

Accessibility of Entrepreneurship Training Programs for Individuals with Disabilities: A Literature Review

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Abstract: Entrepreneurial endeavours often begin with entrepreneurship training. Such trainings, however, remain largely inaccessible to Persons with Disabilities (PWDs), and thus, their entrepreneurial potential remains untapped. This comprehensive literature review examines the barriers to entrepreneurship education for PWDs and identifies strategies to overcome these challenges. The review follows the systematic approach of the PRISMA 2020 Statement, using five databases, including Scopus, JSTOR, ProQuest, DOAJ, and Google Scholar. A total of 2140 articles dating back 10 years were identified, screened, and evaluated, and 17 of them were selected and synthesized to inform the findings. The key findings highlight a spectrum of barriers, including inadequate access to quality education, difficulty in customizing entrepreneurship programs, issues related to both physical and digital access, financial barriers, and the influence of societal norms and self-perception. They also identify strategies to make entrepreneurship education more inclusive, such as applying universal design principles, tailoring education to individual needs, shifting towards active learner-centred methodologies, leveraging information technology, and fostering supportive communities. This review is a practical reference for institutions, organizations, and individuals endeavouring to enhance the inclusivity of entrepreneurship training programs. It also provides a theoretical framework for the already identified requirements of PWDs for entrepreneurship training and presents further opportunities through current limitations and suggestions for future research.



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1. Introduction

Approximately one in six individuals worldwide experience disabilities, varying widely in type, severity, and impact on daily life ([Centers for Disease Control and Prevention 2024](#); [World Health Organization 2023](#)). Disability is an umbrella term the World Health Organization (WHO) uses to describe a condition that affects the body or mind, resulting in impairments. These impairments make certain activities more challenging, leading to activity limitations. Moreover, disability hinders interaction with the surrounding world, causing participation restrictions.

The term “disability” encompasses the negative aspects of the interaction between an individual with a health condition and the contextual factors, which include environmental and personal factors ([World Health Organization 2001](#)). This diverse group encounters challenges influencing health, everyday functioning, and employment opportunities. Persons with Disabilities (PWDs) often experience early mortality, diminished health ([World Health Organization 2023](#)), and increased reliance on family support due to gaps in formal social support mechanisms ([World Health Organization and The World Bank 2011](#)). Numerous studies across developed and developing nations consistently reveal higher unemployment rates among working-age individuals with disabilities compared to their non-disabled counterparts ([OECD 2010, 2023](#)). Such limited labour market participation becomes a critical circumstance that leads to increased poverty for this demographic

(World Health Organization and The World Bank 2011). To address these alarming rates and disability-related challenges, entrepreneurship is often sought after as a solution to bridge that unemployment gap and avoid the marginalization barriers (Dakung et al. 2023) and misconceptions linking PWDs with incompatibility to work and a lack of reasoning (Dakung et al. 2022). Dakung et al. (2023) explain that for PWDs, entrepreneurship also offers a flexible work schedule and an opportunity to accommodate their disability.

Entrepreneurial endeavours could include many different activities, from starting or expanding a business to changing a business strategy, a leadership style, or a social structure (Muñoz et al. 2020). In all cases, these endeavours often create more job opportunities and solve social problems, further reducing unemployment prevalence (Dakung et al. 2023) and potentially eradicating the marginalization of PWDs in society. Research shows that one of the primary elements encouraging entrepreneurship is entrepreneurship training (Shrivastava and Acharya 2020; Zutiasari et al. 2021). Entrepreneurship training is becoming much more widely available nowadays in universities, incubators, and centres supporting new entrepreneurs. It commonly includes a collection of tools and use cases that provide an entrepreneurial lens into the business world. Entrepreneurship and entrepreneurship training, however, may not be accessible to PWDs due to physical or digital accessibility challenges, a lack of a tailored approach and inclusive messaging for PWDs, as well as societal misconceptions related to the capabilities of PWDs to run a business, as highlighted by Krüger and David (2020), Hamburg and Bucksch (2017), and (Dakung et al. 2022, 2023).

Recognizing the potential of self-employment as a flexible alternative, particularly in managing disability and lifestyle, individuals with disabilities often face barriers to formal education and skill development opportunities (OECD 2023; World Health Organization and The World Bank 2011). The widening educational gap between those with and without disabilities poses an escalating obstacle. While existing research sheds light on obstacles to entrepreneurship for disabled individuals, a noticeable gap exists in understanding impediments specific to entrepreneurship education (Dakung et al. 2016b). Other reviews identified within the same topic focused on physical accessibility and how to overcome it with education and attitudes; another explored the difficulties for Indonesian students with disabilities due to societal attitudes and a lack of resources. But none identified covered a holistic review like this one.

This literature review aims to comprehensively explore the multifaceted barriers faced by individuals with disabilities in accessing and deriving benefits from entrepreneurship training programs. Its goal is to provide a framework of strategies and pedagogies to encourage PWDs to take the first step toward an entrepreneurial career through entrepreneurship training. It also scrutinizes the existing literature for recommendations and mitigations to alleviate these barriers. Additionally, this literature review draws inspiration from universal design principles, seeking to discern how these principles can be effectively be integrated into entrepreneurship training programs. Ultimately, this literature review can serve as a reference for institutions, organizations, and individuals endeavouring to enhance the inclusivity of entrepreneurship training programs. The research employed artificial intelligence-assisted methodologies, specifically auto-coding through the natural language processing tool ATLAS.ti® Web v7.1.2. This was utilized to optimize the coverage of existing knowledge, facilitate robust synthesis, and uncover discernible patterns that can significantly inform future strategies to improve accessibility and inclusivity.

Beyond this introduction, the paper presents a methodology section to explain the criteria followed and the selection process for this systematic review. The results section follows with seven identified barriers and suggestions to address them. The limitations and future research sections explore some of the limitations of this study and future research opportunities to explore this topic further and inform more inclusive design in entrepreneurship training. Lastly, the conclusion summarizes the review, findings, and study's goals.

2. Methodology

This systematic literature review was framed following the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) 2020 Statement (Page et al. 2021). PRISMA was selected to ensure transparency and standardization in the review stage and to maintain scientific robustness and rigour by allowing for replicability.

2.1. Eligibility Criteria

This literature review targeted research on barriers to entrepreneurship education for PWDs and strategies to overcome these barriers. Thus, studies focusing solely on the broader obstacles within general education rather than entrepreneurship education precisely were excluded. Similarly, studies that examined barriers to entrepreneurial activities without a direct link to the educational aspects were also excluded. This decision was taken to fill the specific knowledge gap related to the educational barriers PWDs face in entrepreneurship education rather than the more widely discussed general entrepreneurial barriers.

