

# An Assessment of Activities Associated with the Rehabilitation of Children with Intellectual Disabilities in the Kumasi Metropolis

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## Abstract

**Background:** Intellectual disability is a disability characterized by limitations in the intellectual functioning and resulting in the need for extraordinary supports for the person to participate in activities involved with typical human functioning (Wehmeyer, Schalock, Verdugo *et al.*, 2008). Rehabilitation is therefore an essential aspect in the life of the person with a disability. According to the World Health Organization (WHO, 2011), rehabilitation is a process that is aimed at enabling disabled persons reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels. Special schools provide the rehabilitation needs by encompassing educational needs, rehabilitation services and integrated education (Kuyini 2014). Special education has proven to be instrumental in the provision of activities that will foster social development and to the maximum extent possible assimilation into regular schools and community activities (Smith 2007). **Aim:** To investigate the activities undertaken to rehabilitate children with intellectual disabilities in selected schools in the Kumasi metropolis. **Methods:** The study was undertaken at the Garden City Special School and Community Special Vocational School and employed the use of the descriptive design with a qualitative approach. A sample size of fifteen respondents were used, out of which nine (9) were teachers and six (6) were parents. The study made use of two sampling techniques to select the respondents. The sampling technique employed in the selection of teachers was the non-probable purposive sampling whereas the technique for selecting parents was the convenience sampling. Research data was collected by the use of an interview guide and the data collected was analysed using thematic content analysis. **Findings:** The study found out that the activities undertaken to rehabilitate the students with intellectual disabilities in the selected schools, had the underlying basis of promoting independent living and improving the social skills of children with intellectual disabilities relationships with people. Teachers therefore ensured that students were trained in the activities of daily living, communication skills, social skills, fine and gross motor skills, functional arithmetic, vocational skills and the concept of money. The study revealed that children with intellectual disabilities gained a substantial increase in their social interactions and their health. However, it was noted that the special schools faced some challenges that hindered their rehabilitation efforts and these included inadequate teaching and learning materials, lack of new facilities and inadequate and unskilled teachers. **Conclusion:** The special schools are very instrumental in improving the quality of life of persons with intellectual disabilities.

**Keywords:** Education, quality of life, special schools, cognitive impairment, activities of daily living, neurodevelopmental disorders.

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## INTRODUCTION

Persons with intellectual disabilities often experience a variety of needs and limitations which include bodily functions, personal factors and the skills needed to perform activities. The challenges they experience do not only affect themselves but their families and society as a whole. There is therefore the need to provide specific forms of health needs and

special social services to help the persons with disabilities to live independently (Lin *et al.*, 2006). Intellectual disabilities have been defined by the World Health Organization (WHO) as a disorder defined by the presence of incomplete mental development which is often characterized by a decline in concrete functions at the various stages of development and affects the overall intelligence such as physical, cognitive or

emotional impairment and limits a person's ability to learn, communicate or perform one or more activities of daily living. According to Thompson, McGrew and Bruininks (2002), the provision of effective interventions can increase learning and adaptation for persons with intellectual disabilities.

Rehabilitation is therefore an essential aspect in the life of the person with a disability. According to the World Health Organization (WHO, 2011), rehabilitation is a process that is aimed at enabling persons with disabilities reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels. Rehabilitation consists of a combination of treatment methods that have the purpose of addressing multiple needs and overcoming disabilities. Lin *et al.*, (2006) suggested that it is important that rehabilitation is done often and not stopped when the person with intellectual disabilities improve.

In Ghana, persons with disabilities account for 3% of the estimated general population of 24 million (Ghana Statistical Service, 2012). The ministry of Education in Ghana is responsible for specialised educational centres for persons with disabilities and a majority of these functions are undertaken by the Special schools. Persons with intellectual disabilities have rights to rehabilitation services, treatment and provision of care with the least possible restrictions of their freedom (Burns 2008). The study therefore sought to assess the activities associated with the rehabilitation of children with intellectual disabilities in Ghana.

## METHODOLOGY

The study was conducted at the Garden City Special School located at Asokore Mampong in the Mampong municipality in Ashanti region and at the Community Special vocational School located at Kotei - Deduako. These institutions are both schools developed to meet the needs of children with intellectual disabilities especially.

### Research Design and Approach

The study employed a descriptive design and a qualitative approach. According to Burns and Grove (2003: 201) descriptive research is designed to provide a picture of a situation as it naturally happens. Therefore, by virtue of the descriptive design, the study identified the activities used to rehabilitate the intellectually disabled and the benefits associated with these activities. The qualitative approach was used to explore the experiences of teachers, head teachers and parents of persons with intellectual disabilities by inquiring about their insights on the subject.

### Population and Sampling Processes

The population for the study was made up of teachers and head teachers at the selected schools and parents of the persons with intellectual disabilities.

### Sampling Method and Sample Size

The sampling methods utilized for the study was purposive sampling and convenience sampling techniques. Purposive sampling was used to select headteachers and teachers in the selected schools who had been there for more than five years. Convenience sampling was used to select parents and guardians of persons with intellectual disabilities who were readily available during the time the study was being conducted.

