INCLUSIVE EDUCATION: A CASE STUDY ON ITS CHALLENGES AND LONG-TERM IMPACT ON VISUALLY IMPAIRED INDIVIDUALS

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Abstract:

Inclusive education is arguably currently one of the most debated topics in the field of education. With more and more families opting for this approach to education for their special needs child, there is a rise in the number of schools adopting this approach. The present study examines the perceptions of visually impaired individuals towards inclusive education in Malaysia, including the challenges faced. The impact on their social lives was also investigated. Participants for the study comprised of 4 visually impaired individuals who had previously gone through inclusive education in their secondary school years. Employing a qualitative approach, a semi-structured interview was conducted in order to generate an in-depth insight into the phenomenon. The results of the study have indicated overall positive experiences for the participants. While the majority of the teachers were reported to show positive attitudes towards the participants, there were rare occurrences of teachers being unaware of the appropriate approaches of including the visually impaired students while teaching. Moreover, although there were a few instances of being bullied by peers, this improved once the visually impaired and their sighted peers began to socialize and understand each other. This positive repercussion of socialization was evident in the social development of the participants with regard to their working life and relationships with others. Some suggestions were made by the participants, which have been put forth as implications. These include more viable education options and widespread opportunities for attaining stable jobs. Nonetheless, further research is required in the field involving female participants to gain a wider perspective on the phenomenon, while the integration of quantitative methods of data collection will generate more conclusive outcomes.

Introduction

Visual impairment is one of the many learning disabilities that is a common occurrence across nations and even exists in many classroom settings. Visually impaired individuals fall under the broad spectrum of children with learning disabilities, children with special needs (CWSN) or persons with disabilities (PWDs), which all allude to the same phenomena (Bigham, 2010; Buford & Caser, 2012; Novak, & Bartelheim, 2010). As an alternative to segregating these children in specialized centers or special schools, which is the common practice in many instances, inclusive education, also known as mainstreaming, allows children with special needs to experience the same learning environment as normal students and to participate equally in classrooms. Nonetheless, limitations to this may exist based on the degree of severity of learning disorder or disability.

Formal education for the visually impaired in Malaysia first commenced in 1926 with the special education programs that catered solely to the needs of visually impaired students (Saad, 2006). This paved the way for educational opportunities for individuals with learning disability. Years later, Integrated Special Education Programs (PPKI) were introduced, in which classrooms for children with learning disabilities including the visually impaired took place in a mainstream school (Saad). Driven by the right to equal opportunity in education for every child (No Child left Behind Act) which has been mandated by governments nationwide, Malaysia itself implemented the Act in 2003 (Ministry of Education, 2008). Failure to enroll one's child in schools, without exceptions, would result in a hefty compound (UNESCO, 2014). The long term aim of introducing all special needs children to formal education systems was not just to provide holistic education but importantly, to promote social integration among peers that would eventually lead to independent living (UNESCO, 2009).While some schools have placed special restrictions as to the criteria for inclusion of special needs students, the Malaysian government has left the decision to the school authorities. The only two official criteria are that children should be able to function or self-manage themselves, and that there should not exist any behavioral problems that might cause disturbance to the normal flow of classroom activity or learning (Ministry of Education, 2008).

With the rise in the number of disabled students entering classrooms since the state mandated rule in 2003, efforts have been made to successfully integrate students with special needs in general classrooms. As of the year 2008, 228 visually impaired primary school students were enrolled into integrated classes within mainstream schools as opposed to 147 in the secondary school (UNECSO, 2009). Inclusive education for the visually impaired, however, is still a radical approach in Malaysia, particularly full integration. Documented statistics on the inclusive education experience of individuals with visual impairment is little, if non-existent. Although inclusive education by itself is not a novel endeavor in Malaysia, it is noted to be an unfavorable approach by special educators within the country (UNESCO). Yet, there are reported cases of successful learning through total inclusion. Unfortunately, however, the ministry and respective departments "have yet to gather data on total inclusive setting (UNESCO, pg. 9)."

Having recently implemented a "Zero Reject Policy" that enables children with special needs to join mainstream classrooms (Ngah, 2019), there is a need for clear-cut policies in order for decision makers in the educational field and school administration to ensure the child

successfully adapts to the classroom environment. Thus, a detailed insight into the challenges faced in an inclusive education setting, as well as future repercussions, would go a long way in aiding in the formation of informed decisions.