This review included quantitative and qualitative studies to ensure a holistic understanding. It also extended to primary and secondary studies and peer-reviewed conference papers, considering the limited availability of resources on this topic. Language constraints necessitated the exclusion of studies published in languages other than English. This was informed by that fact that most of the work in the field of entrepreneurship is in English. Strictly using English literature would also allow for and ensure an accurate transfer of information. Studies published more than ten years before this review were excluded to ensure the review's contemporary relevance. For example, given the rise of digital accessibility and online audio and video conferencing in recent years, a more recent analysis of the needs of PWDs would be more informative to current institutions attempting to provide inclusive entrepreneurship training. Finally, non-peer-reviewed studies were excluded to maintain the rigour of this review.

2.2. Information Sources and Search Strategy

Selected databases included Scopus, JSTOR, ProQuest, the Directory of Open Access Journals (DOAJ), and Google Scholar. ProQuest and Scopus were selected as primary sources for their management and multidisciplinary focus, respectively, while the remaining databases were added as supplementary sources for further coverage of the topic (Gusenbauer and Haddaway 2020). Moreover, Scopus, JSTOR, and ProQuest were chosen because they are affiliated with our university's library system, which aids in efficiently searching and retrieving publications. The DOAJ was chosen to provide access to a wide range of open-access journals globally. Additionally, Google Scholar allowed for broadening the search scope to include conference papers not covered by the databases mentioned earlier.

The search strategy employed three primary keywords: "entrepreneurship", "education", and "disability", supplemented by the term "barrier" or "barriers" to manage the extensive volume of results encountered in certain databases. Due to each database's varied search functionalities and strengths, search terms and conditions and filtering tools were adapted accordingly. The search parameters were restricted to 2014 through 2024 and to publications in English to narrow down the volume of results. The initial search across all databases yielded 61,820 records, which were narrowed down to 2140 for screening after applying the relevant filters and search terms. Table 1 shows a summary of the search terms and filters applied.

Table 1. Search terms and filters applied.

Database	Search Terms	Records Identified	Filters Applied	Records Screened
Scopus	"entrepreneur" OR "entrepreneurship" OR "entrepreneurial" AND "education" OR "training" AND "disabled" OR "disability" OR "disabilities"	148	Year: 2014–2024 Language: English	137
JSTOR	"entrepreneurship" AND "education" AND "disabled" OR "disability" AND "barrier"	3945	Year: 2014–2024 Language: English Academic content: Journals	162
ProQuest	"entrepreneurship" AND "education" AND "disabled" OR "disability" AND "barrier" OR "barriers"	55,691	Date: 1–31 January 2024 Language: English Limit to: Full text and Peer reviewed Source type: Scholarly Journals Document type: Article Subject: Education	315
DOAJ	"entrepreneurship" "education" "disabled"	16	Year: 2014–2024	16
Google Scholar	"entrepreneurship education" "disabled" "barriers"	2020	Year: 2014–2024 Include: Citations	1510
		61,820		2140

2.3. Selection Process and Quality Assessment

The selection process commenced with refining the initially identified results for relevance, in line with the eligibility criteria specified above. The search results were exported, and duplicate studies were eliminated in Excel before accessing the articles. A manual review followed, which resulted in no further duplicates. The authors examined abstracts from the 2140 results identified. Irrelevant studies, which were screened out, narrowed down the selection to 20 studies. This review deliberately excluded studies that primarily addressed general education barriers rather than specifically focused on entrepreneurship education, as well as those examining barriers to entrepreneurial activities without directly linking to educational issues.

The subsequent retrieval phase saw 19 of these 20 studies accessible through our university's library system. One article could not be accessed due to restrictions requiring payment.

In assessing the quality of the studies, a significant portion was sourced from databases known to include or primarily focus on peer-reviewed publications, such as Scopus, JSTOR, and DOAJ, or those offering peer-review filtering options like ProQuest. To ensure rigour, an additional verification step was implemented to confirm the peer-reviewed status of each study, particularly necessary for those identified through Google Scholar, which lacks a peer-review filter function. This step involved manual checks to ascertain the peer-reviewed status of the studies screened from Google Scholar.

Upon a thorough review of the full content of the 19 retrieved studies, three were further excluded due to their lack of relevance to the research focus. Nonetheless, an additional study, identified through references within the screened articles, specifically the work by [Fernandez Casado and Minarro Casau \(2019\)](#), was included after verifying its peer-reviewed status. This adjustment brought the total number of studies included in this review to 17. Table A1 in Appendix A provides a summary of the selected studies.

2.4. Synthesis Methods

The subsequent stages of data extraction and thematic synthesis were facilitated using ATLAS.ti® Web v7.1.2. Open coding was employed to systematically record studies delineating (a) barriers and challenges to entrepreneurship education faced by learners with

disabilities and (b) strategies to overcome barriers and their application to entrepreneurship training programs. Open coding was utilized to identify, tag, categorize, and describe the pertinent information presented in the texts. Following this, the author reviewed the research findings corresponding to the identified codes to construct a narrative synthesis and address the research questions. Figure 1 depicts the PRISMA 2020 flow diagram for new systematic reviews, including searches of databases only.

