

Qualitative Study Of Factors Affecting Inclusivity Of Physically Disabled Children In Regular School Physical Activity In A Nigerian Primary School

Edward Odogbu Odo¹, Chinedu Ifedi Okeke², Moses Onyemaechi Ede², Gideon O. Emeahara³

¹Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria, Physical and Health Education Unit, School of General Studies.

²Department of Educational Foundations, Faculty of Education, University of The Free State, Bloemfontein, South Africa.

³Department of Human Kinetics and Health Education, Nnamdi Azikiwe University, Awka, Nigeria.

Abstract:

The exclusion of physically disabled children from school physical activity has become a national topic in Nigeria. Meanwhile, nothing has been done in Nigeria to investigate the variables that prevent physically disabled children from participating in routine primary school physical activity, particularly from a qualitative perspective. The purpose of this study was to determine factors affecting the inclusion of children with physical disabilities in regular school physical exercise in a Nigerian primary school using an interpretive descriptive research approach. During the data generation process Semi-structured interviews were used. The study's sample includes 21 physically disabled students from Mbutu Umuojima Community Primary School 1 in the Osisioma Local Government Area of Abia State, Nigeria. The researchers employed thematic content analysis in reporting factors such as lack of self-confidence, stigmatization, discrimination, lack of adapted /modified physical activity, and children's lack of motivation as among the factors that have contributed to exclusivity of children with physical disabilities in regular school physical exertion. The study's findings suggested that forces outside of the children's health may have hampered their inclusion and participation in regular school physical activity, as well as their academic success, implying that lack of or poor participation in school may have hampered their inclusion and participation in regular school physical activity and academic success. Physical disabilities may or may not cause them to engage in physical activity.

Keywords: Physical disabilities, children, school, physical activities, inclusion

Introduction

People with disabilities are one of the most vulnerable populations to social marginalization. Disabled persons are increasingly being barred from all types of learning and training possibilities in several countries like Nigeria (Ede et al 2020). Wars, conflicts, and inadequate medical treatment may have contributed to an increase in the number of people with physical disabilities around the world. According to Uduu (2020), Nigeria has an estimated 25 million disabled people, with one out of every eight Nigerians living with at least one sort of impairment. Visual, hearing, physical, intellectual, and communication impairments are the most frequent of these disorders (disability). People with varied disabilities may be subjected to one kind or another of social marginalization.

Physical infirmity has nearly become synonymous with social isolation in most African nations, and probably other developing economies like Nigeria (UNESCO, 2021). Most countries of the world have domesticated Social Protection Act (SPA) in order to protect the right and improve the Persons with disabilities are included in school and in the community. Nigeria passed the Discrimination Against Persons with Disabilities (Prohibition) Act in 2018, which mandates that all public schools be inclusive and accessible, with trained employees and suitable facilities (UNESCO, 2021). However, in Nigeria, social protection for disabled individuals is still lacking (Uduu, 2020). Discrimination against people with disabilities (PWD) in Nigeria arises from a negative public opinion of disabled individuals in Nigerian communities and schools. In many communities, according to Uduu (2020); and Kolawole, (2016), Due to erroneous cultural ideas, PWDs are frequently regarded as cursed. This could lead to a lack of proper identification, evaluation, placement, and exclusion of disabled children even in primary school. Exclusion and lack of wholesome inclusiveness of children with physical disability contradict the goal of Sustainable Development Agenda.

Goal 4 of the Sustainable Development Agenda recognizes the importance of primary education, stating that by 2030, the world shall offer inclusive and equitable quality education for all and encourage lifelong learning opportunities for all, including a target for universal primary school access (UNICEF, 2021). Primary education is primarily planned for pupils aged 6 to 11 years old, according to UNICEF, though requirements vary. Exclusion of children with disabilities from regular primary school physical activity amount to disability- an impediment to the physical and psycho-social wellbeing of children with physical disability.