Objectives of the Study

The present study is not just unique with respect to its focus on students with visual impairment within the context of inclusive education but is also idiosyncratic in its portrayal of the voices of the students themselves. Specifically, the objectives of the present study are threefold and aim to answer the following research questions:

1) What are the experiences of visually impaired individuals who have undergone inclusive education?
2) What are the challenges faced by visually impaired individuals in an inclusive education setting?
3) How has inclusive education impacted the social lives of individuals with visual impairment?

Literature Review

Successful integration of CWSN, including the visually impaired, can result in positive outcomes in the form of building effective learning and communication skills (Lamport, Graves & Ward, 2012; Parvin, 2015), feelings of self-worth and self-confidence (Berg, 2004), and assistance from sighted peers (Dakwa, 2014). Nonetheless, paradoxes do exist as some of the visually impaired students have reportedly experienced less favorable circumstances such as lack of assistance from peers (Human, 2010), stereotyping and even bullying (Teoh, Cheong, & Woo, 2008). Dawka (2014) did, however, note that these judgmental attitudes and ill-treatments were later reduced once the sighted peers came into direct contact with their visually impaired classmates for group assignments, arriving at a similar realization as Ali, Mustapha and Jelas (as cited in Chopra, 2008), who claim inclusive education augments social interactions among students.

Though a seemingly positive endeavor, imposing certain expectations on a mainstream teacher can be quite taxing without proper training or suitable class materials as this can pose a perplexing scenario for both the mainstream teacher and the visually impaired students. Among the challenges faced are lack of readiness, which was cited by a number of teachers (Ghani & Ahmad, 2012; Shareefa, 2016; Ahmad, 2018), and scarcity of materials for the visually impaired students (Dakwa, 2014). In fact, Sunardi, Yusuf, Gunarhadi, Priyono and Yeager (2011) identified a marked deficit in the number of schools (a mere 10%) that modified instruction to cater for the needs of CWSN despite the prevalence of inclusive education in the country. Additionally, limited opportunities to socialize was also a key obstacle to those seeking social growth (Farrah Dina Yusop et al., 2012; Jacob & Olisaemeka, 2016). Such conditions can greatly impede rather than foster the success of inclusive education. If granted the support required, the visually impaired will attain social success (Villa & Thousand, as cited in Parvin, 2015). This further underscore the importance of providing visually impaired individuals with an environment that facilitates proper socialization with peers.

Conceptual Framework for the Study

Figure 1 below outlines the working framework for the present study
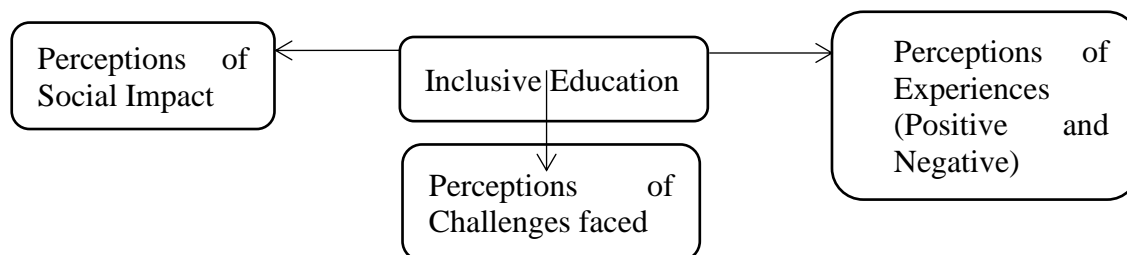
Figure 1: The Conceptual Framework For the Study

Methodology

Research Design

A qualitative approach was adopted in order to explore and adequately comprehend the phenomenon. In line with this approach, a case study method was implemented. This is typically used to gain a more profound and detailed understanding of a situation and its context, seeking to highlight unique aspects (Sammut-Bonnici & McGee, 2015). Moreover, in accordance with Zainal (2007), the requirements of a small number of participants, and a specific context that the participants are familiar with to facilitate a deeper understanding of the issues under investigation were equally met when executing the study.

