Research Article

Job-Related Challenges of Teachers with Physical Disabilities in Kumasi

Moses Danso-Afriyie, MS, Isaac Owusu, MA, Reindolf Anokye, MS,

& Wisdom Kwadwo Mprah, PhD

*Kwame Nkrumah University of Science and Technology*

Kumasi, Ghana

**Abstract:** This study aimed to establish the job-related challenges of Teachers with Physical Disabilities (TWPD) within the Kumasi Metropolitan Education Unit in Ghana. Twenty-one (21) TWPDs completed the study. A cross-sectional study design was used and an interview guide was utilized to solicit responses. Thematic content analysis was employed in analyzing the data collected. Relative to the nature of impairment, ‘pain’ and ‘weakness’ emerged in relation to impairments associated with TWPDs. ‘Mobility on school compound’ and ‘writing on the board’ were specific task related challenges encountered by TWPDs. However, additional job-related challenges existed in the form of attitudinal barriers. Due to the prevailing job-related challenges, most TWPDs had employed specific coping mechanisms to offset some of the challenges. Prominent among these coping mechanisms were being dependent on others for physical support and taking frequent breaks from tasks that were physically demanding. Overall, most TWPDs asserted they felt disadvantaged compared to their colleagues without physical disabilities due to the numerous job challenges they encountered. In light of these, it is recommended that the Ghana Education Service (GES) should profile the respective work-related challenges of TWPDs to come up with policies and interventions that would gradually eliminate these challenges.

**Keywords:** Job-Related; Challenges; Teachers; Physical Disabilities; Kumasi

# Introduction

The term ‘physical disability’ (PD) is defined broadly to cover a wide range of disabilities and health-related issues, including both congenital and acquired disabilities (Belson, 2003). Conditions that may pass for physical disabilities include muscular dystrophy, leg-length discrepancies, amputations, third-grade nerve injuries, spinal cord injuries and chronic fatigue syndrome. Other conditions such as cerebral palsy, spina bifida, arthritis, multiple sclerosis, stroke and auto-immune diseases could lead to physical disabilities. PD typically manifests in the form of restrictions in physical activities including walking, ability to negotiate obstacles, difficulties with using common tools and equipment and easy fatigability (Cockerham, 2007).

According to the World Health Organization (2011), of the one billion of the world’s population that has a disability, 80 million of them live in Africa, 737,743 of those in Africa live in Ghana (Ghana Statistical Service, 2012). Nearly 150 million persons with disabilities in the world experience extremely dire difficulties in life.

Persons with Physical Disabilities (PWPD) have different job-related experiences that typically depend on the type of job and availability or otherwise of barriers/facilitators. Generally, PWPDs tend to face fewer challenges with jobs that are not physically demanding compared to jobs that demand more physical effort (Bredberg, 1999). The foremost challenge of most PWPDs relative to their jobs has to do with access to the workplace. The presence of barriers in the form of staircases, lack of elevators, lack of handrails and ramps at the workplace implies PWPDs expend more effort in reaching their respective offices. In research by Erb and Harriss-White (2002), the majority of PWPDs surveyed admitted to the presence of barriers that hindered their entry to their respective points of work. In a similar survey by Ghai (2003), women with physical disabilities conceded the presence of facilitators would greatly improve accessibility to their respective workplaces. On some rare occasions, the lack of accessibility to workplaces resulted in PWPDs being dependent on other co-workers to access their respective offices (Jeffery & Singal, 2008).

Kalyanpur (2007) found that teachers within the New Delhi metropolis felt the lack of physical facilitators within their respective schools and the metropolis hampered their performance relative to classroom work. In research by Obiozor (2010), some teachers with disabilities felt that less was expected of them at their respective workplaces due to their disabilities. Although this attitude might appear empathic, most of the TWPDs felt it was because they were thought of as ‘weak’.

Teachers play a huge role in shaping and mentoring students not just for academic success, but for life in general. Challenges that have the potential to negatively impact the competence or work of teachers are likely to undermine the aforementioned mentorship role and endanger the academic success of students. Thus there is a need to thoroughly assess the job-related challenges of teachers with disabilities to proffer long-term solutions that would enhance the competence of these teachers as well as ensure their students do well academically.

# Methods

## Study Site

The Kumasi Metropolitan Education Unit (KMEU) is responsible for 551 schools within the Kumasi metropolitan area in Ghana. These schools are made up of 158 kindergarten schools, 205 primary schools, and 188 junior high schools. There are over 4,000 teachers working in the metropolitan unit. TWPDs constitute of less than 1% of all teachers within the unit. The KMEU serves as the administrative center for these schools and ensures that the teaching and learning in these schools is consistent with the dictates of the Ghana Education Service (GES).

