centre. Moreover, as this research is one of the few studies, if not the only one, to look at PwPDs in Northern Nigeria, it was challenging to find literature that explored the experiences of PwPDs in schools and the kind of support they receive from the staff. As a result, this finding serves as an indication that the disability community and charity organisations are key to promoting education among PwPDs through the provision of materials and mobility aids, as shown in this research.

Nevertheless, participants who were enrolled in school shared positive experiences of their teachers and fellow students, with no mentioning of bullying or discrimination by them. These findings contrast with Brydges and Mkandawire's (2017) study, which focused on individuals with visual impairments and reported that their participants experienced teasing and bullying from non-disabled classmates. In my research, most of the participants described their classmates as being supportive. This support from non-disabled colleagues can most likely be attributed to the fact that they had grown up together and came from the same communities. Additionally, cultural, and traditional beliefs play a role, as PwDs are viewed as vulnerable and in need of support, which often leads to acts of kindness and almsgiving from the non-disabled population (Betcher and Wangila, 2016; Nyangweso, 2019). This belief is particularly prevalent in Northern Nigeria compared to other parts of the country.

Conversely, those without disabilities viewed those with disabilities as courageous because, despite their mobility challenges, they chose to go to school and learn. As a result, their non-disabled peers supported them by assisting them to get to school or helping them move from the classroom to where they had parked their mobility aids, as mentioned in section 6.4.2 of the Findings chapter. These findings align with Brydges and Mkandawire's (2017) study, as their participants also expressed appreciation for the support they received from their non-disabled peers in school.

Additionally, I can attest to this, as my secondary school classmates were extremely supportive during my school days. Whenever I was sick or unable to climb the school stairs, they would carry me upstairs to the classroom. Most of the time, they would offer support even if I did not need or require it. For example, they would buy snacks and lunch for me even though I could walk and buy them myself. This sort of support was common and happened more often across schools in North-western Nigeria.

Furthermore, the physical inaccessibility that the participants faced in school was ameliorated because of the support they received from their non-disabled peers. The lack of accessibility to the classrooms and school facilities contributed to the dependence on those without disabilities to the point where, without their support, those with disabilities were unable to continue going to school (as supported by the findings of this study). Inaccessibility to school environments remains a barrier to education for children with physical disabilities, and has been the case for several decades. In 2018, the Nigerian government signed the Discrimination Against Persons with Disabilities (Prohibition) Bill 2009 into law after a relentless campaign by PwPDs and human rights activists (Human Rights Watch, 2019). Although this bill was passed into law, the government and industries have not implemented the necessary changes to resolve accessibility challenges.

Due to the inadequate implementation of anti-discrimination measures against PwDs, observations made by Haruna (2017), Brydges and Mkandawire (2017), Ijudunola et al. (2019), and Arimoro (2019) highlight the challenges faced by these pupils with disabilities in demonstrating competence within a learning environment that does not cater for their needs. Additionally, students with disabilities encounter various obstacles when it comes to accessing their learning environment, such as physical barriers to reaching and navigating classrooms, library facilities, and school amenities, including bathrooms and toilets (Brydges and Mkandawire, 2017; Haruna, 2017; Ijadunola et al., 2019). These findings align with the results of this research, as presented in section 6.3.2 (Images 11, 12, & 13).

In addition to the accessibility challenges faced by PwPDs, they also encountered a shortage of essential learning resources, particularly qualified teachers in government schools. This issue was exacerbated by the delay in salary payments to teachers by both the state and federal governments. It was common for teachers in Nigeria to go for extended periods without receiving their salaries, particularly those employed by state governments (Aiyedun and Jacob, 2021).

In 2022, the Academic Staff Union of Universities (ASUU) embarked on a strike lasting approximately eight months due to unfulfilled government promises. The primary objectives of the strike were to compel the federal government to review lecturers' salaries and enhance funding for universities. Despite the federal government not meeting these demands or promising improved funding, the strike was ultimately called off by the lecturers after a period of around eight months (UNICEF, 2022)

The lack of government support and the reluctance to improve funding for primary and secondary schools across the country have contributed to a below par educational system (Sabo, Umar and Nasiru, 2019; UNICEF, 2022). As a researcher and an observer of the education system in Nigeria, I have witnessed the profound impact of the education budget on the provision of education for PwDs in the country. Regrettably, despite some positive developments, there remains a considerable amount of work to be done to ensure that PwPDs have access to quality education in North-western Nigeria and the nation as a whole.

One of the challenges I observed while conducting this research was the lack of resources and funding allocation for disability-inclusive education in Nigeria. The education budget in Nigeria is insufficient to meet the needs of PwPDs, leaving many children with disabilities out of school or unable to access the support they needed to succeed (as explained in Chapter One). This was a major concern because it meant that many PwDs missed out on the opportunities that education could provide (UNICEF, 2022).

Another challenge I observed was the limited access to high quality education for PwPDs. Despite some efforts to increase resource allocation for disability-inclusive education, many schools in Nigeria, particularly in the North-western part of the country, lacked the infrastructure and support systems necessary to accommodate PwPDs, as highlighted in the Findings chapter. This hindered the ability of these students to access the education required to achieve success and posed a significant obstacle to their full participation in society (Brydges and Mkandawire, 2017; Ijadunola et al., 2019).

In addition to these challenges, I also observed a shortage of adequately trained teachers and support staff to provide education for PwPDs. This further hindered the delivery of quality education and created barriers to accessing the necessary support and resources for success. Most teachers were primarily trained to instruct students without disabilities and lacked the skills and knowledge required to accommodate those with disabilities. For instance, they lacked training in providing the specific support that PwDs need and a comprehensive understanding of their needs (Odia and Omofonmwan, 2007; Fafunwa and Fafunwa, 2018; UNICEF, 2022).

However, as the findings of this research have shown, despite their limited skills and training, the teachers and school staff made diligent efforts to support students with disabilities. This included ensuring that these pupils comprehended the material being taught and offering financial assistance during examination periods, as exemplified in the case of Jamila.

Despite those challenges, I have observed positive developments around disability-inclusive education in Nigeria. For example, there have been efforts to increase the allocation of resources for disability-inclusive education in recent years and initiatives to train teachers and support staff to provide education to PwDs (Aiyedun and Jacob, 2021). Such training and initiatives can be seen across North-western Nigeria, for example in Kano Teachers' college and Sa'adatu Rimi University of Education (Kano State Ministry of Education, 2019). When fully implemented, these developments could provide PwPDs with access to quality education not just in North-western Nigeria but across the nation.

7.2 Overcoming Social and Environmental Challenges

The participants in this study experienced obstacles to gaining independence, which were further compounded by the lack of accessibility to their environments. They reported that schools, buildings, and other facilities did not accommodate their needs, making it challenging for them to fully participate and utilise these spaces. Studies such as that by Brydges and Mkandawire (2017) also supported this view, noting that despite efforts to promote inclusive education in Sub-Saharan Africa, there is still a lack of development in adjusting the environments accordingly for those with disabilities (Ahmed and Ahmed, 2014; Ijadunola et al., 2019). Likewise, in North-western Nigeria, assistive infrastructure such as ramps, railings, and special classrooms for those using crutches, wheelchairs, and tricycles were not readily available, as highlighted in the Findings chapter.

Moreover, many educational facilities in Nigeria lacked guidelines to accommodate students with disabilities (Ijadunola et al., 2019). As a result, the participants had to devise unique methods to cope with the lack of accessibility, such as using tricycles to navigate rough terrain and a roller (as shown in Image 5 & 6, pages 170 – 171) to enter buildings that were not wheelchair accessible, as shown in section 6.4.2 of the Findings chapter. The absence of appropriate accommodations forced PwPDs to be resourceful in discovering ways to move around their surroundings, as seen in the research findings.

PwPDs not only encountered challenges within their physical environments but also faced significant issues with transportation. Various modes of transportation, including tuk-tuks, buses, and taxis, often failed to cater to the specific needs of PwDs, rendering some modes of public transportation like tuk-tuks inaccessible without the risk of experiencing discrimination and harassment from drivers, as noted by the participants in section 6.5.2 of this study.

As a result, PwPDs frequently had to resort to arduous and time-consuming walking over long distances. Nonetheless, the participants in this study regarded these mobility challenges as relatively minor and were willing to endure them. Additionally, they faced an increased risk of being involved in road accidents, a concern corroborated by other studies such as those by Haruna (2017) and Ijadunola et al. (2019). This heightened risk was attributed to reckless driving on the roads and the high incidence of accidents in Nigeria, leading many PwPDs to choose to stay at home due to fear of being struck by a vehicle. This apprehension was also underscored by Haruna (2017) and Ijadunola et al. (2019) in their respective studies.

Additionally, based on the findings of this study, the challenges faced by PwPDs in Nigeria could be addressed if the government had implemented the UN Convention on the Rights of Persons with Disabilities (CRPD) in 2007. The government only signed the Discrimination Against Persons with Disabilities (Prohibition) Act in 2018, after 9 years of advocacy by disability activists and rights groups (Federal Republic of Nigeria, 2019; Human Rights Watch, 2019). However, as stated earlier, this has not translated into better conditions for PwPDs. Even though buildings owned by international organisations are accessible to PwPDs, most government and commercial buildings are not. It may take another decade for this policy to be fully implemented in Nigeria.

Moreover, it is important to note that the implementation of the CRPD would not only have improved the accessibility of buildings, but also addressed a wide range of issues that PwPDs face, such as discrimination, a lack of education and employment opportunities, and a lack of access to healthcare and other services (Ijadunola et al., 2019).

As well as the inadequate accessibility of transportation in several North-western states and throughout Nigeria, PwPDs frequently encounter difficulties and challenges when trying to participate in social activities. This hampers their ability to fully engage in urban life, as pointed out by Haruna (2017). The lack of reliable transportation systems compels PwPDs to seek alternative means of transportation when traveling within their communities, as evidenced in the studies conducted by Bombom and Abdullahi (2016) and Haruna (2017).

Moreover, a study conducted in South Africa by Tshaka, Visagie, and Ned in 2023 underscored that a major obstacle to accessing healthcare services stemmed from the pervasive negative attitudes among healthcare professionals and public taxi drivers. In this research, these negative attitudes were found to discourage the participants from seeking the essential medical assistance that they needed. Notably, Tshaka, Visagie, and Ned’s research findings align closely with my own research, as my participants also highlighted similar challenges.

However, in this study, community vehicle drivers often hesitated to transport PwPDs because their mobility aids, such as tricycles, required a significant amount of space. Consequently, the participants in this study, along with other individuals with physical disabilities, resorted to alternative modes of transportation, such as using rollers, which took up less space. Tshaka, Visagie, and Ned (2023) made a similar observation, noting that although some individuals occasionally hired private taxis, this proved to be an unsustainable solution due to the associated high costs. The additional fare required to accommodate wheelchair space or personal assistance became prohibitively expensive. Consequently, there is a pressing need for government transport departments to prioritise accessibility within transportation systems and collaborate with PwPDs to ensure equal access to public transport.

Furthermore, uneven surfaces, unpredictable traffic, and the lack of traffic control measures and the absence of pavements, created significant challenges for PwPDs when navigating and commuting within and around their environments. This limited their mobility and interactions primarily to their immediate surroundings, such as commuting within their communities. These findings align with the results of Wolffe, Ajuwon, and Kelly (2013a), who highlighted community-related challenges, including the absence of sidewalks, the lack of traffic control, an unplanned pedestrian environment, and unpredictable traffic, which constrained Wolffe's participants from engaging more extensively with their living environment. This also resonates with the findings of the present study.

Furthermore, people with and without disabilities generally avoided visiting government hospitals for medical treatment for reasons such as inadequate healthcare provision by doctors, long waiting times to see a doctor, and a lack of quality medical care services (Onokerhoraye and Omuta, 2014; Omuta and Onokerhoraye, 2015; Smythe et al., 2022). This sentiment was echoed by the participants in this study who, like many non-disabled individuals, preferred to go to a pharmacy for the treatment of minor illnesses as it was easier, faster, and cheaper than going to the hospital. Unlike in developed countries such as the UK, where only basic medication could be obtained from a pharmacy without a doctor's prescription, in Nigeria, many medications could be purchased without a prescription due to a lack of regulation by the Food and Drug Agency (FDA). This is further exacerbated by corruption among pharmacists and a lack of adherence to FDA guidelines (Amadi and Tsui, 2019; Olutuase et al., 2022).

Additionally, the government has attempted to address the difficulties of accessing healthcare by offering financial incentives for medical treatment and providing healthcare insurance for government employees and PwDs, as reported by some of the participants in this study. Despite these efforts, PwPDs often avoided using government healthcare services due to the challenges they experienced while seeking medical treatment. For example, they may have been denied medical care because they could not afford the small fee required for incentivised treatment (Ogaji, 2015). This forced them to rely on financial help from the public, and without it, they were unable to access medical treatment at the point of need (Ogaji, 2015; Haruna, 2017). It could be argued that the government provided this healthcare insurance as a campaign promise, but this has not been followed through. These provisions were poorly advertised, and these healthcare options meant that there was a lack of awareness and poor utilisation of these measures (Ogaji, 2015). This was supported by the experiences shared by the participants in this study.

Moreover, due to the high cost of medical treatment and the lack of effective medical incentives and insurance options provided by the government (Haruna, 2017), PwPDs often sought alternative methods of obtaining medical care (Ogaji, 2015). However, those who had family members with medical insurance were receiving financial support from them. However, those that did not have family members with health insurance relied on their working children for assistance. This helped in preventing them from having to ask for medical support from the public, as also supported by Haruna's (2017) study.

PwPDs often faced negative attitudes from healthcare staff; this was particularly prevalent among women with disabilities who may have experienced health complications as a result (Ubochi et al., 2019). For example, two participants, Aisha, and Firdausi, had miscarriages due to poor healthcare provisions (as mentioned in section 6.4, pages 196 – 198). As a result of these negative experiences, many women with disabilities chose to give birth at home rather than risk being treated poorly in a hospital setting. This was a common phenomenon, as reported in studies conducted by Omuta and Onokerhoraye (2015) and Ubochi et al. (2019).

Similarly, Haruna (2017) stated that PwDs in Nigeria experience daily stigmatisation and discrimination from those without disabilities. This discrimination, which often took the form of prejudice and negative attitudes, was particularly prevalent in interactions between the two groups in society. This resulted in the exclusion of PwDs from accessing essential services such as healthcare, social support, and education (Haruna, 2017).

Nonetheless, in this research, there were instances where nurses and staff exhibited a positive attitude towards the disability community. This was typically seen among those who used private healthcare services, while it was less common among those who used public or government healthcare services. This negative experience was compounded by the lack of accessibility in many government healthcare facilities, as reported earlier.

7.3 Adaptability and Creativity to Accommodate Needs

Most of the participants worked at the centre to support themselves, while some were self-employed, and only a few had been employed at some point in their lives. Those who were employed had worked for the government in the 1970s and late 1990s before being marginalised by the government. Unemployment among PwDs in Nigeria was estimated to be between 90% and 100%, particularly in rural areas (Wolffe, Ajuwon and Kelly, 2013a; 2013b; Institute of development studies, 2020). This was significantly higher than the unemployment rate for non-disabled individuals, not only in Nigeria but also in both developed countries and the Global South, as reported by Wolffe, Ajuwon, and Kelly (2013a, 2013b) and the United Nations (2007).

However, according to the Institute of Development Studies (2020), in Nigeria, youth unemployment rates were higher among PwDs (77.3%) compared to those without disabilities (49.2%). Similarly, adult unemployment rates were higher for PwDs (62.5%) compared to those without disabilities (21.5%). Among young people and adults, males and females with disabilities had similar unemployment rates, but females without disabilities had higher unemployment rates than males without disabilities (Institute of Development Studies, 2020). A significant proportion of young people with disabilities (61%) were neither in education, training, nor employment, whereas this percentage was much lower for individuals without disabilities (23%). The percentage of people employed in informal sectors was lower for PwDs (13%) compared to those without disabilities (30%). The presence of PwDs in managerial roles is extremely rare, whereas it is around 0.9% for those without disabilities (Institute of Development Studies, 2020; Rosa and Varalakshmi, 2020).

Additionally, in this research, the unemployment rate was 100% at the time of data collection, as all the participants were only working for the centre. Only Maryam, Aisha, Labaran, Mahmud, and Aliyu had worked for the government at some point in their lives. Nevertheless, aside from Labaran, Aliyu, and Mahmud, who had previously worked for the government before retiring, the remaining participants had no government employment experience. UNICEF hired participants from the centre to promote the polio vaccine campaign, and provided financial aid. The absence of government employment had led PwPDs to find ways to support themselves. In response, the centre established a source of income for its members through welding and the production of tricycles, swings, and other outdoor equipment that could then be sold. Women were trained in the making of perfume, soap, shoes, bags, and other items. Some members also sold peanuts to help alleviate financial difficulties and care for their families. However, despite these efforts, the lack of employment and support from the government remained a major challenge for PwPDs. The centre’s initiative to create job opportunities and provide skills training had made a positive impact, but more needs to be done to address the root cause of the problem and ensure that PwPDs are given equal opportunities and support in society. Raising awareness and educating the public could improve the lived experiences of PwPDs by dispelling myths and prejudices formed by superstition and misinformation.

The participants were unable to rely on their families and relatives for support. Therefore, they had to find ways to support themselves and their families without depending on others (Nwokorie and Devlieger, 2019). PwPDs often resort to begging on the streets to meet their financial needs. Often, participants who resorted to begging had seen their parents or relatives beg, as in Hannah’s case. Begging on the street was normal for many disabled individuals who had been raised in such circumstances and had to do so to ensure their survival. Studies have shown that PwPDs turned to begging for survival due to the lack of a dependable policy for financial aid (Abdu et al., 2013; Haruna, 2017). PwPDs who begged on the streets in Nigeria were at a higher risk of road traffic accidents, which could lead to severe injuries (Haruna, 2017) or even death (Abdu et al., 2013).

Despite these challenges, the participants who told their stories in this study did not let these obstacles hinder their daily lives. They participated in community events using mobility aids such as tricycles and rollers. They also engaged in sports like para-soccer, which had been created as an initiative within their community. As a result, the participants maintained a healthy physical state, aligning with the WHO statement that physical activity, recreation, and sports were key components of a healthy lifestyle (Üstün, 2010; Ogu, Umunnah, and Nwosu, 2016; Charles and Chinaza, 2018). The participants enjoyed playing para-soccer and competed nationally, winning awards and recognition from the state government. This supported the findings of Charles and Chinaka (2018), who stated that playing football brought happiness to PwDs (Kelly, Ajuwon and Wolffe, 2015; Oladunni, Lyoka and Goon, 2015).

Playing sports, such as para-soccer, not only improved PwPDs' physical fitness but also enhanced mental well-being and promoted social interaction. Participating in this activity provided a sense of accomplishment and boosted self-esteem, while the recognition and awards received also provided a sense of pride and validation. By taking part in sports and other recreational activities, PwPDs could overcome some of the challenges they faced and lead fulfilling lives. These activities served to take care of their health and well-being but also to be an integral part of their communities and break down the social stigma surrounding disabilities.

The participants played and trained in a small public field offered by the government, mainly on Thursdays and Saturdays. However, other people used the same facility for basketball on other days. The adaptive equipment (rollers) was made by the participants themselves which helped them to participate in other sports such as weightlifting. The scarcity of equipment and resources was one of the reasons why PwPDs had limited opportunities for physical activity and exercise (Kelly, Ajuwon and Wolffe, 2015). Additionally, the small size of the field and limited access to adaptive equipment posed challenges to PwPDs' full participation in sports and physical activities. This lack of resources and opportunities could contribute to limited physical fitness and an overall decline in health among this population (Omolola and Abdulateef, 2020).

Furthermore, access to sports and physical activities could help to improve the quality of life for PwPDs, enhance their independence, and foster a sense of community. By providing proper resources and facilities, PwPDs were able to overcome the barriers they faced and participate in these activities on a par with others. This not only promoted physical health but also boosted their confidence and self-esteem. It is essential to recognise the value of providing accessible and inclusive sports and physical activities for PwPDs.

Despite having been in existence for over 30 years, there was a lack of awareness about the disability centre. This may have been attributed to a lack of promotion or individuals with disabilities isolating themselves. Consequently, most of the centre's members were introduced by non-disabled friends and families. In contrast to other disability centres and communities that imposed membership fees, this centre allowed PwDs who could not afford to purchase the enrolment form to join for free. According to Nwokorie and Devlieger (2019), some PwDs preferred isolation due to financial demands from disability communities, resulting in them being excluded from information about events and resources. However, this study found that the centre provided support to both its members and non-members.

Moreover, the centre strove to provide an inclusive and supportive environment for PwDs, without any financial barriers to entry apart from the 500 naira (£0.50) enrolment form that people were required to buy. This created an opportunity for PwPDs to connect and engage in activities that promoted their well-being. The centre offered a sense of community and a platform for PwPDs to build relationships, share experiences, and support each other. By offering these resources for free, the centre was helping to break down the barriers that PwPDs faced and promote a sense of belonging.

The disability centre had been established by PwPDs to support their peers, making it a valuable resource for this community. The centre offered employment, support, and training to its members, who worked independently and contributed a percentage of their profits to fund the centre's operations. The equipment at the centre was accessible because it was placed at ground level, unlike in other parts of Nigeria where studies have shown that PwPDs often work in organisations with inaccessible equipment (Wolffe, Ajuwon and Kelly, 2013a; Vanderschuren and Nnene, 2021; Ramirez et al., 2022).

The centre serves as a successful model for PwPDs, demonstrating that they can be productive and self-sufficient members of society. By providing accessible resources and a supportive environment, the centre empowers PwDs to reach their full potential. It also shows that it is possible to create inclusive workplaces where PwPDs can thrive and contribute to society. By breaking down barriers and promoting accessibility, the centre helps to create a more inclusive environment where everyone can live and work with dignity and independence.

A study by Wolffe, Ajuwon, and Kelly (2013a) and supported by Vanderschuren and Nnene, (2021) identified several challenges that prevented PwPDs from working, including outdated or inaccessible equipment and materials, transportation and environmental obstacles, low motivation and poor payment, lack of funds and time, and a lack of training and housing opportunities. However, my study's findings were contrary to this, as participants received training from the centre and did not report any housing or accessibility challenges.

This suggests that offering accessible training and resources could effectively address these challenges and support PwPDs in their employment endeavours. The centre's approach, which includes providing accessible training and resources to its members, underscores the significance of creating an empowering environment for PwPDs. Through the provision of a supportive community, the centre enables PwPDs to conquer employment barriers and attain their career aspirations. This underscores the potential for disability centres and organisations to play a pivotal role in promoting equal employment opportunities for PwPDs.

However, it is important to note that implementing these improvements will require some time, considering the Nigerian government's failure to fulfil past promises and complete projects. It is unfortunate that discrimination against PwDs persists, as evidenced by the insensitive labelling of the PwPDs leader's bus as the "Emir of Cripples" on both the front and back. This incident highlights the urgent need to address discrimination (Haruna, 2017; Nwokorie and Devlieger, 2019).

The language posted on a government-provided vehicle, as shown in Image 23, is stereotypical and one that labels PwPDs. Therefore, this highlights the need for ongoing efforts to challenge discriminatory attitudes and practices and promote inclusivity and equality for PwPDs. The use of derogatory language and symbols had a negative impact on the self- esteem and dignity of PwPDs and reinforced harmful stereotypes. By working to eliminate discriminatory language and attitudes and promoting inclusivity and respect for PwPDs, society could take important steps towards creating a more equitable and supportive environment for all individuals, regardless of ability.

Although the disability centre did not receive financial support from the government, they did receive funds for training from charity organisations and some of its members were employed by UNICEF through the polio vaccine campaign, as mentioned earlier. These opportunities allowed women at the centre to become self-sufficient.

In addition to support from charity organisations, the centre also provided support for its community. This included giving mobility aids like tricycles to those in need and assisting those who wanted to further their education. This differed from other disability communities in Southern Nigeria, which charge for training and membership and were often run by politicians as a form of an empowerment programme for PwPDs (Smith, 2011; Bombom and Abdullahi, 2016; Brydges and Mkandawire, 2017; Haruna, 2017; Nwokorie and Devlieger, 2019). In brief, the centre serves as a source of support and resources for PwPDs in the North-western states and across the Northern part of the country.

7.4 Challenges in Forming a Lifelong Partnership.

Individuals' perceptions of disability were shaped by their level of knowledge. Those with a good understanding of Western and Islamic education were more likely to have a positive attitude and be accepting of PwPDs, while those with little knowledge tended to view PwPDs negatively and discriminate against them (Vilchinsky, Findler and Werner, 2010; Turner, 2012). This was evident in Nigeria, especially in the North-western part, where the low level of education and high illiteracy rate contributed to these negative attitudes (Eno et al., 2011; Adelakun, 2011). As a result, PwPDs faced difficulties in forming personal relationships, as they were often seen as unable to fulfil their duties in a relationship or marriage (Turner, 2012; Pierri and Barkindo, 2016). These difficulties were reported by the men in this study, with one participant forced to end an engagement due to his disability being rejected by the woman's family and friends.

Despite the absence of forced marriage stories in this study, PwPDs were more likely to be pressured into marrying someone chosen by their parents compared to those without disabilities. Women with disabilities were also more likely to be married to their cousins or relatives which leads to a higher risk of violence and domestic abuse (Pierri and Barkindo, 2016). One participant suggested that PwPDs should marry each other, as such marriages would be more peaceful compared to marrying someone without a disability. This was based on the belief that if those with disabilities married each other, they could be more understanding toward each other's abilities and limitations in the relationship or marriage.

Nonetheless, this highlights the discrimination and challenges faced by PwPDs in forming intimate relationships. It also underlines the need for support and resources to help PwPDs find loving and safe relationships. Marriage should be based on mutual love, respect, and understanding, and not on societal pressure or prejudice (Adhikari, 2020). It is important to raise awareness about the rights and needs of PwPDs and to create an environment in which they can find fulfilling relationships without fear of violence or discrimination.

Nevertheless, the centre's policy is a step towards promoting the equal treatment of PwPDs and challenging the negative stereotypes associated with their abilities in relationships. By showcasing successful marriages and relationships, the policy can dispel the misconceptions and prejudice that prevented PwPDs from finding love and happiness. It is a proactive way of addressing the challenges faced by PwPDs and provides a model for other communities to follow. The policy highlighted the importance of creating an inclusive and supportive group in which everyone has equal opportunities and rights (Vilchinsky, Findler and Werner, 2010; Adhikari, 2020).

However, even with these challenges, PwPDs who could marry someone without a disability often received support from their partner. For instance, Maryam's partner provided support for her business and took care of the family. This support helped to mitigate the transportation challenges faced by PwPDs. Additionally, as reported by Aisha, the community was generally supportive of PwPDs, including their participation in community events like weddings and naming ceremonies. This differed from prior studies which showed that children and adolescents with disabilities in Nigeria were often excluded and isolated, and faced teasing and mockery from their peers in society, neighbourhoods, and schools (Smith, 2011; Brydges and Mkandawire, 2017; Haruna, 2017).

7.5 The Role of the Government in the Lives of PwPDs.

Despite some government support being provided in the past, in recent times there has been minimal assistance to address the needs of PwPDs in Nigeria. This lack of support is conspicuously reflected in their living conditions, which have shown little improvement. Although previous governments allocated some funding and resources, these initiatives did not lead to substantial progress. For instance, the previous government introduced health insurance for PwPDs but, unfortunately, the allocated funds were not disbursed to hospitals. Consequently, PwPDs still had to cover their medical expenses. Furthermore, the process of accessing these benefits proved to be challenging, as the healthcare scheme was not designed to be inclusive; it only catered for those who could not afford to pay for their medical treatment (Ogaji, 2015; Omuta and Onokerhoraye, 2015; Ubochi et al., 2019), i.e. those living in extreme poverty.

Additionally, in the North-eastern region of Nigeria, the government implemented free primary and secondary education for all. However, this commendable initiative was marred by the government's failure to pay teachers, leading to a decline in the quality of education (UNICEF, 2022).

Despite government promises, many policies intended to benefit PwDs were left unimplemented and seemed to be enacted primarily as part of a political agenda. An example of this was the promise to establish a commission responsible for crafting policies for PwDs in North-western states, which, regrettably, never materialised. This discrepancy was pointed out by Mahmud during a casual conversation following a storytelling session. Studies conducted by Haruna (2017), Nwokorie and Devlieger (2019), and Smith (2011) suggested that the government harboured discriminatory attitudes towards PwDs, and consequently their involvement in decisions affecting their lives, such as healthcare provision, was severely limited.

Furthermore, PwDs only received attention, and their voices were only heard during election periods when politicians were seeking re-election or running for office. Politicians extended support to PwDs to secure their votes, and PwDs began making demands in response to the government's attention-seeking tactics close to the elections. This was the only time that PwDs could truly make their voices heard and have their requests acknowledged (Nwokorie and Devlieger, 2019).

Nwokorie and Devlieger (2019) also agreed with the aforementioned views that politicians exploited PwDs through empowerment programmes for their political gain. This observation was made by those who were informed and knowledgeable about the system. Moreover, the support given by the government mostly went to a chosen few who had close relationships with politicians or leaders of the empowerment programmes, while those who were not connected were left out (Nwokorie and Devlieger, 2019). Furthermore, the government's failure to allocate sufficient resources for the implementation of policies aimed at promoting the financial inclusion of PwDs perpetuated the marginalisation of this population.

It could be argued that providing loans to PwDs in Nigeria could bring numerous benefits to the country. Firstly, it would increase the financial independence and social inclusion of this population, enabling them to participate in the economy and attain financial security. By having access to loans and financial services, PwDs could start or expand businesses, purchase assets, and engage in other economic activities that could boost their income and contribute to the country's economic growth. For instance, giving out loans to PwDs in the centre studied in this research would enable them to expand their tricycle and swings business across the nation, improving their chances of making a profit, and in turn, their overall lifestyle.

Additionally, giving loans to PwDs could enhance their financial literacy and knowledge of financial management. Empowering them in this way would enable them to make informed financial decisions and build a secure financial future for themselves. Furthermore, by offering loans to PwPDs, financial institutions could increase their customer base, and diversify their loan portfolios.

7.6 Disability Models in the Context of this Research.

The medical and social models of disability greatly influence our understanding of disability but face challenges in Nigeria specifically and more generally across Africa (Retief and Letšosa, 2018; Disability World, 2020). Limited healthcare infrastructure hinders the medical model, while socio-economic disparities and resource limitations obstruct both models. These barriers perpetuate a cycle of disadvantage, restricting access to resources and opportunities for PwDs (Oliver, 2013; Retief and Letšosa, 2018; World bank, 2020). Cultural sensitivity is crucial in developing interventions to avoid misunderstandings and stigma. Incorporating local customs and beliefs is essential for community acceptance and effectiveness. Although disability-related legislation exists, inadequate implementation and enforcement hinder both the social and medical models (Marks, 1997; Shakespeare, 2004; 2007; Dirth and Branscombe, 2017).

It is necessary to strengthen legal protection and establish robust policies in order to promote equal rights and opportunities. Limited awareness within society, healthcare, and education systems presents further challenges (Dirth and Branscombe, 2017). Public campaigns, inclusive education, and professional training are vital to fostering an inclusive and informed society. By promoting awareness and education, misconceptions and stigmas can be dispelled, leading to greater acceptance and support for PwDs.

In North-western Nigeria and across the nation, the charity model of disability offers distinct advantages over the social and medical models (Amponsah-Bediako, 2013; Mugumbate, 2020). It provides immediate assistance to PwPDs, thus addressing urgent needs in a country with economic challenges and limited government support, as highlighted in the findings of this study. Charity organisations play a significant role by offering mobility aids, medical treatment, and educational support through empowerment programs, especially in North-western Nigeria, but also across the whole nation (Amponsah-Bediako, 2013; Mugumbate, 2020). They fill gaps in governmental support by providing specialised care, rehabilitation services, and vocational training. Additionally, charities raise awareness, promote inclusivity, and challenge social stigmas, fostering dialogue and acceptance within communities (Shakespeare, 2004; 2007; Dirth and Branscombe, 2017; Bennett and Volpe, 2018). The flexibility of the charity model allows for tailored interventions based on regional contexts and specific challenges, thereby maximising their impact. Overall, the charity model complements existing frameworks and enhances the well-being of disabled individuals in North-western Nigeria, based on the findings of this study.

Incorporating the strengths of the charity model alongside other models can lead to a more inclusive society in which disabled individuals can thrive (Amponsah-Bediako, 2013; Dirth and Branscombe, 2017). Given Nigeria’s cultural context, the practicality of the charity model becomes evident. As mentioned earlier, the charity model addresses the urgent needs of disabled Nigerians by providing mobility aids, medical treatment, and educational support through empowerment programmes. This argument is supported by the participants’ narratives as charity organisations provided training to PwPDs at the disability centre to support them in acquiring skills that helped them to sustain their lives. Given Nigeria’s resource constraints, the charity model has become a valuable complement to existing frameworks.

The charity model of disability offers unique advantages in North-western Nigeria and for the nation as a whole. As highlighted earlier, charities raise awareness, promote inclusivity, and challenge social stigmas, actively engage communities, and empower disabled individuals. This community-driven approach enhances well-being and enables full participation in social, economic, and cultural activities (Amponsah-Bediako, 2013; Mugumbate, 2020).