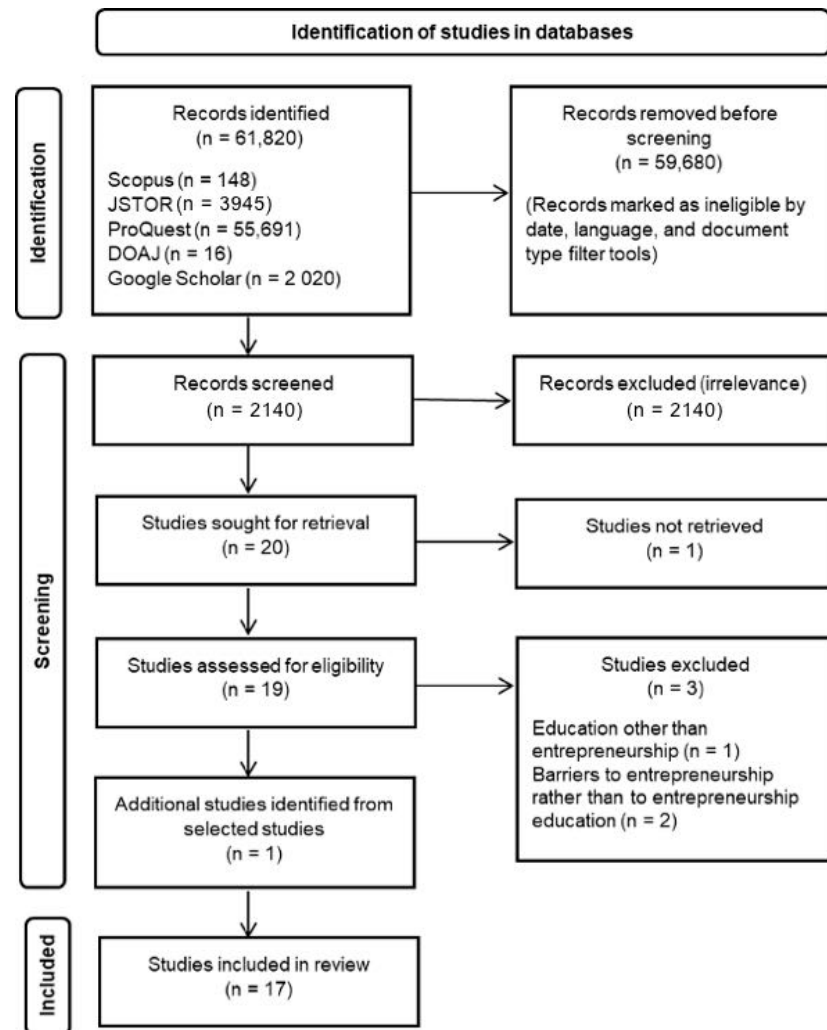


Figure 1. PRISMA 2020 flow diagram for new systematic reviews.

3. Results

The papers identified were mostly quantitative in nature (12 out of 17). At the same time, 4 out of 17 were qualitative, and 1 was conceptual, discussing the theoretical potential behind universal design principles and the integration of digital technologies. The articles originated primarily from Nigeria, Indonesia, and Spain, mainly attributed to the work by Dakung in Nigeria and Muñoz in Spain. There were other articles from Asia and Europe, and most were conducted in the last 5 years (13 out of 17), showing a growing interest in the topic. A recurring commonality among PWDs studies is that they identify societal and systemic barriers that curtail their complete engagement in both general education and entrepreneurial endeavours. These obstacles impede access to entrepreneurship education. This literature review is specifically dedicated to examining entrepreneurship education for PWDs and the unique challenges they face in this domain.

3.1. Limited Access to Quality Education

Studies consistently highlight that PWDs are at a distinct disadvantage due to their inadequate access to quality education. This is a significant deficiency in essential hard and soft skills (Krüger and David 2020), further complicating their workforce entry. The issue is not just the general lack of educational access for those with disabilities, but it is particularly acute in entrepreneurship education. Dakung et al. (2016a) point out the scarcity of solid theoretical frameworks for developing teaching strategies and models in this field. Dakung et al. (2019) further discussed that this situation is compounded by the absence of clear evidence demonstrating the effectiveness of entrepreneurship education in Nigeria.

The issue is exacerbated by educators' inadequate skills in delivering inclusive education, indicating a critical gap in teacher training and pedagogical strategies tailored to the diverse learning needs of disabled students (Dakung et al. 2016b; Hamburg and Bucksch 2017). Moreover, in Indonesia, there exists a prejudiced view that disabled individuals are less capable and, thus, do not require education from qualified teachers (Zutiasari et al. 2021).

3.2. Challenges in Tailoring Entrepreneurship Education

The conventional approach to entrepreneurship education often adopts a uniform methodology that does not cater to the specialized needs of students with disabilities. Krüger and David (2020) and Hamburg and Bucksch (2017) pointed out the shortfall in inclusive entrepreneurship education across many European countries, especially the scarcity of digital innovations aimed at facilitating entrepreneurship education that is specifically adaptable for PWDs. Likewise, in Nigeria, the challenge lies in establishing a supportive environment that promotes continuous learning for disabled students within higher-education institutions (Dakung et al. 2016a, 2016b, 2017, 2019).

Furthermore, Zutiasari et al. (2021) called for entrepreneurship education that meets the special needs of disabled students for a broad array of skills. Similarly, Dakung et al. (2019) stressed the need for tailored training covering a spectrum of business capabilities, including business plan creation, strategic planning, and pricing.

Similar to broader educational contexts, entrepreneurship education faces challenges related to physical and digital accessibility. Mota et al. (2020), along with Zutiasari et al. (2021), address the critical challenge of physical accessibility, which directly impacts the independence of disabled individuals and complicates their entry into the entrepreneurial workforce. Hamburg and Bucksch (2017) stress the imperative of making digital technologies accessible to PWDs. This involves overcoming physical, cognitive, and material access barriers and addressing the challenges posed by language discrepancies in digital content and tools.

The cost of educational materials, assistive technologies, and other learning aids places a significant financial burden on disabled learners, limiting their opportunities for entrepreneurship education (Hamburg and Bucksch 2017; Zutiasari et al. 2021). In Indonesia, as Zutiasari et al. (2021) note, the lack of government funding for disabled students further intensifies these financial obstacles.

Social norms and cultural perceptions about disability significantly influence the entrepreneurial intentions and aspirations of disabled individuals. Studies highlight the impact of societal attitudes and family influences on shaping the entrepreneurial self-efficacy and ambitions of disabled students (Shrivastava and Acharya 2020; Zutiasari et al. 2021). In the context of India, Shrivastava and Acharya (2020) found that family background is a predominant factor influencing individuals' pursuit of entrepreneurship education, noting the importance of family in the decision-making processes about future careers in collectivist cultures.

Internalizing these norms often results in lowered self-confidence and a hesitancy to pursue entrepreneurial education. Shrivastava and Acharya (2020) found that in India, socio-economically marginalized students—those experiencing physical disabilities,

belonging to certain castes or ethnic groups, or coming from rural areas—often do not believe in their capability to initiate new ventures and exhibit diminished entrepreneurial intentions. Similarly, in Indonesia, PWDs encounter internal barriers to participating in entrepreneurship education, including a lack of self-confidence and the necessary knowledge required to grasp entrepreneurial concepts (Zutiasari et al. 2021).