Research Paradigm

The underlying research paradigm for the present study is critical research paradigm. A critical research paradigm is generally employed in the study of minority groups with the aim of bringing about certain changes (Myers, 2008). Despite the fact that inclusive education is a robust phenomenon, neglecting important aspects of the education of this special group of individuals may foster negative outcomes for the development of the visually impaired. As such, their perceptions and experiences should be examined thoroughly in order to make the necessary changes or enhance certain positive practices to bring about its effective implementation.

Participants

The participants for the present study comprised of 4 middle-aged males with visual impairment. Their ages ranged from 42 to 51. These participants were ideal as they had experienced fully integrated inclusive education and would be able to provide a comprehensive narration on the needs and challenges faced. Furthermore, selecting participants who have already undergone inclusive education and can thus provide insight into the long-term impact of inclusive education is conducive for the purpose of the present study. Both purposive sampling and snowball sampling technique were employed in selecting the participants.

Instrument

A total of eight key open-ended questions were addressed to the participants. While a few of the questions were created by the researcher, the majority of the questions were drawn and adapted from past research on inclusive education of the visually impaired. The first three questions were related to their overall experiences in inclusive education. A sample question would be *"can you briefly describe your experience as a student in an inclusive education classroom?"* Additionally, questions 4, and 5 were meant to tap into data regarding the challenges faced. This included the question *"what were some of the challenges you faced as a student?"* Meanwhile, questions 6, 7 and 8 focused on the social impact of inclusive

education and included questions such as *"to what extent has inclusive education impacted your work life?"* and *"to what extent has inclusive education impacted your social life?"*

Procedure

Data collection took place in the form of a focus group, semi-structured interview. The researcher made use of an interview guide in order to follow a certain theme of posing questions. This allowed the researcher to have some control over the flow of the interview, where minimum diversion took place. At the same time, however, the participants' response or further contributions were not restricted in any manner as the open-ended nature of the questions allowed participants to engage with the researcher in a conversational mode, elaborating on statements when necessary. The interview took place in a quiet meeting room at an establishment that three of the participants are working at, while the fourth participant is quite familiar with it. The interview lasted for about an hour and was recorded using a digital voice recorder.

Validity of the Study

The questions for the interview were first assessed for face and content validity by presenting them to a panel of specialists from the Department of Educational Psychology at the researcher's institute of affiliation. This was to check for face validity of the questions. Subsequently, the questions were also posed to a visually impaired individual from the Malaysian Association for the Blind to ensure that the questions were clear and understandable, allowing for a a detailed discussion into the phenomena of interest. After the pilot test, there was no amendment made to the questions. As such, all the questions were retained.

Data Analysis

Content analysis was used in interpreting the raw data once it was transcribed. Using this process, the data from all the participants was first examined individually and coded based on similarities and differences to form themes. These emerging themes were then clustered into main themes and sub themes. Each theme was then displayed and supported by the raw data quotes from the participants. As content analysis is an inductive process and the method of collecting the data is through open-ended questions, some of the resulting themes were unpredictable and unanticipated by the researcher.

Results and Discussion

Interview questions that reflected the objectives and research questions of the study were posed to four participants, two of whom were totally blind, with the remaining individuals being partially sighted or having low vision. Participant 1 is currently an instructor at the Malaysian Association for the Blind and has been teaching there for over 2 decades. Meanwhile, Participant 3 is also an instructor at the Malaysian Association for the Blind. Participant 2 was a former massage therapist for 15 years, while Participant 4 is therapy instructor attached to the Malaysian Association for the Blind. All the participants had gone through inclusive education throughout their secondary school years.

There was a cordial and positive atmosphere right from the beginning. It was very easy to bond with the participants as they were all easy-going and had a penchant for humor. They had no problems with orientation and could find their way around the interview room easily, going as far as to point out a chair for the researcher to sit in. Their attitude and the manner in which they carried themselves testified to their confidence and well-adjusted demeanour. Apart from that, their mode of interaction with the researcher throughout the interview was indicative of a typical interaction the researcher would normally expect with any sighted individual.

The First Research Question

With respect to the first research question regarding the perceptions towards inclusive education in relation to their experience, five themes were identified from the interview. The first theme that came up was academic achievement, followed by teacher's attitude, support, educational materials and student's attitudes.

> "I think in terms of academic, there was no problem because sometimes we get better results than the normal students" [Participant 3].
> "In my class, we were four blind persons. So at that time, number…first, second, third, fourth….were all blind. So, actually, the teachers feel that we are very clever..." [Participant 4].