Another notable strength of the charity model is its flexibility and responsiveness to local needs. Charity organisations can adapt their interventions based on regional contexts, cultural norms, and specific challenges. This adaptability ensures that the support provided remains relevant and effective, ultimately maximising its impact. While recognising the value of the social and medical models, integrating the strengths of the charity model alongside these models can guide North-western Nigeria and the entire country towards a more inclusive society. This approach empowers disabled individuals to thrive and realise their full potential.

7.7 Limitations

As a researcher, I found that the storytelling approach was a powerful method for collecting data and gaining insight into the experiences and perspectives of individuals, particularly in the Global South. However, it is important for me to acknowledge and understand the limitations of this approach that was adopted for this study. An important limitation is that storytelling can be subjective. When collecting narratives, individuals interpret events and experiences through their own lens, and therefore, biases and perspectives that influenced the stories they told could not be eliminated. However, as there had been no previous study of this kind in the community, it was important to hear directly from participants to understand their world as they saw it. No research is entirely free from bias, but providing transparency will allow the reader to draw their own conclusions.

Another limitation of using storytelling as a method of data collection was that it could be time-consuming and resource intensive. Collecting narratives usually requires a significant investment of time, especially if conducting interviews or collecting written narratives from multiple individuals (Creswell, 2014; Creswell and Creswell, 2018). Moreover, I needed to be mindful of my own biases and perspectives when using the storytelling approach. My role as the researcher was crucial in shaping the narratives that were collected, and I had to be aware of how my own biases and perspectives might have influenced the data that I collected and the conclusions that I drew. For this reason, I provided a reflective account of my experience as someone with a physical disability, as explained in Chapter Two.

The role of an insider researcher has its own limitations, but at the same time, it provides valuable insight into experiences that are unique to specific groups and sub-groups. There are several advantages to being an insider within the research community. For example, my physical disability and language skills allowed participants to feel more comfortable sharing their experiences with me. This insider knowledge enabled effective communication during the storytelling sessions, as I could empathise with their experiences. If I had been an outsider, they might have been less willing to share their stories due to my lack of knowledge about disability and the community’s experiences.

Nonetheless, there were additional limitations associated with this research that could have affected the transferability and dependability of the outcomes. Firstly, this research was conducted in North-western Nigeria, where the culture, lifestyle, and religion differed from the southern part of the country, as highlighted in Chapters One (Introduction) and Three

(Scoping Review). Therefore, if similar research were to be conducted in the southern part of Nigeria, different outcomes might be observed. Secondly, I purposely selected the participants for this research from a disability centre in one North-western state, most of whom had some level of education and were somewhat knowledgeable, as highlighted in the Findings chapter (Chapter Six). As a result, they were able to understand the aim of the research, read the PIS (Appendix 8a & 8b) in either their mother tongue, Hausa, or English, and sign the consent form (Appendix 7a & 7b). If similar research had been conducted in a community where the participants were not literate and in difficult financial situations, the outcomes could have been different.

Thirdly, I was an insider in the sense that I had a physical disability and came from the North-western part of Nigeria. This provided me with inside knowledge of the culture, religion, and means of communication among the target population. However, I was also an outsider in the sense that I came from a high-income background, unlike the target population, making me unaware of how they were living their lives, as highlighted in the Reflexive chapter (Chapter Two). My inside knowledge gave me an advantage in terms of being able to understand and relate to their disabilities and situations compared to someone without a disability. If an outsider (someone without a disability) were to conduct similar research, different outcomes could be produced as the participants might not be as willing to discuss intimate issues with someone who does not share a disability or understand what it is like to live with a disability, as highlighted in the Methodology chapter.

Lastly, this research used a qualitative methodology in the form of storytelling, which meant that no standard questions were used to collect the data. Instead, prompted questions were applied to encourage participants to start telling their stories. As a result, different researchers could have different ways of approaching or eliciting stories from participants, such as using photographs or videos. Therefore, conducting similar research using photography or video elicitation could yield different outcomes. However, it is important to note that photo and video elicitation might also limit participants in terms of what they can or cannot share, unlike using prompted questions.

Additionally, due to the COVID-19 pandemic and the resulting insecurity, my ability to travel to other states in the North-western region to collect data was limited, as mentioned in the Methodology chapter (Chapter Four). If a similar study were to be conducted using the same approach in North-eastern and North-central Nigeria, similar or the same outcomes could be achieved if all the methodological steps were followed. It would be possible to achieve similar results because the North-western, North-eastern, and North-central regions share the same culture, traditions, religion, and lifestyle, compared to the southern part of the country.

7.8 Chapter Summary

In this chapter, five key findings were outlined based on the results of the scoping review, which explored the challenges faced by PwPDs in Northern Nigeria, with a specific focus on those in North-western Nigeria. Despite the study's limitations, it provided new insights by highlighting that PwPDs are motivated to support themselves and their families by acquiring job skills, even with limited education. It illustrated the creativity and adaptability of PwPDs in the absence of proper support and resources to sustain their lifestyle.

The participants in the study learned welding skills and utilised them to create various items such as tricycles, rollers, and swings, thus enabling them to support themselves and break away from begging, thus achieving a sense of independence with the assistance of the disability centre. Despite the lack of proper government support, they managed to make ends meet by earning income from their work and personal businesses.

Chapter Eight

Conclusion

8.0 Chapter Overview

This study aimed to gain insights into the lived experiences of PLwPDs in North-western Nigeria, with a specific focus on how they navigate their daily lives, sustain themselves, utilise available resources, and foster relationships within their local communities. In the Scoping Review chapter (Chapter Three), I outlined the gaps in existing studies and elaborated on how these gaps were addressed in this research:

I. Previous research on PwPDs in Nigeria predominantly centred on the challenges faced by individuals in the Southern regions, particularly those with visual impairments. However, a significant gap existed in understanding the lives of PwPDs in North-western Nigeria, with only a limited number of studies addressing physical disabilities. Furthermore, previous studies often concentrated on specific issues such as unemployment and education, rather than exploring the holistic lived experiences of these individuals. The findings of this research have unveiled that, while accessibility challenges are prevalent across the country, PwPDs in North-western Nigeria have displayed ingenuity and adaptability in addressing the environmental challenges that they face. Nevertheless, it is worth noting that these creativities cannot be excluded in other regions, but there is no empirical evidence to provide this insight. They have achieved this through the creation of tricycles and rollers, specifically designed to traverse the rough and unpaved terrains of their environments. These mobility aids have facilitated ease of movement for them, enabling them to navigate their surroundings and avoid unsanitary conditions, as demonstrated in the Findings chapter (section 6.3.2, 6.4, and 6.5).

II. Earlier studies have emphasised the limited resources available to PwPDs, primarily in the Southern part of Nigeria, with a predominant focus on individuals with visual impairments. This research contributes to the existing literature by revealing that the lack of resources is a common challenge throughout the country, affecting not only those with visual impairments but also individuals with physical disabilities, as highlighted in the findings. However, this research emphasises that the lack of resources has not deterred PwPDs from showing resourcefulness in enhancing their mobility and providing for themselves and their families. Additionally, the research underscores the contentment of PwPDs with the resources available to them, which they effectively utilise to meet their needs and support their loved ones. This contentment is attributed to the efforts of disability centres and charity organisations that have provided training and skills for self-sustenance.

III. Prior studies have primarily focused on the physical aspects and work experience of PwPDs in Southern Nigeria, without delving into their relationships with their communities and wider society. No studies have been conducted on PwPDs in North-western Nigeria in this context. This research bridges these gaps by demonstrating that, while instances of discrimination and stigmatisation do occur, most of the participants in these studies have positive relationships with individuals without disabilities in their communities, schools, and workplaces. Unlike other studies that highlight accessibility challenges in relation to work environments and equipment, the participants in this study did not report such issues, as their jobs were tailored to accommodate their disabilities and individual needs, with equipment placed at floor level for ease of use, as shown in section 6.5.2. Furthermore, the participants expressed great appreciation for the support they received from their classmates and community members. Unlike other studies that highlight discrimination and stigmatisation within their communities, the participants in this study primarily faced such challenges from individuals outside their communities, such as public transportation drivers, government workers, and even strangers.

The study design incorporated narrative research, with a storytelling approach employed for data collection. Labov narrative analysis was used to analyse the data. The adoption of narrative research and the storytelling approach ensured the study’s alignment with public health practice by giving PwPDs a platform to share their stories about their lived experiences with physical disabilities. The data were analysed using Microsoft Word before being imported into NVivo for data management and further analysis, resulting in the identification of five key themes: barriers to education faced by PwPDs; overcoming social and environmental challenges; adaptability and creativity to meet their needs; challenges in forming lifelong partnerships and the role of the government in the lives of PwPDs.

This chapter outlines the methodological problems and limitations that were faced during the study. It also explains the implications that these findings would have in public health practice, research, policy, and education. Additionally, recommendations and areas for further research are provided.

8.1 Methodological Problems and Limitations

Narrative research design, combined with a storytelling approach, has gained popularity as a method for collecting and analysing qualitative data. Labov's narrative analysis approach further provides a structured framework for analysing narratives in a thematic format, as explained in the Methodological chapter. While this methodology has offered valuable insights into individuals' experiences, it is essential to recognise the methodological issues and limitations observed during the data collection and analysis.

One significant issue was the inherent subjectivity and potential bias introduced by the storytelling approach. Participants' stories were based on their subjective interpretations of their lives, which may be influenced by their personal perspectives. Similarly, interpretation of the data may have introduced subjectivity, which could potentially have led to biased discussion or understanding of their lives (Murray, 2000; Özyildirim, 2009; Spector-Mersel, 2010; Kellas, 2014). As a result, I have acknowledged and addressed these subjective elements to maintain the rigour and credibility of the research. I achieved this by being transparent throughout the study, explaining every step I took during the research, and providing the rationale for it. For example, I provided a reflexive account of my experience of living with a physical disability in Chapter Two. Additionally, I conducted a pilot study to examine and evaluate the quality and reliability of the initial data and the reasonable adjustments I made to acquire rich data.

Nevertheless, using a narrative research design with a storytelling approach mainly focuses on individual experiences and unique stories. While this approach has provided valuable insights into the richness of the participants' narratives, it might have limited the generalisability of the findings to broader populations or contexts, as highlighted in the Discussion chapter (Polkinghorne, 1995; Riessman, 2005; Bailey, 2008; Spector-Mersel, 2010). The emphasis on individual stories makes it difficult to capture the diversity of experiences within a larger group, thereby limiting the applicability of the findings beyond a specific sample.

The storytelling approach allowed participants to shape their narratives freely, which led to variations in the data collected. Unlike more structured data collection methods, this lack of control over the content and structure of the narratives presented challenges in comparing and analysing the data consistently (Riessman, 2005; Özyildirim, 2009; Spector-Mersel, 2010; Patterson, 2011). This limitation might have affected the findings and introduced difficulties in drawing clear and accurate conclusions.

Presenting the data in a thematic format, while useful for organising and summarising the narratives, might have caused important nuances, contradictions, or connections within the narratives to be overlooked (Murray, 2000; Baker, 2017). Focusing on specific themes limited the depth and comprehensiveness of the analysis, potentially resulting in crucial aspects of the participants' experiences being missed. To address these methodological issues, photographs and video diaries were used to support, dispute, or add to the stories provided by the participants. This approach provided a more holistic understanding of their stories and helped to strengthen the validity and reliability of the results.

Furthermore, the storytelling approach often encouraged participants to disclose sensitive or personal information in their narratives. Consequently, ethical considerations were prioritised in relation to privacy and confidentiality, as highlighted in the Methodological chapter. As part of this research, all the participants' data remained anonymous and their privacy was protected while handling and presenting their narratives. Before commencing data collection, consent was obtained from each participant, and the data was anonymised.

To further mitigate the methodological issues and limitations, several strategies were employed. For instance, a clear articulation of the research process, including my role in presenting the data, was provided in the Methodology chapter. This enhanced the credibility and trustworthiness of the findings.

8.2 Utilisation of the Storytelling Approach

Qualitative research serves as a vital tool in exploring and understanding the multifaceted dimensions of human experiences, particularly in the context of the Global South (Creswell, 2014; Morse and Cheek, 2014; Creswell and Creswell, 2018). However, conventional research methodologies often struggle to capture the rich array of voices, cultural nuances, and social complexities present in these regions. To address this gap, I utilised a storytelling approach, which emerged as an effective means of conducting qualitative research that embraces the unique perspectives of individuals from the Global South (Niemelä and Rauniomaa, 2010; Lewis, 2011; Edosomwan and Peterson, 2016). In the Methodological chapter, I highlighted the significance and benefits of employing a storytelling approach within qualitative research methodologies and emphasised its ability to uncover hidden narratives, promote inclusivity, and contribute to decolonisation efforts.

Storytelling has long been an integral part of human communication, possessing the power to reveal profound insights into the lived experiences of individuals. Within the Global South, storytelling holds immense cultural value, serving as a means of transmitting knowledge, preserving traditions, and asserting identities (Tuwe, 2016; McCall et al., 2019). Integrating storytelling into qualitative research allows researchers to tap into this rich tradition, providing a platform for participants to share their experiences, perspectives, and memories. By placing these stories centre stage, researchers gain access to previously hidden aspects of social phenomena, unearthing valuable data that might otherwise have been overlooked (Tuwe, 2016; McCall et al., 2019). This approach facilitates a deeper understanding of the complexities, struggles, and triumphs experienced by individuals in the Global South, as shown in the Findings and Discussion chapters of this study.

Furthermore, one of the primary advantages of incorporating the storytelling approach into qualitative research is its potential to foster inclusivity (Tuwe, 2016). Historically, marginalised communities in the Global South have been underrepresented, and their voices are often silenced in academic discourses. This study has given a voice to people with disabilities in North-western Nigeria. Also, by utilising storytelling as a research methodology, researchers actively seek to address this power imbalance and empower individuals to share their stories. Consequently, this study can encourage others to participate in disability studies and share their experiences of living with a disability. Therefore, this approach created space for the voices of those who have traditionally been marginalised, allowing them to contribute to the research process and help to shape a more comprehensive understanding of physical disabilities. It has also enabled participants to reclaim their agency, affirm their identities, and challenge dominant narratives that may perpetuate stereotypes or misconceptions about disabilities.

Nevertheless, storytelling, as a method deeply rooted in culture, enables researchers to gain a more nuanced understanding of social phenomena from a Global South perspective (Tuwe, 2016). By immersing themselves in the stories shared by participants, researchers can discern the cultural nuances, historical trajectories, and socio-political factors that shape individuals' experiences. This method goes beyond mere data collection but fosters empathy and cultural sensitivity in the research process. It acknowledges the diversity within the Global South and recognises the role of culture in shaping individual experiences (Tuwe, 2016; McCall et al., 2019). Through a storytelling approach, this qualitative research has become a collaborative endeavour that recognises the importance of context and respects the intricacies of local knowledge.

Consequently, the utilisation of a storytelling approach in qualitative research from a Global South perspective represents a significant step towards decolonising research methodology. Traditional research methodologies have often been embedded within Western epistemologies, which may not adequately capture the complexities and diverse realities of the Global South (Tuwe, 2016). By embracing storytelling, researchers challenge the dominance of Western frameworks and open up space for diverse forms of knowledge. This approach acknowledges the agency of individuals within the research process, shifting power dynamics and fostering a more equitable and inclusive research environment, as shown in this study. By amplifying marginalised voices and embracing alternative ways of knowing, a storytelling approach contributes to dismantling colonial structures within academia. As a result, this study constitutes a step forward in the quest toward achieving this goal and aims to encourage more academics from the Global South to embrace this methodological approach.

8.3 Implications and Recommendations for Public Health Practice, Research, Policy, and Education

Even though these findings may not be directly transferable across Nigeria due to the limitations outlined in the previous section, they can still serve as a foundation for making recommendations in the fields of research, education, policy, and public health practice.

8.3.1 Education

As highlighted in the Introduction, Scoping Review, and Discussion chapters, the Nigerian educational system was not designed with consideration for PwPDs. Government schools, including primary schools, secondary schools, and higher educational institutions such as universities, are not friendly to PwDs, especially those with physical disabilities (Adeloye et al., 2018; Ijadunola et al., 2019). The inaccessibility extended to the learning environments in these government institutions, which are often unpaved, making it difficult for students using tricycles as a means of mobility to move around the grounds due to rough terrain, as discussed in the Findings chapter. This challenge was even more significant for individuals using wheelchairs and rollers as their tyres did not have enough surface area to move effectively across sandy or muddy surfaces.

Consequently, it is recommended that the government takes measures to enhance the accessibility of learning environments for PwPDs. To achieve this, classes, lecture halls, laboratories, and other facilities should be easily reachable by individuals' using wheelchairs, tricycles, and rollers. This can be achieved by removing doorsteps and making entrances flat and wide to ensure easy access. In cases where buildings need to be elevated, ramps should be incorporated, and disability-friendly entrances and exits should be provided.

By implementing these changes, the fourth goal of the SDGs can be achieved. This goal aims to create more disability-friendly learning environments and ensure that they are inclusive, provide equitable quality education and promote lifelong learning opportunities for all.

Apart from making the learning environment more accessible and disability-friendly, the government must incorporate disability courses and classes into the curriculum. The lack of education on disabilities has led to the marginalisation and exclusion of PwPDs from society. Financial challenges and inaccessibility further exacerbate this issue, causing some PwPDs to drop out of school. Consequently, some individuals resort to begging on the streets to sustain themselves and their families.

However, the disability centre where this study was conducted has taken positive steps to address these challenges. They have raised awareness about disability issues and provided job opportunities for PwPDs, resulting in a reduction in street begging among this group, as revealed in the Findings chapter.

Nevertheless, even with the efforts of the disability centre, PwPDs still face difficulties travelling and moving around their communities due to the relaxed road policies in North-western Nigeria. The prevalence of road accidents is also high among PwPDs because of the lack of designated cycle lanes for individuals using bicycles and tricycles.

To address these issues, it is recommended that the Discrimination Against Persons with Disabilities Act be properly implemented. This could significantly reduce road accidents and promote inclusivity and accessibility within society. Additionally, including disability studies in the curriculum of the educational system will provide individuals with the opportunity to learn about disabilities and gain a better understanding of the challenges faced by PwPDs. This would help people to provide better support, meet the needs of PwPDs, and dispel misconceptions and stigma surrounding disabilities. By fostering a more informed and empathetic society, this approach aligns with goal 4 of the SDGs, which aims to ensure inclusive and quality education for all.

8.3.2 Policy

Most of the challenges faced by PwPDs in Nigeria could be addressed through the implementation of effective government policies. The major challenges include inaccessibility, stigma, discrimination, unemployment, and lack of access to healthcare and educational facilities.

One of the major hurdles faced by PwPDs is inaccessibility. To overcome this challenge, the government could introduce policies that mandate the incorporation of accessibility features within public infrastructure. This includes ensuring the availability of ramps, elevators, and braille signage within transportation systems, buildings, and public spaces. By making these changes, PwPDs would have equal access to essential services and be able to access their surroundings more independently.

Furthermore, stigma and discrimination are additional barriers that PwPDs encounter, as shown in the Findings chapter. To address this, the government could implement policies that focus on promoting awareness and education about disabilities. Public campaigns, service announcements, and educational programmes can play a crucial role in reducing stigma and fostering inclusivity. By enhancing understanding and acceptance, society can shift towards a more inclusive mindset that values the rights and contributions of PwPDs.

Additionally, unemployment is a significant challenge faced by PwPDs in Nigeria. To tackle this issue, the government could introduce policies that incentivise the employment of PwPDs. This could include affirmative action programmes, financial support for businesses that hire disabled individuals, and vocational training initiatives tailored specifically to their needs. Creating opportunities and removing barriers to employment, will enable PwPDs to contribute to the workforce and achieve financial independence.

Lack of access to healthcare and educational facilities is another pressing concern. Policies addressing these challenges should ensure equitable access to healthcare services and inclusive education. Specialised clinics or facilities can be established to cater to the healthcare needs of PwPDs. Healthcare professionals could also receive disability-related training to provide appropriate and sensitive care.

In terms of education, policies could focus on making schools and educational institutions more accessible and accommodating through the provision of assistive technologies, teacher training on inclusive teaching methods, and the integration of disability studies into the curriculum. These measures would enable PwDs to access quality healthcare and receive an education that meets their specific needs. Nevertheless, the signing of the Discrimination Against Persons with Disabilities (Prohibition) Act 2018 into law by the Nigerian government in December 2019 was a positive step toward addressing these issues.

8.3.3 Public health practice

The findings of this research can be used to address some of the SDGs of the 2030 Agenda for Sustainable Development. This study could help achieve certain objectives of Goal 4, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. One of the key objectives of this goal is to build and upgrade educational facilities to be child, gender, and disability-friendly, while delivering non-violent, safe, inclusive, and effective learning environments for everyone.

The findings of this study indicated that PwPDs faced difficulties in accessing their learning environments, public transportation, and healthcare systems. This was one of the reasons why PwPDs may stop attending school and face challenges in accessing healthcare and public transportation. By making learning environments more disability-friendly and accommodating the needs of PwDs at all levels of education, Goal 4 of the 2030 SDGs could be achieved. Moreover, providing government institutions with qualified and trained teachers who are knowledgeable about the needs of PwDs could significantly improve the quality of education for this target group. Additionally, by improving the accessibility of healthcare facilities, Goal 3 of the SDGs, which aims to promote healthy lives and well-being through accessible healthcare, could be achieved.

Addressing accessibility challenges in schools would also contribute to achieving Goal 4 of the SDGs, which focuses on providing quality education and creating disability-friendly learning environments at all levels of education. Furthermore, empowering government institutions through the employment of qualified and trained teachers who understand the needs of PwDs is vital for enhancing the quality of education for this target group.

Furthermore, the findings of this research can help to achieve Goal 5 of the SDGs, namely gender equality and the empowerment of all girls and women. The women who participated in this study reported experiencing discrimination when trying to access public transportation and healthcare treatments in their communities. One of the objectives of Goal 5 is to address this inequality, which can be achieved through educational campaigns about disabilities or by empowering women through employment opportunities or providing capital to start or run businesses. By doing so, society would be encouraged to perceive them as independent individuals, rather than those who beg on the streets. Overall, this research provides valuable insights into how addressing accessibility challenges and empowering marginalised groups can contribute to achieving several SDGs, such as Goals 3, 4, and 5 of the 2030 Agenda for Sustainable Development.

This research has the potential to contribute to the attainment of Goal 11, which focuses on creating inclusive, resilient, safe, and sustainable cities and settlements. One of the key objectives of this goal is to ensure that everyone has access to affordable, safe, accessible, and sustainable transport systems. The research findings highlight the significant challenges faced by PwPDs in accessing public transportation and navigating their surroundings. Factors such as uncovered drainages, a lack of pavements, and the absence of designated roads for tricycles and bicycle users contribute to these difficulties, resulting in road accidents.

By addressing these issues and providing adequate infrastructure, including accessible transportation systems and well-designed roads, the lives of PwDs could be significantly improved. Moreover, the implementation of such measures would promote overall developmental growth in North-western Nigeria and the country as a whole. Consequently, achieving Goal 11 of the 2030 SDGs becomes a feasible objective.

8.3.4 Research

This research has contributed to an emerging area of knowledge on the lives of PLwPDs, particularly from a public health standpoint. Berger (2013) stated that researchers without any affiliation with a disability rarely studied it. Those who did study disabilities were either disabled themselves or had a family member or friend who was disabled. As a result, the study of disability or PwDs is still an emerging field due to the limited research on disability studies, particularly in the Global South. Thus, this research is among the few studies conducted in Nigeria, especially in the North-western part of the country, by someone who is physically disabled. A study focusing on the lives of PwPDs using storytelling is still emerging, and this research added to the discussion, particularly in the sense that it explored an under-studied and marginalised area: the lives of PwPDs. Additionally, this study contributed to the literature on studies that utilise the storytelling approach, showing how the storytelling approach could be used to understand the lives of PwPDs.

Everyone who participated in this research had a physical disability, and the chairman of the disability centre helped to distribute the PIS and contacted those who might be willing to participate in the study. This study was self-funded; therefore, no external funding was used, and this did not influence the findings of this research. Nevertheless, this study significantly contributed to the literature as there is a lack of published studies examining the lives of PwPDs in North-western Nigeria. It also outlined the social and environmental challenges that people with disabilities faced and how they navigated and adapted to these challenges to sustain their lives in a non-disability-friendly society.

8.3.5 Intersectionality: A reflective perspective on this research

In this research, I explored several SDGs, particularly Goals 4, 5, and 11, and examined how this research contributes to addressing these objectives. However, despite the recognition of these goals, along with other global treaties and guidelines, there remains a notable gap in adequately addressing disability as a significant facet of identity. Moreover, the existing frameworks often fail to acknowledge disability as an integral part of individuals, intertwined with their other identities such as sex, gender, and race, but instead treat it as a standalone feature (Geothals, De Schauwer, & Van Hove, 2015; Wickenden, 2023).

While earlier discussions on intersectionality primarily centred around gender and race, contemporary literature increasingly explores the experiences of individuals who identify with multiple marginalised groups, including those with non-conforming genders, sexualities, religions, ethnicities, social classes, and disabilities (Wickenden, 2023). Nevertheless, disability as a distinct identity category frequently remains overlooked within intersectionality dialogues.

However, given that this research was conducted in the global South where the concept of intersectionality is still emerging, certain aspects such as race and non-conforming gender may not be as relevant. Instead, I reflected on identities more prominent in the northern region of Nigeria, such as gender, sexuality, religion, ethnicity, social class, and impairments. It is noteworthy that non-conforming genders face significant social barriers in Nigeria, particularly in the Northern regions, due to entrenched religious and traditional beliefs that only recognise binary genders (male and female), and view any deviation as taboo and contrary to religious teachings, particularly within Islam.

With regard to other identities, women with disabilities encounter distinct perceptions and treatment compared to their non-disabled counterparts. The unequal treatment they face is not solely perpetuated by non-disabled men but also by peers without disabilities, stemming from the belief that women with disabilities are incapable of fulfilling traditional gender roles such as caregiving and household chores. This stigma is more pronounced among adult women with disabilities compared to children and adolescents, as illustrated by the narratives of Maryam, Firdausi, and Amina.

The perception of women with disabilities as incapable intersects with age, as some participants noted a decline in physical support as they grew older and their bodies changed, making it difficult for non-disabled peers to assist them, ultimately leading some to discontinue their education. This lack of support disproportionately affects women with disabilities compared to men, as highlighted in the study's findings. Conversely, men with disabilities often discontinue education due to personal life goals rather than lack of support, as observed in the accounts of Haruna, Aliyu, and Adam.

Furthermore, there exists a significant disparity between men and women regarding sexualities among the research participants. Although none explicitly mentioned sexual issues or challenges, it is evident that the discrimination and stigmatisation experienced while seeking a life partner may be related to sexuality. Previous studies (Schulze, 2010; World Health Organisation, 2015; Allen, 2015, Mustapha, 2021) have indicated that PwDs are often perceived as asexual and unattractive, leading individuals without impairments to reject their relationship proposals, as emphasised by Haruna.

Another relevant intersection in this research is social class. The study participants predominantly hail from lower- and middle-class backgrounds, implying that their experiences may not fully resonate with those from higher social strata. For example, my own schooling experience, influenced by coming from a higher social class, differed significantly from that of the participants, with distinct accessibility challenges. Therefore, from an intersectionality perspective, age and social class exert a more pronounced influence on individuals with disabilities from lower-income households compared to their counterparts from higher-income brackets.

Regarding ethnicity, while all the participants in this study belong to the Hausa ethnic group and share a common culture, conducting similar research in regions with diverse ethnic compositions, such as the Northeast where Hausa and Fulani communities coexist, may yield differing lived experiences (concerning intersectionality and sexuality).

Lastly, returning to impairments, individuals with varying forms of physical impairment may encounter distinct challenges. For instance, those with intellectual or hearing disabilities may not face discrimination to the same extent as those with visible physical disabilities. Therefore, individuals' needs and experiences are shaped by how they are perceived, with different aspects eliciting either negative or positive responses from others, particularly among wheelchair, roller, and tricycle users (Wickenden, 2023).

Moreover, Wickenden (2023) contends that intersecting inequalities have exacerbated the exclusion of PwDs, resulting in a network of effects rather than a linear progression. She suggests that if considerations of identity were straightforward, measuring and planning interventions to mitigate negative impacts would be simpler. However, complex disadvantage is deeply ingrained in attitudes and behaviours at both structural and personal levels, and prevails across cultures and economic contexts.

Furthermore, the failure of governments to acknowledge and address the specific access needs of PwDs, hindering their access to essential services such as healthcare and education, perpetuates their exclusion from community events as equal citizens. Consequently, their participation in consultations across various sectors, including education, healthcare, social protection, and employment, is often overlooked, particularly among certain age groups such as young people, children, and the elderly. Their voices are frequently absent in research and participatory activities aimed at informing policies (Geothals, De Schauwer and Van Hove, 2015; Wickenden, 2023). Consistent with Wickenden's assertion, I encountered challenges involving youth and teenagers at the centre, with a predominance of elderly and adult attendees. Emphasising the importance of hearing from teenagers and women to the centre’s chairmen was imperative, as outlined in the Methodology chapter, as failing to do so could have compromised the depth of insights gathered.

Although disability is a significant aspect of one's identity, it often gets overlooked or misunderstood. Planners sometimes fail to recognize the importance of considering the perspectives of people with disabilities, which reveals a lack of awareness about disability across various institutions, including UN bodies, international NGOs, governments at different levels, and community groups, although there have been some improvements over time. Despite advancements spurred by the UN Convention on the Rights of Persons with Disabilities (CRPD) and the increasing assertiveness of the disability rights movement, there is still a tendency to see disabled individuals as a separate group needing specialised treatment rather than fully integrating them into society.

For example, individuals with disabilities might feel excluded from gender-specific groups that don't prioritise disability issues. On the other hand, a person with a disability who also holds privileged identities such as being male, coming from a wealthy or educated background, or being a household provider, may be able to overcome the challenges posed by their disability and achieve a high social status by leveraging their other identities.

8.4 Areas for Further Research

This study generated valuable findings, and it is recommended that future studies should build on this knowledge by adopting narrative research using a storytelling approach to explore the lives of people with other forms of impairments, such as hearing, speech, and intellectual disabilities. This would provide a broader understanding of disabilities in Nigeria, particularly in the Northern part of the country. Hearing their stories, as in the case of this study, could provide a better understanding of their lives and the kind of support they require to improve them.

Other studies could also explore the lives of PwDs across the country, not just in the North-western part of Nigeria. This could aid in the establishment of public health policies and reforms that would better suit and support PwDs across the country. Additionally, this research approach could be applied across the African continent to create a better representation of PwPDs and allow their voices to be heard through their stories and experiences. This research hopes to encourage PwPDs to share their stories in the future and encourages disabled academics to pursue disability studies or focus their research on disabilities.

8.5 Dissemination of the Findings

Throughout my research journey in North-western Nigeria, I have been deeply moved by the untold stories of PwPDs. Employing a powerful storytelling approach accompanied by evocative photographs and compelling videos, I aimed to shed light on the challenges, triumphs, and resilience of this marginalised community.

The findings of my research hold profound significance, not only for academia but also for researchers in disability studies, anthropology, sociology, and regional studies. Through academic publications, I am eager to share the data, analysis, and interpretation, with the goal of fostering greater insights and understanding among fellow scholars.

Furthermore, my commitment to driving social change has led me to engage with local communities through workshops and seminars in the region. I firmly believe that empowering conversations among community members, policymakers, and advocacy groups can bridge gaps and develop much-needed support systems. The power of storytelling during these events aims to cultivate mutual understanding and empathy.

Embracing the vast reach of digital platforms, I am determined to disseminate my research globally. By utilising websites, academic databases, and social media channels, I intend to share engaging articles, photo essays, and short video snippets, thereby reaching people from diverse cultural backgrounds and enabling the lived experiences of PwPDs to resonate across Nigeria and Africa.

As I reflect on my research journey, I am motivated by the conviction that amplifying the voices of PwPDs in Nigeria, not just in the North-western part of the country, can lead to meaningful change. Through storytelling, photographs, and videos, I aspire to foster a more inclusive and compassionate society. My sincere hope is that this work will inspire greater empathy and understanding, ultimately contributing to the betterment of the lives of PwPDs, not only in the region but also in the broader context of humanity.

8.6 Chapter Summary

In this chapter, the aim of the research and the resulting findings were discussed. The

research aimed to explore the lives of PLwPDs in North-western Nigeria, with a specific focus on how they navigate their daily lives, sustain themselves, utilise available resources, and foster relationships within their local communities and societies. This aim was achieved, as the findings revealed that PwPDs face several challenges within their societies.
Despite these challenges, they are resourceful in adapting to their environment. The findings also revealed that PwPDs are collaborative and willing to support each other to sustain and take care of their needs, as well as those of their loved ones. The findings suggest that with adequate support from the government, their lives and those of their families could significantly improve. However, the lack of proper support from the government has hampered their personal and community growth. The implications of these findings for public health practice, research, education, and policy have been communicated, along with recommendations for future areas of study.

Reference List

Abdu, L., Withers, J., Habib, A.G., Mijinyawa, M.S. and Yusef, S.M., 2013. Disease pattern and social needs of street people in the racecourse area of Kano, Nigeria. *Journal of Health Care for the Poor and Underserved*, 24(1), pp.97–105. https://doi.org/10.1353/hpu.2013.0010.

Abdulraheem, I.S., Oladipo, A.R. and Amodu, M.O., 2011. Prevalence and correlates of physical disability and functional limitation among elderly rural population in Nigeria. *Journal of Aging Research*, 2011. https://doi.org/10.4061/2011/369894.