3.3. Strategy to Overcome Barriers and Application to Entrepreneurship Training Programs

The literature review emphasizes the need for inclusive and universally designed entrepreneurship education for disabled persons. Key strategies include integrating universal design principles into educational services, offering tailored educational content, adopting active, learner-centred teaching methods, utilizing information technology (IT) to remove barriers, and building supportive communities to nurture entrepreneurial mindsets.

Studies have highlighted the importance of inclusivity in entrepreneurial education (Dakung et al. 2017, 2022; Fernandez Casado and Minarro Casau 2019; Hamburg and Bucksch 2017; Krüger and David 2020). (Dakung et al. 2017, 2022) found a positive correlation between inclusive educational practices and entrepreneurial action. Their research underscores the critical role of support mechanisms, such as sign language interpretation and accessible instructional materials, in empowering physically disabled students to engage actively in entrepreneurship. By creating a supportive and accepting environment, educational institutions can significantly boost the entrepreneurial motivations among students with disabilities, aligning to formulate entrepreneurship courses (Dakung et al. 2017).

Within inclusive entrepreneurial education, the integration of universal design principles offers a blueprint for creating a suitable learning environment. The discourse on universal design, as delineated by Krüger and David (2020), elucidates a comprehensive approach to making educational environments accessible to all learners, regardless of their physical, sensory, or cognitive differences. This paradigm is anchored in seven core principles identified by The Center for Universal Design, encompassing equitable use, flexibility, simplicity and intuitiveness, perceptible information, tolerance for error, low physical effort, and appropriate size and space for access and use (Krüger and David 2020).

The Inclusive Entrepreneurial Education (IEEPD) framework, as proposed by Krüger and David (2020), integrates these universal design principles to ensure that educational services within the entrepreneurial domain are tailored to meet the diverse needs of learners. Key components of this framework include the following:

1. **Equitable use:** Educational services must be tailored to learners' needs and capabilities, ensuring utility and accessibility for all. This principle necessitates consideration of both pedagogical methods and the physical or virtual learning environments.
2. **Flexibility in use:** Including all learners in the educational process is crucial, as it promotes their full participation and self-determination. This is achieved through the stages of co-creation and co-production, where learners are actively involved in shaping their educational experiences.
3. **Simple and intuitive design:** Learning materials and teaching methods must be simplified to ensure comprehensibility and ease of use, accommodating diverse learner experiences and competencies.
4. **Perceptible information:** Educational content must be accessible to all learners, regardless of sensory abilities, which may involve adapting content delivery methods.
5. **Tolerance for error:** It is necessary to accommodate different learning abilities and speeds, aiming to minimize frustration and maximize learning outcomes through adaptable teaching strategies.
6. **Low physical effort:** Digital tools, such as Massive Open Online Courses (MOOCs), can reduce physical barriers to education, making learning more accessible to those with physical disabilities or those facing geographical constraints.
7. **Size and space for approach and use:** Physical and virtual learning spaces must be designed considering all learners' access and usability requirements, ensuring that no one is excluded from the educational process due to physical limitations.

Echoing the sentiments of [Krüger and David \(2020\)](#), [Fernandez Casado and Minarro Casau \(2019\)](#) advocate for eliminating physical and communicative barriers in education, stressing the importance of accessibility and personal autonomy in the integration and social inclusion of individuals with disabilities. They argue for a proactive approach to education and training that pre-emptively considers the needs and interests of all potential users, including those with disabilities, to facilitate equitable access to entrepreneurial learning opportunities.

3.4. Tailored Education

Entrepreneurship education often adopts a one-size-fits-all approach, failing to consider its students' diverse needs and backgrounds ([Dakung et al. 2023](#)). This generalization overlooks the crucial requirement for educational programs to be specifically tailored for PWDs ([Hamburg and Bucksch 2017](#); [Krüger and David 2020](#); [Muñoz et al. 2020](#); [Prakoso et al. 2019](#); [Zutiasari et al. 2021](#)).

In response to this gap, the University of Castilla-La Mancha introduced a specialized course titled "Entrepreneurship and Disability", as detailed by [Muñoz et al. \(2020\)](#). This course, a pioneering effort within Spanish universities, is specifically designed for disabled students and awards nine credits under the European Credit Transfer and Accumulation System. Its main goals are to equip students with entrepreneurial skills and the foundational knowledge to develop comprehensive business plans. In its third iteration during the 2018/2019 academic year, the course enrolled fifteen students per class and has already led to the forming of one enterprise, with another in the planning stages. One of the ventures is a cooperative focused on producing ecological plant substrate from coffee dregs, and the other aims to assemble guitars. [Muñoz et al. \(2019, 2020\)](#) highlight this program's success, noting that the entrepreneurial intentions among disabled students are comparable to those of non-disabled students. These findings challenge prevailing notions about entrepreneurial capacity and the lack of confidence among disabled students.

[Prakoso et al. \(2019\)](#) experimented with diverse instructional strategies for special needs students (SNSs). Their research showcases a range of adaptations, from additional post-class sessions to specialized assignments, highlighting the responsiveness of students with disabilities to customized educational approaches. Critical to the study is the need for lecturer training in effectively engaging SNSs, especially in entrepreneurship education involving group work and discussions. The findings suggest that, in the context of the research undertaken in an Indonesian university, deaf students may better grasp entrepreneurship concepts than students with other disabilities, who may face challenges in class participation and group activities. Despite the absence of specific courses for SNSs' handling, lecturers managed to communicate effectively with deaf students. In contrast, students with other disabilities exhibited varied levels of engagement, ranging from passive to aggressive behaviours, and showed limited comprehension of the material.

The reaction of non-disabled students towards their peers with disabilities revealed a general supportiveness in non-graded activities, facilitating a more inclusive learning environment. However, concerns arose during graded group assignments, indicating apprehensions about the potential impact of including students with disabilities on overall group performance. This response highlights the need for further integration strategies within academic settings to ensure equitable participation and evaluation for all students, regardless of their abilities.

3.5. The Shift toward Active, Learner-Centred Methodologies

The literature on entrepreneurship education for disabled persons suggests a shift from traditional, teacher-centred pedagogies towards more active, learner-centred methodologies ([Aeknarajindawat et al. 2019](#); [Dakung et al. 2017, 2019](#); [Hamburg and Bucksch 2017](#); [Krüger and David 2020](#); [Muñoz et al. 2019, 2020](#)).