Hence, habits of regular physical activity especially in primary school have a major impact on children's wellbeing. The majority of primary school-aged children require a lot of unstructured play and activity, such as running, chasing, and playing playground games. Walking to school and riding bikes are examples of everyday physical activity (Australian Government Department of Health, 2019). Different regulations and equipment are used in modified games, such as a rubber ball instead of a hard cricket ball, a reduced field size, or smaller teams. All of these can aid in the development of abilities in youngsters without causing them to be wounded or lose confidence. The majority of sports include modified versions of games that are suitable for children of varied abilities (Sports Australia, 2019).

All school pupils, regardless of ability, should engage in at least 60 minutes of daily physical activity (CDC, 2022; Physical Activity Guidelines Advisory Committee, 2018). Children with physical disabilities, on the other hand, fall significantly short of this target and consequently are insufficiently active for health reasons (Sit, McKenzie, Cerin, Chow, Huang, & Yu, 2017; Rimmer, & Marques, 2012). Emotional and social health of children with physical disability could be at risk without appropriate inclusive regular school physical exertion. Physical activity is defined by the World Health Organization (WHO) as any physiological movement that needs energy expenditure and is performed by skeletal muscles. School Physical exercise encompasses all forms of movement, including leisure activities, sports, recreation, and dancing. Physical activity decreases depressive and anxiety symptoms, improves thinking, learning, and judgment skills, and promotes healthy growth and development in children and adolescents (WHO, 2020).

Individuals with physical, cognitive, emotional, and social impairments have a greater need for physical activity (Galal, 2021). Physical activity, according to Galal, can help children with and without physical disabilities reduce stigmatization and unfavorable preconceptions, as well as enhance social integration, connecting, and friendship. People with disabilities usually regarded as "persons who have long-term physical, mental, intellectual, or sensory impairments that, especially combined with additional limitations, that impede them from fully living in society on an equal basis with others" (United Nations General Assembly, 2006). Physical disability, according to Berg (2020), is a chronic and long-term condition that weakens and limits a person's physical performance, mobility, stamina, or dexterity by affecting a part of their body. Children with physical handicaps face a loss of physical capacity, which limits their ability to walk, move their hands and arms, sit and stand, and control their muscular actions (Berg, 2020). Physical disability, on either hand, does not stop one from taking part in physical activities, though it makes physical activity more challenging for the individuals. But with appropriate inclusive school programme physical activity could be less challenging to children with physical disability.

All children, regardless of ability or disability, have the right to be respected and appreciated as valuable members of the school community, fully participate in all school activities, including physical activity, and interact with peers of all ability levels with opportunities to develop friendships (National Center on Health, Physical Activity, and Disability, 2016). To design effective interventions and create appropriate inclusive physical activity programmes for this population, Sit, Li, McKenzie, Cerin, Wong, Sum, and Leung (2019) emphasized that factors that affect their physical activity involvement must be understood. These are factors that could impede inclusion of children with physical disability in regular school physical activity.

The factors affecting inclusive physical activity have been studied to Lack of knowledge and skills, a child's preferences, fear, parental attitude, negative attitudes toward disability, inadequate facilities, transportation issues, lack of programmes and staff capacity, and cost (Shields, & Synnot, 2016). These factors are more disturbing when it occurs in school where the children are supposed to acquire knowledge and skills that will help them attaining their maximum potential in the society. According to European Disability Forum, (n.d) the most important

elements contributing to social marginalization for individuals with disabilities are unemployment, a lack of or limited access to the social environment, stigmatization of disabled people. Lack of adequate training, a lack of specialized services, the inadequacy of educational systems, a lack of economic policies to compensate for the extra cost of disability, and the structure of the benefit system also affecting inclusive physical activity (European Disability Forum, n.d).