Adeloye, D., David, R.A., Olaogun, A.A., Auta, A., Adesokan, A., Gadanya, M., Opele, J.K., Owagbemi, O. and Iseolorunkanmi, A., 2017. Health workforce and governance: The crisis in Nigeria. *Human Resources for Health*, 15(1). https://doi.org/10.1186/s12960-017-0205-4.

Adeloye, D., David, R.A., Olaogun, A.A., Auta, A., Adesokan, A., Gadanya, M., Opele, J.K., Owagbemi, O., Iseolorunkanmi, A., Kurawa, S.S., Miller, T., Kim, A.B., Roberts, J.M., Lucia, S., Renne, E., Miller, T., Kim, A.B., Roberts, J.M., Tyrrell, P., Attah, N.E., Sango, P.N., Ijadunola, M.Y., Ojo, T.O., Akintan, F.O., Adeyemo, A.O., Afolayan, A.S., Akanji, O.G., Biermann, J., Powell, J.J.W., Kerkeni, L., Ruano, P., Delgado, L.L., Picco, S., Villegas, L., Tonelli, F., Merlo, M., Rigau, J., Diaz, D., Masuelli, M., Akanji, B.O., Ogunniyi, A., Baiyewu, O., Archibong, B., ไทรทับทิม, ส., United Nations Development Programme, Survey, H., World meters, Birchall, J., Charles, O.O., GLORIA, I.C., Sumaila, F.G., Abdullahi, H., Shittu, A., Ofojebe, W.N., Ezugoh, C., Smith, N., Haruna, M., Nwakeze, N.M., Kandala, N.B., Fafunwa, A.B., Fafunwa, A.B., McKenzie, J., Ohajunwa, C.O., Nigeria Stability and Reconciliation Programme (NSRP) and World Health Organization, 2018. Disability and Well-Being in Northern Nigeria. *Tizard Learning Disability Review*, [online] 22(2), pp.39–59. https://doi.org/https://doi.org/10.1016/j.sbspro.2010.07.368.

Adhikari, A., 2020. *Marriage and Persons with Disabilities-Current Trends and Reflections*. [online] *RISS Journal Randwick International of Social Science (RISS) Journal*, Available at: <http://www.randwickresearch.com/index.php/rissj-53->.

Ahmed, A., Al-Cheikh, Z., Awad, M. and Adam, M., 2014. DISABLING CAMPUSES: THE DEVELOPMENT AND OUTCOMES OF NIGERIAN DISABILITY POLICIES. *OIDA International Journal of Sustainable Development*, [online] 07(10), pp.73–84. Available at: <http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html>.

Ahmed, S. and Ahmed, T.Z.M., 2014. Qualitative Research: A Decisive Element to Epistemological & Ontological Discourse. 8(2), pp.298–313.

Aiyedun, O. and Jacob, O.N., 2021. Shortage of Professional Science and Environmental Education Teachers in Nigeria. *Asian Journal of Science Education*, [online] 3(1), pp.1–11. Available at: <https://ssrn.com/abstract=3927784>.

Akanji, B.O., Ogunniyi, A. and Baiyewu, O., 2002. *Healthcare for Older Persons, A Country Profile: Nigeria*.

Akhidenor, C., 2007. Nigerians' attitudes toward people with disabilities.

Akinrolie, O., Okoh, A.C. and Kalu, M.E., 2020. Intergenerational Support between Older Adults and Adult Children in Nigeria: The Role of Reciprocity. *Journal of Gerontological Social Work*, 63(5), pp.478–498. https://doi.org/10.1080/01634372.2020.1768459.

Akinsanya, A. and Bach, C., 2014. *Narrative analysis: The Personal Experience Narrative approach*.

Almu, B., Adesina, M. and Kanmodi, K., 2019. Northern Nigeria: An overview.

Aluede, R.O.A., 2006. Educational Development in Nigeria: How Far can it be Managed to Incorporate The Rural Areas? *Studies of Tribes and Tribals*, 4(2), pp.113–115. https://doi.org/10.1080/0972639x.2006.11886543.

Amadi, C. and Tsui, E.K., 2019. How the quality of essential medicines is perceived and maintained through the pharmaceutical supply chain: A perspective from stakeholders in Nigeria. *Research in Social and Administrative Pharmacy*, [online] 15(11), pp.1344–1357. https://doi.org/10.1016/j.sapharm.2018.11.011.

Amaghionyeodiwe, L.A., and Osinubi, T.S., 2006. *THE NIGERIAN EDUCATIONAL SYSTEM.*

Amponsah-Bediako, K., 2013. Relevance of disability models from the perspective of a developing country: An analysis. *Developing Country studies*, [online] 3(11), pp.121–133. Available at: <www.iiste.org>.

Archibong, B., 2018. Historical origins of persistent inequality in nigeria. *Oxford Development Studies*, 46(3), pp.325–347. https://doi.org/10.1080/13600818.2017.1416072.

Arksey, H. and O'Malley, L., 2005. Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory and Practice*, 8(1), pp.19–32. https://doi.org/10.1080/1364557032000119616.

Arsel, Z., 2017. Asking questions with reflexive focus: Atutorial on designing and conducting interviews. *Journal of Consumer Research*, 44(4), pp.939–948. https://doi.org/10.1093/jcr/ucx096.

Asakitikpi, A.E., 2019. *Healthcare Coverage and Affordability in Nigeria: An Alternative Model to Equitable Healthcare Delivery*. [online] Available at: <www.intechopen.com>.

Awojobi, O.N., 2014. Poverty and Insecurity in Nigerian Democratic Dispensation. *International Journal of Innovative Research & Development*, 3(6), pp.357–365.

Azungah, T., 2018. Qualitative research: deductive and inductive approaches to data analysis. *Qualitative Research Journal*, 18(4), pp.383–400. https://doi.org/10.1108/QRJ-D-18-00035.

Bailey, J., 2008. First steps in qualitative data analysis: Transcribing. *Family Practice*, 25(2), pp.127–131. https://doi.org/10.1093/fampra/cmn003.

Baker, M., 2017. Narrative analysis and translation. pp.179–193.

Balarabe, A., 2014. Contribution of corneal blindness to visual disability among street blind beggars in a local government area of a state in Northern Nigeria. *Sahel Medical Journal*, 17(4), p.136. https://doi.org/10.4103/1118-8561.146818.

Barnes, C. and Mercer, G. (Geoffrey), 2003. *Disability*. Polity Press.

Barnes, C. and Mercer, G. (Geoffrey), 2010. *Exploring disability : a sociological introduction*. Polity Press.

Basil, M., 2011. *Use of photography and video in observational research*. *Qualitative Market Research: An International Journal*, https://doi.org/10.1108/13522751111137488.

Bennett, J., 2017. Blessed silence: Explorations in Christian contemplation and hearing loss. *Journal of Moral Theology*, 6(2), pp.138–157.

Bennett, J.M. and Volpe, M.A., 2018. *Models of Disability from Religious Tradition: Introductory Editorial*. *Journal of Disability and Religion*, https://doi.org/10.1080/23312521.2018.1482134.

Berger, R.J., 2013. *Introducing Disability Studies*. Boulder, Colo: Lynne Rienner Publishers.

Berghs, M., Atkin, K., Graham, H., Hatton, C. and Thomas, C., 2016. Implications for public health research of models and theories of disability: a scoping study and evidence synthesis. *Public Health Research*, 4(8), pp.1–166. https://doi.org/10.3310/phr04080.

Berghs, M., Atkin, K., Hatton, C. and Thomas, C., 2019a. Do disabled people need a stronger social model: a social model of human rights? *Disability and Society*, 34(7–8), pp.1034–1039. https://doi.org/10.1080/09687599.2019.1619239.

Berghs, M., Atkin, K., Hatton, C. and Thomas, C., 2019b. Rights to social determinants of flourishing? A paradigm for disability and public health research and policy. *BMC public health*, 19(1), p.997. https://doi.org/10.1186/s12889-019-7334-8.

Berros, J.B., 2012. The integration of the psycho-narrative paradigm in the theory of Organizational Communication. *Journal of Organisational Transformation & Social Change*, 9(3), pp.227–246. https://doi.org/10.1386/jots.9.3.227_1.

Betcher, S. V. and Wangila, M.N., 2016. Religion After the Medical Miracle: Recovering “Disability” as Religious Analytic of Social Suffering. In: *Disability in the Global South*. Springer International Publishing. pp.117–129. https://doi.org/10.1007/978-3-319-42488-0_8.

Bombom, L.S. and Abdullahi, I., 2016. Travel patterns and challenges of physically disabled persons in Nigeria. *GeoJournal*, [online] 81(4), pp.519–533. https://doi.org/10.1007/s10708-015-9629-3.

Brydges, C. and Mkandawire, P., 2017. Perceptions and Concerns about Inclusive Education among Students with Visual Impairments in Lagos, Nigeria. *International Journal of Disability, Development and Education*, [online] 64(2), pp.211–225. https://doi.org/10.1080/1034912X.2016.1183768.

Burman, E., Greenstein, A. and Kumar, M., 2015. Editorial: Frames and debates for disability, childhood and the global South: Introducing the Special Issue. *OPEN ACCESS*, [online] 2(2), pp.563–569. Available at: <www.dgsjournal.org>.

Butina, M., 2015. *NO 3 SUMMER 2015 CLINICAL LABORATORY SCIENCE 190*. [online] *Clin Lab Sci*, Available at: <http://hwmaint.clsjournal.ascls.org/>.

CASP tool, 2019. *CASP Checklists*. https://casp-uk.net/casp-tools-checklists.

Centre for Disease Control, 2020. *Public Health Guidance for Safe School Re-opening in Nigeria*. Abuja.

Charles, O.O. and Chinaza, N.K., 2018. Physical Activity Qualitative Study. *Palaestra*, 32(3), pp.21–27.

Cope, D.G., 2014. The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5).

Cramm, J.M., Nieboer, A.P., Finkenflügel, H. and Lorenzo, T., 2013. Comparison of barriers to employment among youth with and without disabilities in South Africa. *Work*, 46(1), pp.19–24. https://doi.org/10.3233/WOR-121521.

Creswell, J.W., 2014. *Research design: qualitative, quantitative, and mixed methods approaches*. Fourth ed. Thousand Oaks, CA: SAGE.

Creswell, J.W. and Creswell, J.D., 2018. *Research design: qualitative, quantitative, and mixed methods approaches*. fifth ed. Thousand Oaks, California: SAGE Publications, Inc.

Creswell, J.W., Hanson, W.E., Clark Plano, V.L. and Morales, A., 2007. Qualitative Research Designs: Selection and Implementation. *The Counseling Psychologist*, 35(2), pp.236–264. https://doi.org/10.1177/0011000006287390.

Daniel, B.K., 2019. Using the TACT framework to learn the principles of rigour in qualitative research. *Electronic Journal of Business Research Methods*, 17(3), pp.118–129. https://doi.org/10.34190/JBRM.17.3.002.

Daudt, H.M.L., Van Mossel, C. and Scott, S.J., 2013. Enhancing the scoping study methodology: A large, inter-professional team's experience with Arksey and O'Malley's framework. *BMC Medical Research Methodology*, 13(1), pp.1–9. https://doi.org/10.1186/1471-2288-13-48.

De-Gialdino, V.I., 2011. *Ontological and Epistemological Foundations of Qualitative Research*. [online] Available at: <http://www.qualitative-research.net/>.

DesRoches, C.M., 2020. Healthcare in the new age of transparency. *Seminars in Dialysis*, 33(6), pp.533–538. https://doi.org/10.1111/sdi.12934.

Dirth, T.P. and Branscombe, N.R., 2017. Disability Models Affect Disability Policy Support through Awareness of Structural Discrimination. *Journal of Social Issues*, 73(2), pp.413–442. https://doi.org/10.1111/josi.12224.

Disability Data Initiative, 2022. *Prevalence of Functional Difficulties*.

Disability World, 2020. *The Models of Disability Biomedical Model of Health Medical Model of Disability*. [online] Available at: <https://www.disabled-world.com/definitions/disability-models.php>.

Drum Cussac, 2021. *Covid-19 risk in Nigeria*.

Edosomwan, S. and Peterson, C.M., 2016. *A HISTORY OF ORAL AND WRITTEN STORYTELLING IN NIGERIA*.

Elabor-Idemudia, P., 2002. Participatory research: A tool in the production of knowledge in development discourse. *Feminist post-development thought: Rethinking modernity, post-colonialism and representation*, pp.227–242.

Etherington, K., 2004. Becoming a reflexive researcher. *Counselling and Psychotherapy research*, 4(2), pp.46–47.

Etieyibo, E. and Omiegbe, O., 2016. Religion, culture, and discrimination against persons with disabilities in Nigeria. *African journal of disability*, [online] 5(1), p.192. https://doi.org/10.4102/ajod.v5i1.192.

Fafunwa, A.B. and Fafunwa, A.B., 2018. The Nigerian Educational System. *History of Education in Nigeria*, 3, pp.182–206. https://doi.org/10.4324/9780429454905-7.

Fatien, D.P. and Nizet, J., 2019. Ethics as a Fabric: An Emotional Reflexive Sensemaking Process. *Business Ethics Quarterly*, 29(4), pp.461–489. https://doi.org/10.1017/beq.2019.11.

Federal Ministry of Budget and National Planning, 2020. 2020 Budget Analysis and Opportunities. [online] p.42. Available at: <www.yourbudgit.com>.

Federal Republic of Nigeria, 2019. *Discrimination Against People with Disabilities (Prohibition) Act 2018 Expanarory Memorandom*. [online] Available at: <https://afri-can.org/wp-content/uploads/2019/08/Nigeria.pdf> [Accessed 30 June 2023].

Federal Road Safety Corps, 2021. *Number of road traffic accidents in Nigeria as of Q4 2021*.

Frith, H. and Harcourt, D., 2007. Using photographs to capture women's experiences of chemotherapy: reflecting on the method. *Qual Health Res*, 17(10).

Gilbert, K.R., 2001. Introduction: Why Are We Interested in Emotions? . *The Emotional Nature of Qualitative Research*, pp.3–16.

Given, L., 2012. *The SAGE Encyclopedia of Qualitative Research Methods*. *The SAGE Encyclopedia of Qualitative Research Methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781412963909.

Gov.uk, 2020. *Actions for schools during the coronavirus outbreak*. United Kingdom government.

Halai, N., 2007. *Making Use of Bilingual Interview Data: Some Experiences from the Field*. [online] *The Qualitative Report*, Available at: <http://www.nova.edu/ssss/QR/QR12-3/halai.pdf>.

Harper, D. and Thompson, A.R., 2011. *Qualitative Research Methods in Mental Health and Psychotherapy: A Guide for Students and Practitioners*. *Qualitative Research Methods in Mental Health and Psychotherapy: A Guide for Students and Practitioners*. John Wiley and Sons. https://doi.org/10.1002/9781119973249.

Harper, M. and Cole, P., 2012. *Member Checking: Can Benefits Be Gained Similar to Group Therapy?* [online] Available at: <http://nsuworks.nova.edu/tqr/vol17/iss2/1>.

Haruna, M., 2017. The problems of living with disability in Nigeria. *Journal of Law, Policy and Globalization*, [online] 65, pp.103–113. Available at: <http://www.iiste.org/Journals/index.php/JLPG/article/view/39027/40128>.

Heath, C., Hindmarsh, J. and Luff, P., 2017. *Video in Qualitative Research: Analysing Social Interaction in Everyday Life*. *Video in Qualitative Research: Analysing Social Interaction in Everyday Life*. SAGE Publications, Inc. https://doi.org/10.4135/9781526435385.

Higgins, J.P.T. and Thomas, J., 2019. *Cochrane Handbook for Systematic Reviews of Interventions*. [online] Newark, UNITED KINGDOM: John Wiley & Sons, Incorporated. Available at: <http://ebookcentral.proquest.com/lib/anglia/detail.action?docID=5906330>.

Holland and Rees, 2016. *Frameworks for critiquing research articles*. Oxford University Press.

Human Rights Watch, 2019. *Nigeria Passes Disability Rights Law*. Nigeria.

Ibrahim, N. and Edgley, A., 2015. *Embedding Researcher's Reflexive Accounts within the Analysis of a Semi-Structured Qualitative Interview*. *The Qualitative Report*, .

Ijadunola, M.Y., Ojo, T.O., Akintan, F.O., Adeyemo, A.O., Afolayan, A.S. and Akanji, O.G., 2019. Engendering a conducive environment for university students with physical disabilities: assessing availability of assistive facilities in Nigeria. *Disability and Rehabilitation: Assistive Technology*, [online] 14(4), pp.354–360. https://doi.org/10.1080/17483107.2018.1449017.

Institute of Development Studies, 2020. *Nigeria Situational Analysis*. [online] Available at: <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/15561/DID%20SITAN%20Nigeria%20V2%20July%202020.pdf?sequence=1&isAllowed=y#:~:text=Unemployment%20rates%20of%20adults%20were,compared%20to%20males%20without%20disability.https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/15561/DID%20SITAN%20Nigeria%20V2%20July%202020.pdf?sequence=1&isAllowed=y#:~:text=Unemployment%20rates%20of%20adults%20were,compared%20to%20males%20without%20disability.> [Accessed 27 June 2023].

Janghorban, R., Roudsari, R.L. and Taghipour, A., 2013. Pilot Study in Qualitative Research: The Roles and Values. *Journal of School of Nursing and Midwifery*, 19(4).

Jennings, D., Cormack, S., Coutts, A.J., Boyd, L. and Aughey, R.J., 2010. *The Validity and Reliability of GPS Units for Measuring Distance in Team Sport Specific Running Patterns*. *International Journal of Sports Physiology and Performance*, .

Jewitt, C., 2012. *An Introduction to Using Video for Research*.

Johnstone, B., 2016. 'Oral versions of personal experience': Labovian narrative analysis and its uptake. *Journal of Sociolinguistics*, 20(4), pp.542–560. https://doi.org/10.1111/josl.12192.

Kano State Ministry of Education, 2019. *KANO STATE FEDERAL REPUBLIC OF NIGERIA REVISED EDUCATION STRATEGIC PLAN (ESP*. Kano .

Kellas, J.K., 2014. Narrative Theories: Making Sense of Interpersonal Communication. In: *Engaging Theories in Interpersonal Communication: Multiple Perspectives*. SAGE Publications, Inc. pp.241–254. https://doi.org/10.4135/9781483329529.n18.

Kelly, S.M., Ajuwon, P.M. and Wolffe, K.E., 2015. The recreation and leisure pursuits of employed adults with visual impairments in Nigeria: Part 1. *Journal of Visual Impairment and Blindness*, 109(1), pp.19–30. https://doi.org/10.1177/0145482x1510900104.

Knoblauch, H., 2012. Introduction to the special issue of Qualitative Research: Video-analysis and videography. *Qualitative Research*, 12(3), pp.251–254. https://doi.org/10.1177/1468794111436144.

Kuokkanen, R., 2000. *TOWARDS AN 'INDIGENOUS PARADIGM' FROM A SAMI PERSPECTIVE*. *The Canadian Journal of Native Studies XX*, .

Larkin, V., Pearson, P. and Aarvold, J., 2013. *Encounters in the field, challenges and negotiations in midwifery research*. *Evidence Based Midwifery*, .

Lather, P., 2016. Top ten+ list: (Re)thinking ontology in (post)qualitative research. *Cultural Studies - Critical Methodologies*, 16(2), pp.125–131. https://doi.org/10.1177/1532708616634734.

Lear, H., Eboh, W. and Diack, L., 2018. *A nurse researcher's guide to reflexive interviewing*. *Nurse Researcher*, https://doi.org/10.7748/nr.2018.e1550.

Lee, C.J.G., 2012. Reconsidering Constructivism in Qualitative Research. *Educational Philosophy and Theory*, 44(4), pp.403–412. https://doi.org/10.1111/j.1469-5812.2010.00720.x.

Levac, D., Colquhoun, H. and O'Brien, K.K., 2010. Scoping studies: Advancing the methodology. *Implementation Science*, 5(1), pp.1–9. https://doi.org/10.1186/1748-5908-5-69.

Lewis, P.J., 2011. Storytelling as research/research as storytelling. *Qualitative Inquiry*, 17(6), pp.505–510. https://doi.org/10.1177/1077800411409883.

Liberati, A., Altman, D.G., Tetzlaff, J., Mulrow, C., Gøtzsche, P.C., Ioannidis, J.P.A., Clarke, M., Devereaux, P.J., Kleijnen, J. and Moher, D., 2009. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: explanation and elaboration. *BMJ (Clinical research ed.)*, 339. https://doi.org/10.1136/bmj.b2700.

Lincoln, Y.S., Lynham, S.A. and Guba, E.G., 2011. *PARADIGMATIC CONTROVERSIES/ CONTRADICTIONS/ AND EMERGING CONFLUENCES*.

Malmqvist, J., Hellberg, K., Möllås, G., Rose, R. and Shevlin, M., 2019. Conducting the Pilot Study: A Neglected Part of the Research Process? Methodological Findings Supporting the Importance of Piloting in Qualitative Research Studies. *International Journal of Qualitative Methods*, 18. https://doi.org/10.1177/1609406919878341.

Mann, S., 2016. *The Research Interview Reflective Practice and Reflexivity in Research Processes*.

Marks, D., 1997. *Models of disability. Disability and Rehabilitation*, https://doi.org/10.3109/09638289709166831.

Mason, M., 2010. Sample Size and Saturation in PhD Studies Using Qualitative Interviews [63 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 13(3).

Mayah, E., Mariotti, C., Mere, E. and Okwudili Odo, C., 2017. *Inequality in Nigeria: Exploring the drivers*. [online] Available at: <www.oxfam.org>.

McCall, B., Shallcross, L., Wilson, M., Fuller, C. and Hayward, A., 2019. Storytelling as a research tool and intervention around public health perceptions and behaviour: A protocol for a systematic narrative review. *BMJ Open*, 9(12). https://doi.org/10.1136/bmjopen-2019-030597.

McCambridge, J., Witton, J. and Elbourne, D.R., 2014. *Systematic review of the Hawthorne effect: New concepts are needed to study research participation effects*. *Journal of Clinical Epidemiology*, https://doi.org/10.1016/j.jclinepi.2013.08.015.

McKenzie, J. and Ohajunwa, C., 2017. Understanding disability in Nigeria: A commentary on ‘country profile: Intellectual and developmental disability in Nigeria’. *Tizard Learning Disability Review*, 22, pp.94–98. https://doi.org/10.1108/TLDR-02-2017-0008.

Miles, B.W. and Hernandez, D.M.J., 2019. *The Handbook of Social Work Research Methods*. *The Handbook of Social Work Research Methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781544364902.

Mitchell, S., 2018. Open wounds: visible physical disability and its meaning for the group and society. *Group Analysis*, 51(4), pp.487–499. https://doi.org/10.1177/0533316418767193.

Morse, J.M., Barrett, M., Mayan, M., Olson, K. and Spiers, J., 2002. *Verification Strategies for Establishing Reliability and Validity in Qualitative Research*. *International Journal of Qualitative Methods*, .

Morse, J.M. and Cheek, J., 2014. Making room for qualitatively-driven mixed-method research. *Qualitative Health Research*, 24(1), pp.3–5. https://doi.org/10.1177/1049732313513656.

Motulsky, S.L., 2021. Is Member Checking the Gold Standard of Quality in Qualitative Research? *Qualitative Psychology*, 8(3), pp.389–406. https://doi.org/10.1037/qup0000215.

Mubaraq, Z., Kurniawan, F., Bahruddin, U., Lailatus Sholihah, S. and at UIN Maulana Malik Ibrahim Malang Indonesia, L., 2021. *Model Of Disability Learning in Islamic Education at Inclusive School Malang, Indonesia*. *Turkish Journal of Computer and Mathematics Education*, .

Mugumbate, J., 2020. BABA JAIROS JIRI’S UBUNTU MODELS OF CHARITY, DISABILITY AND REHABILITATION. *Special issue on Ubuntu MUGUMBATE*, 10(1), p.2020.

Munn, Z., Peters, M.D.J., Stern, C., Tufanaru, C., McArthur, A. and 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), pp.1–7. https://doi.org/10.1186/s12874-018-0611-x.

Murray, M., 2000. Levels of narrative analysis in health psychology. In: *Journal of Health Psychology*. SAGE Publications Ltd. pp.337–347. https://doi.org/10.1177/135910530000500305.

Nel, K., Rankoana, S.A., Govender, I., Mothibi, K. and Moloantoa, M., 2015. The challenges experienced by students with a physical disability (SWPD) at a higher education institution in South Africa The challenges experienced by students with a physical disability (SWPD) at a higher education institution in South Africa. *African Journal*, 2015(December), pp.801–811.

Niemelä, M. and Rauniomaa, M., 2010. Mobilizing (Re)tellings of a Story to Accomplish Multiple Social Actions. *SKY Journal of Linguistics*, 23, pp.227–264.

Nigeria Country report, 2018. *Nigeria Country Report June 2018 Governance and Current Affairs*. [online] Available at: <http://statisticstimes.com/geography/african->.

Nwokorie, O. V. and Devlieger, P.J., 2019. 'We only got Coca-Cola': Disability and the paradox of (dis)empowerment in Southeast Nigeria. *African Journal of Disability*, 8, pp.1–13. https://doi.org/10.4102/ajod.v8i0.444.

Nyangweso, M., 2019. Disability in Africa : A Cultural / Religious Perspective. (October).

Odia, L.O. and Omofonmwan, S.I., 2007. Educational System in Nigeria Problems and Prospects. *Journal of Social Sciences*, 14(1), pp.86–85. https://doi.org/10.1080/09718923.2007.11978347.

Ogaji, D., 2015. *The Nigerian Health Care System: Evolution, contradictions, and proposal for future debates*. [online] Available at: <https://www.researchgate.net/publication/306315335>.

Ogu, O.C., Umunnah, J.O. and Nwosu, K.C., 2016. Disability Types, Self-Efficacy, and Attitude To Participate in Physical Activity in Children With Disabilities: a Pilot Study. *Palaestra*, [online] 30(4), pp.25–32. Available at: <http://ezproxy.lib.utexas.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=120591176&site=ehost-live>.

Oladunni, B., Lyoka, P.A. and Goon, D.T., 2015. Perceived motivational factors influencing students with disabilities towards sports participation in Amathole district, Eastern Cape Province, South Africa. *African Journal for Physical, Health Education, Recreation & Dance*, [online] 21(4:2), pp.1389–1401. Available at: <http://libezproxy.syr.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=s3h&AN=119182794&site=ehost-live>.

Oladunni, T.M., 2012. Sexual behavior and practices among adolescents with disabilities in Southwest Nigeria. *Sexuality and Disability*, 30(3), pp.289–299. https://doi.org/10.1007/s11195-012-9270-8.

Oliver, M., 2013. The social model of disability: Thirty years on. *Disability and Society*, 28(7), pp.1024–1026. https://doi.org/10.1080/09687599.2013.818773.

Olutuase, V.O., Iwu-Jaja, C.J., Akuoko, C.P., Adewuyi, E.O. and Khanal, V., 2022. Medicines and vaccines supply chains challenges in Nigeria: a scoping review. *BMC Public Health*, [online] 22(1), pp.1–15. https://doi.org/10.1186/s12889-021-12361-9.

Omolola, I. and Abdulateef, Y.K., 2020. IMPROVING THE QUALITY OF LIFE OF THE PHYSICALLY CHALLENGED PERSONS THROUGH SPORTS PARTICIPATION. *AL-HIKMAH JOURNAL OF EDUCATION*, 7(2).

Omona, J., 2013. Sampling in Qualitative Research: Improving the Quality of Research Outcomes in Higher Education. *Makerere Journal of Higher Education*, 4(2). https://doi.org/10.4314/majohe.v4i2.4.

Omuta, G.E.D. and Onokerhoraye, A.G., 2015. *CPED Monograph Series 12 GOVERNANCE CHALLENGES IN PRIMARY HEALTH CARE DELIVERY IN DELTA STATE, NIGERIA: AN ASSESSMENT OF COMMUNITY PARTICIPATION*. [online] Available at: <www.cpedng.org>.

Onokerhoraye, A.G. and Omuta, G.E.D., 2014. *KNOWLEDGE TRANSFER AND KNOWLEDGE BROKERAGE FOR POLICY MAKING ON HEALTH CARE IN NIGERIA: The Example of the Primary Health Care Project in Delta State*. *CPED Policy Paper Series*, .

Orlin, M.N., Cicirello, N.A., O'Donnell, A.E. and Doty, A.K., 2014. The continuum of care for individuals with lifelong disabilities: Role of the physical therapist. *Physical Therapy*, 94(7), pp.1043–1053. https://doi.org/10.2522/ptj.20130168.

Özyildirim, I., 2009. Narrative analysis: An analysis of oral and written strategies in personal experience narratives. *Journal of Pragmatics*, 41(6), pp.1209–1222. https://doi.org/10.1016/j.pragma.2009.01.003.

Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N. and Hoagwood, K., 2015. Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), pp.533–544. https://doi.org/10.1007/s10488-013-0528-y.

Patterson, W., 2011. *Doing Narrative Research*. *Doing Narrative Research*. SAGE Publications, Ltd. https://doi.org/10.4135/9780857024992.

Pessoa, A.S.G., Harper, E., Santos, I.S. and Gracino, M.C. da S., 2019. Using Reflexive Interviewing to Foster Deep Understanding of Research Participants' Perspectives. *International Journal of Qualitative Methods*, 18. https://doi.org/10.1177/1609406918825026.

Pierri, Z. and Barkindo, atta, 2016. Muslims in Northern Nigeria: Between Challenge and Opportunity. In: *Muslim Minority-State Relations*. pp.133–153.

Polkinghorne, D.E., 1995. Narrative configuration in qualitative analysis. *International Journal of Qualitative Studies in Education*, 8(1), pp.5–23. https://doi.org/10.1080/0951839950080103.

Ramirez, D.Z.M., Nakandi, B., Ssekitoleko, R., Ackers, L., Mwaka, E., Kenney, L., Holloway, C. and Donovan-Hall, M., 2022. The lived experience of people with upper limb absence living in Uganda: A qualitative study. *African Journal of Disability*, 11. https://doi.org/10.4102/ajod.v11i0.890.

Retief, M. and Letšosa, R., 2018. Models of disability: A brief overview. *HTS Teologiese Studies / Theological Studies*, 74(1). https://doi.org/10.4102/hts.v74i1.4738.

Riessman, K.C., 2005. *Narrative Analysis*.

Riley, R.G. and Manias, E., 2004. The Uses of Photography in Clinical Nursing Practice and Research: A Literature Review. *Journal of Advanced Nursing*, 48, pp.397–405.

Roberts, K.G., 2004. Texturing the narrative paradigm: Folklore and communication. *Communication Quarterly*, 52(2), pp.129–142. https://doi.org/10.1080/01463370409370186.

Rosa, M.M. and Varalakshmi, V., 2020. *Social inclusion of persons with disabilities in Nigeria: Challenges and opportunities*. World Bank.

Rowland, R.C., 1987. Narrative: Mode of discourse or paradigm? *Communication Monographs*, 54(3), pp.264–275. https://doi.org/10.1080/03637758709390232.

Rubin, H.J. and Rubin, I.S., 2005. *Qualitative Interviewing: The Art of Hearing Data* . 2nd ed. Thousand Oaks: SAGE.

Rubisch, M., Reinalter, A., Miller-Fahringer, K. and Bednar, M., 2016. *National Action Plan on Disability 2012 – 2020*.

Sabo, A., Umar, M.S. and Nasiru, A., 2019. Academic Staff Salaries and Academic Union Struggles: Historical Evidence from Nigeria. *International Journal of Economics and Management Studies*, 6(6), pp.97–101. https://doi.org/10.14445/23939125/ijems-v6i6p115.

Sango, P.N., 2017. Country profile: Intellectual and developmental disability in Nigeria. *Tizard Learning Disability Review*, 22(2), pp.87–93. https://doi.org/10.1108/TLDR-07-2016-0019.

Sedgwick, P. and Greenwood, N., 2015. *Understanding the hawthorne effect. BMJ (Online)*, https://doi.org/10.1136/bmj.h4672.

Shakespeare, T., 2004. Social models of disability and other life strategies. *Scandinavian Journal of Disability Research*, 6(1), pp.8–21. https://doi.org/10.1080/15017410409512636.

Shakespeare, T., 2007. *Disability rights and wrongs.* New York, NY: Routledge.

Shakespeare, T. and Officer, A., 2011. World report on disability. *Disability and rehabilitation*, [online] 33(17–18), p.1491. https://doi.org/10.3109/09638288.2011.590392.

Shenton, A.K., 2004. *Strategies for ensuring trustworthiness in qualitative research projects*. *Education for Information*, IOS Press.

Silverman, D., 2001. *Interpreting qualitative data methods for analyzing talk, text and interaction*. Thousand Oaks, California: Sage publications Inc.

Slevitch, L., 2011. Qualitative and quantitative methodologies compared: Ontological and epistemological perspectives. *Journal of Quality Assurance in Hospitality and Tourism*, 12(1), pp.73–81. https://doi.org/10.1080/1528008X.2011.541810.

Smith, N., 2011. The face of disability in Nigeria: A disability survey in Kogi and Niger states. *Asia Pacific Disability Rehabilitation Journal*, 22(1), pp.35–47. https://doi.org/10.5463/DCID.v22i1.11.