Fifteen (15) participants were involved in the study. A total of nine (9) teachers were selected from Garden City Special School and Deduako Community Life and Vocational school. Six parents or guardians of persons with intellectual disabilities in the selected schools were also selected for the study.

### Data Collection Instruments

Data was collected using an interview guide to identify the activities undertaken to rehabilitate persons with intellectual disabilities. This tool provided in-depth information on the activities undertaken to rehabilitate persons with intellectual disabilities in the selected schools.

### Data Analysis

Data gathered through interviews was analysed using thematic content analysis. This was done by transcribing the recorded data, organizing and generating themes, coding the data and describing the data acquired. Themes were generated from similar codes and were further supported by direct quotes from participants.

### Validity and Reliability

Validity was ensured by using simple and clear to understand words in order to avoid ambiguity. Persistent observations were also adopted over a period of time to identify all important elements.

Reliability was achieved by subjecting the data and relevant documents to be scrutinised by an external auditor and providing detailed description of data collection and analysis in order to provide an accurate picture of the methods adopted in the study.

### Ethical Consideration

An informed consent form was given to the respondents involved in the research informing them of their rights, risks and benefits of the research. Participants involved in the research are those who signed the form. Confidentiality and Anonymity was

ensured by removing all identifiers and protecting the information received from participants on a password protected computer.

## Findings

### Demographic Characteristics of participants.

Out of the 15 participants involved in the study, 11 (73%) were females and 4 (27%) were males. 2 (13%) were headteachers, 7 (47%) were teachers and 6 (40%) were parents or guardians.

## Themes

The study explored the following themes during the interview; activities undertaken to rehabilitate persons with intellectual disabilities in the schools, benefits persons with intellectual disabilities gain from these activities and the factors that can enhance the rehabilitative efforts of the schools.

### Activities Undertaken to Rehabilitate Persons with Intellectual Disabilities in the Schools

The selected schools had a different approach as compared to the mainstream schools. However, among the selected schools, The Garden City Special School had a more extensive curriculum compared to the Community Special Vocational School.

(Respondent L) stated that we teach them based on their needs rather than collectively as done in mainstream schools. And as such our curriculum is quite different from that of mainstream schools. For instance, instead of the subject mathematics which is taught in the regular schools here we have functional arithmetic where we teach them how to do simple calculations, recognize money and many others.

The fundamental skill that is taught to children with intellectual disabilities in the selected schools is the activities of daily living. In order to improve their level of independence, they are taught how to dress up, bathe, wash their clothes and even brush their teeth, toilet training is also an essential aspect of their training and this helps to promote their personal hygiene.

(Respondent H) stated that sometimes certain students with intellectual disabilities can be as old as eighteen and may not possess any communication skills. They cannot even ask to use the toilet. So, we teach them how to communicate their needs, how to dress up and even how to button their shirts and this helps them to be independent in some way.

Both schools had similar vocational activities but varying curriculum. The vocational activities included batik, tie and dye, bead making, sowing, leatherworks and small-scale vegetable production.

(Respondent D) emphasized that students who are intellectually disabled cannot grasp abstracts and therefore in order to help them become independent, they must be taught skills that will enable them become employed or even self-employ themselves.

Another activity children with intellectual disabilities are taken through is social skills. The study found out that most children with intellectual disabilities are isolated at home. It is therefore essential that they are given the skills needed to help them socialize with their peers and participate in the activities that are undertaken in their communities.

(Respondent J) stated that they usually organize trips outside of their schools to churches, other times to schools like Kwame Nkrumah University of Science and Technology just so they can interact with others. It is therefore our duty to create an environment that is conducive for fostering of relationships.

Moreover, children with intellectual disabilities are taken through functional arithmetic where the students are taught how to add simple numbers, make subtractions, recognize money and understand the concept of money.

(Respondent B) stated that when some of them come to the school, they have little or no idea about the concept of money, what it looks like and what it is used for, so when they come here, we teach them and this helps them recognize the value of the money they hold.

Another activity is the training provided for students who do not have fine or gross motor skills.

(Respondent D) explained that students with cerebral palsy have difficulties grasping objects so we provide physical therapy to help them move their fingers to the level of their ability.

### Economic and Social Benefits Students with Intellectual Disabilities Gain from Attending the Schools

Students with intellectually benefit greatly from attending the schools both socially and economically. But the social benefit is of a high side than the economic.

(Respondent I) affirms that some of the student before they came to the school couldn't interact with others since their parents take them out of the community and separate them from others so they do not socialize with others. But when they are brought here, we allow them to mingle with others, teach them how to speak coherently and this helps them a lot as they are able to express their feelings better.

(Respondent L) stated that in order for them to socialize, we take them to places outside the school like, churches other schools, organizations and they even go on excursions to places of interest all these they are not able to experience when they left at home with nobody to talk to or even socialize with.

(Respondent A) stressed that the economic aspect is quite on a low side, since students are unable to grasp the activities well. Very few of them have graduated with some having jobs. This all stems from the fact that most of them have short attention span and are unable to sit down for long to acquire the necessary knowledge.