Additionally, the Metropolitan Education Unit enforces the policies of the GES related to compensation of teachers with disabilities. Teachers with physical disabilities are entitled to a ‘disability allowance’ that is paid monthly as part of their monthly remuneration. However, there are no teacher-specific policies that are directed towards making the job of teachers with physical disabilities any friendlier at the Metropolitan Education Unit level. Job-related challenges of teachers with physical disabilities are typically reported to the highest school authority for remedial actions.

## Study Design and Approach

A cross-sectional design and a qualitative approach was adopted for the study. Cross-sectional design allows for studies to be conducted over a relatively shorter period of time and are usually cost-effective (Hatch, 2002). With respect to this study, a cross-sectional design was the best approach. A major disadvantage of cross-sectional design is the fact that the timing of the snapshot might not be representative of the study population (Creswell, 2009).

Relative to this research, the emphasis was put on unearthing the ‘meaning’ of the work-related challenges of teachers in an in-depth manner. Thus the choice of a qualitative approach was the best option as it allowed for a free-flowing narrative in which teachers thoroughly expressed themselves. Additionally, adopting a qualitative philosophy allowed for more probing questions that the researcher might not have initially considered. The job-related challenges of TWPDs is a complex issue that ranges from the obvious such as physical barriers to the very subtle such as difficulties in using teaching materials. Other advantages of qualitative research include the fact that it is not limited to rigidly defined variables and draws on the compelling experiences of respondents (Creswell, 1998).

## Study Population and Inclusion Criterion

The study population consisted of all teachers with physical disabilities within the Kumasi Metropolitan Education Unit. The Metropolitan Education Office keeps information of all teachers with physical disabilities for policy and management purposes. Additional inclusion criterion involved teachers having practiced for at least a year. This was to ensure respondents had some level of experience in the rudiments of their work. Further to this, the aforementioned inclusion criterion raised the chances that respondents would have encountered some challenges relative to their work.

## Sampling Technique and Size

A purposive sampling technique was employed in this study to select teachers with physical disabilities. The aforementioned sampling technique allows a researcher to reach his/her targeted sample over a relatively short period of time, while allowing for a variety of research designs to be utilized (Morse et al., 2002). With respect to this study, TWPDs were the target participants and due to their relatively low numbers, a purposive sampling approach allowed for the majority of them to be included in the study. The disadvantages of purposive sampling include possible researcher bias in selecting participants and the lack of representativeness relative to the sample (Kuckartz, 2014).

For qualitative research, samples must be large enough to allow for all unique perspectives on an issue to be covered. However, if the sample becomes too large, the data are likely to be repetitive and subsequently, superfluous.

The sample size for this study was based on the concept of saturation as espoused by Morse (2001). By this concept, saturation is achieved when adding more respondents to the study that does not add any new perspective to the information collected. With respect to this study, no new perspectives were discovered beyond the first 21 respondents. Relative to the nature of impairment, ‘pain’ and ‘weakness’ were repeated by three (3) respondents beyond the 21st respondent. Other issues that were repeated by the aforementioned respondents included challenges with mobility on school compounds and difficulties with teaching materials.

## Research Instruments

The study utilized an interview guide. Information relating to demographic characteristics of respondents was sought using closed questions while those related to the specific objectives of the research utilized open-ended questions. A major advantage of using an interview guide is the fact that it allows for easy flow of the conversation between the researcher and respondent while giving the opportunity for the researcher to ask more probing questions (Creswell, 1998). More probing questions were asked based on respondents' answers to specific questions. The essence of the probing questions was to unearth the ‘true’ meaning of respondents' answers which is consistent with qualitative research.

## Report on the Pilot Study

A pilot study was carried out to test the overall feasibility of the study as well as streamline the questions in the interview guide. The pilot study was carried out at the Ejisu Juaben Municipal Education Unit with 10 teachers with physical disabilities completing the interview schedule. It was discovered that respondents experienced varying impairments that were mainly associated with an arm or leg. Pain and weakness were the major manifestations of the underlying impairments. Pain, in particular, was discovered to interfere with the activities of TWPDs and on certain rare occasions, halted the execution of specific physical activities. The majority of respondents felt the impairment they experienced did not interfere with most of their job-related activities. A common improvised method employed by respondents in overcoming difficult physical activities involved soliciting the help of pupils.

Physical barriers confronting TWPDs included inaccessible classrooms and a general lack of reasonable accommodation within classrooms. Specifically, staircases, non-adjustable seats, fixed writing boards were common physical barriers cited by TWPDs. Overly sympathetic behaviors from colleagues and students, students' fixation on teachers' physical disabilities, lesser expectations from higher authorities were some of the major attitudinal barriers pilot respondents admitted to. Most pilot respondents believed that the policies of the Ghana Education Service on TWPDs hardly addressed the challenges within the classrooms. In terms of the aforementioned challenges on the performance of TWPDs, most respondents felt the challenges did not negatively impact their overall competence as teachers.