Li, Sit, Yu, Duan, Fan, McKenzie, and Wong, (2016) reported that several modifiable physical, psychological, and environmental correlates were consistently and positively associated with PA in children with PD. Environmental factors, such as the size of the exercise area and family and peer social support, may, however, affect the amount and intensity of physical activity among children with Physical Disability. According to Shields and Synnot (2016), children with disabilities are believed to experience additional barriers to participate in physical activity. When compared to children with typical development, which includes a lack of teaching skills and, unwillingness to be inclusive, societal views toward disability, and a scarcity of local options. People with physical disability according to WHO (2021) are Because of their disability, they are subjected to many violations of their rights, including acts of aggression, abuse, prejudice, and contempt, which connects with other types of discrimination based on age, gender, and other criteria.

Some of the challenges affecting children with physical disability in Nigeria schools are, among others, insufficient educational funding, high costs of educational materials and equipment, and a shortage of specialists and paraprofessionals (Oladejo, & Oladejo, 2011). Aderemi (2015) observed that in Nigeria Even when children with disabilities are enrolled to mainstream institutions, learning and teaching resources are frequently deficient, and teachers lack the necessary skills and training.

According to Shields, Synnot, and Barr (2012), a child's desire to be fit and active, skill practice, peer involvement, family support, close and accessible facilities, opportunities sensitive to the needs of children with disabilities, skilled staff, and information dissemination all help to facilitate inclusion, even in physical activity. Sit, McManus, McKenzie, & Lian, (2007) reported that children with physical disabilities accrue little Physical activity at school. Children with physical disability not enjoying and attaining their maximum potential in physical activity indicate that there is a barrier to their inclusion in physical activity.

In a range of children with disabilities, Pitchford, Leung, and Webster (2021) observed delays in basic motor skill (FMS) competency. All of the above challenges confronting children with physical disability (CPD) could potentially be improved through inclusion in physical activity. Multiple intervention studies have shown that children with impairments can increase fundamental motor skill competency when these skills are directly taught and practiced (Maano, Hue, & April, 2019; Yu, Burnett, & Sit, 2017). If the required help is provided, some physically challenged children can participate in mainstream physical exercise.

Inclusion and learning opportunities in physical activity for all is child right. Children with physical disability are often not offered playing and non-playing roles during regular school physical activity. Children with physical disability are not offered opportunity to participate in an

activity as an athlete, neither are they offered a role on the team like house captain, team president or volunteer.

There is paucity of empirical evidence in Nigeria regarding factors perceived to affecting inclusion of children with physical disability in regular primary school physical activity. This study uses an interpretive descriptive approach to address the ongoing concern in Nigeria about the exclusion of children with physical disabilities from normal primary school physical activity. Specific peer, personal, and school-related factors that affect the inclusion of children with physical disabilities in regular primary school physical exercise were identified as a result of this research.

Method

In this study, an interpretative descriptive design was used. The interpretive descriptive study is a type of qualitative research that takes a broad approach (Nwosu, Okoyoe, & Onah, 2018). In qualitative research, non-numerical data such as text, video, or audio is collected and analyzed in order to better comprehend concepts, opinions, or experiences (Bhandari, 2020). The Qualitative research gives the researcher the opportunity for in-depth insights into the participants problem and experience. One of the benefits of generic qualitative studies is that they can draw on the strengths of existing techniques while remaining flexible in their approach, taking into account specific interests that may not fit neatly within the scope of a particular recognized methodology (Nwosu, Okoyoe, & Onah, 2018). The current study, which investigated the perceptions of children with physical disabilities on the variables underlying their inclusion in school physical activities, is more suited to the generic qualitative approach. It allowed the researchers to describe and evaluate the thoughts of the participants (Nwosu, Okoyoe, & Onah, 2018) on the aspects that contributed to their exclusivity in school Physical exercise in a natural setting. The researchers gained understanding of participants directly expressed perspectives.