[Krüger and David \(2020\)](#) emphasize the importance of actively engaging learners in both the planning and execution stages of educational services to create a personalized

learning environment. Recognizing disability as a spectrum with varying needs and capabilities, they argue for the adoption of co-creation and co-production in developing IIEPD. They illustrate how preferences for learning environments, such as virtual spaces for wheelchair users or physical classrooms for prosthetic users, necessitate a flexible approach to educational design. The application of Design Thinking in the co-creation and co-production processes is highlighted as a strategy for fostering innovation that centers on human needs, making it exceptionally suited for addressing the challenges faced by individuals with disabilities. By following an iterative process of understanding, ideation, prototyping, and testing, this approach ensures that educational services are tailored to meet the unique requirements of each learner.

Krüger and David (2020) also propose incorporating co-creation and co-production as central elements of the curriculum. This approach benefits individuals with disabilities by providing a more relevant educational experience and enriches the entrepreneurial ecosystem by nurturing diverse perspectives and innovative solutions.

This approach aligns with the broader pedagogical shifts suggested by (Dakung et al. 2016a, 2017, 2019), advocating for activity-based pedagogies over traditional lecture-based methods. These studies reinforce the premise of role-playing, management simulations, team projects, and participative discussion sessions, which are instrumental in stimulating students' entrepreneurial behaviour. Such active pedagogies facilitate and reflect the ambiguous nature of entrepreneurial experiences and allow students to develop skills through reflective observation and abstract conceptualization. These findings resonate with the recommendations from Aeknarajindawat et al. (2019) and Muñoz et al. (2020), who call for innovative and practical teaching methods such as simulations, problem-solving practices, and real or simulated venture creation to meet student needs and enhance program performance.

3.6. Use of Information Technology

The integration of IT in entrepreneurship education for PWDs represents a pivotal advancement toward fostering inclusivity, breaking down barriers, and facilitating equitable access (Fernandez Casado and Minarro Casau 2019; Hamburg and Bucksch 2017; Krüger and David 2020). Fernandez Casado and Minarro Casau (2019) highlighted the crucial role of Information and Communication Technologies (ICTs) in providing unprecedented access to information and facilitating communication, which is essential for people for whom traditional access to education and cultural content is challenging. Fernandez Casado and Minarro Casau (2019) further pointed out the importance of addressing communication barriers created by structural issues in both public and private infrastructures, as these hinder the sharing and receiving of information, thereby complicating access to education and training and exacerbating the difficulties in executing daily tasks.

3.7. Supportive Communities

Dakung et al. (2019, 2022) proposed that supportive ecosystems are integral to nurturing students' entrepreneurial mindsets and ambitions by providing tailored support networks and ensuring a welcoming environment. Collaboration with alumni, industry partners, research projects, religious groups, and incubators is crucial to fostering such ecosystems, as they offer idea practice and support opportunities. In particular, incubators are highlighted for their dual role in facilitating new venture creation and enhancing entrepreneurship education by offering business social support. Accessibility, relatability, and support within these networks are essential for PWDs.

Likewise, Krüger and David (2020) also recommend the social innovation ecosystem perspective, which calls for engaging all relevant actors beyond traditional educational systems. This includes identifying key stakeholders such as foundations and promoting their willingness to collaborate towards common goals. The quadruple helix model of knowledge production is invoked to emphasize the contributions of academia through training and education; industry through mentorship and adoption; government through

policy, regulations, and funding; and lastly, the public by raising awareness, advocacy, and community support toward a supportive ecosystem. These suggestions are not exclusive but could be potential starting areas of contribution. Considering roles, functions, structures, and norms, this holistic ecosystem approach provides an understanding of the contexts that support or hinder the implementation of inclusive entrepreneurship education. Additionally, research by [Maulida and Nurbaity \(2020\)](#) aligns with this perspective, illustrating that the entrepreneurial knowledge disabled students acquire often stems from their immediate surroundings, such as parents, relatives, and peers at college.

4. Limitations of This Study

In conducting the literature review, several methodological constraints may have influenced the study's depth. These limitations are crucial to acknowledge as they provide a context for the findings and suggest areas for future methodological improvement.

Access to certain academic articles was constrained due to the scope of available resources within the university's library system. The review includes only those studies that could be directly accessed or requested through this library system, excluding any studies that required additional purchase or were, otherwise, inaccessible. This limitation means that potentially valuable studies, which could offer additional insights or alternative perspectives, were not included in the review. In addition, the review was limited by language constraints, with the selection of articles restricted to those published in English. This exclusion of the non-English literature could have omitted some research conducted in other languages, thus narrowing the global perspective. However, much of the entrepreneurship literature is published in English globally; thus, the most relevant findings are included in this review. Another limitation is the effectiveness of the search engine, and the search strategy employed posed a challenge that might lead to the omission of relevant articles. Choosing keywords, search strings, and database selection could impact the literature search's comprehensiveness. For example, there has been a rise in the use of new terms to describe disability, like "differently abled", "person with special needs", and "people of determination." These terms, however, are misguided as they go against the desires of the disabled community and have a counter-effect in combating ableism ([United Nations Office at Geneva 2021](#)). Regardless, given the rise in their commonality, a broader search query could result in additional insights.

Furthermore, limitations are inherent to the studies reviewed. Several studies were geographically limited to specific countries, restricting the generalizability of their findings to broader contexts. Overall, most of the selected studies were conducted in Nigeria, such as those by ([Dakung et al. 2019, 2022, 2023](#)), among others. Further narrowing the focus, some studies were confined to particular regions within a country, such as Plateau State and Abuja in Nigeria, in the studies by ([Dakung et al. 2016a, 2016b](#)) or central and western India in the study by [Shrivastava and Acharya \(2020\)](#). Although this approach provides in-depth insights into these particular areas, it also restricts the applicability of the findings across more diverse settings. Variations within a single country regarding economic conditions, educational infrastructure, and disability policies may differ substantially. Regions within the same country can exhibit significant differences in economic activities, educational infrastructure, and local policies supporting disabled individuals. Additionally, some studies are limited to specific educational institutions, focusing on entrepreneurship education within singular university settings. Examples include the research conducted at Jakarta State University by [Maulida and Nurbaity \(2020\)](#) and at the University of Castilla-La Mancha by [Muñoz et al. \(2019\)](#). This further narrows the scope of the findings, limiting their applicability across the broader educational landscape.

The participant pools in these studies were also often small, weakening the generalizability of the findings. For instance, [Prakoso et al. \(2019\)](#) engaged with 14 informants from a single university, and [Muñoz et al. \(2020\)](#) gathered questionnaire responses from 234 individuals. Additionally, there is potential bias due to reliance on self-reported data

from surveys, such as in the studies by [Dakung et al. \(2023\)](#), [Muñoz et al. \(2020\)](#), and [Aeknarajindawat et al. \(2019\)](#), among others.