Overall the pilot study informed a re-arrangement of the questions in the interview guide to allow for a better flow of the conversations based on respondents’ answers. Additionally, it allowed the researcher to anticipate the explaining technical terms such as disability and impairment.

## Field Data Collection

Data collection for this study took approximately two months to complete. The interviews took place within the premises of respondents' respective schools. TWPDs chose the most convenient time to have an interview with the researcher. The interview sessions usually lasted 30 minutes per respondent with an audio recording of the entire session. Respondents first completed demographic questions, followed by the nature of their impairment and finally job-related challenges. Grey areas were clarified based on respondent's probing questions. Similarly, based on the respondent's answers, the researcher probed further in instances where answers lacked clarity.

## Data Management and Analysis

To ensure the integrity of data, all audio recordings were played back on the same day of recording by the researcher to ensure clarity of responses to questions. Additionally, all recordings were uploaded on google drive for backup purposes, safe-keeping, and easy retrieval.

Data analysis involved thematic analysis that utilized the six procedures; familiarization with data, forming initial codes, identifying themes within codes, reviewing themes, naming themes and creating the final report.

In the familiarization with the data stage, all audio recordings were transcribed verbatim into written format. Generating the initial codes involved identifying recurring patterns within the transcribed data. These recurring patterns were not based on mere words but based on the ‘true’ meanings of respondents' answers to questions. Within the initial codes, themes were further identified and the relationship between themes identified. Reviewing the themes involved establishing a link between the themes and the literature review undertaken for the research. This was to ensure that there was literature to support and expand the generated themes. The final report of the thematic analysis is reported in the next chapter and is consistent with research objectives.

## Validity

To ensure the validity of the interview guide, questions were made consistent with the study objectives. Questions were reworded in line with established concepts of disability and challenges usually encountered by persons with physical disabilities. Questions were exhaustive enough to cover all study objectives and put in simple clear language. Further to this, the research questions of previous studies related to the challenges of persons with physical disabilities by Bredberg (1999); Horstman et al. (2008); and Jeffery and Singal (2008) were thoroughly studied to ensure some of the questions asked in these previous studies were consistent with those in this study.

## Reliability

The aforementioned pilot study ensured the reliability of the research instrument (interview guide). Grey areas of the interview guide were thoroughly rephrased and made consistent to ensure respondents were in no doubt as to the meaning of the questions. These grey areas were considered for modification whenever at least two pilot respondents sought clarity on a particular question. Specific questions that were modified to improve consistency included those related to attitudinal barriers, policies of the GES and the perceived disadvantages TWPDs encountered.

## Ethical Consideration

Ethical approval was sought and granted by the ethics committee of the Committee on Human Research, Publications and Research (CHRPR) of Kwame Nkrumah University of Science and Technology. Ethical approval was also sought and granted by the Kumasi Metropolitan Education Unit. Respondents and the researcher signed an informed consent form. The consent form detailed the process of the research, potential benefits as well as the potential harm that could arise from it. Pseudonyms were used to mask the identities of respondents while ensuring participants could be reached in case further clarification on responses was needed. Further to this, respondents were assured of their right to withdraw from the study at any time if they wished.

Proper record keeping and storage ensured confidentiality of data related to respondents. Additionally, transcribed data were kept on the researcher's computer with a password.

# Results

## 4.1 Socio-Demographic and Disability Characteristics of Respondents

Table 1 presents the socio-demographic and disability characteristics of respondents. Males formed the vast majority (71.43%) of respondents. Less than a quarter (23.81%) of all respondents had a Diploma qualification, the remainder had a Bachelor’s (61.90%) or a Post-Graduate (14.29%) qualification. Lower-limb (leg) disability (71.43%) was the most prevalent form of disability. Nearly half (47.62%) of all respondents did not use an assistive device. However, lower limb assistive devices were the most commonly used (38.09%).