Participants

In this study, first, we purposely sampled children with Physical disabilities in Mbutu Umuojima Community Primary School 1 in Osisioma Local Government Area of Abia State, Nigeria, given the fact that the available records in the school show that Nominal Roll of Pupils in the school as at 6th January, 2022 is 307 (107 male, 200 female). Second, 21 out of 307 pupils were purposely sampled. These were school children with different physical disabilities (Amputation, hunchback, Cerebral Palsy and Fractures). Permission was sought to interview the children with physical disabilities. Informed consent was obtained from the School Head Teacher and children with physical disabilities. They were informed about the study's purpose and accepted to take part. The study's participants ranged in age from 6 to 11 years old. The study participants were assured that information obtained from them were for research purpose and will be handled with utmost confidentiality. Respondent one (female) or respondent one (male) were assigned to the study participants depending on their gender and respondent number (male). Respondent number two (female) or number two (male), and so on.

Data Collection

The researchers collected and categorized qualitative data on children with physical disabilities' perceptions of personal, peer, and school variables that contributed to their exclusion from school physical activity. During the data generation stage in this study Semi structured interviews were developed and employed. The researchers consulted an Educational Psychologist and an Adapted Physical Educator in a Nigeria university on the content and scope of the interview. The researchers noted and took into consideration the corrections of the two experts. The researchers discussed among themselves the Ethics that have to do with interviewing. Conversations are held during the interview sessions in order to relax the interviewees and provide an opportunity for debate. The goal of the interviews was explained to the participants during the sessions. The researchers administered the interviews to elicit from the respondents' information regarding the factors that are responsible for their exclusion in school physical activity. The interviews were individually conducted in the respondents' school. The interview was conducted during the respondents' lesson free period. The interview lasted approximately 25 minutes for each respondent. By way of introduction, the researchers mentioned their names and then ask the respondents to introduce themselves by their names as well. The respondents were now asked to explain the factors that were responsible for their exclusion in school physical activity. The respondents were encouraged to feel free to say what their concerns are as it regards their exclusion from school physical activity. Probing questions were asked in some cases to ensure that the researchers' already known facts about the exclusion against people with disabilities do not interfere with their sense of objectivity. The ability to examine and follow up on both expected and unexpected findings adds depth and richness to the interviews (Merriam & Tisdell, 2016).

Data Analysis

Interpretative and descriptive analyses were adopted in this study. With this approach, in order to arrive at a conclusion, inferences were drawn for a better understanding of the concerns expressed by respondents. Thematic content analysis was adopted to examine data. The process of data analysis began as the data were being collected during the interview. During the coding process, some respondents' exact expressions were used. The transcripts were examined by the researchers in order to discover developing concerns and thoughts that addressed the research questions. The concepts were labeled as they appeared (Nwosu, Okoyoe, & Onah, 2018) from the data. The themes presented in the results section were formed from the concept that emerged from data. The researchers put Asterix on a respondent's comments that struck their attention. Meaning was assigned to those comments. The data from respondents were not considered as a group, instead separately to get an overview of the perception of each and every participant. Most significant emerging concepts such as lack of self-confidence, stigmatization, discrimination, lack of adapted /modified physical activity, and children's lack of motivation were identified and grouped to form themes and subthemes. The interview transcripts were reread by the Researchers. The Researchers carried out key words search with the final list of themes

Results and Discussions:

The findings are presented, and conversations are held in terms of topics that emerged from the interview analysis, as well as important interview concepts. The following themes dominated the discussions: peer factor, personal factor, and school factor. These themes were identified in response to the study questions, with specific themes coming from the interview transcript analysis.

Peer-Related Factors Affecting Inclusivity of Children with Physical Disabilities

The respondents in the interview mentioned stigmatization and discrimination as peer-related factors that affects their inclusions in regular school physical activity. Stigmatization defined as the act of treating someone or group of persons as objects of pity or fear (Amnesty International, 2022), or being falsely accused of being terrible or having something to be embarrassed of by others. Discrimination is the practice of drawing unwarranted distinctions between people based on their membership in certain groups, classes, or other categories.