Smythe, T., Mabhena, T., Murahwi, S., Kujinga, T., Kuper, H. and Rusakaniko, S., 2022. A path toward disability-inclusive health in Zimbabwe Part 1: A qualitative study on access to healthcare. *African Journal of Disability*, 11. https://doi.org/10.4102/AJOD.V11I0.990.

Spector-Mersel, G., 2010. Narrative research. *Narrative Inquiry*, 20(1), pp.204–224. https://doi.org/10.1075/ni.20.1.10spe.

Spencer, S., 2011. *Visual research methods in social sciences: Awakening visions*. 1st ed. London: Routledge, Taylor and Francis Group.

Stanczak, G.C., 2007. *Visual research methods: Images, society and interpretation*. 1st ed. London: SAGE.

Swartz, L. and Bantjes, J., 2016. Disability and Global Health. In: *Disability in the Global South*. Springer International Publishing. pp.21–33. https://doi.org/10.1007/978-3-319-42488-0_2.

Tariq, S. and Woodman, J., 2013. Using mixed methods in health research. *JRSM Short Reports*, 4(6), p.204253331347919. https://doi.org/10.1177/2042533313479197.

The Federal Republic of Nigeria, 2019. *Demographic and Health Survey*. [online] Available at: <www.DHSprogram.com.>.

Thoha, N., 2009. Investigating the Transcription and Translation's issues for an Australian PhD Conducting Interview in Bahasa Indonesia. 8(2).

Thomas, D.R., 2017. Feedback from research participants: are member checks useful in qualitative research? *Qualitative Research in Psychology*, 14(1), pp.23–41. https://doi.org/10.1080/14780887.2016.1219435.

Thyer, B.A., 2019. *The Handbook of Social Work Research Methods*. *The Handbook of Social Work Research Methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781544364902.

Tshaka, B., Visagie, S. and Ned, L.Y., 2023. African Journal of Disability. [online] https://doi.org/10.4102/ajod.

Turner, D.M., 2012. *Disability in Eighteenth-Century England : Imagining Physical Impairment*. [online] London, UNITED KINGDOM: Taylor & Francis Group. Available at: <http://ebookcentral.proquest.com/lib/anglia/detail.action?docID=1016183>.

Tuwe, K., 2016. *African Studies Association of Australasia and the Pacific (AFSAAP) The African Oral Tradition Paradigm of Storytelling as a Methodological Framework: Employment Experiences for African communities in New Zealand*.

Ubochi, N.E., Ehwarieme, T.A., Anarado, A.N. and Oyibocha, E.O., 2019. Building a strong and sustainable health care system in Nigeria: The role of the nurse. *International Journal of Nursing and Midwifery*, 11(7), pp.61–67. https://doi.org/10.5897/ijnm2019.0374.

UNICEF, 2022. *Education*. UNICEF for every child.

United Nations, 2022. *INTRODUCING THE UNITED NATIONS CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES Toolkit on for DISABILITY AFRICA*.

United Nations Development Programme, 2018. Planning the Opportunities for a Youthful Population. *National Human Development Report*.

United Nations: Division for social policy and development (DSPD), 2017. Culture, Beliefs, and Disability. *Toolkit On Disability For Africa*, pp.1–32.

Üstün, T.B., 2010. Measuring Health and Disability: Manual for WHO Disability Assessment Schedule WHODAS 2.0. *World Health Organization*, [online] p.90. Available at: <https://books.google.com/books?hl=en&lr=&id=h9fhLNiaRTgC&pgis=1>.

Vanderschuren, M.J.W.A. and Nnene, O.A., 2021. Inclusive planning: African policy inventory and South African mobility case study on the exclusion of persons with disabilities. *Health Research Policy and Systems*, 19(1). https://doi.org/10.1186/s12961-021-00775-1.

Vilchinsky, N., Findler, L. and Werner, S., 2010. Attitudes Toward People With Disabilities: The Perspective of Attachment Theory. *Rehabilitation Psychology*, 55(3), pp.298–306. https://doi.org/10.1037/a0020491.

Ware, H. and Schuelka, M.J., 2019. Constructing 'disability' in Myanmar: teachers, community stakeholders, and the complexity of disability models. *Disability and Society*, 34(6), pp.863–884. https://doi.org/10.1080/09687599.2019.1580186.

Wolffe, K.E., Ajuwon, P.M. and Kelly, S.M., 2013a. A quantitative analysis of the work experiences of adults with visual impairments in nigeria. *Journal of Visual Impairment and Blindness*, 107(6), pp.411–424. https://doi.org/10.1177/0145482x1310700604.

Wolffe, K.E., Ajuwon, P.M. and Kelly, S.M., 2013b. Working with visual impairment in Nigeria: A qualitative look at employment status. *Journal of Visual Impairment and Blindness*, 107(6), pp.425–436. https://doi.org/10.1177/0145482x1310700605.

World Bank, 2020. *Disability Inclusion in Nigeria*. [online] Available at: <https://openknowledge.worldbank.org/handle/10986/34073> [Accessed 11 December 2022].

World Health Organisation, 2011. *Disability Inclusion in Nigeria*.

World Health Organization, 2022. *Countries in the European Region commit to disability-inclusive health systems and societies*. Countries in the European Region commit to disability-inclusive health systems and societies.

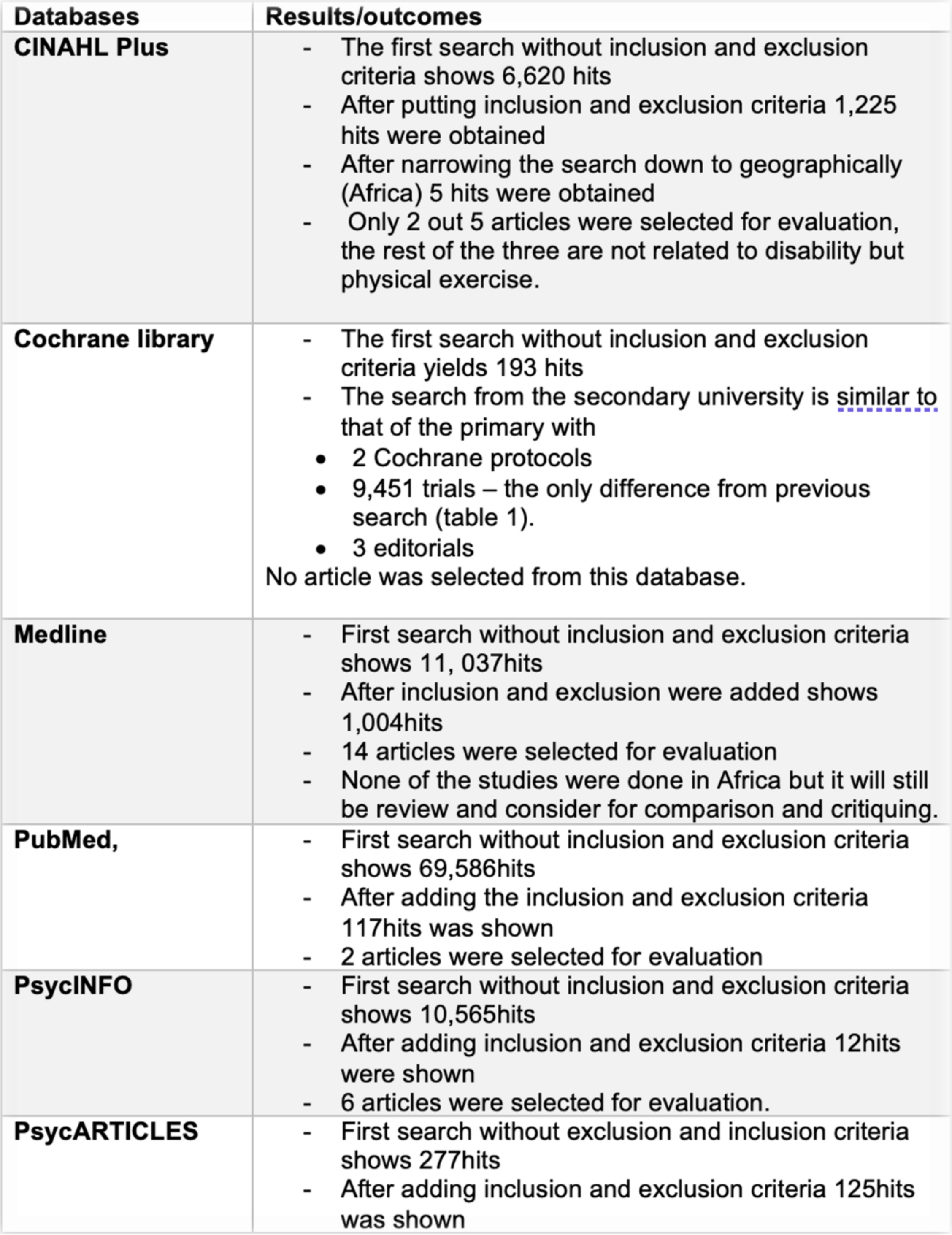
World Health Organization, 2023. *Health Topic (Nigeria)*. WHO Africa.

Yang, K.H., 2015. Participant Reflexivity in Community-Based Participatory Research: Insights from Reflexive Interview, Dialogical Narrative Analysis, and Video Ethnography. *Journal of Community and Applied Social Psychology*, 25(5), pp.447–458. https://doi.org/10.1002/casp.2227.

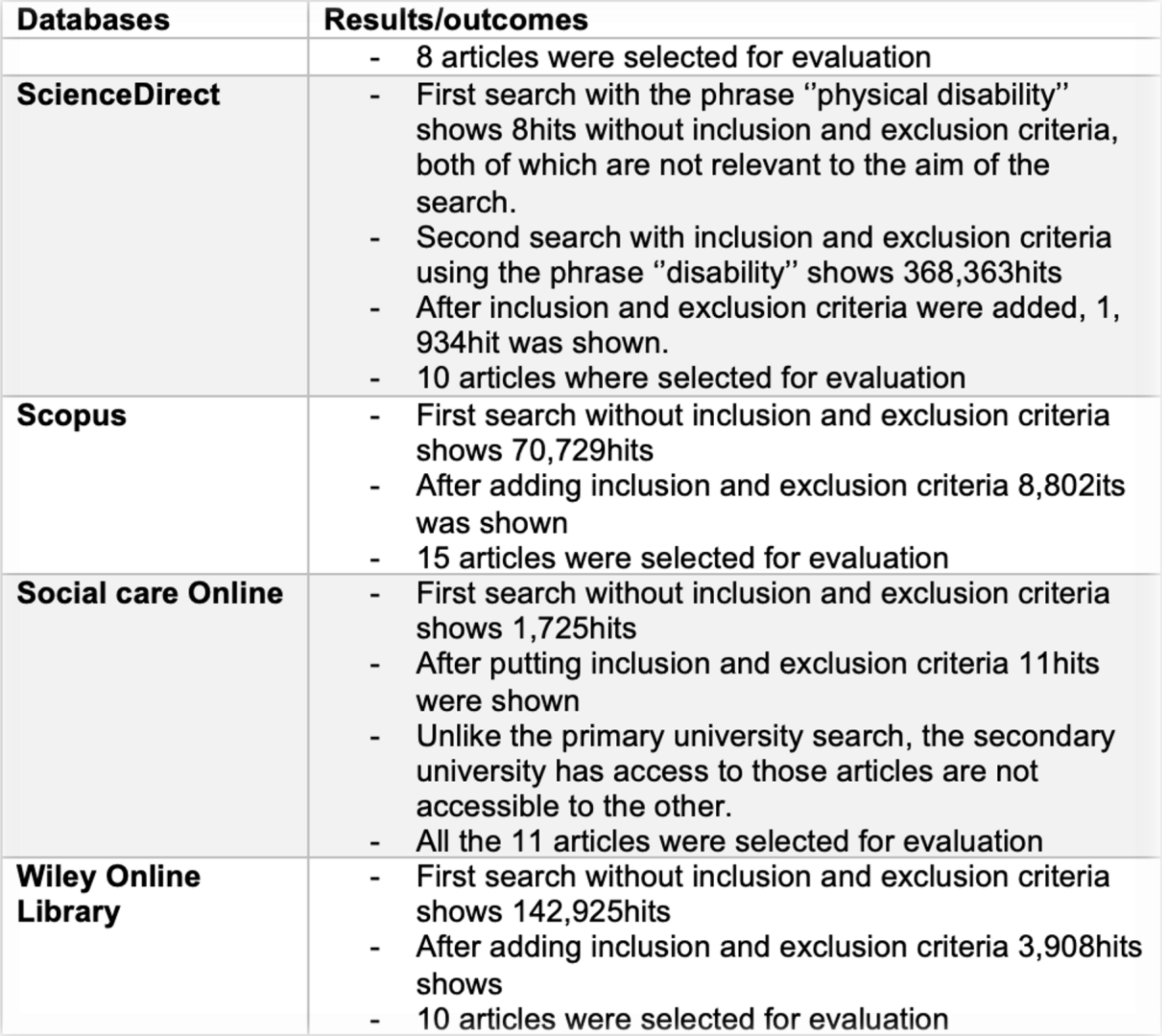
Youngstedt, S.M., 2004. *Creating Modernities through Conversation Groups: The Everyday Worlds of Hausa Migrants in Niamey, Niger*. *Review*, .

Appendixes

Appendix 1: Second literature search from one of the universities in Eastern England.



Databases	Results/outcomes
CINAHL Plus	- The first search without inclusion and exclusion criteria shows 6,620 hits - After putting inclusion and exclusion criteria 1,225 hits were obtained - After narrowing the search down to geographically (Africa) 5 hits were obtained - Only 2 out 5 articles were selected for evaluation, the rest of the three are not related to disability but physical exercise.
Cochrane library	- The first search without inclusion and exclusion criteria yields 193 hits - The search from the secondary university is similar to that of the primary with • 2 Cochrane protocols • 9,451 trials – the only difference from previous search (table 1). • 3 editorials No article was selected from this database.
Medline	- First search without inclusion and exclusion criteria shows 11, 037hits - After inclusion and exclusion were added shows 1,004hits - 14 articles were selected for evaluation - None of the studies were done in Africa but it will still be review and consider for comparison and critiquing.
PubMed,	- First search without inclusion and exclusion criteria shows 69,586hits - After adding the inclusion and exclusion criteria 117hits was shown - 2 articles were selected for evaluation
PsycINFO	- First search without inclusion and exclusion criteria shows 10,565hits - After adding inclusion and exclusion criteria 12hits were shown - 6 articles were selected for evaluation.
PsycARTICLES	- First search without exclusion and inclusion criteria shows 277hits - After adding inclusion and exclusion criteria 125hits was shown



Databases	Results/outcomes
	- 8 articles were selected for evaluation
ScienceDirect	- First search with the phrase ''physical disability'' shows 8hits without inclusion and exclusion criteria, both of which are not relevant to the aim of the search. - Second search with inclusion and exclusion criteria using the phrase ''disability'' shows 368,363hits - After inclusion and exclusion criteria were added, 1, 934hit was shown. - 10 articles where selected for evaluation
Scopus	- First search without inclusion and exclusion criteria shows 70,729hits - After adding inclusion and exclusion criteria 8,802its was shown - 15 articles were selected for evaluation
Social care Online	- First search without inclusion and exclusion criteria shows 1,725hits - After putting inclusion and exclusion criteria 11hits were shown - Unlike the primary university search, the secondary university has access to those articles are not accessible to the other. - All the 11 articles were selected for evaluation
Wiley Online Library	- First search without inclusion and exclusion criteria shows 142,925hits - After adding inclusion and exclusion criteria 3,908hits shows - 10 articles were selected for evaluation

Appendix 2a: CASP tool

CASP

Paper for appraisal and reference:...

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?	Yes Can't Tell No	HINT: An issue can be 'focused' In terms of • the population studied • the intervention given • he outcome considered

Comments:

2. Did the authors look for the right type of papers?	Yes Can't Tell No	HINT: 'The best sort of studies' would • address the review's question • have an appropriate study design {usually RCTs for papers evaluating interventions)

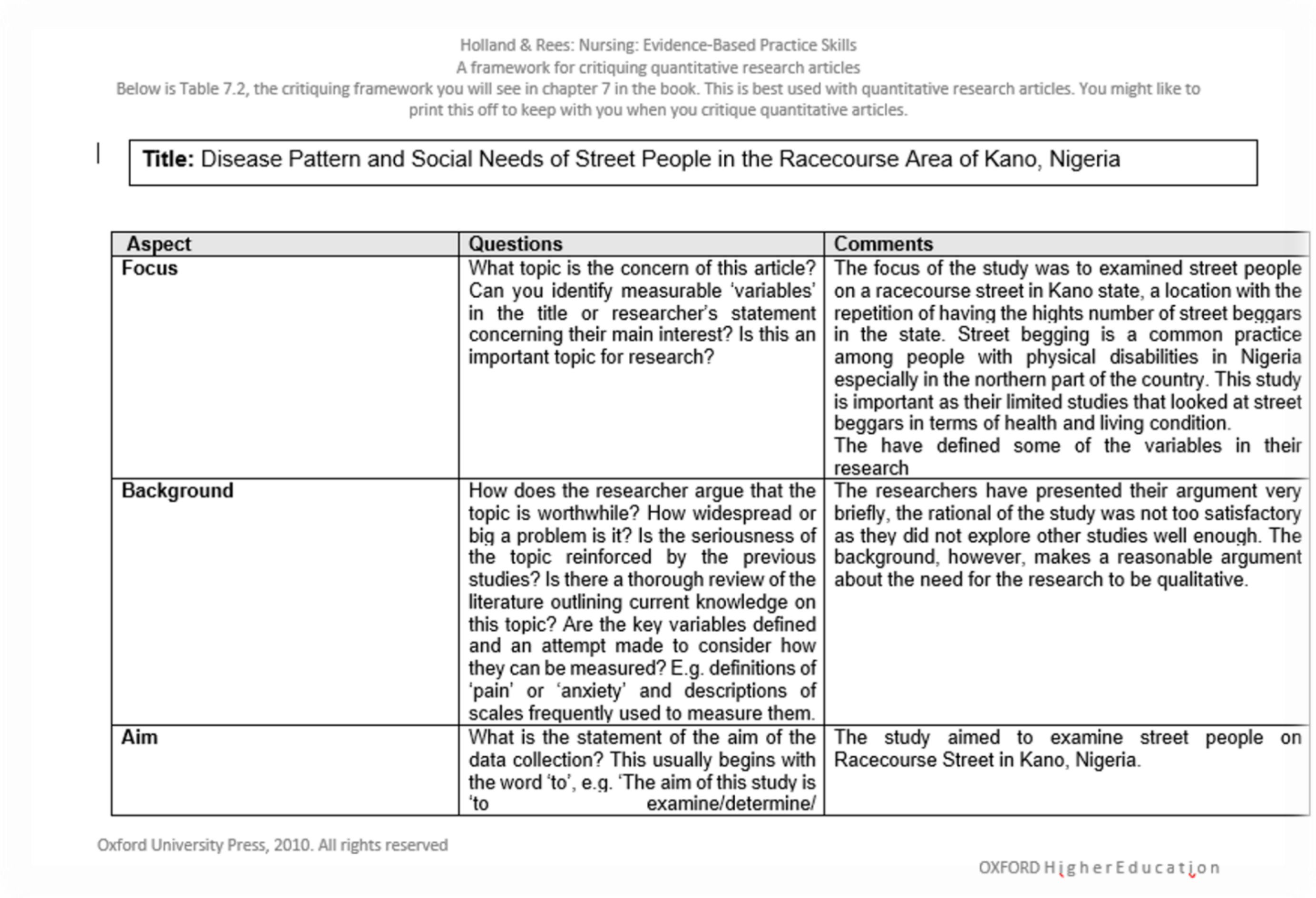
Comments:

Is it worth continuing?

3. Do you think all the mportant, relevant studies were included?	Yes Can't Tell No	HINT: Look for • which bibliographic databases were used • follow up from reference lists • persona contact with experts • unpublished as well as published studies • non-English language studies

Comments:

Appendix 2b: Holland and Rees critiquing tool



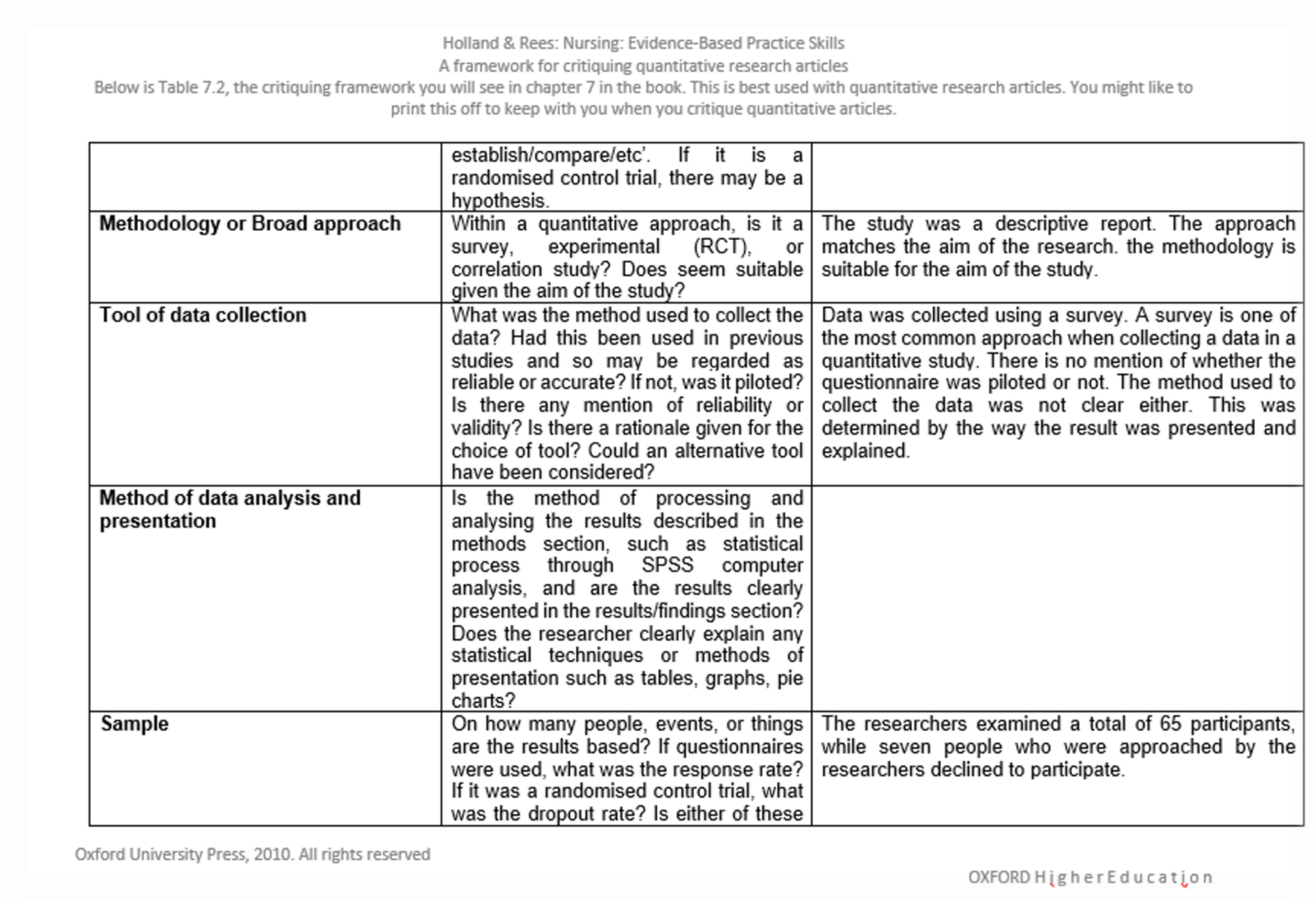
Holland & Rees: Nursing: Evidence-Based Practice Skills
A framework for critiquing quantitative research articles
Below is Table 7.2, the critiquing framework you will see in chapter 7 in the book. This is best used with quantitative research articles. You might like to print this off to keep with you when you critique quantitative articles.

Title: Disease Pattern and Social Needs of Street People in the Racecourse Area of Kano, Nigeria

Aspect	Questions	Comments
Focus	What topic is the concern of this article? Can you identify measurable 'variables' in the title or researcher's statement concerning their main interest? Is this an important topic for research?	The focus of the study was to examined street people on a racecourse street in Kano state, a location with the repetition of having the hights number of street beggars in the state. Street begging is a common practice among people with physical disabilities in Nigeria especially in the northern part of the country. This study is important as their limited studies that looked at street beggars in terms of health and living condition. The have defined some of the variables in their research
Background	How does the researcher argue that the topic is worthwhile? How widespread or big a problem is it? Is the seriousness of the topic reinforced by the previous studies? Is there a thorough review of the literature outlining current knowledge on this topic? Are the key variables defined and an attempt made to consider how they can be measured? E.g. definitions of 'pain' or 'anxiety' and descriptions of scales frequently used to measure them.	The researchers have presented their argument very briefly, the rational of the study was not too satisfactory as they did not explore other studies well enough. The background, however, makes a reasonable argument about the need for the research to be qualitative.
Aim	What is the statement of the aim of the data collection? This usually begins with the word 'to', e.g. 'The aim of this study is 'to examine/determine/	The study aimed to examine street people on Racecourse Street in Kano, Nigeria.

Oxford University Press, 2010. All rights reserved

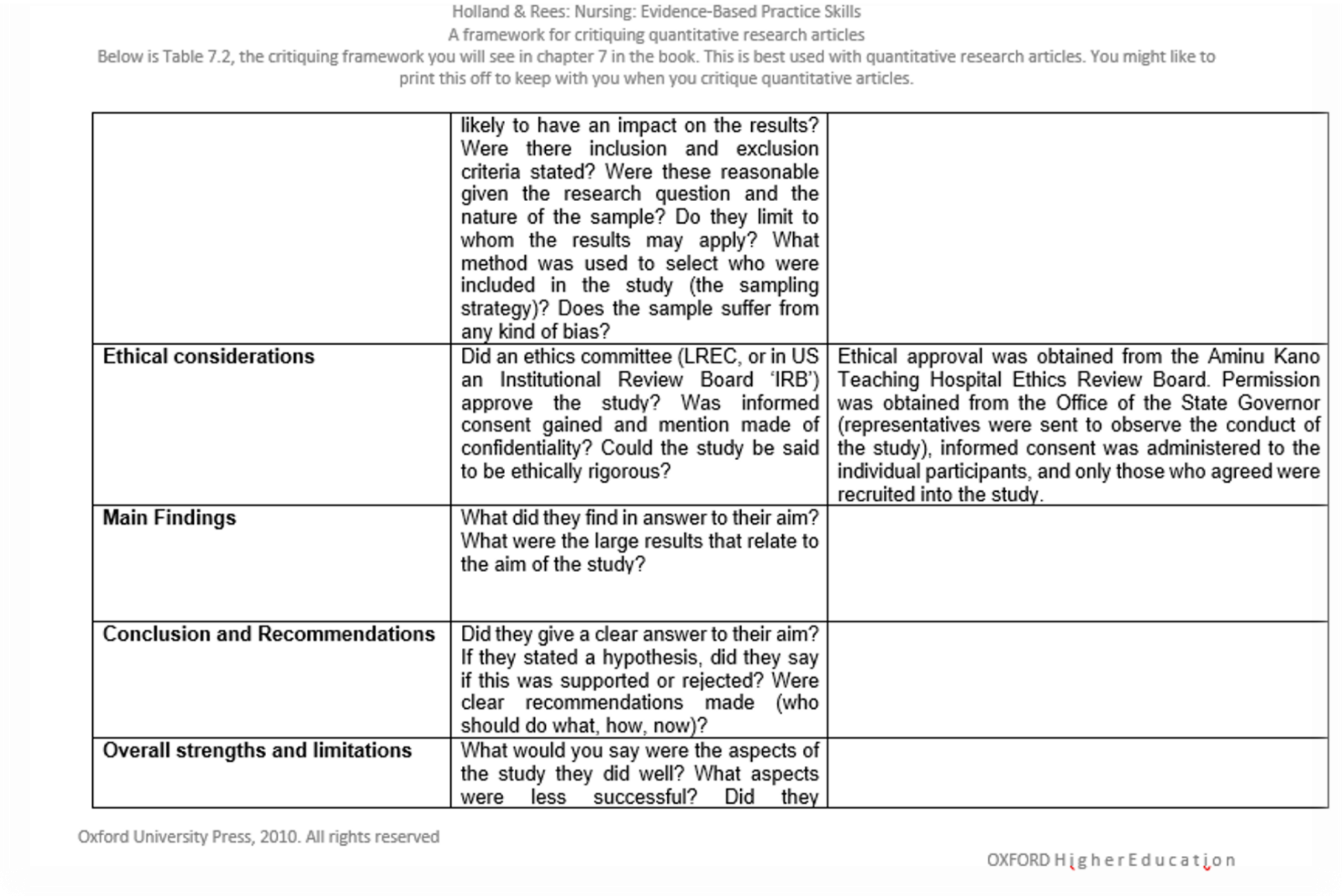
OXFORD Higher Education



Holland & Rees: Nursing: Evidence-Based Practice Skills
A framework for critiquing quantitative research articles
Below is Table 7.2, the critiquing framework you will see in chapter 7 in the book. This is best used with quantitative research articles. You might like to print this off to keep with you when you critique quantitative articles.

	establish/compare/etc'. If it is a randomised control trial, there may be a hypothesis.	
Methodology or Broad approach	Within a quantitative approach, is it a survey, experimental (RCT), or correlation study? Does seem suitable given the aim of the study?	The study was a descriptive report. The approach matches the aim of the research. the methodology is suitable for the aim of the study.
Tool of data collection	What was the method used to collect the data? Had this been used in previous studies and so may be regarded as reliable or accurate? If not, was it piloted? Is there any mention of reliability or validity? Is there a rationale given for the choice of tool? Could an alternative tool have been considered?	Data was collected using a survey. A survey is one of the most common approach when collecting a data in a quantitative study. There is no mention of whether the questionnaire was piloted or not. The method used to collect the data was not clear either. This was determined by the way the result was presented and explained.
Method of data analysis and presentation	Is the method of processing and analysing the results described in the methods section, such as statistical process through SPSS computer analysis, and are the results clearly presented in the results/findings section? Does the researcher clearly explain any statistical techniques or methods of presentation such as tables, graphs, pie charts?	
Sample	On how many people, events, or things are the results based? If questionnaires were used, what was the response rate? If it was a randomised control trial, what was the dropout rate? Is either of these	The researchers examined a total of 65 participants, while seven people who were approached by the researchers declined to participate.

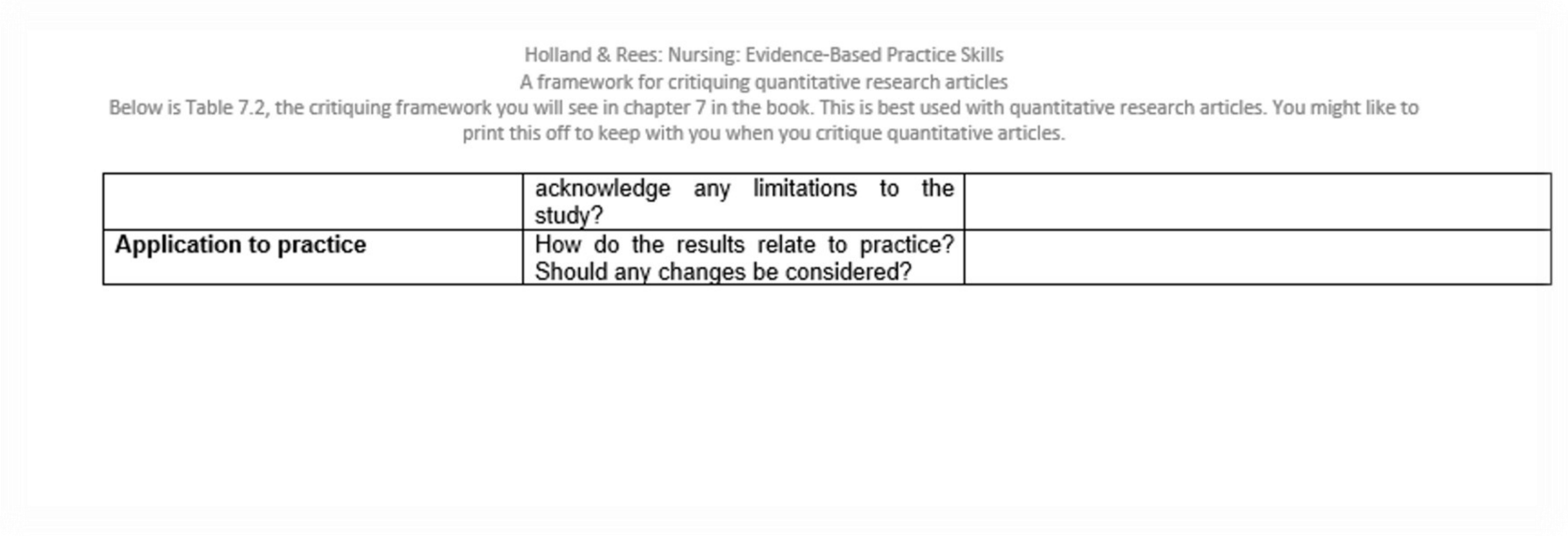
OXFORD Higher Education



Holland & Rees: Nursing: Evidence-Based Practice Skills
A framework for critiquing quantitative research articles
Below is Table 7.2, the critiquing framework you will see in chapter 7 in the book. This is best used with quantitative research articles. You might like to print this off to keep with you when you critique quantitative articles.