Table 1 *Socio-Demographic and Disability Characteristics of Respondents*

|  |  |
| --- | --- |
| **Age in years (Mean ± SD)** | **40.20 ± 4.5**  |
| **Gender** |   |
| Male | 15 (71.43%) |
| Female | 6 (28.57%) |
| **Years of practice (Mean ± SD)****Highest educational attainment** |  **15 ± 6.41**  |
| Diploma | 5 (23.81%) |
| Bachelor’s degree | 13 (61.90%) |
| Post-graduate degree | 3 (14.29%) |
| **Teaching Level** |   |
| Primary | 9 (42.86%) |
| Junior High | 12 (57.14%) |
| **A body part with disability** |   |
| Upper limb (arm) | 5 (23.80%) |
| Lower limb (leg) | 15 (71.43%) |
| Trunk | 1 (4.76%) |
| **Type of assistive device** |   |
| None | 10 (47.62%) |
| Arm support | 1 (4.76%) |
| Leg support | 8 (38.09%) |
| Wheelchair | 2 (9.52%) |

## Nature of Impairment and its Effects Among Teachers

Relative to how the underlying impairment was manifested, two major themes emerged; ‘pain’ and ‘weakness'. The majority of respondents felt that pain was a major debilitating factor in their respective physical disabilities. Respondents gave different accounts of the type of pain and the associated weakness they experienced. While some respondents described the pain as sharp and shooting, others suggested the pain they experienced was dull and aching. For some respondents, the occurrence of pain was occasional; while others explained the pain was more persistent and disrupted their everyday activities. Oduro stated that:

The feeling of pain from my right leg is the most difficult symptom I experience; the pain is present most of the time and I do not have to exert myself to experience it.

Kofi stated:

I experience a dull aching pain that makes me weak in the left elbow and shoulder when I raise my arm; the pain is usually severer in the mornings compared to other times of the day.

Most respondents with lower limb physical disabilities further alluded that the pain experienced in the affected limb typically radiated to the lower back as well. This phenomenon, they believed was due to the compensatory mechanisms they adopted in order to overcome the physical challenges associated with their respective disabilities. Mansa reaffirmed:

Due to the state of my right leg being shorter than the left, I tend to put more weight on the right half of my body. This has resulted in my spine taking a more curved appearance and as a result, I feel lots of pain in my lower back.

Additionally, the vast majority of respondents believed the pain and associated weakness affected their overall physical endurance to such an extent that they were unable to cope with numerous everyday physical activities. As noted by Kwame:

Due to the constant pain and weakness in my left thigh, I do not feel fit at all as I easily get tired walking the shortest of distances.

Beyond the symptoms associated with the primary impairment, another trend that emerged was pain and weakness that were associated with the use of assistive devices and compensatory mechanisms. For example, a good number of respondents with lower limb physical impairments who utilized axillary crutches as assistive devices reported experiencing painful shoulders due to pressure from the axillary crutches as Kwadwo highlighted:

Aside from the pain from my leg, I do experience lots of pain from my right shoulder due to the fact that I have been on these crutches for several years.

## Job-Related Challenges of Teachers

In relation to the specific job-related tasks that proved most challenging, ‘mobility on school compound’ and ‘writing on the board’ emerged as major themes. Teachers explained that they encountered numerous physical barriers within school compounds that impeded their movements between classrooms. Prominent among these physical barriers were uneven floors, lack of concrete floors, lack of ramps, and presence of staircases at the entrances to some classrooms.

Uneven floors generally made the use of assistive devices very difficult. On some occasions, the imbalance it produced led to the tripping of some teachers on axillary crutches, with the potential for serious injury. Amponsah succinctly explains:

My biggest job-related challenge is movement on the school compound with my crutches, the uneven floor makes me lose balance occasionally and I have actually fallen thrice since I started work.

Additionally, respondents explained that the lack of concrete floors in some schools made it extremely challenging to use assistive devices as well as increased their chances of tripping. This situation was made worse on days when it rained, as there was virtually no grip between the floor and the tip of walking aids. The lack of ramps on school compounds made it extremely difficult for teachers to navigate their way around school compounds. Among respondents, wheelchair users complained the most about the lack of ramps on school compounds; however, teachers who utilized crutches equally explained the lack of ramps and presence of staircases posed serious ambulatory challenges for them. Afia, who uses a tricycle propelled with the upper limbs, asserted:

With my tricycle, I usually have to switch to crutches and get the assistance of another person before I am able to negotiate the staircase in front of my classroom.

With respect to the challenges of writing on classroom boards, nearly all respondents admitted to one challenge or the other. For respondents on axillary and elbow crutches, the relatively higher placed boards meant they were unable to have the maximum support of their respective assistive devices as they had to stretch to write on the board. Akenten captured this as:

Writing on the board poses a lot of problems for me as I have to lift my arm from my elbow crutches while I reach for the board; this makes me feel highly unstable with respect to my balance.

For respondents who utilized wheelchairs, the situation was even worse. They admitted to being able to use only the lower margins of writing boards within their respective schools due to the fact that the writing boards were fixed and not adjustable.