Stigmatization

Persons with disabilities are stigmatized, which leads to isolation from society and, as a result, ostracism from developmental programs aimed at improving a person's quality of life and future prospects (Koszela, 2013). Lusli, Zweekhorst, Miranda-Galarza, Peters, Cummings, Seda, Bunders, & Irwanto (2015); and ILEP (2011) investigated the impact of stigma on the emotions, thoughts, behavior, and relationships of people with health difficulties. Fear, grief, depression, humiliation, guilt, anxiety, low self-esteem, hopelessness, and rage, as well as the inability to communicate such sentiments, are among the effects of stigmatization (Yayasan Transformasi Lepra Indonesia, 2008). Majority of the children with physical disabilities interviewed complained of stigmatization as a serious factor that impede their inclusion in regular school physical activity.

Personal-Related Factors Affecting Inclusivity of Children with Physical Disabilities

Study participants mentioned low of self-confidence, low self-esteem, and shame were among the factors that impede their inclusion in regular school physical activity. Low self-confidence is feeling of self-doubt about one's abilities or skills. Low self-esteem is the negative views and opinion about oneself.

Low Self-confidence

Low self-confidence was a personal element that influenced whether or not children with physical limitations were included in normal school physical activities (Abed, & Shackelford, (2022). Low self-confidence can be caused by a variety of events, such as growing up in a critical and unsupportive environment (Ahmmed, 2016). Self-confidence is person's attitude about one's skills and abilities (University of South Florida, 2022). School becomes an unsupportive environment if the children with physical disabilities experience stigmatization and discrimination from peers or

teachers. However, in this present study, the respondents noted that they experience low self-confidence towards participation in regular school physical activity.

Low self-esteem

Low self-esteem was another personal-related factor characterized by the study participants. According to some data, poor self-esteem may precede the onset of depression symptoms (Whitney, Sullivan, & Herman, 2010). According to Cerda, Garca, & Cerda, (2021), high school students who participate in sports and have positive self-esteem perform better academically, while low self-esteem has a negative impact on academic achievement, ranging from 5.8% to 2.9 percent. To Osero (2015), poor self-esteem was contributing to teachers' pessimism toward inclusive education, which hampered the implementation of inclusive education. The respondents in this study in the expression of their views noted and exhibited low self-esteem as one of the issues affecting their inclusion in regular school physical activity. This finding is consistent with Åsebø, Løvoll, and Krumsvik, (2020); and Kerner, Haerens, and Kirk, (2018) discovered that children with higher body dissatisfaction (poor self-esteem), i.e., not being fit enough or not accepting one's appearance, had a stressful perspective towards physical activity, which affects participation and involvement in physical activity. Kerner, Kirk, De Meester, and Haerens, (2019) discovered that children who were more at ease and content with their physical appearance valued and enjoyed physical lessons more.

Shame

The participants in this study noted shame involves a negative self-evaluation, bodily or self-condemnation (Terrizzi, & Shook, 2020) due to one's defects. Self-evaluation is not solely based on one's own acts and characteristics; it is also influenced by the actions and characteristics of other members of the same group to which the subject belongs (Salice, & Sánchez, 2016). Moral self-evaluation among physically challenged school children is influenced by the actions of other members of the school community, such as classmates and teachers. The respondents in this present study noted that actions such as stigmatization and discrimination made them to feel ashamed of themselves to participate in regular school physical activity.

School-Related Factors Affecting Inclusivity of Children with Physical Disabilities

Study participants mentioned limited access to sports facilities, lack of modified physical activity, and discrimination.

Limited access to sports facilities

The participants in this study noted limited access to sports facilities. This means access to playground and recreational arena, public spaces, and any other facility children needed during physical activities in school. According to Ejike (2018), the lack of mobility aids in the school made it difficult for the disabled to access sport facilities of their choosing. Install features that make the facility easier for those with disabilities to use (like ramps and equipment with Braille

on the buttons) (Snook, 2019). Have resources available to modify programming. Health and Human Right Resource Guide (2014) stated that if a person cannot access a facility because of his/her mobility impairment, it is not his inability to walk which is the issue, but rather the lack of accessibility to the facility.