Though it may be surprising to many that visually impaired students would actually outperform their sighted peers, the statements made are in line with Villa and Thousand (as cited in Parvin, 2015), who alleged that visually impaired individuals would thrive academically given the opportunity. In this case, their teachers, who gained valuable advice from their predecessors may have played a role in this:

> "…because we had some teachers who used to have these blind students before so what did they do? They got advice from these other teachers…how do we teach these blind students in our class? So, they advised them and gave them some ideas such as making a blind student sit with another normal student…maybe because the sighted friend can help him to learn those things that the teacher wrote on the white board" [Participant 2].

Another issue highlighted by the participants is the equal treatments.

> "In my school, actually all the teachers treat us as normal students. If we do something wrong, they will punish us…we would stand on the chair. It's normal for us. If we come late for school, we have to be punished" [Participant 3].

This provided them with a sense of belongingness instead of feeling like outsiders in class. The equal treatment provided by these teachers has also been advocated in a study by Avcıoğlu (2017), who asserts that a positive environment needs to be fostered to facilitate adjustment.

Nonetheless, this enabling attitude was not displayed by all teachers as some were not as positive in their attitudes towards visually impaired students in their classroom:

> "Not all the teachers understand us…some of them feel like there are no blind astudents in the class! So, sometimes they don't realize that we are there. So, when they teach they would say 'this plus this, equals to this.' So, we wouldn't know anything. At those times, we would sleep!" [Participant 3]

Although these cases were reported by the participants to be rare, their existence allude to an issue that needs to be critically examined in order for inclusive education to be effective. Not all schools are free from such obstacles, particularly when a teacher does not possess the required skills or is inexperienced in dealing with a special needs student. In fact, past studies have supported the assumption that trained teachers tend to have significantly more positive attitudes than untrained teachers (Chopra, 2008; Coelho, Blázquez & Cubo, 2017).

Additionally, this unfavorable attitude was reserved for specific types of learning disabilities, which included children with physical impairments such as loss of hearing or sight (Khan, 2011), with lack of training being cited as the main cause (Ghani & Ahmad, 2012).

When describing their relationship with their sighted peers, both favorable and unfavorable responses were elicited.

> [Participant 1]…some of them they think because we are blind, we don't know anything. Sometimes, they will ask us questions like "how do you bathe?", "how do you eat?"
>
> [Participant 3] Irritating! They would ask us questions like "how does an airplane look like?" and to describe an animal. They think that we don't know how to talk, that our knowledge about the world is very little.

This sort of sentiment and attitude is not something foreign to inclusive education classrooms, particularly for those experiencing such an interaction for the first time. Adults with disability and the parents of children with a disability have expressed concerns regarding the relationship between disabled and non-disabled individuals which they felt was typified with "fear, insecurity and ignorance" (Rutter, as cited in UNESCO, 2009, p. 1). Participant 2 later ruled out the seemingly impolite attitude by non-disabled peers as something of a curiosity from the part of their peers while Participant 4, who was partially sighted, had the advantage of borrowing notes from his peers and pointed out the positive and beneficial bonds of friendship that can be formed:

> "Maybe the first one week will be something strange for them also. So, maybe they will talk to us, discuss…it would take some time. Then they will think "oh, these people also know what is happening around them and have knowledge. Later they realize this." [Participant 2].
>
> "My relationship with them was good. I would normally borrow their notes. They would help me out. Some of them, our very close friends understood us and they would also take us to the cinema and explain to us the scenes" [Participant 4].

Though there were mixed results from past studies in this regard with some indicating negative relationship with peers (e.g. Teoh et al., 2008; Human, 2010) and others positive outcomes (e.g. Lamport et al., 2012), the current findings resonate largely with that of Dakhwah (2014), who discoverd that disabled and non-disabled students only warmed up to each other after frequent contact.

When asked specifically about whom they received support from at this point of time in their study period, it was interestingly not from their parents or guardians:

> "…the resource teacher I would say" [Participant 1].
>
> "Although we had the resource teacher, we also had some very close friends. It may be one or two, but they were very supportive" [Participant 2].

Apart from the support provided by the special education teacher and peers, it was also reported that some of the sighted students would volunteer to help out the visually impaired in class:

> "Another thing is that we had a voluntary reader" [Participant 3].
>
> "They come voluntarily. They will register their names to be our volunteer readers" [Participant 2].