Beyond task-specific challenges, other challenges for teachers with physical disabilities existed, mainly in the form of attitudinal barriers. However, most teachers admitted stigmatization of their respective conditions was rare at the workplace. Rather, it was an avalanche of ‘sympathy from colleagues and students’ that they believed negatively affected their respective work. This overly sympathetic attitude, they asserted, led to colleagues, students, and superiors expecting less from them. As captured by Kwame:

Consistently when I present my lesson notes to the headmaster, he tends to pass it off quickly while he does a lot of criticism on that of my colleagues. Initially, I felt it was because my notes were better, only to detect that I committed the same errors as my colleagues.

Most teachers felt the attitude of expecting less from them generally made them feel helpless and acted against building their confidence. Sympathetic behavior from other teachers and students often came in the form of unsolicited physical support. Teachers complained that on most occasions when they tried some physical tasks, there were numerous colleagues and sometimes students on hand to take over. While a few teachers with physical disabilities thought this attitude was beneficial to them, the majority felt it negatively impacted on their confidence in terms of executing physical activities.

With respect to specific Ghana Education Service (GES) policies towards teachers with physical disabilities, most respondents thought they were woefully inadequate. Beside a paltry ‘disability allowance’ that is paid as part of their monthly salary, teachers felt the barriers hampering their work in their respective schools were hardly addressed. Teacher specific challenges such as inaccessible classrooms due to the lack of ramps, non-adjustable writing boards and inaccessible washrooms that had been reported to the GES by headmasters had largely not been addressed. Teachers explained that headmasters often alluded to the fact that the GES does not have readily available funds to eliminate the aforementioned barriers, but with the introduction of inclusive education, most of these barriers would be removed. However, with the passage of time and the deadline for all schools to be fully inclusive having expired, teachers are yet to see any concrete measures relative to the removal of work-related barriers.

## Coping Mechanisms Adopted by Teachers

Teachers admitted to employing numerous improvised methods to overcome the difficulties associated with specific work-related tasks. ‘Support from colleagues and students’ and ‘taking frequent breaks’ were the major themes that emerged. Teachers admitted to being dependent on colleagues on occasions when they had to negotiate physical barriers to their respective school compounds. This dependence often came in the form of physical support which occasionally required more than one colleague. Kumi stated:

To make my way to the staffroom, I usually have to wait on my colleague who sometimes calls in a second colleague due to the fact that the staircase leading to the room is quite expansive.

With respect to making maximum use of the writing boards, teachers who reported difficulties admitted soliciting the support of students. These students often wrote on the board for the teachers while class was in session.

Taking occasional breaks from specific tasks was equally an effective strategy used by some teachers in order to overcome specific work-related tasks. These teachers explained that they often took breaks to relieve themselves of the severe discomfort they felt in performing those activities. Teachers generally admitted the aforementioned improvised methods were often successful but came at a huge cost. As Kumi stated:

Due to the fact that I mostly wait on my colleagues before accessing the staffroom, I usually lose several minutes and sometimes a whole hour of work at the office.

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## Effects of the Challenges on the Work of Teachers with Physical Disability in the Kumasi Metropolitan Education Unit

Professionally, teachers generally felt they were ‘somehow disadvantaged’ due to their physical disabilities. They recounted numerous opportunities they missed due to their respective physical disabilities. Opportunities for professional development, workshops and seminars were missed because school authorities felt they were too physically demanding for TWPDs. Additionally, teachers felt their chances of a transfer to a desirable school were greatly reduced as the school would have to be closer to their residence. Oforiwa emphasized that:

There are some few schools within the metropolis with great opportunities that would have enhanced my career, but they are quite far from my residence and as such working there would be challenging.

The vast majority of teachers equally felt they wielded less influence in terms of exerting control of their respective classes. This they believed was due to their limited mobility which sometimes made it difficult for them to enforce class rules. Additionally, they admitted the fact that they depended on students to run numerous errands did impact on enforcing strict class rules. Yaw put it as:

I honestly find it difficult strictly enforcing the class rules, as a rule as I generally have a liberal relationship with the majority of my class members; they help me out on a lot of physically demanding tasks.

In spite of the numerous improvised methods teachers employed to minimize the effects of their respective physical disabilities; most teachers believed they would have performed a lot better on their respective subjects if the appropriate physical facilitators were in place. Kwadwo explained that:

My job as a mathematics teacher demands I write a lot of illustrations on the board; due to the relatively higher position of the board, I am forced to stand over extended periods of time. This makes me very tired and affects my overall performance.

In relation to punctuality, most teachers asserted they were usually ‘punctual’ despite the numerous physical barriers they encountered. Adopted strategies to avoid lateness included setting off early and avoiding congested areas when heading for their respective schools. Further to this, most teachers admitted their respective physical disabilities rarely made them miss school.