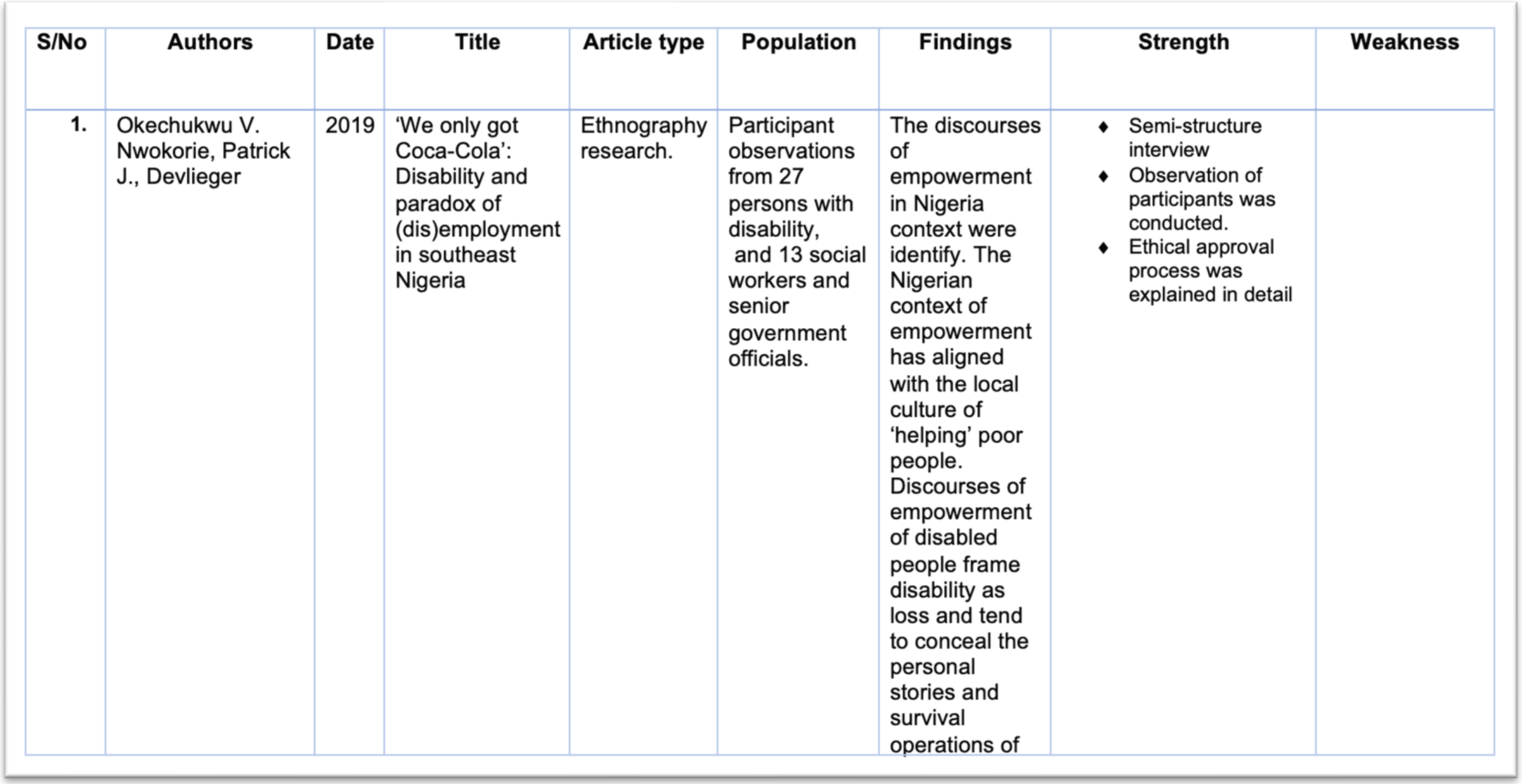
	likely to have an impact on the results? Were there inclusion and exclusion criteria stated? Were these reasonable given the research question and the nature of the sample? Do they limit to whom the results may apply? What method was used to select who were included in the study (the sampling strategy)? Does the sample suffer from any kind of bias?	
Ethical considerations	Did an ethics committee (LREC, or in US an Institutional Review Board 'IRB') approve the study? Was informed consent gained and mention made of confidentiality? Could the study be said to be ethically rigorous?	Ethical approval was obtained from the Aminu Kano Teaching Hospital Ethics Review Board. Permission was obtained from the Office of the State Governor (representatives were sent to observe the conduct of the study), informed consent was administered to the individual participants, and only those who agreed were recruited into the study.
Main Findings	What did they find in answer to their aim? What were the large results that relate to the aim of the study?	
Conclusion and Recommendations	Did they give a clear answer to their aim? If they stated a hypothesis, did they say if this was supported or rejected? Were clear recommendations made (who should do what, how, now)?	
Overall strengths and limitations	What would you say were the aspects of the study they did well? What aspects were less successful? Did they	

OXFORD HigherEducation



	acknowledge any limitations to the study?	
Application to practice	How do the results relate to practice? Should any changes be considered?	

Appendix 3: Summary of the data extraction findings



S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
1.	Okechukwu V. Nwokorie, Patrick J., Devlieger	2019	'We only got Coca-Cola': Disability and paradox of (dis)employment in southeast Nigeria	Ethnography research.	Participant observations from 27 persons with disability, and 13 social workers and senior government officials.	The discourses of empowerment in Nigeria context were identify. The Nigerian context of empowerment has aligned with the local culture of 'helping' poor people. Discourses of empowerment of disabled people frame disability as loss and tend to conceal the personal stories and survival operations of	♦ Semi-structure interview ♦ Observation of participants was conducted. ♦ Ethical approval process was explained in detail	

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						disabled people		
2.7	Karen E. Wolffe, Paul M. Ajuwon, and Stacy **M.** Kelly	2013	A Quantitative Analysis of the Work Experiences of Adults with Visual Impairments in Nigeria	Quantitative study	172 adults with visual impairments.	The research has shown that annual income, confidence level, performing work, hours worked per week,and future work opportunities were found to be significant based upon participants, education, or marital status. People with advanced education are more likely to be paid higher salaries and have more	♦ Ethical approval was clearly stated ♦ Data was well presented and clearly detailed.	♦ Declaration of conflict of interest was not stated. ♦ No mentioned of reviewers or prior comments on the paper ♦ Methodology was not clearly stated.

confidence in ______________________________

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						performing their work.		
3.	Grace 0. Vincent-Onabajo, and Wasinda S. Malgwi.	2015	Attitudes of physiotherapy students in Nigeria toward persons with disability	Cross-sectional study	Physiotherapy students were recruited from the 3 Universities through purposive sampling	The study has shown positive attitude among physiotherapy students. However, discriminatory, and stereotypical attitudes have been observed among the participants. The study has also highlighted the need for the implementation of educational strategy capable of improving physiotherapy students attitudes	♦ Large sample size was used ♦ Data was well presented and easy to understand.	♦ There is no mention of ethical

toward

approval

- Used purposive sampling

5/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						people with disability		
47	Abiola Olaleye, Olorunfemi Ogundele, Samson Deji, Oluseye Ajayi, Omolara Olaleye, and Titilope Adeyanju	2012	Attitudes of Students towards Peers with Disability in an Inclusive School in Nigeria	Cross-sectional study	107 students	The study demonstrates that social contacts make a difference to attitudes of students in secondary schools in Nigeria towards their peers with disabilities. The study has shown that having a friend or relative with disability was associated with the positive response they have obtained	● Semi-structured questionnaire ● The research use Chedoke-McMaster Attitudes Towards Children with Handicaps (CATCH) scale ● Population size is relatively large. ●	● There is no mention of ethical approval process ● Conflict of interest was not stated.

participants.	Limitations of the study were clearly stated.

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
5.	Ogu Okey Charles and Nwosu Kingsley Chinaza	2018	Barriers and Facilitators of Physical Activity Participation Among Youth with Visual and Hearing Impairments in Nigeria: A Qualitative Study	Qualitative Study	21 participants	The study identified the possible facilitators that limit the regular participation of people with disability in sports and physical activity. It also suggested that development of strategies aimed at increasing participation of these individual is needed.	♦ Ethical approval was mentioned clearly. ♦ Semi-structured interviews were used.	♦ Purposive sampling.
6.	Aliyu Hamza Balarabe	2014	Contribution of corneal blindness to disability among	Cross sectional study	202 of the registered persons with impairment	The study shows that Non-trachomat opacity was	• Ethical approval clearly stated. ♦ The study was Simple terms were	

visual visual ous corneal

street blind the major

● detailed.

used for better understandinq.

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
			beggars in a local government area of a state in Northern Nigeria			cause of blindness (60.8%), followed by trachomatous corneal opacity (12.8%) and cataract (5.4%). These findings were presented in tabular format.		
7.	Colton Brydges & Paul Mkandawire	2016	Perceptions and Concerns about Inclusive Education among Students with Visual Impairments in Lagos, Nigeria.	Qualitative study	17 students with visual impairments	The study showed that despite decades of inclusive education policies, Nigerian students with disabilities continue to face a lack of instructional support and	♦ Researcher bias has been considered ♦ Disability theory was used.	♦ The study type was not clearly stated ♦ Ethical approval was not clearly stated.

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						discriminatory attitudes. Often, students with disabilities are compelled to rely on their peers rather than teachers for instructional support, potentially reinforcing their subordinate status in these schools.		
8.	Macellina Y. Ijadunola, interviews Temitope 0. Oja, Florence 0. Akintan, Ayoade 0. Adeyemo, Ademola S. Afolayan &	2018	Engendering a conducive environment for university students with physical disabilities: assessing	Mixed method	52 students with disability	The study found that assistive facilities for students with physical disabilities in Obafemi Awolowo	● in-depth and semi-structured were conducted on both staff and students. ● the sample size is relatively large. ● A checklist was	

Olakunle G. Akanji	availability of assistive facilities in Nigeria	University are limited. The facilities found to be available	used to assess assistive facilities on campus.

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						for these categories of students were special hostel accommodation, privately funded scholarship schemes and the presence of ramps in some buildings on campus to improve access for wheelchair users, but many other important ones like library assistive technologies, hostel facilities and learning assistance were found to be limited.		

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
9.	Lawan Abdu, James Withers, that Abdulrazaq G. Habib, Muhammad S. Mijinyawa and Shehu M. Yusef	2013	Disease Patterns and Social Needs of Street People in the Racecourse Area of Kano, Nigeria	Descriptive report/study	65 participants	The study showed participants consumed mainly carbohydrate meals, inadequate in quality and quantity mainly from charitable sources and food vendors. Also, the participants have no regular decent accommodation, and one fifth of them live on the streets.	♦ Sample size is relatively large. ♦ The study was very detailed and clearly presented. ♦ Ethical approval was clearly stated	♦ No conflict of interest was stated and there was no acknowledgment of external review of the study.

10.	Okey Charles Ogu, Kingsley Chinaza Nwosu, and Joseph Onuwa Umunnah in	2016	Disability types, self-efficacy, and attitudes to participation physical	A pilot study	30 children with disabilities	The study has revealed that children with disabilities have positive self-efficacy	♦ Study design was clearly stated. • The data was presented in different formats with colourful	

5/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
			activity in children with disabilities: a pilot study			and attitudes toward participation in physical activity. Also, there are no significant differences in self-efficacy between girls and boys living with different disabilities.	diagrams and tables for easy understanding.	
11.	Mohammed Awaisu Harnma	2017	The Problems of Living with Disability in Nigeria.	Descriptive study*	-	The study concluded by stating that "Despite the efforts of international organizations such as the United Nations and other regional organizations, and	♦ Two theories were used the Bio-medical Model of diseases, illness and disability and the Social Model ♦ External reviwers	♦ Study design was not clearly. ♦ Secondary data was

us governments in formulating	and editors were involved.	used.

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						and enacting laws aimed at ensuring the rights of disabled people throughout the world, this has not been adequately materialized in Nigeria for several reasons socially, culturally, politically and economically".		
12.	Emeka Joshua Chukwuemeka and Dominic Samaila	2019	Teachers' perceptions and factors limiting the use of High-Tech Assistive Technology in special education schools in North-west	Descriptive survey study	354 participants	The study showed that the use of high- Niqeria.	♦ Face and content validity have been considered.	

techassist

ive ♦Exter

nal reviews

devices to deliver instruction will improve teaching and learning in special

were involved.

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						education schools. This will help to relieve teachers the stress of having to attend to the needs of every student in the classroom.		
13.	Taiwo Modupe Oladunni	2012	Sexual Behaviour and Practices Among Adolescents with Disabilities in Southwest Nigeria	Quantitative study	140 students with physical disability.	In this study participants indicated that sexual assault, and molestation by strangers, relatives, carers, and parents are common sexual health problems sometimes encountered.	◆ Study size was relatively large ♦ The data analysis was well presented.	♦ The study design was not clear.

This agrees
with previous
studies which
have found
that
adolescents

S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						with physical disabilities from poor families are forced into prostitution as a means of earning a livelihood and sometimes strangers, carers, and parents may take advantage of their vulnerability to abuse them sexually		
14.	Natalie Smith	2011	The Face of Disability in Nigeria: A Disability Survey in Kogi and Niger States	A survey (Quantitative study)	1093	The study stated that disabled women are more likely to be uneducated, lack access to health	♦ Very large sample size ♦ Weakness of the disability were identified. ♦ The study was a collaborative effort with disability organisations and was	

services, and
be victims of

reviewed by
external third party.

							Strength	**Weakness**
						discrimination and abuse. This survey revealed similar relationships for women, with lower levels of education, occupation, employment and finances than men. Women with intellectual disabilities were more disadvantaged than others.		
15.	Karen E. Wolffe, Paul M. Ajuwon, and Stacy **M.** Kelly	2013	Working with Visual Impairment in Nigeria: A Qualitative Look at Employment Status.	Qualitative study.	172 adults with visual impairments.	The study showed that out-of-date or inaccessible equipment and materials, coupled with inadequate	• The sample size was relatively large. • Participants were selected from various disciplines. ♦ The study can be understood by a wide audience.	♦ Ethical process was not clearly explained ♦ The abstract layout

S/No	Authors	Date	Title	Article type	Population	Findings

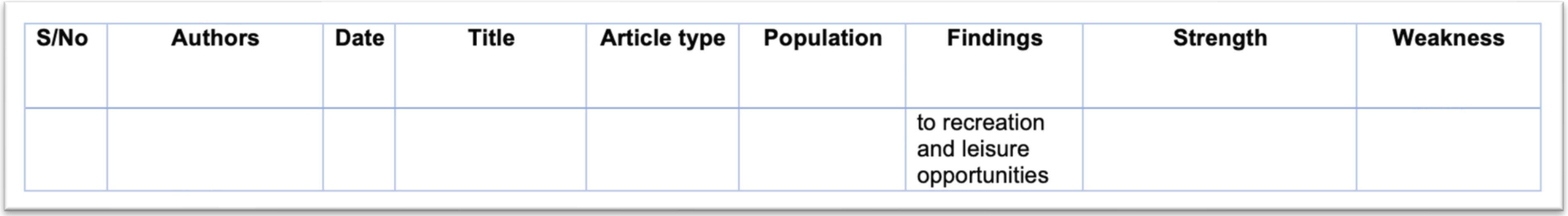
S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						assistance, transportation issues and environmental barriers, poor remuneration, weak job status, discrimination, lack of funds or time, inaccessible housing, and limited training opportunities as work challenges.		was hard to read.
16.	Leonard Sitji Bombom and Ibrahim Abdullahi	2016	Travel patterns and challenges of physically disabled persons in Nigeria.	Mixed method	214 participants with physical disability	The study showed that the predominance of street begging as the primary means of livelihood among the physically	♦ Interviews and questionnaires were used. ♦ Data were presented in several ways: tables, figures, and charts.	♦ The study design was not clearly identified.

disabled ______________________________

5/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						person is simultaneously both a reflection and a projection of their low educational attainment levels and their income statuses.		
17.	Stacy M. Kelly, Paul M. Ajuwon, and Karen E. Wolffe.	2015	The Recreation and Leisure Pursuits of Employed Adults with Visual Impairments in Nigeria: Part 1	Mixed method	172 adults with visual impairments	The study found that the physical environment in Nigeria, particularly dangerous travel routes and environmental challenges such as an unreliable	● The data was well presented and could be understood by a wide range of audiences. ● Limitations of the study were identified and explained.	● Study design was not clearly identified.

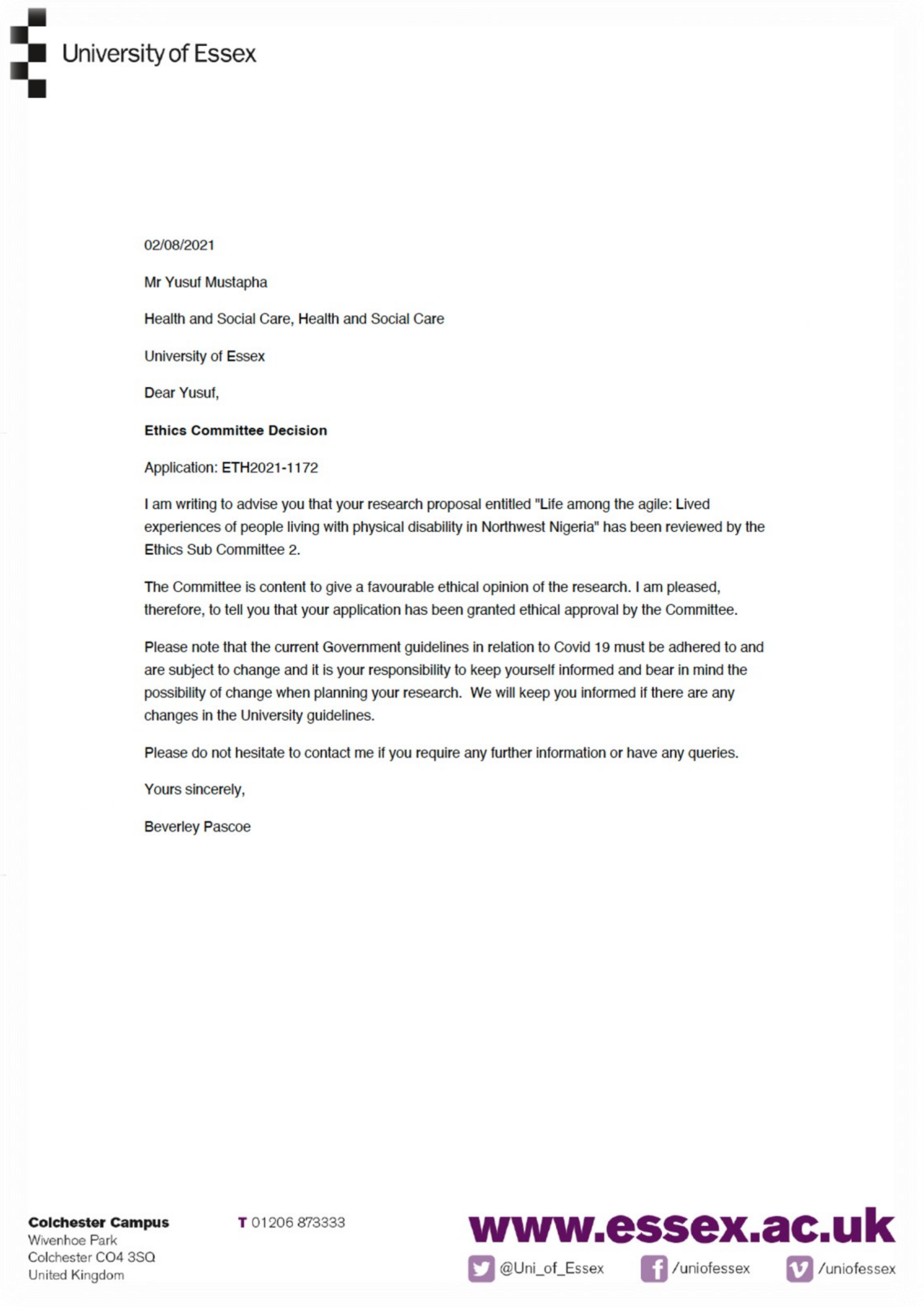
infrastructure, impeded both their prog

ress in employment and access



S/No	Authors	Date	Title	Article type	Population	Findings	Strength	Weakness
						to recreation and leisure opportunities		

Appendixes 4: University of Essex ethics approval.



University of Essex

02/08/2021

Mr Yusuf Mustapha

Health and Social Care, Health and Social Care

University of Essex

Dear Yusuf,

Ethics Committee Decision

Application: ETH2021-1172

I am writing to advise you that your research proposal entitled "Life among the agile: Lived experiences of people living with physical disability in Northwest Nigeria" has been reviewed by the Ethics Sub Committee 2.

The Committee is content to give a favourable ethical opinion of the research. I am pleased, therefore, to tell you that your application has been granted ethical approval by the Committee.

Please note that the current Government guidelines in relation to Covid 19 must be adhered to and are subject to change and it is your responsibility to keep yourself informed and bear in mind the possibility of change when planning your research. We will keep you informed if there are any changes in the University guidelines.

Please do not hesitate to contact me if you require any further information or have any queries.

Yours sincerely,

Beverley Pascoe

Colchester Campus
Wivenhoe Park
Colchester CO4 3SQ
United Kingdom

T 01206 873333

www.essex.ac.uk

@Uni_of_Essex
/uniofessex
/uniofessex

Appendix 5: Ethical Approval from Nigeria

National Health Research Ethics Committee of Nigeria (NHREC)
Promoting Highest Ethical and Scientific Standards
for Health Research in Nigeria

Federal Ministry of Health

NHREC Protocol Number NHREC/01/01/2007- 31/12/2020
NHREC Approval Number NHREC/01/01/2007-08/01/2021
Date: 08th January, 2021

Re: Life among the agile: Lived experiences of people living with physical disability in Northwest Nigeria

Health Research Ethics Committee (HREC) assigned number: NHREC/01/01/2007
Name of Student Investigator: Yusuf Karkarna Mustapha
Address Student Investigator: University of Essex
Department of Health and life Science
Faculty: School of Health and Social Care
Email: karkarna4@gmail.com
Tel: +44(0)7517564190
Date of receipt of valid application: 31/12/2020
Date when final determination of research was made: 08/01/2021

Notice of Full Committee Review and Approval

This is to inform you that the research described in the submitted protocol, the consent forms and other participant information materials have been reviewed and given full committee approval by the National Health Research Ethics Committee.

This approval dates from 08/01/2021 to 07/01/2022. If there is delay in starting the research, please inform the HREC so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. *All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study.* **If this is a multi-year research, endeavour to submit your annual report to the HREC early in order to obtain renewal of your approval and avoid disruption of your research.**

The National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations and with the tenets of the Code including ensuring that all adverse events are reported promptly to the HREC. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code. The HREC reserves the right to conduct compliance visit to your research site without previous notification.

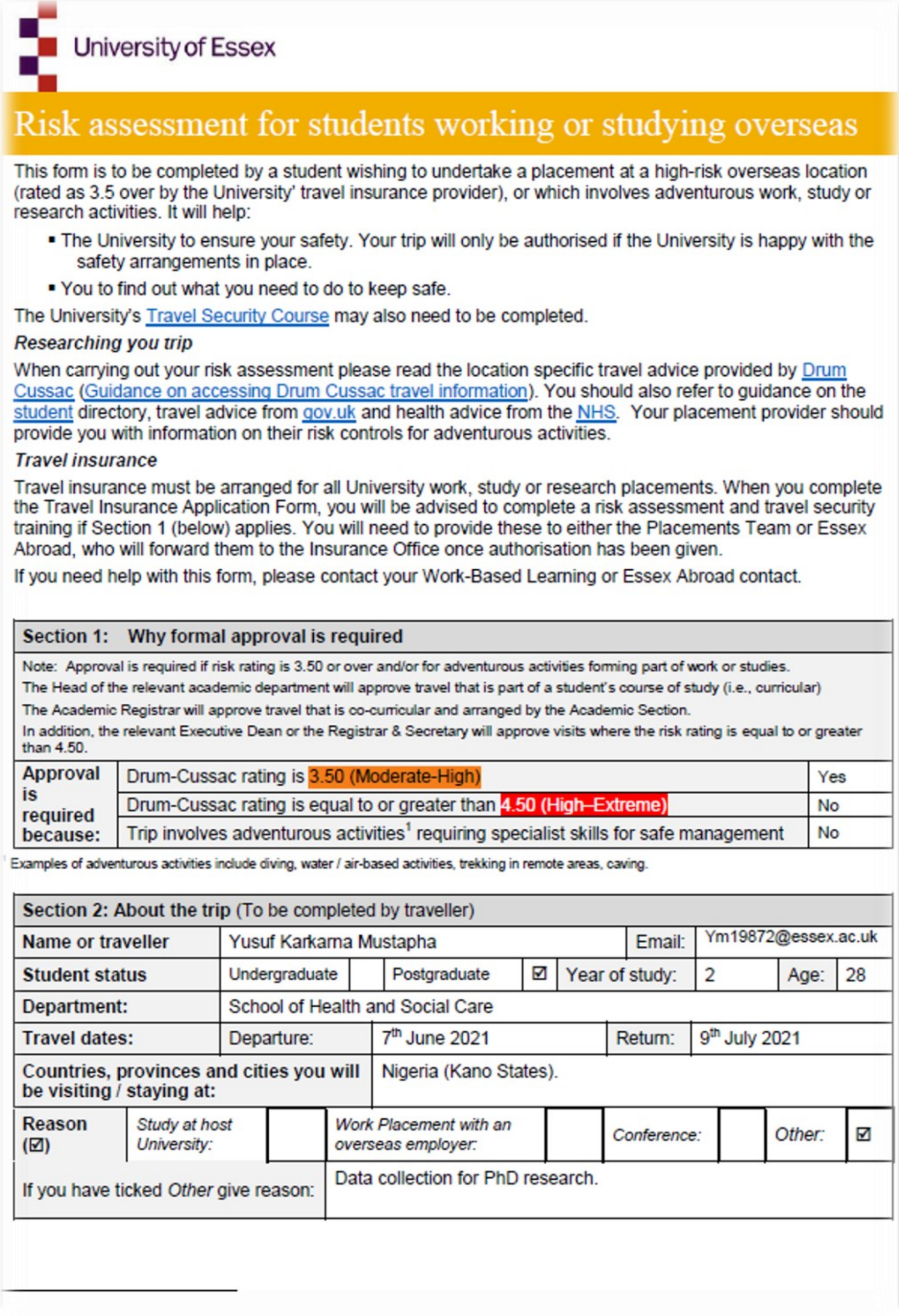
Signed

Professor Zubairu Iliyasu MBBS (UniMaid), MPH (Glasg.), PhD (Shef.), FWACP, FMCPH
Chairman, National Health Research Ethics Committee of Nigeria (NHREC)

Department of Health Planning, Research & Statistics
Federal Ministry of Health
11th Floor, Federal Secretariat Complex Phase III
Ahmadu Bello Way, Abuja

Tel: +234-09-523-8367
E-mail: chairman@nhrec.net, secretary@nhrec.net, deskofficer@nhrec.net,
URL: http://www.nhrec.net,

Appendix 6a: Risk assessment for students working or studying overseas.



University of Essex

Risk assessment for students working or studying overseas

This form is to be completed by a student wishing to undertake a placement at a high-risk overseas location (rated as 3.5 over by the University' travel insurance provider), or which involves adventurous work, study or research activities. It will help:

- The University to ensure your safety. Your trip will only be authorised if the University is happy with the safety arrangements in place.
- You to find out what you need to do to keep safe.

The University's Travel Security Course may also need to be completed.

Researching you trip

When carrying out your risk assessment please read the location specific travel advice provided by Drum Cussac (Guidance on accessing Drum Cussac travel information). You should also refer to guidance on the student directory, travel advice from gov.uk and health advice from the NHS. Your placement provider should provide you with information on their risk controls for adventurous activities.

Travel insurance

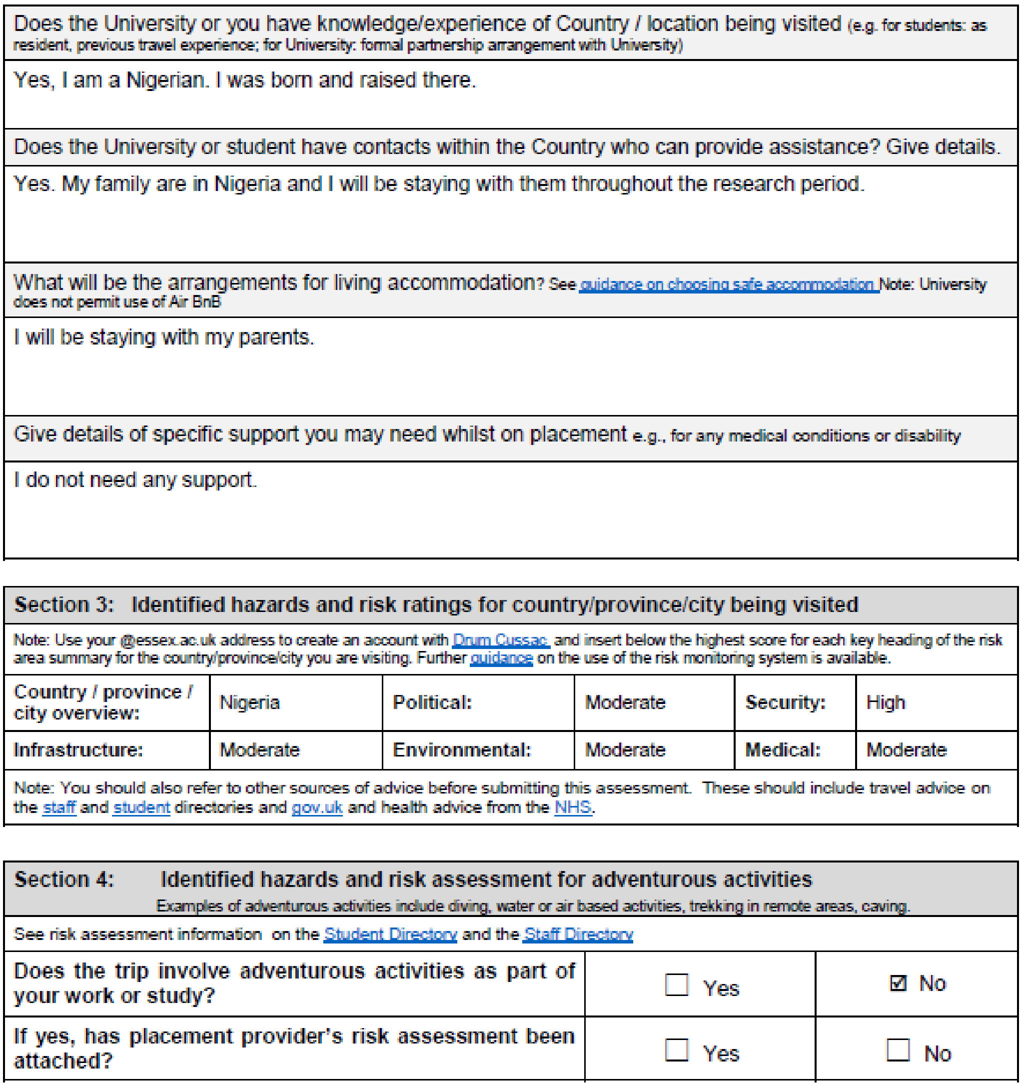
Travel insurance must be arranged for all University work, study or research placements. When you complete the Travel Insurance Application Form, you will be advised to complete a risk assessment and travel security training if Section 1 (below) applies. You will need to provide these to either the Placements Team or Essex Abroad, who will forward them to the Insurance Office once authorisation has been given.

If you need help with this form, please contact your Work-Based Learning or Essex Abroad contact.

Section 1: Why formal approval is required		
Note: Approval is required if risk rating is 3.50 or over and/or for adventurous activities forming part of work or studies. The Head of the relevant academic department will approve travel that is part of a student's course of study (i.e., curricular) The Academic Registrar will approve travel that is co-curricular and arranged by the Academic Section. In addition, the relevant Executive Dean or the Registrar & Secretary will approve visits where the risk rating is equal to or greater than 4.50.		
Approval is required because:	Drum-Cussac rating is 3.50 (Moderate-High)	Yes
	Drum-Cussac rating is equal to or greater than 4.50 (High–Extreme)	No
	Trip involves adventurous activities[1] requiring specialist skills for safe management	No

[1] Examples of adventurous activities include diving, water / air-based activities, trekking in remote areas, caving.

Section 2: About the trip (To be completed by traveller)								
Name or traveller	Yusuf Karkarna Mustapha					Email:	Ym19872@essex.ac.uk	
Student status	Undergraduate		Postgraduate	☑	Year of study:	2	Age:	28
Department:	School of Health and Social Care							
Travel dates:	Departure:	7th June 2021			Return:	9th July 2021		
Countries, provinces and cities you will be visiting / staying at:	Nigeria (Kano States).							
Reason (☑)	*Study at host University:*		*Work Placement with an overseas employer:*		*Conference:*		*Other:*	☑
If you have ticked *Other* give reason:	Data collection for PhD research.							



Does the University or you have knowledge/experience of Country / location being visited (e.g. for students: as resident, previous travel experience; for University: formal partnership arrangement with University)
Yes, I am a Nigerian. I was born and raised there.
Does the University or student have contacts within the Country who can provide assistance? Give details.
Yes. My family are in Nigeria and I will be staying with them throughout the research period.
What will be the arrangements for living accommodation? See guidance on choosing safe accommodation Note: University does not permit use of Air BnB
I will be staying with my parents.
Give details of specific support you may need whilst on placement e.g., for any medical conditions or disability
I do not need any support.