Lastly, many studies were cross-sectional, which limited the ability to infer causality. For instance, the [Dakung et al. \(2022\)](#) study offers a snapshot of entrepreneurship education's impact on disabled persons within a specific academic year. While valuable, this approach does not account for shifts in educational policies, the introduction of new teaching methodologies, or changes in societal attitudes toward disabled entrepreneurs. An additional example is the research by [Shrivastava and Acharya \(2020\)](#), which examines the entrepreneurial intentions among students in central and western India during a specific academic session. This temporal framing limits the study's ability to capture longitudinal trends, such as how students' intentions might evolve post-graduation or as they gain more real-world experience.

Notwithstanding, these studies have started a very important conversation about making entrepreneurship education more accessible for PWDs, and they should be commended.

5. Further Research

Despite numerous investigations into education for individuals with disabilities, research focusing specifically on entrepreneurship education within this demographic remains limited. Primary studies examining the barriers to entrepreneurship education for people with disabilities are scarce, with existing research primarily comprising literature reviews, such as the work by [Zutiasari et al. \(2021\)](#). Given the critical role of entrepreneurship education in fostering entrepreneurial initiatives among PWDs, as highlighted by [Dakung et al. \(2022\)](#), and the necessity for robust theoretical frameworks to guide the development of teaching strategies and models, as noted by [Dakung et al. \(2016b\)](#), there is a clear call for more focused research in this area. The authors noticed increased entrepreneurship education studies for PWDs from regions like Nigeria, Spain, and Indonesia.

As mentioned above, most studies have utilized cross-sectional designs, restricting our understanding of how entrepreneurial intentions evolve. Echoing the sentiments of [Dakung et al. \(2022\)](#), [Shrivastava and Acharya \(2020\)](#), and [Muñoz et al. \(2020\)](#), further research could employ longitudinal studies to track the dynamic nature of entrepreneurship education and its enduring impacts on individuals. This would include measurements of entrepreneurial intention and other factors influencing entrepreneurial activity, such as self-efficacy and social network, at multiple stages before and after completion of entrepreneurship education programs to allow for observations of change over time. This could offer insights into the developmental trajectories of various factors influenced by education and changing personal circumstances.

Moreover, the importance of sample size and composition (suggestions of composition measures such as demographics, gender, field of study, socio-economic status, previous experience, type of disability, and education level) in strengthening the statistical validity of research findings has been acknowledged by scholars like [Mota et al. \(2020\)](#) and [Muñoz et al. \(2019\)](#). Future research should aim not only to increase sample sizes but also to pay attention to sample composition. Firstly, expanding the research to cover previously unexplored regions would facilitate comparative studies to highlight the distinct experience of PWDs within sophisticated or early-stage inclusive educational systems. The inquiry by [Shrivastava and Acharya \(2020\)](#) on how their findings from central and western India compare with global entrepreneurship education trends underscores the value of such comparative research across diverse cultural and economic settings. Similarly, [Muñoz et al. \(2019\)](#) stated the importance of replicating their studies in different environments, particularly those focusing on entrepreneurship education for PWDs in varied national contexts. This is necessary to inform the degree and intensity of incorporating varying support measures to PWDs going through entrepreneurship training and the varying needs distinct for specific regions. Each region may have different inclusive education measures and local infrastructures and stigmas towards disabilities that significantly impact PWDs independence, educational experience, and societal inclusion. Finally, incorporating an

intersectional approach, particularly regarding gender, family background, and the type of disabilities, is vital. Research by [Dakung et al. \(2019, 2022\)](#) has shown that variables such as gender and family background can significantly impact access to and experiences within entrepreneurship. Moreover, factors such as age and the various nature of one's disability have been demonstrated to influence entrepreneurial potential ([Dakung et al. 2022](#)). Therefore, it is crucial to have a nuanced understanding of how these and other intersecting factors affect entrepreneurship education for PWDs.

6. Conclusions

This review aims to provide a guiding framework to universities, incubators, and centres supporting entrepreneurs to extend their offerings to include PWDs. It highlights critical areas for improvement, such as the integration of universal design principles, the tailoring of educational content to diverse needs, the shift towards active and student-centred teaching approaches, the strategic employment of technology to eliminate barriers, and the development of supportive communities to encourage entrepreneurial pursuits among persons with disabilities. Entrepreneurship offers a pathway to economic empowerment for individuals with disabilities; however, numerous barriers hinder their full engagement in such educational programs. These obstacles range from inadequate access to quality education and the need for personalized programs design to address physical and digital accessibility challenges, financial limitations, and societal biases.

In developing this study, the population of the disabled and their relationship with entrepreneurship and entrepreneurship education was explored. The opportunities entrepreneurship offers to PWDs have the potential to provide holistic benefits across their networks, communities, and the global economy. The limited number of articles in the field of entrepreneurship education for PWDs was also clear in the methodology, which raises a need for more research exploring this field. The results section presents recommendations that can be implemented in any entrepreneurship education program to not just include PWDs but also to create a more inclusive education experience for all those going through the training.

The study faced limitations, including restricted access to a broader range of academic works beyond the university's library resources and a focus on English-language research, potentially omitting valuable international insights. Additionally, the methodology's reliance on specific databases and keywords may have missed pertinent studies. The geographical focus, primarily on Nigeria, and the narrow scope of some research settings further limit the applicability of the findings. The small scale of participant groups and self-reported data could introduce bias, while the dominance of cross-sectional designs may limit the depth of causal analysis. These gaps underscore the need for comprehensive future research, particularly longitudinal studies, to grasp the dynamic impact of entrepreneurship education over time. Expanding the research to include a wider array of sample populations and employing comparative and intersectional analyses are essential to crafting an inclusive and effective entrepreneurial education framework for individuals with disabilities.

Ultimately, this literature review endeavours to serve as a practical resource for educators, policymakers, and researchers to make entrepreneurship training programs more inclusive and encourage more PWDs to pursue entrepreneurship as a viable career option. By creating educational environments that are welcoming, supportive, and adaptable, the potential for the entrepreneurial capabilities of this underrepresented demographic exists, which will enhance their welfare and contribute to broader socio-economic growth. From a theoretical standpoint, this work serves as a modern starting point to both guide further improvements in the field of research in inclusive entrepreneurship training and suggest additional work required to understand and continue eradicating barriers and empowering persons with disabilities.