(Respondent L) again stated that the economic aspect is not all about being able to work and live independently. It includes being able to recognize money, thus the concept of money and their ability to be sent to acquire or buy simple stuffs is a great economic achievement.

### **Factors that can enhance the Rehabilitation Efforts of the School**

Most of the respondents stated that the school needed support from the government and other benevolent societies or individuals. Their most pressing needs include, food, facilities for both teaching and housing, teaching and learning materials and the need for competent and skilled teachers.

(Respondent A) stated that since most children with intellectual disabilities have short attention span, constant practice is needed to ensure that they are able to retain what they learnt and therefore there is the need for constant supply of teaching learning materials.

(Respondent L) stated that there are always delays on the part of the government in the disbursement of funds and incentives to the respective schools which is needed to run the school and as such the school has been struggling to feed the children. However, donors' step in occasionally to help and without this the school will have closed down.

(Respondent M) asserted that if the school had enough facilities, then they could enroll many students in order to rehabilitate them to make them independent in the society. The better the resources available, the greater the performance of the schools in rehabilitating the students. More facilities will also mean that the schools will be able to admit many students and help them achieve their potentials in life.

(Respondent H) stated that should we get all that we desire, even if not all but most, teaching and learning will be improved upon greatly. Because if the materials are available for practical's, with constant

practice the students are going to become well abreast with whatever we are teaching them.

(Respondent D) added that if there were adequate skilled personnel necessary for teaching, students will gain all the necessary skills they need to become independent. There will be a reduction in streetism, stigmatization and poverty as students will be able to self-employ themselves and therefore gain some money to support themselves.

## **DISCUSSIONS**

The study revealed that, the activities undertaken to rehabilitate persons with intellectual disabilities in the selected schools included vocational training, activities of daily living, fine and gross motor skills training, social skills and functional arithmetic. These training when effectively executed would be very beneficial to persons with intellectual disabilities.

Activities of daily living were found to be one of the most important aspects in rehabilitation. This finding is supported by a study by Edemekong *et al.*, (2022), which suggests that it is essential that people are able to perform some basic and instrumental Activities of daily living in order to ensure people enjoy a high quality of life through independent living and improvements in their functional capabilities. This is because, it provides them with the necessary skills to function to the best of their abilities.

Moreover, research done by Gyamfi *et al.*, (2015) asserts that employability is one of the instrumental steps in rehabilitation as it gives persons with disabilities a sense of belonging, improves their independence and also creates the avenue for persons with disabilities to be involved in the community. A study by Gomes-Machado *et al.*, (2016) also confirms the role of vocational training in increasing the employability of persons with intellectual disabilities leading to acquired independence.

Sechoaro *et al.*, (2014) argued that classroom training was also very important in improving the functional capabilities of persons with intellectual disabilities. The study suggested that continued exposure to classroom training and community-based trainings led to an increase in their level of independence which is visible both at home and in schools.

Interestingly, social skills training were also identified as an important aspect of community living skills. Research conducted by Drysdale *et al.*, (2008) furthers supports this finding. The study suggested that social skills training played an important role in improving the functional ability of persons with intellectual disabilities. According to Goldstein (2002), social skills and communication training enable



students form relationships with friends, family and the society as a whole and also help the students to communicate their needs.

Both parents and teachers recognized the benefits that children with intellectual disabilities gain from attending these schools. The general consensus among all the participants was that early enrolment into a special school yielded the best results in terms of a more visible rehabilitation impact.

The study identified a lack of commitment on the part of the government in performing its duties by addressing the needs of the special schools. This is evident in studies done by various authors over the years (Dankwa, 2013), (Laing, 2014), (Gyamfi *et al.*, 2015) in Ghana. The lack of support on the part of the government is a major contributing factor to the inability of these special schools to perform the requisite roles in order to bring forth positive outcomes and avoid the delays which can derail the efforts of the schools.

## CONCLUSION

The study concluded that rehabilitation is a multidisciplinary effort and is aimed at helping individuals to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional needs. Although there are no specific rehabilitation centres for persons with disabilities in Ghana, the special schools are relied upon to perform the functions of rehabilitation centres. Children with intellectual disabilities are able to improve the quality of life as the activities undertaken by the schools are geared towards inclusive living and independent living for the children with intellectual disabilities

## Implications

The study has several implications for special schools in Ghana specifically those involved with persons with intellectual disabilities. Although the selected schools have been instrumental in improving the quality of life of children with intellectual disabilities, they are lacking in certain areas which in turn derail their efforts to rehabilitate the students such as the need for more competent teachers to help in teaching the students and also the need for new facilities to house students and the need for sufficient teaching and learning materials. The aforementioned needs can be addressed with adequate support from the government. The government can help improve the potentials of children with disabilities by providing the necessary financial and material resources. The Standard Rules on the Equalization of Opportunities for persons with disabilities states that “rehabilitation should not be done alone and that persons with disabilities and family should be encouraged to involve themselves in the rehabilitation whether as trained teachers, instructors or as counsellors. Therefore, it is recommended that parents of children with intellectual

disabilities be involved in the schools’ activities by the school officials in order to improve their cognitive abilities when in school and at home.

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