In spite of the several challenges, most teachers felt they were ‘competent’ in their respective roles. They explained that the stellar academic performance of their respective classes was proof that the underlying physical impairment and associated challenges had not affected their competencies. Personally, most teachers admitted to being ‘confident’ of their abilities as teachers and recounted how they are able to partake in organizing co-curriculum activities such as sports. Kumi asserted:

I honestly believe I am as competent as any of my colleagues; over the past years students taking my course have generally done well and I am able to accomplish most co-curriculum activities assigned me.

# Discussion

The high incidence of pain among TWPDs is consistent with the findings of Wade and de Jong (2000) who reported pain to be one of the most common debilitating occurrences affecting persons with physical disabilities. The issue of pain has a number of implications. Firstly, the uncomfortable nature of pain could further derail the levels of physical functioning of affected teachers as more effort is expended on routine activities when working through the pain barrier. Thus a vicious cycle sets in which TWPDs who find physical functioning quite demanding are further compromised by pain. This is likely to give rise to fatigue with the potential to impact on the overall work performance of affected teachers. This phenomenon probably explains why the majority of TWPDs who experienced pain equally reported weakness as a concomitant debilitating factor. Secondly, as posited by Muse (2002), long-term pain has the potential to make affected persons irritable, short-tempered and impatient. The aforementioned negative attributes could undermine their work and more importantly, negatively impact the academic performance of their respective students.

Pain associated with the usage of assistive devices could cause TWPDs to use those devices less frequently. It is also possible for some TWPDs to completely abandon such assistive devices (Phillip & Zhao, 1993). Indeed, this could be responsible for the relatively higher number of respondents in this study who did not employ an assistive device. As posited by Ostir et al. (2002) assistive devices generally enhance the functional independence of persons with disabilities by providing additional support, boosting feelings of safety and raising confidence. Thus in both instances, affected teachers are likely to lose some level of functional independence and are likely to depend on the physical support of others with long-term negative implications for their respective jobs. Additionally, non-usage of assistive devices could give rise to more compensatory gait mechanics such as ‘stooping’ with the possibility of inducing more pain.

The general absence of physical facilitators such as walkways, ramps, curb ramps and handrails within the environs of TWPDs could equally account for nearly half of respondents who did not use assistive devices. As asserted by Sah (2010), assistive devices should be coupled with the provision of facilitators to allow for the optimal physical functioning of PWPDs. For example, teachers using wheelchairs, walkways would ensure there was sufficient space for mobility while curb ramps would ensure they were able to join adjoining roads. In the absence of these facilitators, the use of a wheelchair for mobility is extremely difficult and on some occasions, virtually impossible. Accommodations for teachers, including ramps and better flooring, would help students as well as visitors to the school. As such they can be perceived to be more cost-effective than they might seem if the focus was only on teachers.

As asserted by Bredberg (1999), PWPDs generally find jobs that are ‘physically demanding tough to cope with'. Teaching, by its very nature, demands constant interaction with students and the school environment that may prove physically demanding. Difficulties with mobility on school compounds due to the lack of facilitators suggests that affected teachers were less mobile on campus due to possible discomfort associated with mobility. This could have a negative impact on building interpersonal relationships with colleagues. Such interpersonal relationships are important for teachers to share ideas and relieve job-related stress. As espoused by Mayo et al. (1999), in the absence of interpersonal relationships at work, feelings of depression and helplessness could set in and negatively impact the work of teachers. On occasions where affected teachers are obliged to move, such as having a class in an adjacent block, uneven floors, and lack of ramps could raise the risk of tripping with possible injuries that could derail the health of the affected TWPDs. As reaffirmed by the Heart and Stroke Foundation (2017), facilitators do not only ensure better physical performance by PWPDs but ensure their safety as well.

On the other hand, the lack of facilitators such as ramps, as deduced by Jeffery and Singal (2008), could force teachers to be dependent on other people for their mobility. These teachers are likely to be stranded or lose precious time on the days that these persons are not readily available. Further to this, teachers, being dependent on other people for mobility feeds into the perception that PWDs (including affected teachers) are helpless and mask the issue of a lack of facilitators.

Additionally, decreased mobility among TWPDs, as suggested by Horstman et al. (2008), could give rise to physical deconditioning in which the affected teachers' physical endurance further diminishes due to the lack of physical activity. This could have long-term negative implications for affected teachers' ability to move, even when utilizing assistive devices.