These students who would volunteer to read the text for students or help them catch up with the notes in class would have helped greatly, particularly due to the issue of not having Brailled textbooks:

> "Every five years the Ministry of Education will change the books so for us to have new Brailled books, it would take a very long time. We need these volunteers to make the process fast" [Participant 2].

The change in textbooks is usually done as a means of keeping in tandem with the current syllabuses. This is not just practiced in the local front but can be observed as an obstacle in inclusive classrooms overseas as well. In these instances, having someone who can read the text for you is a great help but time consuming and can detract from time that can be spent developing other skills. Fortunately, with the advent of technology, it is now possible for visually impaired students to get their educational resources from online portals in a Brailled version that can also make use of voice recognition and can convert work to Braille (De Silva & Wedasinghe, 2017; Umarani & Sheddi, 2018). Inclusive schools with visually impaired students can work towards implementing such software that would make the task of Brailling a book and submitting assignments much easier.

The Second Research Question

For the second research question regarding the challenges faced in inclusive education, two main themes were identified. The first was the inability to follow some instruction in class and the second was the limited opportunities to further education in a higher institute.

> "…if you say geography, we still need to learn like maps, right? And if mathematics, then we need to learn formulas or graphs or when we learn about cubes. When you come to science, of course it would come to colors. They would say 'okay, when you mix this part with this it would become blue' or maybe yellow. For us, it is difficult. It would be a problem so we will go to our resource teachers as they would know how to explain and handle this" [Participant 2].
>
> "…Arts we have to drop. Drop the subject and the class, because of course *lah* blind cannot do drawings" [Participant 1].

Although the special education teacher is there to guide the visually impaired students when certain topics in subjects like Science and Mathematics are beyond their physical abilities to comprehend, subjects like art were not an option for the visually impaired for seemingly obvious reasons. Nonetheless, visually impaired students have been documented to be as animated in arts when given the encouragement and room to express their own minds (e.g. Johnson, 2018). Instead of the traditional drawing and painting, they can engage in other aspects of art such as creating experiences or images using sensory inducing objects to express themselves. As a matter of fact, novel inventions are being fashioned to enhance the plight of the visually impaired when it comes to arts, which include the design of Fonseka and Wedasinghe (2018) that enbles image to Braille conversions.

Despite the help and support the students received throughout their inclusive education towards fostering good academic achievement, this did not seem to be much help to them in their aspirations of attaining higher educational pursuits:

> "Sometimes, we get good grades, but we can't enter a prestigious school. So, we are left with no choice…although we have better results than the normal students, they still can't accept us" [Participant 2].
>
> "Usually, they would say there are no facilities" [Participant 4].

When graduating from primary and secondary school, the next obvious step would be to further one's education. Nonetheless, when hindrances are encountered in the form of lack of facilities or preparedness, it becomes disappointing for the individuals involved. Participant 3 was the only participant who managed to enter a prestigious university which caters to students with visual deficiencies and was thus more positive about the current opportunities.

> "Actually, the opportunities to study for the blind is much, much better than before..." [Participant 3]

Opportunities to study at any university of choice for the blind are slowly improving as funds are required to set up the appropriate equipment, using the latest technologies. This may very well explain the current scenario faced, whereby the visually impaired encounter greater impediments when applying for higher education than students with other kinds of disability (Farrah Dina Yusop et al, 2012), and is supported by Nasir and Efendi (2016) who discovered a lack in 'assistive devices' and PWD-friendly facilities in Malaysian schools.

Another setback encountered by the participants was faced after graduation. Attaining a distinguished university degree almost definitely provides a boost for the job market. Nonetheless, when both one's physical abilities and educational training are in question, difficulties in employment arise:

> "I guess the ministry and special education department have to work more seriously on the facilities so that when they send students to inclusive education programs, they can think about their future…what they are going to do later. So there should be some job opportunities. There are some who maybe finished their PHD but are still jobless. Even though they go for talks and get paid and do things themselves without any help, they are still jobless. We feel a sense of loss for these kinds of assets who are not being utilized in a better way…" [Participant 2]
>
> [Participant 3]"…job opportunities is still very, very slow. Sometimes, after we complete our studies we don't know where to go. So, we would have wasted our time and money and in the end can't contribute anything to our country. That's a waste. Very sad, actually."