Section 3: Identified hazards and risk ratings for country/province/city being visited					
Note: Use your @essex.ac.uk address to create an account with Drum Cussac and insert below the highest score for each key heading of the risk area summary for the country/province/city you are visiting. Further guidance on the use of the risk monitoring system is available.					
Country / province / city overview:	Nigeria	**Political:**	Moderate	**Security:**	High
Infrastructure:	Moderate	**Environmental:**	Moderate	**Medical:**	Moderate
Note: You should also refer to other sources of advice before submitting this assessment. These should include travel advice on the staff and student directories and gov.uk and health advice from the NHS.					

Section 4: Identified hazards and risk assessment for adventurous activities Examples of adventurous activities include diving, water or air based activities, trekking in remote areas, caving.		
See risk assessment information on the Student Directory and the Staff Directory		
Does the trip involve adventurous activities as part of your work or study?	☐ Yes	☑ No
If yes, has placement provider's risk assessment been attached?	☐ Yes	☐ No

Section 5: Risk description and control measures for overseas travel

Describe the risks identified in Sections 2 and 3 and then detail the measures you are putting in place to reduce the identified risks.

If you have a relevant existing risk assessment, this can be attached and referred to below.

Example risks:	***Example control measures:***
Medical - high prevalence of Malaria	*GP provided anti-malarial medication; mosquito nets used……*
Activities - trekking in remote areas	*See attached detailed risk assessment 'Trekking in Nepal'*
Risk	**Measures taken to reduce the risk**
High prevalence of Malaria	Will take anti-malarial medication, will use mosquito nets
Risk of Covid - 19	I am fully vaccinated. Also, I will take Covid test prior to departure, wearing face masks, regular handwashing/use of hand sanitisers and self-isolation for 14 days. A full Covid-19 contingency plan has been drawn up following guidance of University of Essex.
Travel from UK to Nigeria	I shall be taking a flight from London to Malan Aminu Kano International Airport, Kano. I shall take a Covd-19 test prior to travel and do a 14-day quarantine on arrival at my home in Kano.
Travel from home to fieldwork site	I shall travel by car to the fieldwork site. The roads in Kano state are tarmac and the road traffic accident rate is low.

Please add more rows if required

Section 6: Traveller declaration and approval

Traveller declaration (by traveller or group leader):

- I understand the risks associated with this trip and will follow the precautions in this risk assessment and the risk assessment for adventurous work, study or research activities.
- *For Drum-Cussac rating of 4.0 (High) and above*: I confirm that I have completed the required online security course(s) (or an equivalent course) and have attached copies of relevant certificate(s).

Signed:			**Date:**	12th April 2021
Attached:	Risk assessment for adventurous work, study or research activities	Yes	Certificate(s) of completion of online security course(s)	Yes

Instructions for submitting risk assessment

Once you have completed your risk assessment, please send (along with attachments) for approval to:

- Placements@essex.ac.uk for trips associated with your studies, if you are a Placement Student or
- The Essex Abroad Office (essexabroad@essex.ac.uk) if you are a Study Abroad Student or for trips not directly associated with your studies.

They will check the risk assessment prior to forwarding it to your Head of Department or Academic Registrar for approval. If approval is given, they will forward the assessment to the Insurance Officer, who will then send you your Travel Insurance.

For Placements/ Essex Abroad Team

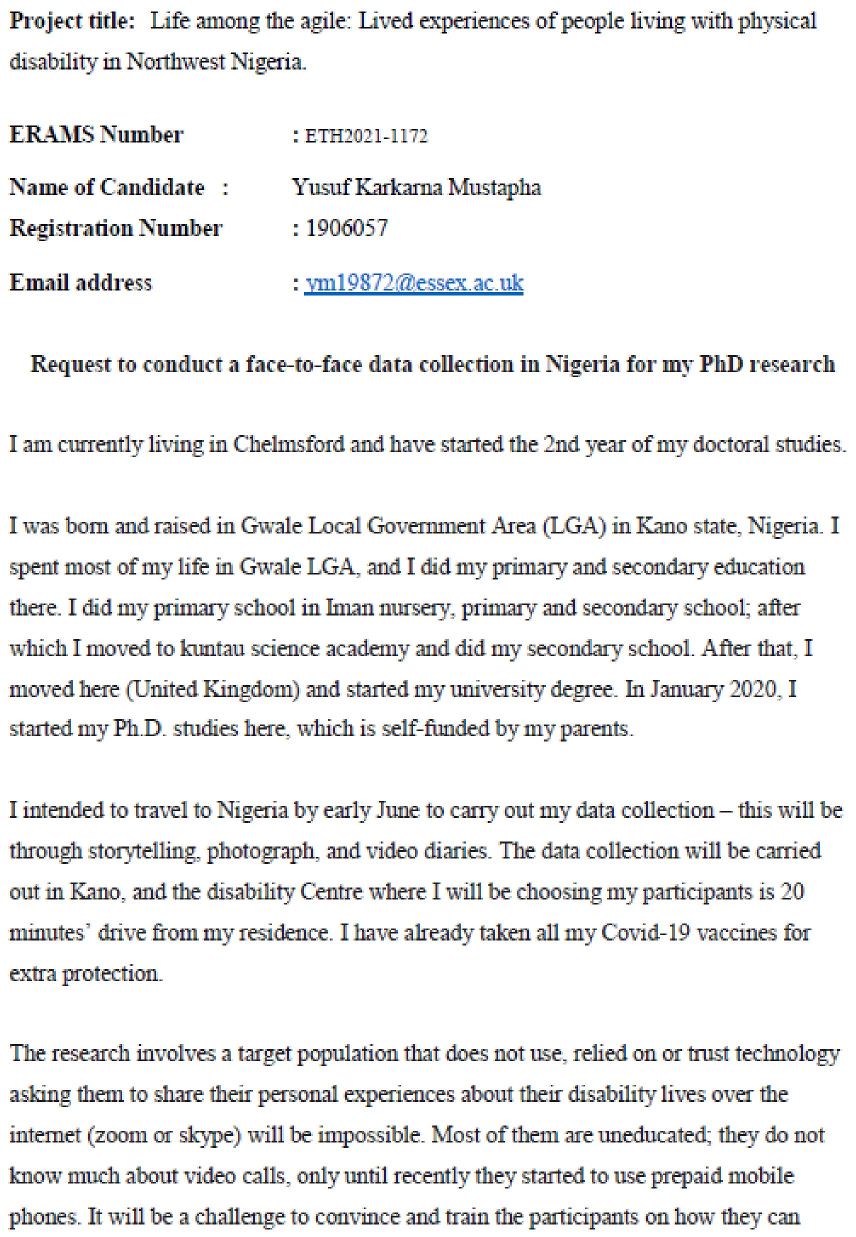
Name of Placements / Essex Abroad contact:	
Contact details:	
Date forwarded to approving manager:	
Date forwarded to Insurance Office:	
Date student informed of outcome	

For approving manager

- If you approve the placement, please sign and return to Placement team / Essex Abroad contact above, or
- Contact the Placement Team / Essex Abroad, if you would like to discuss the placement or require further information.

Name of approving manager[2]:	Professor Victoria Joffe		
Designation:	Dean of School of Health and Social Care and Professor (R)		
Approver declaration: I have read the risk assessment(s) and am satisfied that the proposed visit is necessary, and that the traveller has taken reasonable precautions.			
Signed:		**Date:**	07/05/2021

Appendix 6b: COVID-19 Contingency plan



Project title: Life among the agile: Lived experiences of people living with physical disability in Northwest Nigeria.

ERAMS Number : ETH2021-1172
Name of Candidate : Yusuf Karkarna Mustapha
Registration Number : 1906057
Email address : ym19872@essex.ac.uk

Request to conduct a face-to-face data collection in Nigeria for my PhD research

I am currently living in Chelmsford and have started the 2nd year of my doctoral studies.

I was born and raised in Gwale Local Government Area (LGA) in Kano state, Nigeria. I spent most of my life in Gwale LGA, and I did my primary and secondary education there. I did my primary school in Iman nursery, primary and secondary school; after which I moved to kuntau science academy and did my secondary school. After that, I moved here (United Kingdom) and started my university degree. In January 2020, I started my Ph.D. studies here, which is self-funded by my parents.

I intended to travel to Nigeria by early June to carry out my data collection – this will be through storytelling, photograph, and video diaries. The data collection will be carried out in Kano, and the disability Centre where I will be choosing my participants is 20 minutes' drive from my residence. I have already taken all my Covid-19 vaccines for extra protection.

The research involves a target population that does not use, relied on or trust technology asking them to share their personal experiences about their disability lives over the internet (zoom or skype) will be impossible. Most of them are uneducated; they do not know much about video calls, only until recently they started to use prepaid mobile phones. It will be a challenge to convince and train the participants on how they can communicate over a live video chat app. Also, as most of them have never talked to someone over a video call, they will be nervous and anxious and not feel comfortable having a proper conversation, especially a personal conversation. Another challenge is the lack of a good internet connection for calls, video, or live chat. The regions where the researcher will be conducting his research have a reputation for bad cellular connectivity. Personally, most times, it is hard for me to have a good conversation with my family over Skype and WhatsApp as their network is always not good; a 15-minute conversation is difficult because of the bad cellular connectivity.

Nonetheless, culturally, Hausa people (those that speak Hausa, the majority of northern Nigeria) have a strong belief in Hira (storytelling), and physical interaction. Remote interviews will not be possible with this target population. For the researcher to acquire good data, he needs to go to Nigeria and sit with this population. The researcher cannot collect his data remotely because of the people he is researching. As the methodology is narrative (storytelling), meeting the participant in person is the best way of collecting rich data, and as a Hausa person (the researcher), I believe that participants are not going to share their personal experience with their disability over a video chat as we (Northerners – people from northern Nigeria) believes in face-to-face interaction on a topic that is of significantly important, like this one. Some participants will likely feel disrespected when asked to share their experience remotely on something significant and personal to them, even if told that confidentiality will be maintained. To this end, it is not possible to conduct the research remotely, due to the above reasons.

Currently, the risk of covid-19 infection in northwest Nigeria is very low, and in LGAs like the Gwale and other municipals, it is extremely low. Most of the covid-19 centres have been closed, and life has returned to normal in the Northwest of Nigeria. Still, people are advised to continue wearing masks, washing hands, and observing social distancing; this advice was given by the Nigerian government. The researcher will follow all the recent covid19 guidelines set by the government. Even though Kano is the largest city in the country, with over 13 million people living and working in the state, the total covid-19 cases in the state are 3,949. There is no data on cases from individual

LGAs.

Nigeria is my home country, and as I have mentioned, I was born and grew up in the community where I intend to conduct this research project. I have completed the risk assessment form and included covid-19 contingency plans (shown below).

I have obtained ethical approval from the Nigerian government, and I am in the process of getting approval from the university.

I am aware that the covid-19 situation can change rapidly; I am ready to suspend my data collection and suspend for a period if necessary, in response to the changing circumstances.

Regarding Covid-19, I have made the following plan to minimise the risk:

1. Can the research be conducted within current government requirements in relation to protection measures? Researchers and ethics reviewers should always refer to the most up to date Government guidance.
   Yes, the research can be conducted in the current situation. In Nigeria, life has gone back to pre-Covid status, while maintaining social distancing and wearing masks. This research will be conducted in LGAs, where there are no reported registered cases, and the overall case in the city is very low.

2. Can social distancing be maintained?
   Social distancing will be maintained all the time, because culturally sitting very close to someone in Nigeria, is impolite. What distance would this be, and would other measures be taken to mitigate risks such as face coverings? The 2 metres will be observed, and the storytelling sessions will be carried out in open spaces or well-ventilated room if outdoor sessions are not possible. The researcher will provide face marks and hand sanitisers to the participants.

3. Where is the contact taking place?

   Storytelling sessions will take place in a preselected disability centre or in the participant's house or anywhere they feel comfortable sharing their stories with the researcher. Nigeria is experiencing hot and dry season now. Houses in the rural areas are far apart, such that confidentiality is always maintained. The storytelling sessions will be conducted in the afternoon, when the weather is nice and good instead of noon when is hot. In the afternoon, participants that are working or schooling have come back home and are free to participate in the storytelling sessions If the storytelling sessions must take place indoors, masks will be worn, and other Covid -19 preventions measures will be followed. In case of bad weather, storytelling sessions will be rescheduled.

4. How many people would be involved at any one time? Would the participants be from more than one household and, if so, how many?

   Only one person at any given time will be asked to take part in the storytelling session. The researcher will only collect data from two people per day, individually. There will be one day break (for analysis interval between data collection.

5. Will participants be put at greater risk than they would otherwise be in their daily life under restrictions in place at the time?

   They will not be put at any risk, as there are no other restrictions apart from washing hands, social distancing and wearing facemasks.

6. Will participants declare in writing that they have not to their knowledge been in contact with anyone displaying COVID-19 symptoms, nor experienced symptoms themselves, in the last 14 days before taking part in the research?

   They will not be expected to declare in writing about their COVID-19 status, instead I will be the one who must declare in writing, because I could have met someone with COVID-19 while on transit from UK to Nigeria. Upon my arrival I will be on self-quarantine for 14 days as per COVID -19 prevention guidelines, before commencing data collection. People LGAs especially those with physical disabilities rarely travel *because of transport problems, there are no accessible buses or cars. They use tricycles or crutches to walk to the nearest trading centre. A participant declaration template form is available.*

7. Who are the participants? Are any of them at higher risk from COVID-19?
   People with physical disability between the age of 18 and above. Some of them could be at a higher risk from COVID-19 because of their ages. The disability centre will conduct a risk assessment on potential participants before the data collection start. Those with underlying health conditions who want to take part in the study will be given extra-protection. For instance, creating a small well ventilated glass room for the participants to sit in during the storytelling session. Afterwards, the glass room will be disinfected before the next participant enters. Any participant that needs medical attention will be provided with the help of the disability centre. However, If it will not be possible to include some participants, then I will consult my supervisors for guidance.

8. Researchers should be mindful of effects of the pandemic on participants other than the virus itself, such as emotional stress, and should recognise and mitigate the risks of compounding these. Appropriate measures might include signposting information and support systems.
   These measures are already in place, government is sharing information on the radios, churches and mosques are sharing information during prayers. They are also sewing and distributing face masks to the rural communities. They are also teaching people how to wash hands, outside each church and mosques are handing washing facilities. Schools also have hand washing facilities and are teaching pupils to teach their parents, relatives, and grandparents on the same.

Where an activity will take place overseas

Where an activity will take place overseas, similar considerations will apply as above (see 'Where an activity requires face-to-face contact' above), with reference to any restrictions or guidance operating in the country where the research is taking place. A copy of the guidance in English must be attached to the application for ethical approval. However, researchers should be aware that the minimum protection measures that will be acceptable are those set out in the UK Government guidance, which applies, to other research involving human participants undertaken by University staff and students.

Signature of student: Date: 26th April 2021

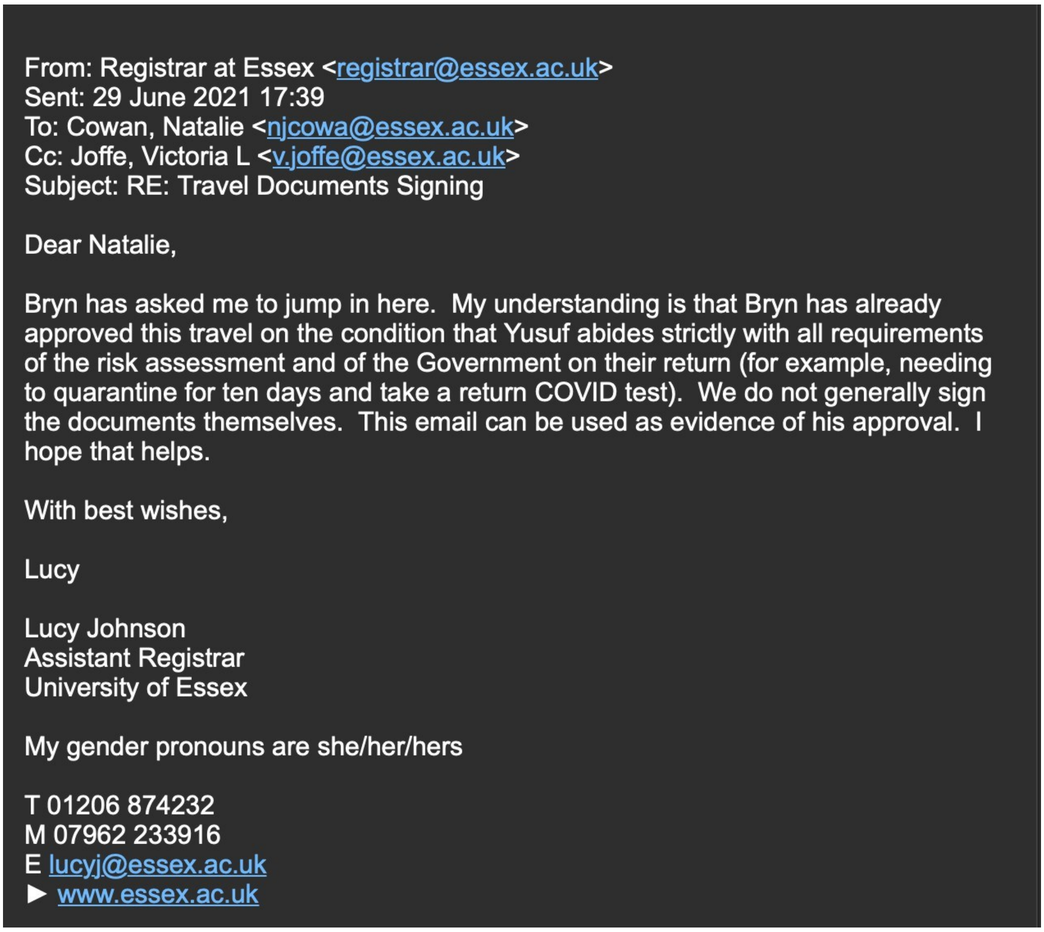
Statement from Supervisor

I am supportive of this request. As it is a narrative (storytelling) study, he will have to conduct face-to-face storytelling sessions, in addition to video diaries and photographs with people living with physical disabilities in his community where he grew up. I have explored with him the possibility of collecting data remotely, but as he explains above, this is not feasible as people in the community do not have access to good internet, not forthcoming with technology, and have strong cultural beliefs toward physical interaction as well as sharing of their personal lives with other people. Yusuf is mindful of the risks involved and has been vaccinated to minimize the risk of getting infected by the virus, and he is less likely to aid the spread of the virus as a result. He will of course suspend his data collection if the situation in Nigeria worsens.

Signature of supervisor:

Signature of Dean of School:

Signature of Registrar:



From: Registrar at Essex <registrar@essex.ac.uk>
Sent: 29 June 2021 17:39
To: Cowan, Natalie <njcowa@essex.ac.uk>
Cc: Joffe, Victoria L <v.joffe@essex.ac.uk>
Subject: RE: Travel Documents Signing

Dear Natalie,

Bryn has asked me to jump in here. My understanding is that Bryn has already approved this travel on the condition that Yusuf abides strictly with all requirements of the risk assessment and of the Government on their return (for example, needing to quarantine for ten days and take a return COVID test). We do not generally sign the documents themselves. This email can be used as evidence of his approval. I hope that helps.

With best wishes,

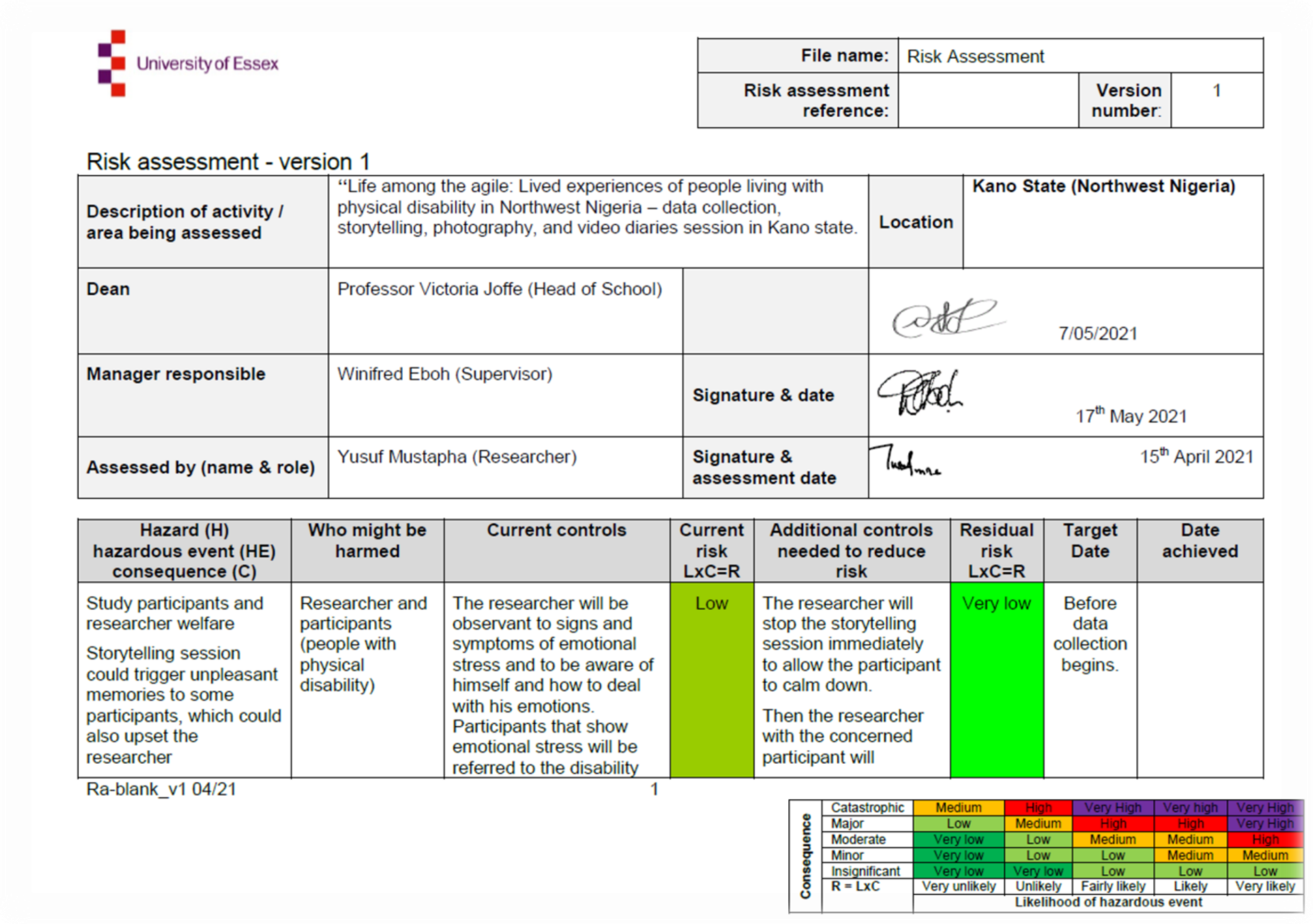
Lucy

Lucy Johnson
Assistant Registrar
University of Essex

My gender pronouns are she/her/hers

T 01206 874232
M 07962 233916
E lucyj@essex.ac.uk
► www.essex.ac.uk

Appendix 6c: Risk assessment



University of Essex

File name:	Risk Assessment		
Risk assessment reference:		**Version number:**	1

Risk assessment - version 1

Description of activity / area being assessed	"Life among the agile: Lived experiences of people living with physical disability in Northwest Nigeria – data collection, storytelling, photography, and video diaries session in Kano state.	**Location**	**Kano State (Northwest Nigeria)**
Dean	Professor Victoria Joffe (Head of School)		7/05/2021
Manager responsible	Winifred Eboh (Supervisor)	**Signature & date**	17th May 2021
Assessed by (name & role)	Yusuf Mustapha (Researcher)	**Signature & assessment date**	15th April 2021

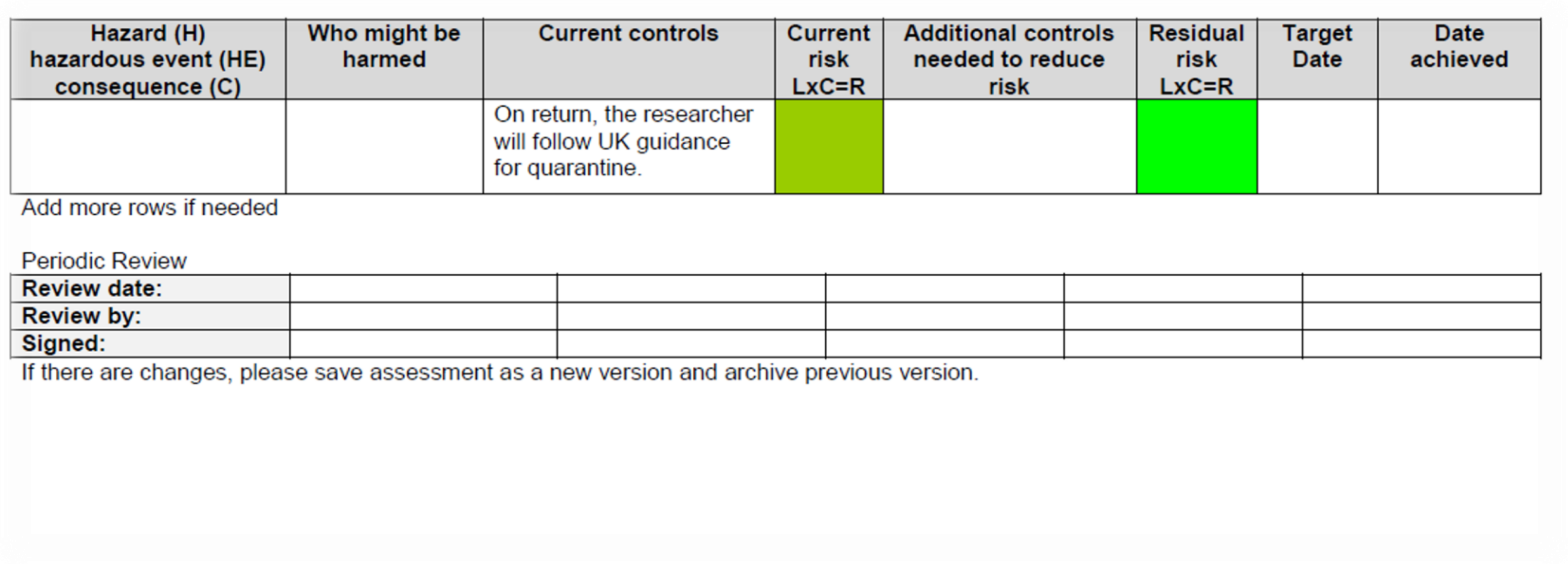
Hazard (H) hazardous event (HE) consequence (C)	Who might be harmed	Current controls	Current risk LxC=R	Additional controls needed to reduce risk	Residual risk LxC=R	Target Date	Date achieved
Study participants and researcher welfare Storytelling session could trigger unpleasant memories to some participants, which could also upset the researcher	Researcher and participants (people with physical disability)	The researcher will be observant to signs and symptoms of emotional stress and to be aware of himself and how to deal with his emotions. Participants that show emotional stress will be referred to the disability	Low	The researcher will stop the storytelling session immediately to allow the participant to calm down. Then the researcher with the concerned participant will	Very low	Before data collection begins.	

Ra-blank_v1 04/21 1

Consequence	Catastrophic	Medium	High	Very High	Very high	Very High
	Major	Low	Medium	High	High	Very High
	Moderate	Very low	Low	Medium	Medium	High
	Minor	Very low	Low	Low	Medium	Medium
	Insignificant	Very low	Very low	Low	Low	Low
	R = LxC	Very unlikely	Unlikely	Fairly likely	Likely	Very likely
		Likelihood of hazardous event				

Hazard (H) hazardous event (HE) consequence (C)	Who might be harmed	Current controls	Current risk LxC=R	Additional controls needed to reduce risk	Residual risk LxC=R	Target Date	Date achieved
		centre for support.		reassess the situation to either proceed with the session or not, or refer him/her to the disability centre, who the researcher made an agreement to provide emotional support to participants. Also, participant will be asked if he/she wishes to withdraw from the study or if the wish to continue. The researcher will be in continues contact with his supervisors and seek help from them, if needed.			
Study participants and researcher at risk of Covid -19	Researcher and participants (People with physical disability)	Nigeria registered very low cases and the rural areas where this research will be taking place did not record any. The situation has improved, Covid-19 centres have closed, only in the cities that there are still small number of Covid-19 centres (there	Low	If the situation deteriorates the data collection could be suspended.	Very low		

Hazard (H) hazardous event (HE) conseauence{CI	Who might be harmed	Current controls	Current risk LxC=R	Additional controls needed to reduce risk	Residual risk LxC=R	Target Date	Date achieved
		are no covid-19 centres where the research will be taking place due to lack of cases). Life has gone back to pre Covid-19 status, while observing social distancing and wearing face masks. The researcher has been fully vaccinated against Covid-19 infection. Nonetheless, A full Covid-19 contingency plan has been made following University of Essex guidelines: the researcher will take a Covid-19 antigen test prior to departure, self-isolate for 14 days on arrival, wear face coverings/masks during the storytelling sessions, observe social distancing and make regular use of handwashing and hand sanitisers.					



Hazard (H) hazardous event (HE) consequence (C)	Who might be harmed	Current controls	Current risk LxC=R	Additional controls needed to reduce risk	Residual risk LxC=R	Target Date	Date achieved
		On return, the researcher will follow UK guidance for quarantine.	🟩		🟩		

Add more rows if needed

Periodic Review

Review date:					
Review by:					
Signed:					

If there are changes, please save assessment as a new version and archive previous version.

Appendix 7a: Consent form – English version.

University of Essex

Consent Form

Project title: Life among the agile: Lived experiences of people living with physical disability in Northwest Nigeria.

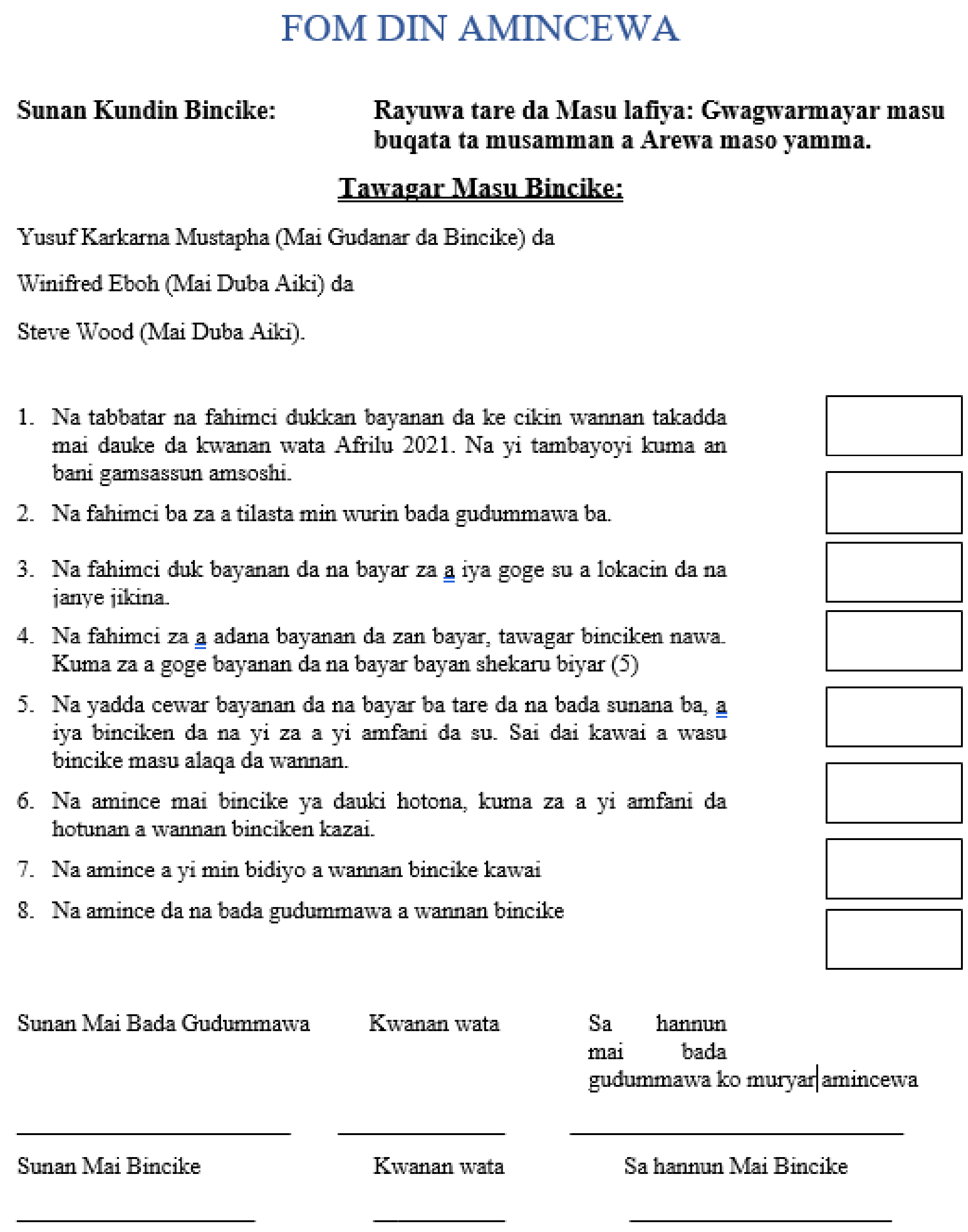
Research Team: Yusuf Karkarna Mustapha (Researcher), Vinifred Eboh (Supervisor) and Steve Wood (Co-supervisor).