The widespread issue of difficulties with using the writing board is of grave concern as it is a basic tool of communication between teachers and students. Teachers in wheelchairs who utilized only the lower margin of the writing boards suggests that these teachers had only a limited space to share information with students. In the absence of teaching assistants, these teachers are likely to utilize the services of some students in writing out notes on the board. This unorthodox approach would likely have a negative impact on teaching and learning. The student who volunteers to write on the board would have to make extra time to write out his/her personal notes. This has the tendency to affect the general class organization as well as burden those students who volunteer to write on the board. For teachers who felt unstable on their crutches due to the fact that they had to stretch to reach relatively high writing boards, the situation puts them at risk of falling due to the lack of body balance created. Moreover, affected teachers were likely to be fatigued as it takes more physical effort to maintain their balance without the maximum support of their crutches.

Improvised methods by TWPDs such as taking occasional breaks suggest these teachers took a longer time to accomplish work-related tasks. On occasions where time was limited, affected teachers were likely not to accomplish these tasks with the potential to affect their overall performance as well as that of their students.

As asserted by Minow (1990) sympathetic behavior towards PWDs are usually founded on the perception that such persons are helpless. Sympathetic behavior from colleagues and school authorities expecting less from TWPDs could negatively impact their overall competencies as teachers. For example, lesson notes are strictly planned based on curriculum content, student needs, and teaching strategies. Subsequently, if these lesson notes are not thoroughly inspected by the appropriate authorities as admitted by some respondents, teachers are bound to develop a lacklustre attitude towards such an important exercise. With the passage of time, this lackluster attitude becomes entrenched and has the potential to negatively impact affected teachers' professionalism. Additionally, students' academic performance could suffer if teachers' competencies are compromised.

Sympathetic behavior towards PWDs tends to discount their contributions and frustrates their efforts in improving their work output (Nambissan, 2000). For hardworking TWPDs who get results, the sympathetic behavior could mean they are not appreciated as their outputs are never critically examined. Subsequently, there is no motivation to improve.

The lack of policies by the Ghana Education Service (GES) to address specific problems encountered by TWPDs implies these problems are likely to linger on over the long term. As the regulatory body responsible for the management and development of schools and their human resources, the lack of clear-cut policies on catering for the needs of teachers with disabilities implies school authorities are at a loss as to whether to report on barriers hampering such teachers. For school authorities who take the initiative to report on such issues, the lack of clear-cut policies on supporting teachers with disabilities means the GES does not have the budget to support such reports. The reports become mere formalities and over time, school authorities are likely to give up and not forward these reports to the GES. With respect to TWPDs, this situation creates a feeling of hopelessness and could lead to psychological problems alongside the pertaining physical challenges. The disability allowance paid to TWPDs does little to solve the numerous challenges confronting teachers as they are meant for personal use while the majority of the aforementioned challenges confronting teachers are job-related.

The general feeling of being disadvantaged by TWPDs is a testament to the widespread barriers (both physical and attitudinal) they faced relative to their jobs. The numerous professional development opportunities missed by TWPDs points to the fact that school authorities view the challenges confronting these teachers as emanating from them and not due to the lack of facilitators, alluding to the normal-abnormal categorization as espoused by Lányi et al.(2004). In the aforementioned categorization, the barriers associated with disability (including physical challenges) emanate from the individual person with a disability and the expectations for he/she to cope.

TWPDs admitting to having less control of their respective classes due to their lack of mobility within classrooms have far-reaching implications for their respective jobs. Firstly, the situation of lack of class control could lead to students not having the full import of lessons as a class could potentially be easily disrupted. Additionally, classroom misbehavior such as avoidance of work, clowning, harassing classmates, verbal abuse and defiance could become entrenched with the passage of time. The aforementioned misbehavior on the part of students would most likely negatively impact on the academic performance of students while creating the impression TWPDs were not up to the task.

Subject-specific challenges of TWPDs due to the lack of physical facilitators could demotivate teachers and affect students' enthusiasm towards those subjects and subsequently their academic performances on those subjects. Despite teachers believing they were competent and alluding to the stellar academic performances of their respective students, the existence of subject-specific challenges implies students' performance in these subjects could improve if the associated barriers were eliminated. Additionally, the persisting physical challenges in teaching these subjects could force affected teachers to adopt less stressful postures towards those subjects. For example, in the classic case of Nkansah the mathematics teacher, taking a seat and utilizing the lower margin of the writing board would be more comfortable than the prolonged standing he has to endure. However, this is likely to negatively impact on his lesson delivery as teaching mathematics requires writing out systematic illustrations in order for students to comprehend the concepts.

## Limitations

A major limitation of the study is the fact that the relatively small numbers of TWPDs available in the Kumasi Metropolitan Education Unit would not allow for the application of probability sampling, thus limiting the extent to which the study findings could be generalized. Also, there are no such studies on TWPDs available in developing countries to compare with the findings from this study.