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Appendix A

Table A1. Summary of selected studies.

Author (Year)	Title	Methodology	Location	Pertinent Findings
Aeknarajindawat et al. (2019)	Role of essence, objectives, and content of entrepreneurship education programs on their performance: Moderating role of learner disability in Thailand	Quantitative	Thailand	The study explores how entrepreneurship education programs' core objectives and content impact their performance, particularly when considering the moderating role of learners' disability. It emphasizes the importance of tailoring educational content to meet the unique needs of learners with disabilities.
Dakung et al. (2022)	Entrepreneurship education and the moderating role of inclusion in the entrepreneurial action of disabled students	Quantitative	North-Central Nigeria	The study investigated the influence of inclusive entrepreneurship education on the entrepreneurial actions of disabled students. It found a positive correlation between inclusive educational practices and entrepreneurial initiatives among students with disabilities.
Dakung et al. (2023)	Passion and intention among aspiring entrepreneurs with disabilities: The role of entrepreneurial support programs	Quantitative	Nigeria	The study highlights the critical role of support programs in boosting the passion and intentions of aspiring entrepreneurs with disabilities, emphasizing the need for tailored support that addresses the unique challenges faced by this group.
Dakung et al. (2016b)	Robustness of personal initiative in moderating entrepreneurial intentions and actions of disabled students	Quantitative	Plateau State and Abuja, Nigeria	The study suggests that learner-centred pedagogical approaches positively impact entrepreneurial actions, and personal initiative traits such as proactiveness, resilience, and innovation play a crucial role in strengthening the link between the entrepreneurial intentions and actions of disabled students.

Table A1. Cont.

Author (Year)	Title	Methodology	Location	Pertinent Findings
Dakung et al. (2017)	Self-employability initiative: Developing a practical model of disabled students' self-employment careers	Quantitative	North-Central Nigeria	The study proposes a practical model for enhancing the self-employability of students with disabilities, focusing on developing entrepreneurial skills and attitudes that support self-employment careers.
Dakung et al. (2019)	Developing disabled entrepreneurial graduates: A mission for the Nigerian universities?	Quantitative	North-Central Nigeria	The study underscores universities' pivotal role in enhancing disabled students' entrepreneurial intentions through dedicated entrepreneurship education, infrastructure, and role models. It suggests that engaging teaching methods and inspiring role models effectively prepare students for entrepreneurial careers post-graduation.
Dakung et al. (2016a)	Disabled students' entrepreneurial action: The role of religious beliefs	Quantitative	Plateau State and Abuja, Nigeria	The study's findings indicate that vocational training, social services, and social networks, bolstered by religious group support, positively influence the entrepreneurial actions of disabled students.
Fernandez Casado and Minarro Casau (2019)	Physical accessibility, key factor for entrepreneurship in people with disabilities	Qualitative	Not specified	The study stresses the importance of physical accessibility in entrepreneurship education and workspaces for people with disabilities, identifying it as a key factor for their successful participation in entrepreneurial activities.
Hamburg and Bucksch (2017)	Inclusive education and digital social innovation	Conceptual	Not specified	The study discusses the potential of digital social innovation to promote inclusive education, including entrepreneurship education for people with disabilities, by leveraging technology to break down barriers.
Krüger and David (2020)	Entrepreneurial education for persons with disabilities—A social innovation approach for inclusive ecosystems	Conceptual	Not specified	The study advocates for a social innovation approach to develop inclusive entrepreneurial education ecosystems, emphasizing the importance of universal design principles and the integration of digital technologies.
Maulida and Nurbaity (2020)	Entrepreneurship education and entrepreneurial intention among disability students in higher education	Qualitative	Jakarta State University, Indonesia	The study examines the impact of entrepreneurship education on the entrepreneurial intentions of higher-education students with disabilities, highlighting the importance of family and peers.

Table A1. Cont.

Author (Year)	Title	Methodology	Location	Pertinent Findings
Mota et al. (2020)	Handicaps and new opportunity businesses: What do we (not) know about disabled entrepreneurs?	Literature review	General	The study highlights physical accessibility as a key obstacle in entrepreneurship education for disabled individuals, emphasizing the importance of education and training in overcoming these barriers and fostering entrepreneurial attitudes among them.
Muñoz et al. (2020)	Sustainability, entrepreneurship, and disability: A new challenge for universities	Quantitative	The University of Castilla-La Mancha, Spain	The study emphasizes the role of universities in promoting sustainability entrepreneurship among students with disabilities, calling for the integration of sustainability principles into entrepreneurship education.
Muñoz et al. (2019)	Entrepreneurship education and disability: An experience at a Spanish university	Quantitative	The University of Castilla-La Mancha, Spain	The study examined the impact of entrepreneurship education on students' entrepreneurial attitudes, revealing that education level, business experience, and study field significantly influence these attitudes, with no significant differences between disabled and non-disabled students.
Prakoso et al. (2019)	Entrepreneurship teaching method for special needs students in BINUS University: A qualitative research approach	Qualitative	BINUS University, Indonesia	The study reveals that BINUS University's entrepreneurship educators initially lacked awareness of students with special needs, complicating tailored educational planning. It emphasizes the need for lecturer training to accommodate these students better, noting differing engagement levels and learning outcomes between deaf students and those with other disorders, especially in group activities and assessments.
Shrivastava and Acharya (2020)	Entrepreneurship education intention and entrepreneurial intention amongst disadvantaged students: an empirical study	Quantitative	Central and Western India	The study finds that socioeconomic disadvantages, including disabilities, negatively impact students' intentions to pursue entrepreneurship education and entrepreneurial activities, underscoring the need for inclusive and supportive educational practices.
Zutiasari et al. (2021)	Barriers to entrepreneurship education for disabilities in Indonesia	Literature review	Indonesia	The study identifies specific barriers faced by students with disabilities in Indonesia to access entrepreneurship education, including societal attitudes and lack of resources, and calls for targeted interventions to overcome these barriers.