Please initial box

1. I confirm that I understand the Information Sheet dated April 2021 for the above study. I have had an opportunity to consider the information, ask questions, and have had these questions answered satisfactorily. D
2. I understand that my participation is voluntary and that I am free to withdraw from the project at any time without giving any reason and without penalty. I understand that any data collected up to the point of my withdrawal will be destroyed. D
3. I understand that the identifiable data provided will be securely stored and accessible only to the members of the research team directly involved in the project, and that confidentiality will be maintained. The data collected will be destroyed after a mandatory five-year period, after the research has ended. D
4. I understand that my fully anonymized data will be used for this research and any publication related to this study or any publication that involves the researcher and his research. D
5. I permit the researcher to photograph me for this research. The images taken will only be used for the purpose of this research. D
6. I agreed to provide a video diary of my typical day for this research. The video diary I provided will only be used for the purpose of this research. D
7. I agree to take part in the above study. D

Participant Name	Date	Participant Signature (or voice recording of consent)
________________	________________	________________
Researcher Name	Date	Researcher Signature
________________	________________	________________

Appendix 7b: Consent form – Hausa version



FOM DIN AMINCEWA

Sunan Kundin Bincike: **Rayuwa tare da Masu lafiya: Gwagwarmayar masu buqata ta musamman a Arewa maso yamma.**

Tawagar Masu Bincike:

Yusuf Karkarna Mustapha (Mai Gudanar da Bincike) da

Winifred Eboh (Mai Duba Aiki) da

Steve Wood (Mai Duba Aiki).

1. Na tabbatar na fahimci dukkan bayanan da ke cikin wannan takadda mai dauke da kwanan wata Afrilu 2021. Na yi tambayoyi kuma an bani gamsassun amsoshi. ☐
2. Na fahimci ba za a tilasta min wurin bada gudummawa ba. ☐
3. Na fahimci duk bayanan da na bayar za a iya goge su a lokacin da na janye jikina. ☐
4. Na fahimci za a adana bayanan da zan bayar, tawagar binciken nawa. Kuma za a goge bayanan da na bayar bayan shekaru biyar (5) ☐
5. Na yadda cewar bayanan da na bayar ba tare da na bada sunana ba, a iya binciken da na yi za a yi amfani da su. Sai dai kawai a wasu bincike masu alaqa da wannan. ☐
6. Na amince mai bincike ya dauki hotona, kuma za a yi amfani da hotunan a wannan binciken kazai. ☐
7. Na amince a yi min bidiyo a wannan bincike kawai ☐
8. Na amince da na bada gudummawa a wannan bincike ☐

Sunan Mai Bada Gudummawa	Kwanan wata	Sa hannun mai bada gudummawa ko muryar amincewa
______________________	____________	___________________________
Sunan Mai Bincike	Kwanan wata	Sa hannun Mai Bincike
____________________	__________	______________________

Appendix 8a: Participant information sheets

University of Essex

Participant information sheet

Life among the agile: Lived experiences of people living with physical disability in Northwest Nigeria.

I am Yusuf Karbma Mwtapha; I am physically disabled due to contracting polio when I was 2 years old. I am a Ph.D. student in the Scjhool of Health and Social Care at the Universtity of Essex, United Kingdom. I grew up in Gwak: Local Govermnent, Kano state, and my family are still living in this local government. As part of my studies, I am carrying out this research to explore the lived experiences of people with physical disabilities in Northwest Nigeria. The main aim of the study is to understand lived experiences in relation to healthcare accessibility and social amenities in the community, and resources available for day-to-day living. The study has been approved by the National Health Research Ethics Committee, in Abuja and by the University of Essex Ethics Committee.

I would like to invite you to participate in this research **and** share your experiences. Before you decide whether to take part, it is important for you to read and understand why the research is being undertaken and what it will involve. Please take time to read the following information carefully or discuss it with others if you wish. If you cannot read this information, I will be happy to read it out to you in Hausa and record your verbal consent. If you have any questions or want more clarification or would like more information, please contact me on this number 08100856964..

What is the **purpose the study?**

I am interested in understanding your lived experiences concerning your disability; when accessing health and social care amenities and the resources that help you manage your life on a day-to-day basis. Also, I want to know about the kind of support you are receiving.

Why have I been invited to participate?

I invited you to participate in this study because of your disability. I am wondering if you could be. kind enough to help me by taking part m this study_By participating, you will be supporting me to complete one off the requirements needed for my Ph.D. degree. You will also help me identify the type of healthcare and Support services available to you in your community. I would be very grateful if you could take about 45-60 minutes to tell me your story? If it is okay with you, I would like to audio-record our conversation for my analysis. Approximately 15 -people including yourself, have been invited to participate in this study.

Do I have to take part?

No, participation in this study is voluntary., and there is no obligation to take part. If you wish not to take part, your decision will be respected. You are free to withdraw at any time, without giving a reason, it will not affect you in any way.

What are the possible disadvantages and risks of taking part?

There are no known risks associated with taking part in this study, only that you may find some the content of the discussions to be personal which may trigger unpleasant memories. If this occurs, I will be referring you to your disability centre for support. I will also ask you if you wish to stop or proceed with the study, and if you choose to leave, this will not affect you in any way.

What are the possible benefits of taking part?

I cannot promise that the study will not be too personal. Nonetheless, the knowledge acquired from this study will help to improve the lives of people like you and me.. The information obtained through this study will help improve the overall services provided to people like you and me across the states when the results are published and shared with the government

What information will be collected?

The information to be collected will include your experiences and views on the healthcare and support services provided to you in your community and state. With your permission, I would like to take some pictures of you accessing some of the facilities provided to you. These pictures will show your body (Elbow to shoulder), and your face will not be included to maintain anonymity. I would like to know what yonr typical day is like by video recording yourself while going about your day. Video recording equipment will be provided to you. This video equipment has been sterilised to prevent cross contamination. Please, take care of the video equipment while in your possession.. This video will be a 30-minute summary of your typical day. Throughout this study, anonymity is going to be maintained. If you can provide photographs of a typical day and video of your day at work, please tick the appropriate box on the consent form included with this participation information sheet.

Will my information be **kept confidential?**

Yes, I will maintain your privacy and confidentiality throughout the research. I plan to achieve this by ensuring that the storytelling sessions will be conducted in a quiet place, away from other people, and that all the data collected are not accessible to other people. Only I and my supervisors will have access to the data. After each session, all the information collected will be anonymized, which means nobody will know who said what. I will not use names at the time of data analysis, but I will use a pseudonym instead on the research tools or the audio recordings. It will help me maintain anonymity **and** confidentiality. The responses you provide will be kept confidential. No.identifying information will appear on any document or the final report.

I wil1 be protecting your data accordmg to the UK Data Protection Act 2018. Any information that might identify you will be kept confidential. At the end of my research, I will be providing an electronic copy of my research materials to my university. These materials will remain in the university's archives for a period of five years before the materials are erased from their systems.

What is the legal basis for collecting the data, and who is the Data Controller?

I will be following ethical and legal practices throughout the research period. The University of Essex will have control of the data collected through the office of'the University Information Assurance Manager (Sara Stock) on dpo@essex.ac_nk

What should I do if I want to take part?

If you are interested in taking part, you will need to complete and sign and give verba1 consent The verba1 consent will be audio recorded. The session will last 45 -60 minutes and will take place at a convenient time and place for yon. If you would like to find out more about the research before taking part, please do not hesitate to contact the research team, Yusuf Karkama Mustapha by email, at ym19872@.essex.ac..nk or 081U0856964 or my supervisors
Dr Winifred Eboh and Dr. Steve Wood,
at w.eboh@essex..ac..uk. scwood@essex:.ac.uk respectively.

What will happen to the results of the research study?

The data will be analysed and made available to a range of people, including yourself (if interested), health professionals, and researchers through written reports, presentations, and journal publications. I will be submitting copies of the thesis to the University of Essex and the Nigerian State and Federal Government. Nonetheless, it will not be possible to identify any individnal participants from these reports or publications.

Who is organizing and funding the research?

This research is self-funded.

Who has reviewed the study?

The research was reviewed and approved by the National Health Research Ethics Committee in Abuja (Reference Number: NHRECJO l/OV2007-08f0 l/2!021). Also, the study has been reviewed and approved by the University of Essex: Research and Ethics Committee. I will be obtaining consent before the research commences.

Concerns and Complaints

If you have any concerns about any aspect of the study or you have a complaint, please feel free to email me at ym19872@essex.ac.uk or OBW0856964. If you are still concerned, or you think your complaint has not been addressed to your satisfaction, or you feel that you cannot approach the Principal Investigator, please contact the Postgraduate Research Director responsible for this project, Dr. Winifred Eboh at w.eboh@essex.ac.uk. If you are still not satisfied, please feel free to contact the University's Research Governance and Planning Manager, Sarah Manning-Press at sarahm@essex.ac.Yk, and the Chairperson of the National Committee on Research in the Social Sciences and Humanities at flwh@ncst.mw.

Name of the Researcher/Research Team Members

If you want to know more about the research, please contact the research team. You can contact me at ym19872@essex.ac.uk or 08100856964. You can also talk to my supervisors Dr. Winifred Eboh and Dr. Steve Wood from the School of Health and Social Care, at w.eboh@essex.ac.uk, scwood@essex.ac.uk respectively.

Thank you for taking your time to read this study information sheet.

Appendix 8b: Hausa version of participant information sheets

TAKARDAR BAYANIN MAI BADA GUDUMMAR GUDANAR DA BINCIKE

RAYUWA TARE DA MASU CIKAKKIYAR LAFIYA:

Gwagwarmar masu Buqata Ta Musamman a Arewa maso Yammacin Nijeriya

Suna na Yusuf Karqarna Mustapha, mai buqata ta musamman sakamakon kamuwa da Foliyo tun ina xan shekara biyu. A yanzu haka ina karatu digiri na uku (PhD). A Tsangayar Lafiya da Bada Kulawa ta Jami'ar Essex United Kingdom. Ni xan asalin qaramar hukumar Gwale ne a jihar Kano. Kuma har yanzu dangi na na zaune a Gwale cikin jihar Kano.

Kasancewar wannan shi ne abin da nake karanta. Daga cikin abin da nake karanta nake gudanar da wannan bincike domin na gano gwagwarmayar masu buqata ta musamman A Arewa maso yammacin Nijeriya. Maqasudin yin wannan nazari shi ne domin na gano yadda masu buqata ta musamman suke samun kulawa ta lafiya da abubuwan more rayuwa, a mazaunin su da kuma abin tafikar da rayuwa. Kwamitin lafiya na qasa mai kula xa'ar gudanar da bincike da ke Abuja wanda kwamitin xa'ar bincike ta Jami'ar Essex yake tallafawa, ya sahalemin na gudanar da wannan binciken.

Ina gayyatar ku, da ku bada gudummawa a wannan bincike ta hanyar bada iliminku/ kwarewarku. Amma ka fin ku amince, yana da muhimmanci ku karanta domin ku fahimci dalilin gudanar da binciken da kuma yadda za a gudanar da shi. Ka karanta wannan bayani a nitse, za kuma ka iya tattaunawa da wani idan ka so. Idan kuma ba za ka iya karantawa ba, zan yi farincin na karanta maka da harshen Hausa, sannan na naxi muryarka cewar ka amince, idan kana da wata tambaya ko qarin bayani ka neme ni a wannan lambar 08100856964.

- **Menene Maqasudin Gudanar da Binciken?**

Ina da sha'awar na gano yadda rayuwar masu buqata ta musamman take, a lokacin da suke neman lafiya da samun kulawa ta kayan more rayuwa, da kuma yadda suke iya gudanar da rayuwarsu ta yau da kullum. Sannan kuma ina son na san irin tallafin da suke samu.

➢ Me Yasa aka Gayyace ni Domin na Bada Gudummawa?

Na gayyace ka/ki da ka bada gudummuwa a wannan bincike saboda lalurar ka/ki. Zan yi farin ciki idan ka/kika taimake ni a wannan bincike. Gudunmuwar ka/ki za ta taimake ni wajen cika sharuxan samun digirina na uku. Zai kuma taimaka min wajen gano irin tsarin lafiya da tallafi da kuke samu a mazaunanku. Zan yi farin-ciki idan kuka bani minti 45 ko 60; domin ka/ki bani labarin ka/ki idan hakan ya yi maka/ki, to zan naxi sautin muryar ka/ki na yi nazari daga baya. A qalla akwai mutane goma sha biyar da aka gayyata domin gudanar da wannan bincike, ciki har da kai/ke.

➢ Shin dole ne na Bayar da Gudummuwa?

A'a, bayar da gudummuwa a wannan bincike sai an yi niya. Babu tilashi a ciki. Idan ka ga ba zaka bada gudummuwa ba, hakamma muna godiya. Koda lokacin da ake tsaka da gudanar da binciken za ka iya tafiyarka babu mai tsangwamarka.

➢ Waxanne Abubuwa ne ka iya Zama Matsaloli wajen Bada Gudummawa a Wannan Bincike?

Babu wasu sanannun abubuwa da ka iya zama haxari wajen bada gudummuwa a wannan bincike, sai dai za ka iya ganin wasu bayanan kamar da kai ake kai tsaye wanda hakan zai iya sa ka ji ba daxi. Idan hakan ta kasance zan turaka cibiyar masu kula da masu buqata ta musamman domin samun tallafi. Zan kuma ji ra'ayinka idan kana so a dakatar da kai daga cikin masu bada gudunmuwa kuma babu mai tsangwamarka.

➢ Waxanne Abubuwane ka iya Zama Riba Gare ni Don Gudanar da Wannan Bincike?

Ban yi alqawarin cewa wannan bincike zai taimaka maka kai tsaye ba, sai dai ilimin da za'a samu daga cikinsa zai amfani rayuwar mutane irinka da irin mu. Haka zalika, bayanan da za a tattara a wannan bincike za su taimaka wajen bunqasar walwalar mutane kamar ku a jahohi daban-daban musamman idan aka bada sakamakon binciken ga gwamnatoci.

➢ Waxanne Bayanai Za'a Tattara?

Bayanan da za a tattara sun haxa da labarin gwagwarmayar ka/ki da ra'ayoyin ka a kan tsarin lafiya da kuma tallafi da ake muku a jahohinku. Bisa izinin ka/ki zan xauki hotunanka/ki a lokacin da kake amfani da kayan da aka tallafa maka da su. A hoton za a xauki iya jikinka ne kawai daga kafaxa zuwa qasa ba za a xau hoton fuskar ka ba, domin voye waye kai. Zan so nasan ya tsarin rayuwar ka/ki yake a kowace rana ta hanyar maka bidiyo a kan abubawan da kake a kowace rana, za a kawo na'uwar xaukar bidiyo wacce akai mata rigakafin kariya daga yaxa cututtuka, za a yi bidiyon minti talatin akan yadda kake gudanar da rayuwarka ta yau da kullum.

Yayin gudanar da binciken ba za a bayyana waye kai ba. Idan kuma kana da wasu hotunan ko bidiyo na yadda kake gudanar da ayyukanka ko sana'arka. Ta hanyar cike akwatinan da za su zo a qasa.

➢ Bayanan da zan bayar za su zama na sirri?

Tabbas! Duk bayananka za su zaman a sirri, mun shirya cewa inda za mu zauna mu gana ma na sirri ne. Ba mai iya sanin bayanan da za ku bayar. Ni da malamai na ne kawai za mu iya gani. Ba za mu yi amfani da sunayanku ba, za mu yi amfani da wasu sunayen ne daban, a cikin bincike.

Ba za mu saka wata sheda da za a iya gane ku da ita ba a qarshen rahoton bincikenmu. Zan kare dukkanin bayanan da za ku bayar kamar yadda dokar qasar Birtaniya ta kare haqqin bayanai ta 2018 ta bayar. A kuma qarshen binciken nawa zan tura abin da na tattara ta kwamfuta ga Jami'ar da nake yi wa bincike. Kuma bayanan da zan tura za su kasance a xakin gudanar da bincike (Library) na Jami'a, a tsawon shekara biyar. Kafin kuma daga baya a goge su daga kwamfuta.

➢ *Mene Maqasudin amfani da bayanan ta Mahangar sannan waye kuma zai kula da bayanan?*

Zan bi dukkanin tanade-tanaden doka a binciken, kuma Jami'ar Essex ce za ta kula da bayanan ta ofishin manajan kula da bayanai (Sara Stock) on dpo@essex.ac.uk.

➢ Me zan yi idan ina so nima na Bada Gudummuwa?

Za ka rubuta takaddar amincewa ne, ko ka faxa da bakinka ta hanyar rikodin. Za a yi minti 45 zuwa minti 60 ana ganawa a lokacin da ya fi dace maka. Idan kana buqatar qarin bayani a kan yadda zaman zai kasance tintivi shugaban binciken Yusuf Karkarna Mustapha ta adireshin Email at ym19872@essex.ac.uk ko lambar waya 08100856964 ko ta malamaina Dr. Winifred Eboh da Dr. Steve wood, ta wannan adireshin w.eboh@essex.ac.uk, scwood@essex.ac.uk.

➢ Me za a yi da Sakamakon Binciken?

Za a yi nazari a kan bayanan, sannan a ba wa wasu taqaitattun mutane, ciki har da kai idan kana so da kwararrun Jami'an lafiya da masu gudanar da bincike. Za kuma a miqa wa Jami'ar Essex da gwamnatin Jaha da kuma ta tarayya. Ba kuma za a iya gane waxanda suka bada gudummawa a binciken ba.

➢ Wa ya shirya Binciken kuma ya auki Nauyinsa?

Me binciken shi ya dauki nauyin gudanar da binciken sa.

➢ Waye ya sa ido kan yadda za a gudanar da binciken?

Kwamatin qasa mai kula da tsarin gudanar da binciken lafiya da ke Abuja ne ya sahale ya kuma amince. Lambar Sheda: NHREC/01/01/2007-08/01/2021). Shi ma kwamatin kula da tsare-tsare na Jami'ar Essex ya sahale a gudanar da wannan bincike.

➢ Kulawa da Qorafe-Qorafe

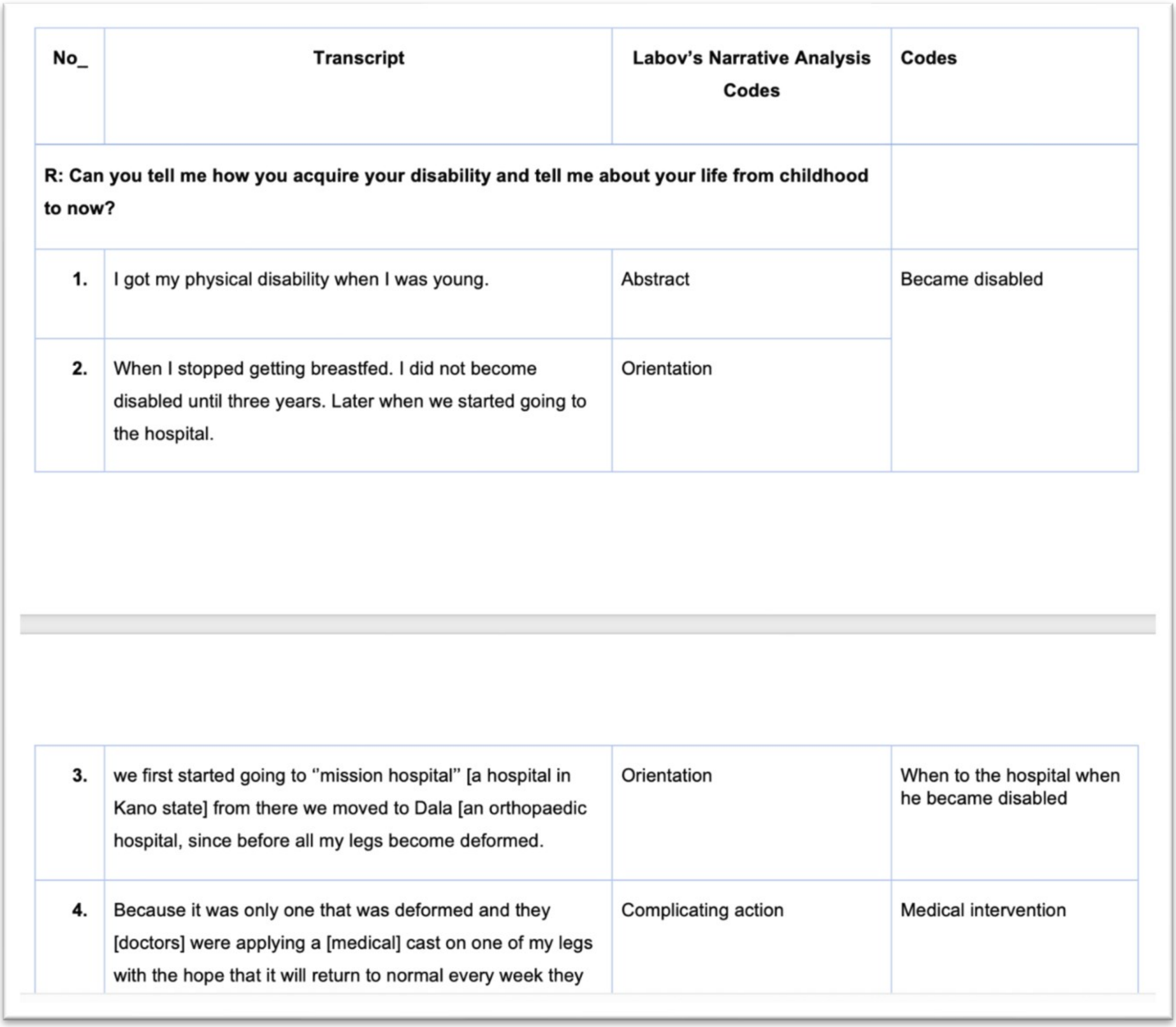
Idan kana da wata damuwa ko wani qorafi, ka tura ta wannan adireshin Email xin ym19872@essex.ac.uk ko ta wannan lambar 08100856964. Idan kuma ka ga ba a amsa maka qorafinka ba ko ba za ka iya tunkarar babban jami'in bincike ba, to ka tuntivi daraktan wannan bincike Dr. Winifred Eboh ta wannan adireshin w.eboh@essex.ac.uk. Idan har yanzu ba ka gamsu ba to ka tuntivi shugabar sashen bincike da tsare-tsare na Jami'ar Sarah Manning Press ta wannan adireshin Sarahma@essex.ac.uk. Ko kuma shugaban kwamatin bincike na qasa a sashen koyar da kimiyyar zamantakewar dan'adam ta adireshin Email ncrsh@ncst.mw

➢ Sunayen Masu Gudanar da Bincike

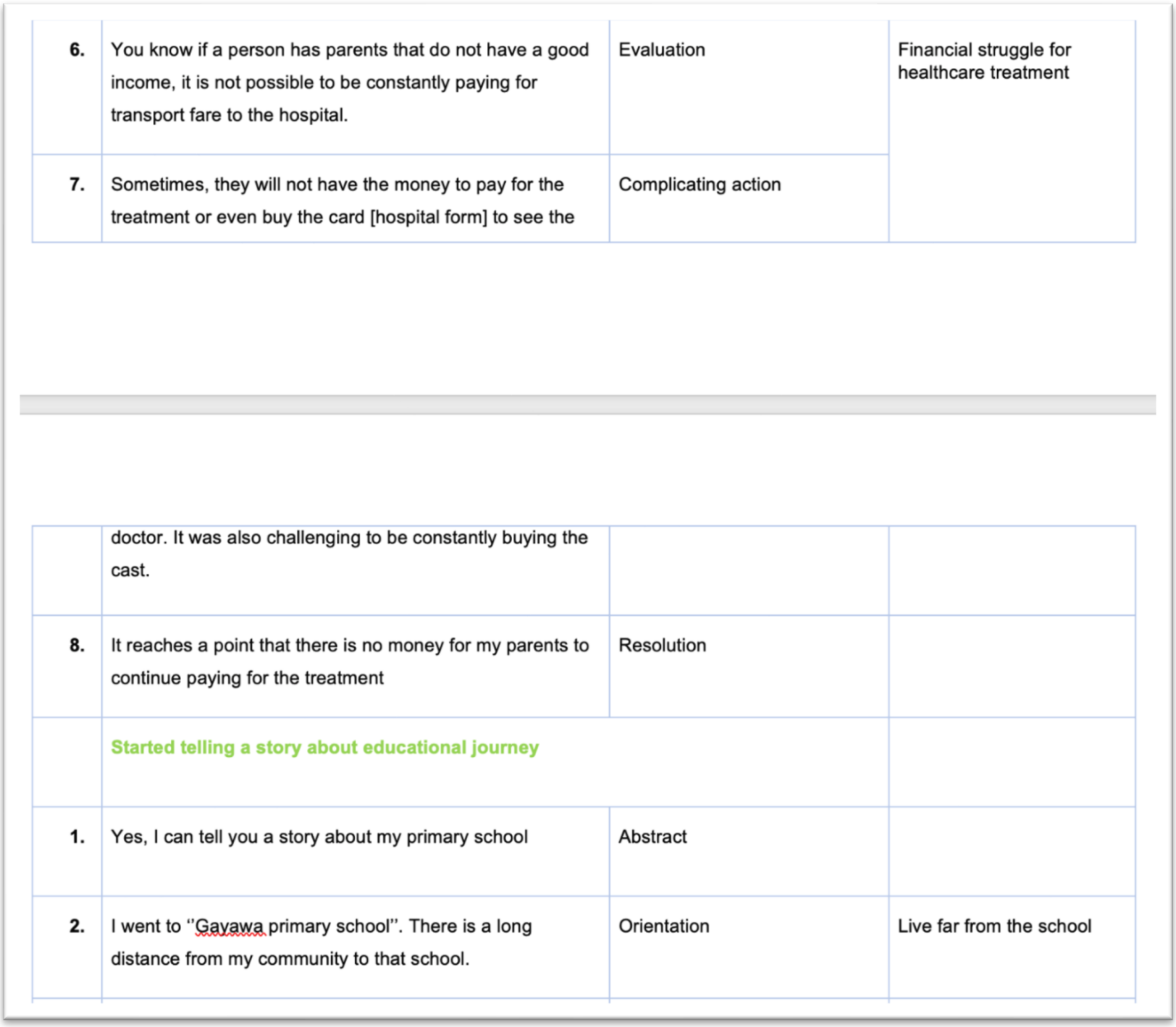
Idan kana son sanin wani abu a kan wannan bincike, ka tuntivi masu gudanar da binciken ko a tuntive ni ta wannan adireshin Email xin ym19872@essex.ac.uk ko ta wannan lambar 08100856964. Ko ka tuntivi Malamaina Dr. Winifred Eboh, da kuma Dr. Steve ta wannan adireshin w.eboh@essex.ac.uk, scwood@essex.ac.uk.

Muna godiya da bamu lokacin ka/ki da ka yi na karanta wannan bayanan.

Appendix 9: First stage of data extraction

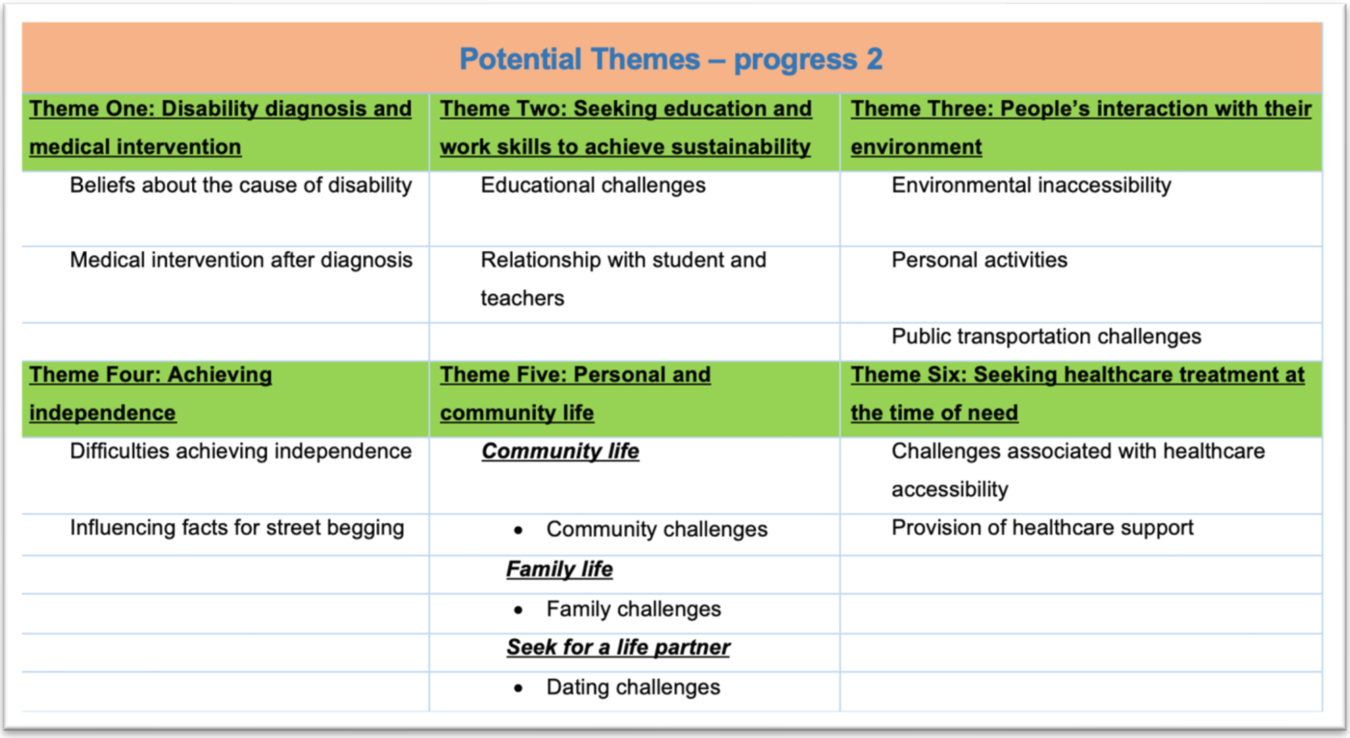


No_	Transcript	Labov's Narrative Analysis Codes	Codes
R: Can you tell me how you acquire your disability and tell me about your life from childhood to now?			
1.	I got my physical disability when I was young.	Abstract	Became disabled
2.	When I stopped getting breastfed. I did not become disabled until three years. Later when we started going to the hospital.	Orientation	
3.	we first started going to "mission hospital" [a hospital in Kano state] from there we moved to Dala [an orthopaedic hospital, since before all my legs become deformed.	Orientation	When to the hospital when he became disabled
4.	Because it was only one that was deformed and they [doctors] were applying a [medical] cast on one of my legs with the hope that it will return to normal every week they	Complicating action	Medical intervention

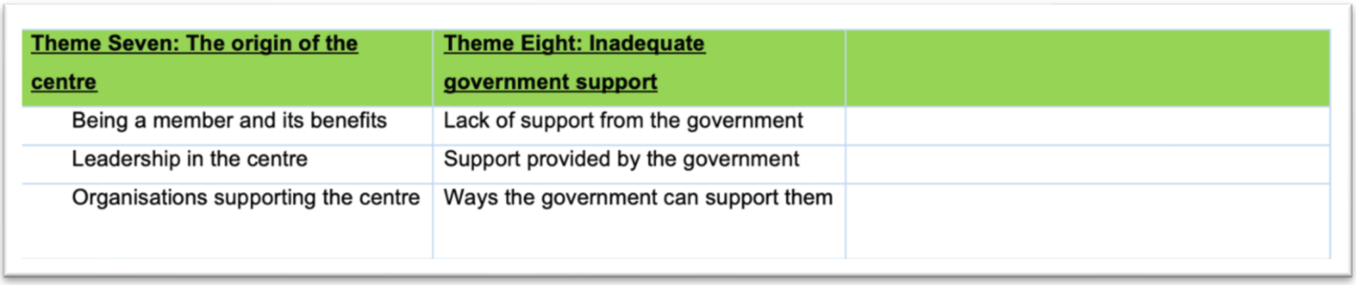


6.	You know if a person has parents that do not have a good income, it is not possible to be constantly paying for transport fare to the hospital.	Evaluation	Financial struggle for healthcare treatment
7.	Sometimes, they will not have the money to pay for the treatment or even buy the card [hospital form] to see the doctor. It was also challenging to be constantly buying the cast.	Complicating action	
8.	It reaches a point that there is no money for my parents to continue paying for the treatment	Resolution	
	Started telling a story about educational journey		
1.	Yes, I can tell you a story about my primary school	Abstract	
2.	I went to ''Gayawa primary school''. There is a long distance from my community to that school.	Orientation	Live far from the school

