

EXPLORING INFRASTRUCTURE FACILITIES FOR PERSONS WITH DISABILITIES (PWD) TRAINEES IN TVET TRAINING INSTITUTIONS

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ABSTRACT

This study aims to explore the support provided to Persons with Disabilities (PWD) trainees at GIATMARA, identify the barriers faced by PWD trainees, and examine the physical infrastructure facilities available for PWD trainees at GIATMARA training centers. Disability-friendly infrastructure is a critical component in ensuring accessibility, effective learning, and social integration for PWD trainees. This research employs a descriptive approach through case studies at selected GIATMARA centers. Data were collected using unstructured interviews and analyzed thematically. The results reveal that although several initiatives have been implemented to meet the needs of PWDs, there are still shortcomings in infrastructure design, facility maintenance, and management awareness of the specific needs of PWD trainees. The study recommends improvements such as the provision of dedicated pathways, learning aids, and the implementation of staff training programs to enhance understanding of the needs of this group. The findings of this study are significant in empowering PWDs through more inclusive and disability-friendly vocational education at GIATMARA.

Keywords: Persons with Disabilities (PWD), GIATMARA, Support, Infrastructure

1. INTRODUCTION

Persons with Disabilities (PWD), as defined under Act 658 – Persons with Disabilities Act 2008, are individuals diagnosed with long-term disabilities in physical, cognitive, mental, or sensory aspects, which may restrict their full participation in society. There are seven categories of PWDs identified by the Department of Social Welfare (JKM): hearing impairment, visual impairment, speech impairment, physical impairment, learning disabilities, mental disabilities, and multiple disabilities.

PWDs are entitled to continue their education to higher levels after completing school. To secure employment, PWDs often require certification in specific fields. According to the Career Carnival for PWDs 2021 Media Statement, a total of 659 job vacancies were offered to PWDs. Before entering the workforce, PWDs need to equip themselves with knowledge in vocational fields to assist them in their careers. Many institutions, including public and private colleges, offer educational programs for PWDs. Among the government's efforts are institutions like Community Colleges, GIATMARA, the Industrial Training and Rehabilitation Center in Bangi (PLPP), and Community-Based Centers. The career transition module implemented in schools for students with

special needs helps prepare them for selecting colleges and courses suited to their abilities. GIATMARA has taken the initiative to offer programs for special needs students, aiming to develop a knowledgeable and skilled workforce through Technical and Vocational Education and Training (TVET) and lifelong learning.

Therefore, the purpose of this study is to explore the physical infrastructure facilities provided by GIATMARA for PWD trainees. Education is a fundamental necessity for individuals, and Malaysia's education system continues to evolve to meet current needs. The government has provided numerous opportunities for all individuals, including PWDs, to access education. TVET institutions established by the government aim to provide vocational education for PWDs. GIATMARA targets various groups, including the underprivileged, PWDs, single mothers, and youths.

TVET serves as an essential platform for equipping individuals with skills and knowledge to build a competent and competitive workforce. However, for PWDs, access to education and training is often hindered by inadequate infrastructure. Suitable infrastructure is crucial not only for ensuring accessibility but also for enhancing learning effectiveness, social integration, and the potential development of PWD trainees.

In TVET training institutions, the provision of facilities catering to the specific needs of PWD trainees is vital for creating an inclusive educational system. However, questions arise about the suitability and effectiveness of existing facilities. Do the current infrastructures meet the actual needs of PWD trainees, or are there gaps that need addressing to improve their learning experience?

This study emphasizes the importance of inclusive and disability-friendly infrastructure in TVET institutions. While some initiatives have been undertaken to support PWD needs, the findings indicate persistent issues in design, maintenance, and management awareness regarding PWD trainees' specific requirements.

2. LITERATURE REVIEW

The provision of disability-friendly infrastructure in educational and training institutions has been a primary focus in efforts to enhance accessibility and the effectiveness of vocational education. According to previous studies, well-designed infrastructure not only ensures that PWD trainees can easily access physical facilities but also enhances their learning experience and social integration (Ismail et al., 2020). The study highlighted that disability-friendly infrastructure, such as dedicated pathways, elevators, accessible restrooms, and learning aids, are fundamental components that support inclusive learning.

In the context of TVET education, institutions play a crucial role in developing the skills of PWD trainees, enabling them to compete in the labor market. However, research by Abdullah et al. (2019) found that many TVET institutions have yet to meet minimum requirements for disability-friendly infrastructure. This shortfall is often due to budget constraints, a lack of technical expertise in inclusive design, and low awareness among institutional management.

Furthermore, a study by Lee and Omar (2021) emphasized the importance of infrastructure maintenance to ensure functionality and accessibility for PWD trainees. They also noted that infrastructure alone is insufficient without the support of trained educators and staff who understand the specific needs of PWDs. This view was reinforced by Shafie et al. (2022), who stated that training staff in empathy and awareness of PWD requirements is key to creating a supportive learning environment.