References

- Aeknarajindawat, Natnaporn, Preecha Karuhawanit, and Sumneung Maneechay. 2019. Role of Essence, Objectives, and Content of Entrepreneurship Education Programs on Their Performance: Moderating Role of Learner Disability in Thailand. *Journal of Computational and Theoretical Nanoscience* 16: 4606–13. [CrossRef]
- Centers for Disease Control and Prevention. 2024. Disability and Health Overview. Disability and Health Promotion. May 2. Available online: <https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html> (accessed on 15 April 2024).
- Dakung, Reuel Johnmark, John C. Munene, and Waswa Balunywa. 2016b. Robustness of personal initiative in moderating entrepreneurial intentions and actions of disabled students. *Cogent Business and Management* 3: 1169575. [CrossRef]
- Dakung, Reuel Johnmark, John C. Munene, Waswa Balunywa, Laura Orobias, and Mohammed Ngoma. 2017. Self-employability initiative: Developing a practical model of disabled students' self-employment careers. *Africa Journal of Management* 3: 280–309.
- Dakung, Reuel Johnmark, John C. Munene, Waswa Balunywa, Joseph Ntanyi, and Mohammed Ngoma. 2019. Developing disabled entrepreneurial graduates: A mission for the Nigerian universities? *Journal of Research in Innovative Teaching and Learning* 12: 198–221. [CrossRef]
- Dakung, Reuel Johnmark, Robin Bell, Laura A. Orobias, and Lemun Yatu. 2022. Entrepreneurship education and the moderating role of inclusion in the entrepreneurial action of disabled students. *The International Journal of Management Education* 20: 100715. [CrossRef]
- Dakung, Reuel Johnmark, Robin Bell, Laura Aseru Orobias, Kasmwakat Reuel Dakung, and Lemun Nuhu Yatu. 2023. Passion and intention among aspiring entrepreneurs with disabilities: The role of entrepreneurial support programs. *Journal of Small Business and Enterprise Development* 30: 1241–63. [CrossRef]
- Dakung, Reuel Johnmark, Tsenba Wummen Soemunti, Orobias Laura, John C. Munene, and Waswa Balunywa. 2016a. Disabled students' entrepreneurial action: The role of religious beliefs. *Cogent Business & Management* 3: 1252549. [CrossRef]
- Fernandez Casado, Ana Belen, and Piedad Minarro Casau. 2019. Physical accessibility, key factor for entrepreneurship in people with disabilities. *Suma de Negocios* 10: 58–64.
- Gusenbauer, Michael, and Neal R. Haddaway. 2020. Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. *Research Synthesis Methods* 11: 181–217. [CrossRef] [PubMed]
- Hamburg, Ileana, and Sascha Bucksch. 2017. Inclusive Education and Digital Social innovation. *Advances in Social Sciences Research Journal* 4: 5. [CrossRef]
- Krüger, Daniel, and Alexandra David. 2020. Entrepreneurial Education for Persons With Disabilities—A Social Innovation Approach for Inclusive Ecosystems. *Frontiers in Education* 5: 3. [CrossRef]
- Maulida, Ernita, and Esty Nurbaity. 2020. Entrepreneurship Education and Entrepreneurial Intention among Disability Students in Higher Education. *KnE Social Sciences* 4: 281–89. [CrossRef]
- Mota, Irisalva, Carla Marques, and Octávio Sacramento. 2020. Handicaps and new opportunity businesses: What do we (not) know about disabled entrepreneurs? *Journal of Enterprising Communities: People and Places in the Global Economy* 14: 321–47. [CrossRef]
- Muñoz, Rosa Maria, Yolanda Salinero, Isidro Peña, and Jesus David Sanchez de Pablo. 2019. Entrepreneurship Education and Disability: An Experience at a Spanish University. *Administrative Sciences* 9: 34. [CrossRef]
- Muñoz, Rosa M., Yolanda Salinero, and M. Valle Fernández. 2020. Sustainability, Entrepreneurship, and Disability: A New Challenge for Universities. *Sustainability* 12: 2494. [CrossRef]
- OECD. 2010. *Sickness, Disability and Work: Breaking the Barriers: A Synthesis of Findings across OECD Countries*. Organisation for Economic Co-Operation and Development. Available online: https://www.oecd-ilibrary.org/social-issues-migration-health/sickness-disability-and-work-breaking-the-barriers_9789264088856-en (accessed on 15 April 2024).
- OECD. 2023. *OECD Economic Surveys: European Union and Euro Area 2023*. Organisation for Economic Co-Operation and Development. Available online: https://www.oecd-ilibrary.org/economics/oecd-economic-surveys-european-union-and-euro-area-2023_7ebe8cc3-en (accessed on 15 April 2024).
- Page, Matthew J., David Moher, Patrick M. Bossuyt, Isabelle Boutron, Tammy C. Hoffmann, Cynthia D. Mulrow, Larissa Shamseer, Jennifer M. Tetzlaff, Elie Akl, Sue E. Brennan, and et al. 2021. PRISMA 2020 explanation and elaboration: Updated guidance and exemplars for reporting systematic reviews. *BMJ* 372: n160. [CrossRef] [PubMed]
- Prakoso, Gatot Hendra, Indriana Indriana, Indira Tyas Widyastuti, and Ira Setyawati. 2019. Entrepreneurship Teaching Method for Special Needs Students in Binus University: A Qualitative Research Approach. *Journal of Entrepreneurship Education* 22: 1–14.
- Shrivastava, Umesh, and Satya Ranjan Acharya. 2020. Entrepreneurship education intention and entrepreneurial intention amongst disadvantaged students: An empirical study. *Journal of Enterprising Communities: People and Places in the Global Economy* 15: 313–33. [CrossRef]
- United Nations Office at Geneva. 2021. *DISABILITY-INCLUSIVE LANGUAGE GUIDELINES* [Report]. Available online: <https://www.ungeneva.org/sites/default/files/2021-01/Disability-Inclusive-Language-Guidelines.pdf> (accessed on 10 April 2024).
- World Health Organization. 2001. *International Classification of Functioning, Disability and Health*. Available online: <https://iris.who.int/bitstream/handle/10665/42407/9241545429.pdf?sequence=1> (accessed on 15 April 2024).
- World Health Organization. 2023. *Disability*. Available online: <https://www.who.int/news-room/fact-sheets/detail/disability-and-health> (accessed on 15 April 2024).

World Health Organization, and The World Bank. 2011. World Report on Disability. Available online: <https://www.who.int/teams/noncommunicable-diseases/sensory-functions-disability-and-rehabilitation/world-report-on-disability> (accessed on 15 April 2024).

Zutiasari, Ika, Wening Patmi Rahayu, Jefry Aulia Martha, and Siti Zumroh. 2021. Barriers to Entrepreneurship Education for Disabilities in Indonesia. Paper presented at the BISTIC Business Innovation Sustainability and Technology International Conference (BISTIC 2021), Online, July 27–28; pp. 150–159.

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