Appendix 10a: Stage two of data analysis

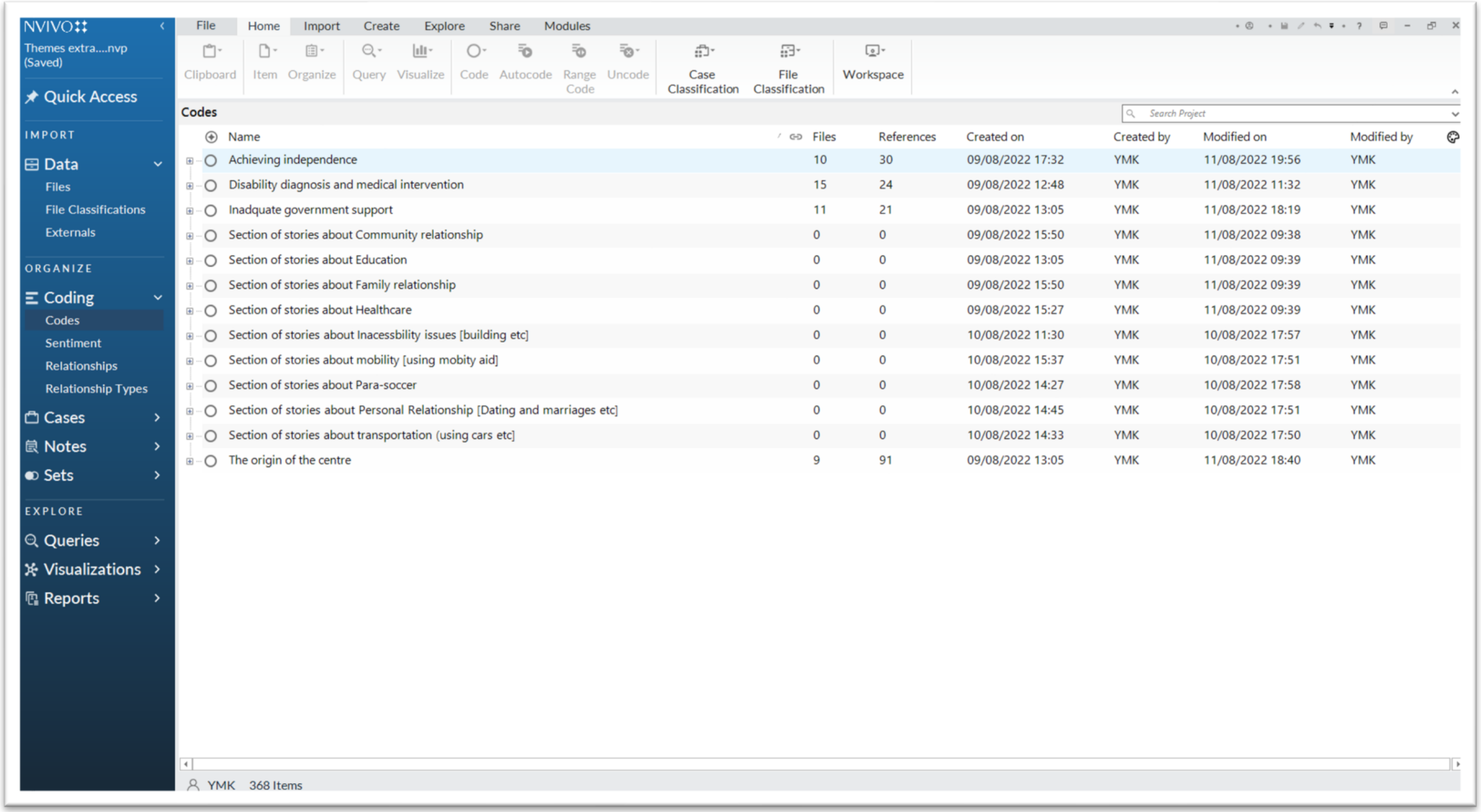


Potential Themes – progress 2		
Theme One: Disability diagnosis and medical intervention	**Theme Two: Seeking education and work skills to achieve sustainability**	**Theme Three: People's interaction with their environment**
Beliefs about the cause of disability	Educational challenges	Environmental inaccessibility
Medical intervention after diagnosis	Relationship with student and teachers	Personal activities
		Public transportation challenges
Theme Four: Achieving independence	**Theme Five: Personal and community life**	**Theme Six: Seeking healthcare treatment at the time of need**
Difficulties achieving independence	***Community life***	Challenges associated with healthcare accessibility
Influencing facts for street begging	• Community challenges	Provision of healthcare support
	Family life	
	• Family challenges	
	Seek for a life partner	
	• Dating challenges	



Theme Seven: The origin of the centre	**Theme Eight: Inadequate government support**	
Being a member and its benefits	Lack of support from the government	
Leadership in the centre	Support provided by the government	
Organisations supporting the centre	Ways the government can support them	

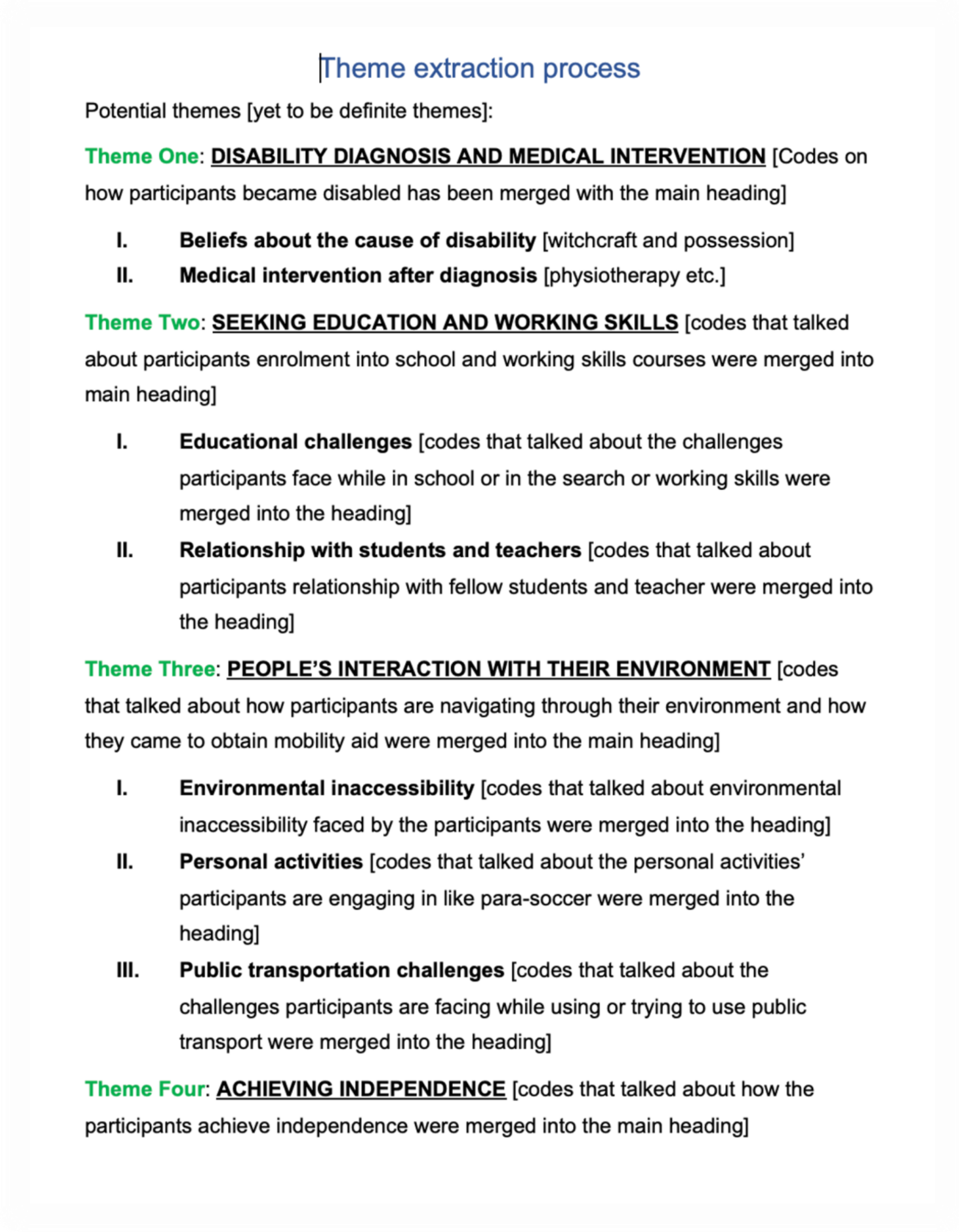
Appendix 10b: Stage two of data analysis



Codes

Name	Files	References	Created on	Created by	Modified on	Modified by
Achieving independence	10	30	09/08/2022 17:32	YMK	11/08/2022 19:56	YMK
Disability diagnosis and medical intervention	15	24	09/08/2022 12:48	YMK	11/08/2022 11:32	YMK
Inadquate government support	11	21	09/08/2022 13:05	YMK	11/08/2022 18:19	YMK
Section of stories about Community relationship	0	0	09/08/2022 15:50	YMK	11/08/2022 09:38	YMK
Section of stories about Education	0	0	09/08/2022 13:05	YMK	11/08/2022 09:39	YMK
Section of stories about Family relationship	0	0	09/08/2022 15:50	YMK	11/08/2022 09:39	YMK
Section of stories about Healthcare	0	0	09/08/2022 15:27	YMK	11/08/2022 09:39	YMK
Section of stories about Inacessbility issues [building etc]	0	0	10/08/2022 11:30	YMK	10/08/2022 17:57	YMK
Section of stories about mobility [using mobity aid]	0	0	10/08/2022 15:37	YMK	10/08/2022 17:51	YMK
Section of stories about Para-soccer	0	0	10/08/2022 14:27	YMK	10/08/2022 17:58	YMK
Section of stories about Personal Relationship [Dating and marriages etc]	0	0	10/08/2022 14:45	YMK	10/08/2022 17:51	YMK
Section of stories about transportation (using cars etc]	0	0	10/08/2022 14:33	YMK	10/08/2022 17:50	YMK
The origin of the centre	9	91	09/08/2022 13:05	YMK	11/08/2022 18:40	YMK

Appendix 10c: theme extraction process stage.



Theme extraction process

Potential themes [yet to be definite themes]:

Theme One: **DISABILITY DIAGNOSIS AND MEDICAL INTERVENTION** [Codes on how participants became disabled has been merged with the main heading]

I. **Beliefs about the cause of disability** [witchcraft and possession]
II. **Medical intervention after diagnosis** [physiotherapy etc.]

Theme Two: **SEEKING EDUCATION AND WORKING SKILLS** [codes that talked about participants enrolment into school and working skills courses were merged into main heading]

I. **Educational challenges** [codes that talked about the challenges participants face while in school or in the search or working skills were merged into the heading]
II. **Relationship with students and teachers** [codes that talked about participants relationship with fellow students and teacher were merged into the heading]

Theme Three: **PEOPLE'S INTERACTION WITH THEIR ENVIRONMENT** [codes that talked about how participants are navigating through their environment and how they came to obtain mobility aid were merged into the main heading]

I. **Environmental inaccessibility** [codes that talked about environmental inaccessibility faced by the participants were merged into the heading]
II. **Personal activities** [codes that talked about the personal activities' participants are engaging in like para-soccer were merged into the heading]
III. **Public transportation challenges** [codes that talked about the challenges participants are facing while using or trying to use public transport were merged into the heading]

Theme Four: **ACHIEVING INDEPENDENCE** [codes that talked about how the participants achieve independence were merged into the main heading]

I. **Difficulties achieving independence** [codes that talked about the difficulties participants were facing while trying to be independent and sustain their lives that of their families were merged into the heading]

II. **Factors influencing street begging** (codes that talked about street begging and its influence on participants' lives were merged into the heading]

Theme Five: **PERSONAL AND COMMUNITY LIFE** [Codes that talked about family and community life, seeking a life partner as well as personal activities were merged into the main heading - this will be separated upon write up]

I. **Seeking a life partner** [codes that talked about participants dating and personal relationships were merged into the main heading]
   - *Dating challenges* (codes that talked about the challenges people face while looking for a life partner were merged into the heading]

II. **Family life** [codes that talked about participants' family and family responsibilities were merged into the heading]
   - *Family challenges* [this will be a paragraph in the writeup not a sub-theme or sub-sub-theme]

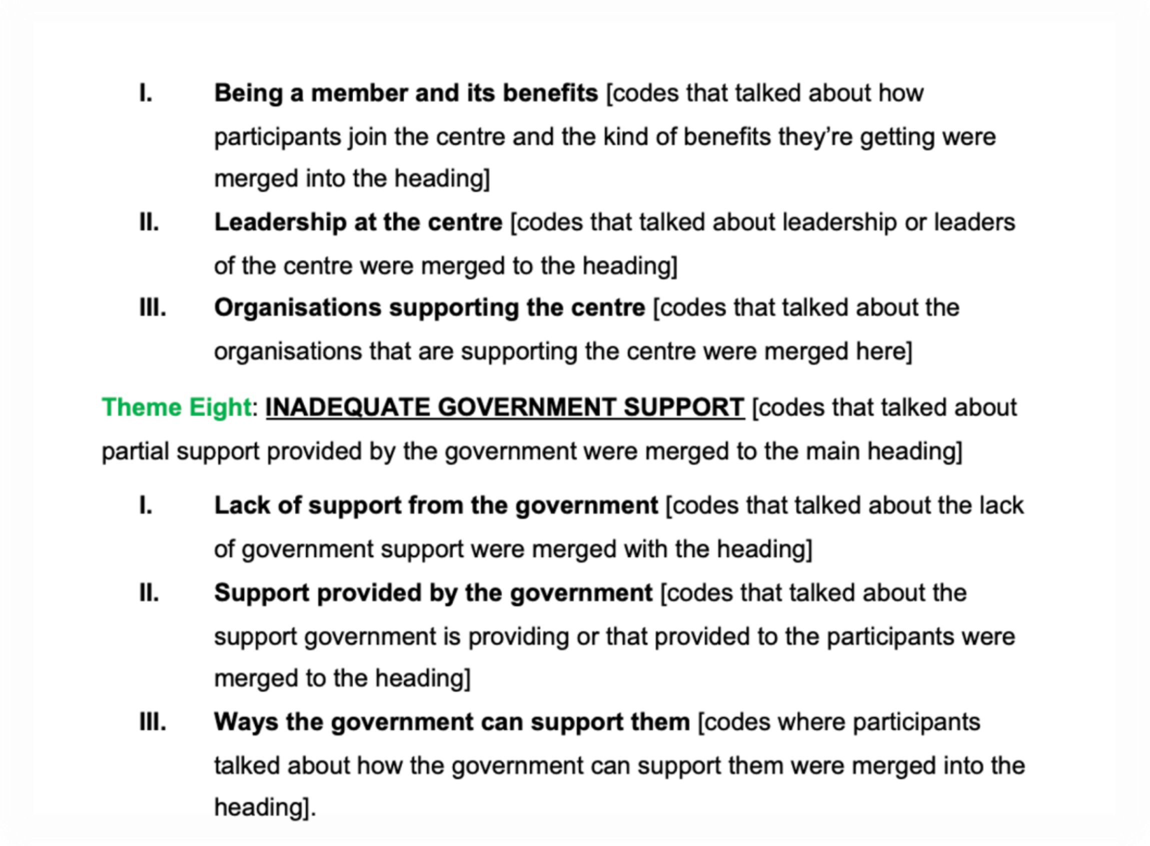
III. **Community life** [Codes that talked about participants' relationship with people in the community were merged into the heading]
   - *Community challenges* [this will be a paragraph in the writeup not sub-theme or sub-sub-theme]

Theme Six: **SEEKING HEALTHCARE TREATMENT AT THE TIME OF NEED** [codes that talked about the process participants used to seek medical care were merged into the main heading]

I. **Challenges associated with healthcare accessibility** [codes that talked about the challenges participants face while seeking medical care were merged into the heading]

II. **Provision of healthcare support** [codes that talked about the support people are getting at the hospital were merged into the heading

Theme Seven: **THE ORIGIN OF THE CENTRE** [codes that talked about the creation and how the centre came into existence were merged into the main heading]



I. **Being a member and its benefits** [codes that talked about how participants join the centre and the kind of benefits they're getting were merged into the heading]

II. **Leadership at the centre** [codes that talked about leadership or leaders of the centre were merged to the heading]

III. **Organisations supporting the centre** [codes that talked about the organisations that are supporting the centre were merged here]

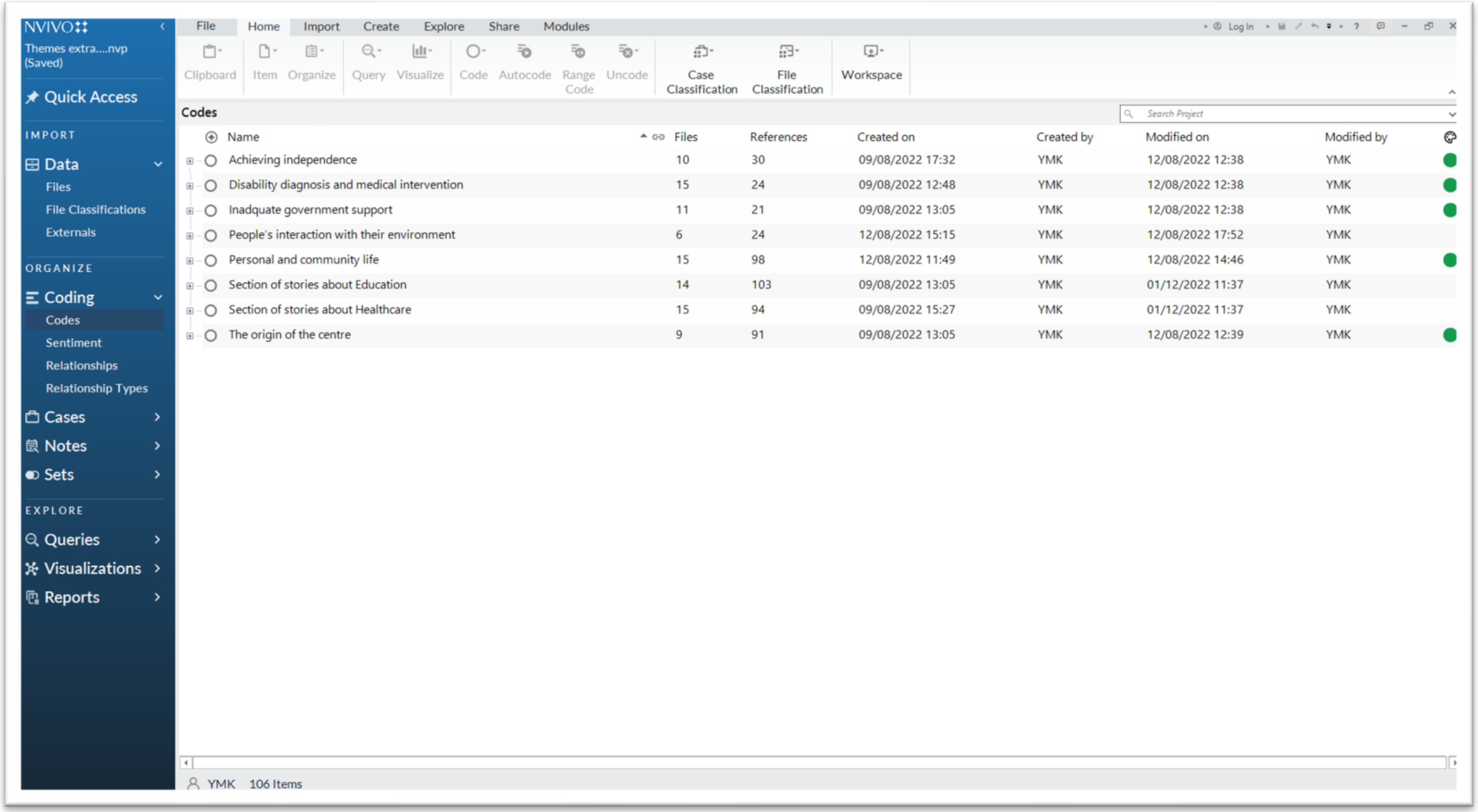
Theme Eight: **INADEQUATE GOVERNMENT SUPPORT** [codes that talked about partial support provided by the government were merged to the main heading]

I. **Lack of support from the government** [codes that talked about the lack of government support were merged with the heading]

II. **Support provided by the government** [codes that talked about the support government is providing or that provided to the participants were merged to the heading]

III. **Ways the government can support them** [codes where participants talked about how the government can support them were merged into the heading].

Appendix 10d: NVivo theme extraction process stage



Codes

Name	Files	References	Created on	Created by	Modified on	Modified by	
Achieving independence	10	30	09/08/2022 17:32	YMK	12/08/2022 12:38	YMK	●
Disability diagnosis and medical intervention	15	24	09/08/2022 12:48	YMK	12/08/2022 12:38	YMK	●
Inadquate government support	11	21	09/08/2022 13:05	YMK	12/08/2022 12:38	YMK	●
People's interaction with their environment	6	24	12/08/2022 15:15	YMK	12/08/2022 17:52	YMK	
Personal and community life	15	98	12/08/2022 11:49	YMK	12/08/2022 14:46	YMK	●
Section of stories about Education	14	103	09/08/2022 13:05	YMK	01/12/2022 11:37	YMK	
Section of stories about Healthcare	15	94	09/08/2022 15:27	YMK	01/12/2022 11:37	YMK	
The origin of the centre	9	91	09/08/2022 13:05	YMK	12/08/2022 12:39	YMK	●

Appendix 11a: Theme extraction process – part three

Theme extraction process - Part three.

Themes

Theme One: DISABILITY DIAGNOSIS AND ACQUISITION OF SKILL:

I. **Disability diagnosis and medical intervention** [Codes on how participants became disabled, beliefs about disability (witchcraft and possession) and medical intervention after diagnosis has been merged with the heading]

II. **Seeking education and working skills** [codes that talked about participants' enrolment into school, educational challenges, working skills courses and relationships with students and teachers were merged into main heading]

Theme Two: ACHIEVEMENT OF INDEPENDENCE AND ENVIRONMENTAL ADAPTABILITY:

I. **People's interaction with their environment** [codes that talked about how participants navigate through their environment, acquisition of mobility aids, environmental inaccessibility, personal activities, and public transportation were merged into the main heading]

II. **Achievement of independence** [codes that talked about how the participants achieve independence, difficulties and the influencing factors leading to street begging were merged into the main heading]

Theme Three: PERSONAL AND COMMUNITY LIFE [Codes that talked about family and community life, seeking a life partner as well as personal activities, were merged into the main heading - these will be separated upon write up]

I. **Seeking a life partner** [codes that talked about participant dating and personal relationships were merged into the main heading]
   - *Dating challenges* [codes that talked about the challenges people face while looking for a life partner were merged into the heading]

II. **Family life** [codes that talked about participants' family and family responsibilities were merged into the heading]
   - *Family challenges* [this will be a paragraph in the write up not a sub-theme or sub-sub-theme]

III. **Community life** [Codes that talked about participants' relationships with people in the community were merged into the heading]
  - *Community challenges* [this will be a paragraph in the write up not a sub-theme or sub-sub-theme]

Theme Four: SEEKING HEALTHCARE TREATMENT AT THE TIME OF NEED [codes that talked about the process participants used to seek medical care were merged into the main heading]

I. **Challenges associated with healthcare accessibility** [codes that talked about the challenges participants face while seeking medical care were merged into the heading]

II. **Provision of healthcare support** [codes that talked about the support people are getting at the hospital were merged into the heading]

Theme Five: THE ORIGIN OF THE CENTRE [codes that talked about the creation and how the centre came into existence were merged into the main heading]

I. **Being a member and its benefits** [codes that talked about how participants joined the centre and the kind of benefits they're getting were merged into the heading)

II. **Leadership at the centre** [codes that talked about leadership or leaders of the centre were merged into the heading)

III. **Organisations supporting the centre** [codes that talked about the organisations that are supporting the centre were merged here]

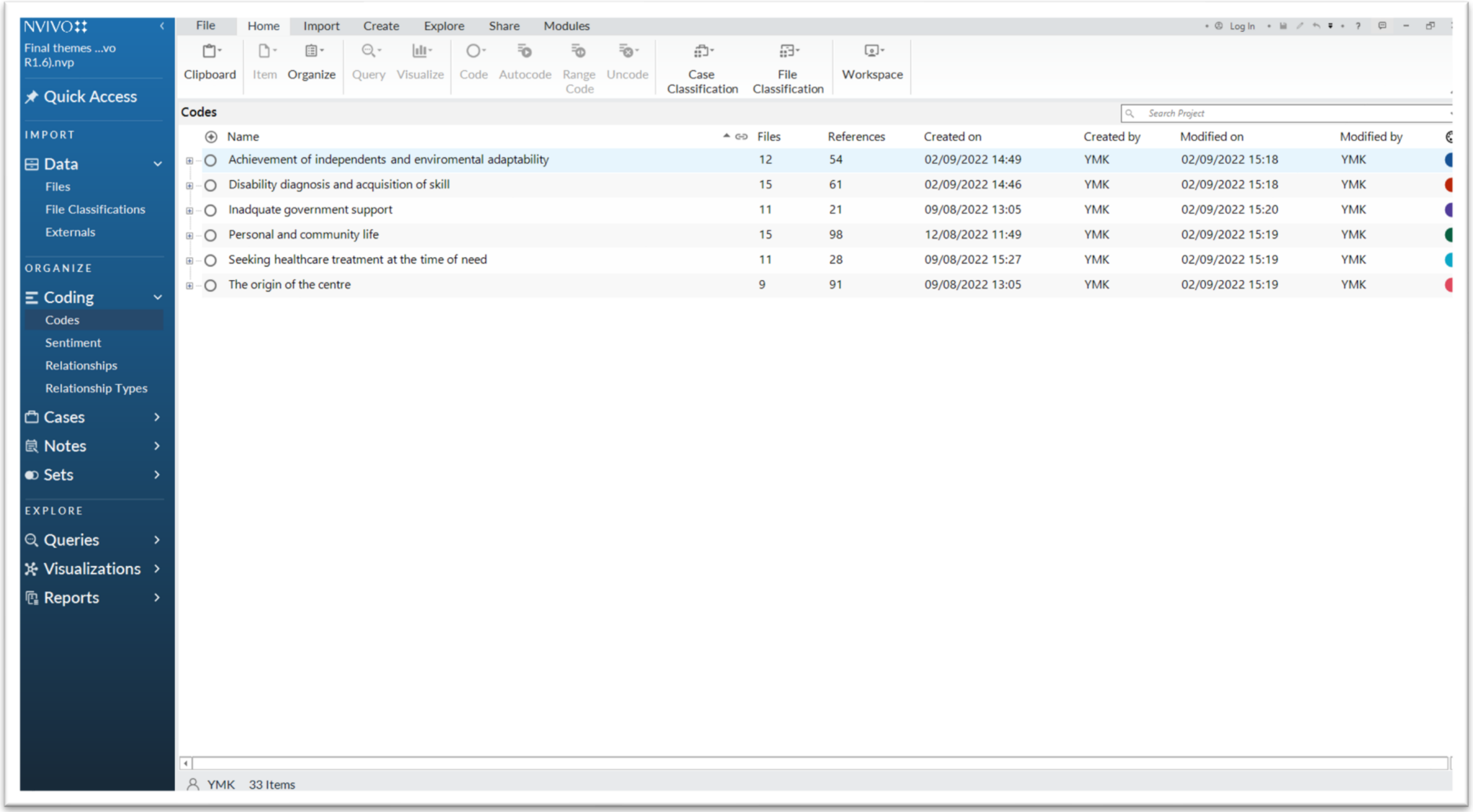
Theme Six: INADEQUATE GOVERNMENT SUPPORT [codes that talked about partial support provided by the government were merged into the main heading]

I. **Lack of support from the government** [codes that talked about the lack of government support were merged with the heading]

II. **Support provided by the government** [codes that talked about the support the government is providing or had provided to the participants were merged into the heading]

III. **Ways the government can support them** [codes where participants talked about how the government can support them were merged into the heading].

Appendix 11b: NVivo theme extraction for process – part three



Codes

Name	Files	References	Created on	Created by	Modified on	Modified by
Achievement of independents and enviromental adaptability	12	54	02/09/2022 14:49	YMK	02/09/2022 15:18	YMK
Disability diagnosis and acquisition of skill	15	61	02/09/2022 14:46	YMK	02/09/2022 15:18	YMK
Inadquate government support	11	21	09/08/2022 13:05	YMK	02/09/2022 15:20	YMK
Personal and community life	15	98	12/08/2022 11:49	YMK	02/09/2022 15:19	YMK
Seeking healthcare treatment at the time of need	11	28	09/08/2022 15:27	YMK	02/09/2022 15:19	YMK
The origin of the centre	9	91	09/08/2022 13:05	YMK	02/09/2022 15:19	YMK

Appendix 12: A summary of the narratives provided by pilot study participants.

Narrative/structure	Abstract	Orientation/Time, place, and participants	Complicating action/what happened	Resolutions/how it was addressed	Evaluation/why it is important to tell the story	Coda
Narrative 1: Acquirement of disability	Can you tell me the story of how you became disabled?	Became disabled at a young age. Age ranges from 9 months to the age of 12 years old. Across the five participants. Taken to the hospital	Became disabled (narrated by four participants) due to illnesses like fever, and polio. Become disabled (narrated by one participant)	Taken to the hospital for treatment and after some time, their parents decided to accept their faith of being disabled (narrated by four participants).	No evaluation was identified	None

			due to unspecified accidents.			
Narrative 2: Educational achievements	Can you tell me a story about your primary/ secondary school experience?	Attended Western [primary and secondary) schools (narrated by four participants) Attended Islamic school (narrated by one participant)	Enrolled in primary school, finished, and started secondary before dropping out of school (narrated by 4 participants) Attended Islamiyah while in the village, before getting married (one	Stopped studying at SS2 (Grade 11) due to financial challenges and the passing of my father (Narrated by one participant) Stopped going to Islamiyah because our parents do not want us to be more knowledgeable	Took some time off of school to mourn my father because he is the best support I had (narrated by one participant) At that time women were not allowed to be knowledgeable enough to challenge the less knowledgeable	Now I am back in Islamic school and have memorised the Qur'an (narrated by one participant)

			participant narrated)	than our husbands (narrated by one participant)	husbands (narrated by one participant)	
Narrative 3: Healthcare treatment	How do you acquire healthcare treatment when you are sick?	we go to the pharmacy first before going to the hospital (narrated by all participants).	When sick, we first go to the pharmacy and get some medication and if we do not feel better, then we will go to the hospital (narrated by all participants) Sometimes we will follow the queue while sometimes	We will get tested to see what is wrong and be given a prescription to go and buy Sometimes the staff will help us, and we do not need to follow the queue (narrated by two participants)	It is challenging following the queue in the hospital especially if no one allows you to go first (narrated by one participant)	Now, for minor illnesses, I tend to treat my children and myself at home, such as fever, headache, and stomach-ache (narrated by one participant)

			people will allow us to go first (narrated by 2 participants)			
Narrative 4: Personal activities	Regarding day-to-day life, like going to the market and visiting families. Can you tell me a story about that aspect?	Welding, street vendor and street begging	Work at the disability centre (narrated by three participants) as welders. We create tricycles and sell them to people with disabilities and charity organisations	We get some money from the things we created and sold to take care of our family and needs (narrated by three participants) The money I get from selling Y@illi!. I use it to support myself and buy myself the things I need	This business has made us achieve a lot of things, like having our own house and family (narrated by three participants) I felt like I need to support my mother as she is also trying to support us, that	We are still working with the centre as you can see. I stop selling the ____ because there is no more profit (narrated by one participant).

			Selim [pancake-like snack] (narrated by 1 participant) outside our house. Begged on the streets (narrated by 1 participant) every day to get money	(narrated by one participant) The money I get from begging on the street I used it to take care of my family and needs (narrated by one participant)	is why I sell (narrated by one participant) Life is hard and begging on the street is sometimes the only option you will have (narrated by one participant)	I still begged on the street but mostly on Fridays after Friday prayer (narrated by one participant)
Narrative 5: Relationships with people in the community	How are your relationships with people in your community?	Community, people without disability	We have no problem with people in the community, the people are very supportive	We live with them happily The problem we face in the community is mostly accessibility and	Most people in the community are very supportive. They support and contribute	None

			most times, but we have some issues here and there (narrated by **4** participants). The way people treat me (narrated by one participant) in the community is different from the way they treat my non disabled sister.	tricycled helped mobilise them (narrated by 4 participants). People that treat me diifferently mostly do not know much about **disability**.I started to just ignore them (narrated by one participant).	at the time of need (narrated by 4 participants). It was sad sometimes to be treated differently because of your disability (narrated by one participant).	

The disability centre has helped us a lot and involved us in activities that come up (narrated by all participants).

It provides training for us (narrated by two participants) and taught us how to start our own business.

It provides training and gives us small capital to start our own business (narrated by two participants).

It brings us opportunities, like working with charity organisations and giving tricycles to people without a means of mobility

It brings us together; it feels good to come and meet people like yourself at the centre and feel welcome (narrated by all participants).

We have been working with the centre for a long period now. We use the money we get from the centre to take care of our family every day (Narrated by three participants).

(narrated by all participants).

Narrative 6: Disability centre	What kind of support are you getting here in the disability centre?	Disability centre, Participants	The centre gave us a job (narrated by

			three participants) and we create things.			
Narrative 7: Government role	Are you getting support anywhere like the government?	Government	We are not getting any support from the government, everything we must do it ourselves (narrated by all participants).	The government can support us by buying our materials and giving us projects, to create things for her (narrated by three participants).	The government do not need to give us money, it can just give us materials to create a thing for her and pay us (narrated by three participants).	None