From a policy perspective, initiatives like the National Action Plan for PWDs 2016-2022 have provided frameworks to improve access to education and training for PWDs. However, the implementation of such policies often faces challenges, including insufficient human and financial resources at the institutional level (Ramli et al., 2020). Despite comprehensive policy frameworks, these challenges highlight the need for better coordination and monitoring at the grassroots level. In summary, the literature review underscores the urgent need to improve disability-friendly infrastructure in TVET institutions to ensure inclusivity. Support from various stakeholders, including the government, institutions, and the community, is crucial to provide PWD trainees with equitable and high-quality learning experiences. This study contributes to the existing body of knowledge by exploring specific challenges and solutions relevant to TVET institutions.

3. METHODOLOGY

This study collects detailed and in-depth information to explore the perspectives of the study subjects. Therefore, the researcher employed a qualitative research design and case study approach, which is suitable for understanding complex issues or objects in greater depth. Case study research was chosen because the small number of respondents allows for an in-depth understanding of the issue, and a complex relationship between the subject and the research objectives can emerge (Noraini, 2013).

The study utilized a qualitative approach, specifically semi-structured interviews, as the primary method of data collection. Interviews involve the direct collection of data and information where both respondents and the researcher are present (Noraini, 2013). Semi-structured interview questions were developed based on the research objectives. The interviews were conducted in a semi-formal manner, enabling respondents to share their experiences comfortably and in detail.

3.1. Population and Sample

The population refers to the entire set of individuals, objects, or phenomena sharing similar characteristics (Iran Herman, 2005). In this study, the target population consisted of four GIATMARA instructors and two Persons with Disabilities (PWD) trainees from GIATMARA. The selected disability category focused on learning disabilities. The study participants were chosen based on the Malaysian Skills Certificate (SKM) offered by GIATMARA.

Purposive sampling was employed to select participants who could provide the necessary information. Purposive sampling involves selecting samples based on the researcher's knowledge and the specific objectives of the study (Noraini, 2013). The sample comprised instructors from two GIATMARA centers in Pahang and Johor and two PWD trainees.

3.2. Research Instruments

Several instruments were utilized to gather relevant data for exploring the infrastructure facilities for PWD trainees at GIATMARA. The choice of instruments was aligned with the study's objectives and qualitative approach. Semi-structured interview guides were prepared for this purpose.

Interview questions were developed based on previous studies, such as Hasnah et al. (2009), which explored the support and challenges faced by PWD students in higher education institutions in Malaysia. The interview guide included nine questions divided into three sections: participant information (Section A), support and barriers (Section B), and the provision of physical infrastructure for PWD trainees (Section C). The semi-structured format allowed respondents the freedom to express their views while enabling the researcher to probe further as needed.

3.3. Data Collection Process

The data collection process is a critical step in qualitative research. For this study, interviews were conducted via phone calls, enabling in-depth discussions between respondents and the researcher. Qualitative data, described as verbal or written accounts of observable human behavior, were collected (Taylor and Bogdan, 1984). The researcher contacted GIATMARA to obtain participants' phone numbers and scheduled interviews after securing their consent.

Before starting the interviews, the researcher introduced themselves and explained the purpose of the interview. Respondents were asked for permission to record the interview sessions for transcription purposes. Once consent was obtained, the interviews proceeded.

3.4. Data Analysis

Thematic analysis was used to analyze the collected data. After transcribing the interview data, the researcher developed codes manually and repeatedly reviewed the transcripts to ensure accuracy. Two colleagues assisted in the coding process to minimize errors.

Categories and themes were developed after completing the coding process. The researcher performed consensus coding to identify relevant themes based on the research questions. This procedure involved six steps: data collection, initial coding, theme identification, theme organization, theme categorization, and report writing (Rusli & Yusoff, 2022).

4. FINDINGS

The findings of this study were analyzed and summarized based on the objectives and research questions. Two instructors and one trainee from GIATMARA Institution A, as well as two instructors and one trainee from GIATMARA Institution B, participated in the interviews. The findings are categorized into three main themes: support provided to PWD trainees, challenges faced by GIATMARA in providing disability-friendly facilities, and physical infrastructure available for PWD trainees.

4.1. Support Provided at GIATMARA for PWD Trainees

The findings reveal that peer acceptance provides significant support for PWD trainees at GIATMARA. Five out of six participants indicated that PWD trainees receive support from their peers. For instance, Participant 1 stated:

"All instructors and peers treat everyone equally, whether they are typical trainees or PWD trainees." (Participant 1)

Participant 2 also noted that peers are understanding and helpful towards PWD trainees:

"It's very satisfying; they are very helpful. When they see PWD trainees, they feel sympathetic and want to help. They are friendly and willing to assist, without any discrimination." (Participant 2)

Similarly, instructors at GIATMARA showed positive acceptance of PWD trainees. Five out of six participants stated that instructors were supportive and willing to teach PWD trainees. For instance, Participant 1 mentioned:

"All instructors and peers treat everyone equally, whether they are typical trainees or PWD trainees." (Participant 1)

4.2. Challenges Faced by PWD Trainees at GIATMARA

The challenges faced by PWD trainees at GIATMARA are divided into five sub-themes: transportation to attend classes, housing facilities, access to information, teaching and learning processes, and financial constraints.