The Malaysian government has acknowledged the hardships faced by persons with disability in maintaining a bright future and functioning as every other individual in the community. Apart from having provided health and travel benefits, the government is working towards providing individuals with disability vocational training and jobs that would enhance their sense of satisfaction and promote socialization with the surrounding community (Kamaruddin, 2007). Although programs organized for this endeavor cater mainly to individuals in special needs schools, an extension can be made to include those in inclusive education classrooms as well.

The Third Research Question

The third research question dealt with the social impact of inclusive education on the current lives of the visually impaired. This yielded three main themes: better relationship with others, confidence and independence. Participant 2 describes how the nature of his relationship with those around him and in the workplace took a positive turn due to inclusive education:

> "When we start to mix with new people around our teenage years, it gives us a very good experience when we come to the working environment. So, we know how to mix around with the public especially our superiors. Maybe they also don't understand much about the blind. When we have this inclusive program, we already faced the problem in the beginning stage so when it comes to the later stage, maybe in the working environment or maybe even in university, since we already know the situation we will be able to handle it from the beginning" [Participant 2].

The experiences gained from inclusive education with the teachers and students did not just help in enhancing interaction with those around him and in the workplace, but also helped Participant 2 in countering possible barriers in interaction with others. This experience was echoed by the rest of the participants and was outlined by Salend (as cited in Braunsteiner& Mariano-lapidus, 2014), who also mentioned a greater likelihood of job acceptance as a result of this adjustment. Furthermore, the participants felt a greater sense of confidence and independence as a result of their inclusive education:

> "If there was no inclusive education, let's say I'm going out somewhere. Maybe I am going west and maybe I have to look for the right bus for me to take or travel. If I feel so inferior and not ready, it will be quite hard for me to communicate with the people in order for me to get the right bus, with the right number or for me to look for a taxi or to look for the train….Maybe I'll feel inferior or shy so I will never talk. I cannot hope for the people to come to me. I have to go to the people. This is what we actually learnt during this inclusive program; "don't be inferior, don't be shy." So you have to introduce yourself to the public. Don't wait for the public to come to you" [Participant 2].
> "We can handle ourselves now" [Participant 3].

The development of a confident, independent individual with high self-esteem who functions well in a community, as is seen here, has previously been identified as a result of inclusive education (Parvin, 2015).

Implications of The Study
The study has far-reaching implications that involve a number of spheres. At the individual level, awareness of the challenges and, more importantly, the future impact of inclusive education can guide potential students and respective parents to make informed decisions about enrolment into inclusive schools. Additionally, in the teaching realm, more meticulous planning and training can be carried out to enhance teacher readiness, equipping them with skills in dealing with the visually impaired in inclusive classrooms, ultimately minimizing barriers to their successful integration. Plus, the utilization of advanced software's that convert text to Braille, and pictures to Braille will not only pave the way for a smoother transition but would also provide heightened opportunities for social interaction with peers. Meanwhile, within the domain of education policies, the Higher Ministry of Education can look into creating additional avenues to allow for the enrolment of a greater number of visually impaired individuals into tertiary education. Finally, polices that cater to the vocational needs of the visually impaired can be investigated by the respective parties if the end goal of inclusive education is truly to induce independent living, in accordance with UNESCO (2009). This may begin with the enhancement of policies for tertiary education, leading up to the provision of both vocational training and wider opportunities for better job security.

Conclusion and Recommendation
The study was conducted to examine the experiences of visually impaired individuals within the Malaysian context. The challenges faced and the impacts on social development were also explored. In general, the situations encountered were common across all participants, as were the challenges of being in an inclusive education classroom. Although there were some infrequent unpleasant encounters, they were far outweighed by the positive experiences. The impact of inclusive education on the social development of the participants was arguably the most integral part of the inclusive education experience, with far reaching implications that encompassed almost all aspects of the participants' lives. Nonetheless, this study is not

without its limitation. Since the sample for the present study was comprised solely of males, the results may not be as varied or similar to those provided by females who have undergone inclusive education. Moreover, a mixed approach to the study that incorporates quantitative methods of data collection would provide external validity and further generalizability of the study. Hence, additional research is required on the topic of inclusive education within the local context in order to further explore this phenomenon and generate more conclusive findings.

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