# Conclusion

In conclusion, the numerous job-related challenges TWPDs encountered in this study mirror the challenges of PWPDs in Ghana in which issues of disability and disablement are often not prioritized by policymakers. This is often exacerbated by cultural stereotypes in which PWDs (including TWPDs) in general are seen as helpless and needing the support of others. Thus a vicious cycle is created where the absence of facilitators make TWPDs more vulnerable, and consequently, adopt unorthodox means of overcoming the barriers to their respective jobs. This, in turn, reinforces the stereotypes against them and masks the real issues militating against their respective jobs.

# Recommendations

In light of the findings of inadequate policies by GES, it is recommended that the GES, in addition to collecting information on TWPDs, should profile their respective work-related challenges. This profiling would give a vivid description of the varied and respective physical challenges that could form the basis of long-term policies towards eradicating the numerous barriers that confront these teachers. Additionally, the profiling would allow for prioritizing some challenges over others in the face of a limited budget. For example, issues of accessibility to the workplace could be prioritized over classroom challenges if it is discovered more teachers have challenges with accessing the workplace. Thus with the passage of time, most barriers would be removed in order of their respective frequency of occurrence among teachers. This profiling should commence as soon as feasible and should directly involve officers of the GES and TWPDs.

Secondly, the GES, with its’ specialist disability staff could embark on sensitization programs on the concept of reasonable accommodation within the various schools. This would ensure stakeholders (including teachers, headmasters, and Parent-Teacher Associations) contribute to interventions that would ensure the gradual removal of the numerous barriers confronting TWPDs. For example, PTAs of the respective schools could possibly raise funds to procure adjustable writing boards that would cater for the difficulties associated with writing boards confirmed by some TWPDs. This sensitization program could be carried out once a year by the respective schools within the metropolitan education unit.

With respect to the avalanche of sympathetic behavior towards TWPDs, advocacy on the social construction of disability would help improve stakeholders' attitudes towards TWPDs. Stakeholders should be made to understand that if the appropriate facilitators are in place, TWPDs could be physically independent. Thus the avalanche of sympathy is misdirected as TWPDs are not primarily responsible for the physical challenges encountered. Disability campaigners, for example *Disability Talkers* in Kumasi, would be a very appropriate body to embark on the aforementioned advocacy. This could be done through seminars periodically and should commence as soon as feasible.

The finding that TWPDs missed out on a number of professional development opportunities suggests forming a self-help group, this could work to increase their chances of professional development. Firstly, the self-help group could lobby organizers of teacher-related workshops and seminars to make provisions for TWPDs while engaging school authorities to nominate them for such endeavors. Additionally, self-help groups could enable TWPDs to share valuable experiences that would enhance their roles in their respective schools. The self-help group could be formed as soon as feasible.

Furthermore, the problems related to difficulties with writing on the board, could be handled with technological accommodations that are now relatively cheap to provide. The Ministry of Education could support this initiative by making the technologies available.

**Moses Danso-Afriyie**, MS, is a young man who was born in a small community known as Kwamang within the Bekwai Municipality of the Ashanti Region of Ghana. He is a teacher by profession, who has been teaching Information and Communication Technology for the past 9 years at the Junior High School Level in Ghana. He currently holds a Master of Science degree in Disability, Rehabilitation and Development.

**Isaac Owusu**, MA, is presently a lecturer at the Kwame Nkrumah University of Science and Technology. His research interest areas include disability studies and inclusion. He has published articles in peer-reviewed journals in Disability and Public Health.

**Reindolf Anokye**, MS, is a Social Worker, Social entrepreneur and a Biostatistician. He studied social work, sociology and history at the University of Ghana and has recently completed a Master of Science degree program in Disability, Rehabilitation and Development at the Kwame Nkrumah University of Science and Technology. He is presently pursuing a PhD program at Edith Cowan University in Australia. Reindolf Anokye does research in social policy, social work, disability and health.

**Wisdom Kwadwo Mprah**, PhD, is a lecturer at the Centre for Disability and Rehabilitation Studies, Department of Community Health, School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. He holds a Diploma (Education), Bachelor of Arts (Geography), and Master of Philosophy (Geography) from the University of Cape Coast, Ghana, and PhD (Disability Studies) from the University of Illinois at Chicago, USA. Dr. Wisdom Kwadwo Mprah has conducted research, both locally and internationally, in the areas of Education and the Sexual and Reproductive Health experiences of Persons with Disabilities. He is also interested in the participation of persons with disabilities in employment and politics. He has published in more than 15 peer-reviewed journals and is also a reviewer of the African Journal of Disability, Disability, CBR & Inclusive Development, British Journal of Visual impairment and International Journal of Inclusive Education. He is an active member of the Ghana National Association of the Deaf and the Ghana Federation of Disability Organizations and has tremendously impacted on the operations of these organizations.

# Disclosure Statement

No potential conflict of interest was reported by the author.

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