Transportation emerged as a significant barrier for most PWD trainees, with participants highlighting their reliance on parents or the use of public transport. For instance, Participant 1 explained:

"They are transported by their parents during class days, and they must rely on their parents." (Participant 1)

4.3. Physical Infrastructure Provided for PWD Trainees

The study identified six types of physical infrastructure for PWD trainees: wheelchair ramps, disability-friendly restrooms, elevators, classrooms, and designated parking spaces for PWDs. Five out of six participants noted the presence of ramps for wheelchair users; however, issues related to safety, such as steep inclines and inadequate divider barriers, were highlighted. Participant 1 stated:

"Ramps are available, but they are not suitable due to steep inclines and the absence of proper dividers." (Participant 1)

The findings highlight the importance of addressing these barriers to improve the accessibility and inclusivity of PWD trainees at GIATMARA.

5. DISCUSSION

The findings of this study reveal significant insights into the support provided, challenges faced, and physical infrastructure available for PWD trainees at GIATMARA. The discussion focuses on three main areas: the support provided to PWD trainees, the barriers they encounter, and the adequacy of existing infrastructure in meeting their needs.

5.1. Support Provided to PWD Trainees

The study indicates that GIATMARA provides significant support to PWD trainees through peer acceptance, instructor engagement, and staff assistance. The positive relationships established among trainees, instructors, and staff contribute to a supportive learning environment. This finding aligns with research by Marina and Monica (2015), which highlights the importance of informal support from family and peers in enhancing the learning experience of PWDs.

However, contrasting findings from Intan and Munirah (2014) suggest that instructors at some institutions demonstrate moderate preparedness to teach PWD trainees. This emphasizes the need for ongoing professional development to enhance instructors' capabilities in addressing the specific needs of PWDs.

5.2. Challenges Faced by PWD Trainees

Transportation challenges emerged as a significant barrier for PWD trainees. Many rely on parents or face safety concerns when using public or private transportation. This finding is consistent with Marina and Monica (2015), who identified transportation as a critical challenge for PWDs in accessing education.

The lack of housing facilities at GIATMARA also poses difficulties for trainees, particularly for those with disabilities. Providing on-campus housing for PWD trainees could address safety and accessibility issues, as suggested by Reduan and Haryati (2017). Housing facilities would not only enhance their learning experience but also foster greater independence.

While financial constraints were not identified as a significant barrier due to the provision of monthly allowances, the adequacy of such support may vary depending on trainees' individual circumstances. This highlights the importance of tailoring financial aid to meet the diverse needs of PWD trainees.

5.3. Adequacy of Physical Infrastructure

The study found that while GIATMARA has made efforts to provide physical infrastructure for PWD trainees, several gaps remain. For example, wheelchair ramps are available but often fail to

meet safety and accessibility standards. This finding aligns with Ezlina and Alice (2020), who emphasized the importance of designing infrastructure that adheres to disability-friendly standards.

Additionally, the absence of essential facilities such as disability-friendly restrooms, elevators, and designated parking spaces highlights the need for improved planning and resource allocation. These findings underscore the necessity for GIATMARA to prioritize the development of inclusive infrastructure that meets the needs of PWD trainees effectively.

In conclusion, the discussion highlights the need for comprehensive strategies to address the challenges faced by PWD trainees at GIATMARA. By improving support mechanisms, addressing barriers, and enhancing physical infrastructure, GIATMARA can create a more inclusive and supportive environment for PWDs.

6. CONCLUSION

This study provides an in-depth understanding of the suitability and effectiveness of the infrastructure provided for Persons with Disabilities (PWD) trainees at GIATMARA centers. The findings reveal that although initial efforts have been made to provide disability-friendly facilities, several aspects still require improvement. These include the design and maintenance of infrastructure, as well as awareness and training among staff regarding the specific needs of PWD trainees.

The research emphasizes that disability-friendly infrastructure not only fulfills the basic needs of PWD trainees but also plays a crucial role in ensuring the effectiveness of vocational training programs. The study recommends several strategic measures, including improving the design and maintenance of physical infrastructure, increasing the availability of appropriate learning aids, and enhancing staff awareness and training related to PWD requirements.

By implementing these measures, GIATMARA can become a more inclusive platform for vocational education, empowering PWD trainees to reach their full potential in technical and vocational fields. Furthermore, the study opens avenues for future research in inclusive education and the development of infrastructure for PWDs.

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