Lack of modified Physical activity

Children with physical disabilities interviewed complained of modified Physical activity (MPA). A sport can be made more accessible for athletes with disabilities by changing the teaching approach, rules, equipment, and surroundings (Snook, 2019).

Discrimination

Discrimination occurs when a person is denied the opportunity to exercise his or her human or other legal rights on an equal footing with others due to an unjustifiable difference in treatment (Amnesty International, 2022). Discrimination in sports based on disability is likely the least discussed form of discrimination in sports (Snook, 2019). Because they do not want to put in the extra effort to accommodate athletes with disabilities during ordinary school physical activities (Snook, 2019), school physical educators, games masters, and mistresses may leave them out. Schools are expected to provide modified physical activity opportunities for children with physical disabilities to enable them enjoy equal access to and benefit of physical activity with their peers. Respondents in the present study noted that they are being left out when other pupils are in the playground for recreation and sports.

Conclusion

In a Nigerian primary school, the researchers investigated the factors that influence the inclusion of children with physical disabilities in normal school physical exercise. Several factors were reported by respondents. Inclusion of children with physical disability in regular primary school physical activity is determined by peer factor, personal factor, and school factor. These factors bordered on students' experiences in school. The experiences include stigmatization, Low Self-confidence, Low self-esteem, Shame, Limited access to sports facilities, discrimination, Lack of modified Physical activity. The implication of these experiences was the exclusion of children with disabilities from regular primary school physical activity amount to disability. This shows that a more realistic approach to implementing inclusive education should be taken in other to address the issue of stigmatization, Low Self-confidence, Low self-esteem, Shame, Limited access to sports facilities, discrimination, Lack of modified Physical activity in regular primary school physical activity.

Acknowledgement: We thank Dr. Moses Onyemaechi Ede, Educational Foundations Studies, Faculty of Education, University of The Free State, Bloemfontein, South Africa. ede.h.mo@ufs.ac.za for serving as corresponding author.

References

- Abed, M. G., & Shackelford, T. K. (2022). The Importance of Providing Play and Learning Materials for Children with Physical Disabilities in Saudi Arabia: The Perceptions of Parents. [Int J Environ Res Public Health](#), 2022 Mar; 19(5): 2986. doi: [10.3390/ijerph19052986](#)
- Aderemi, T.J. (August, 2015). Exclusion as problem of children with disabilities. BBC's Focus on Africa
- Amnesty International, (2022). Discrimination. <https://www.amnesty.org/en/what-we-do/discrimination/>
- Ahmed, M. (2016). Stuck with Low Self-Esteem? There May Be A Solution. <https://www.coursehero.com/file/18255809/Low-Self-esteem-ASPS/>.
- Åsebø E-KS, Løvoll HS and Krumsvik RJ (2020) Perceptions of Contextual Stressors in Physical Education. A Qualitative Case Study. *Front. Sports Act. Living* 2:528979. doi: 10.3389/fspor.2020.528979.
- Australian Government Department of Health (2019). Australia's physical activity and sedentary behaviour guidelines and the Australian 24-hour movement guidelines. Canberra: Australian Government Department of Health. Retrieved 21 April 2020 from <https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-phys-act-guidelines>.
- Berg, V. (2020). Types of physical disabilities. <https://www.carehome.co.uk/advice/types-of-physical-disabilities>.
- Bhandari, P. (2020). What is Qualitative Research? | Methods & Examples. <https://www.scribbr.com/methodology/qualitative-research/>
- Bloemen, M, A. T., Backx, F. J.G., Takken, T., Wittink, H., Benner, J., Mollema, J., de Groot, J. F. (2015). Factors associated with physical activity in children and adolescents with a physical disability: a systematic review. *Dev Med Child Neurol*. 57(2):137-48. [[PubMed](#)] [[Ref list](#)]
- Center for Disease Control and Prevention-CDC, (2022). Inclusive School Physical Education and Physical Activity. https://www.cdc.gov/healthyschools/physicalactivity/inclusion_pepa.htm
- Cerda, A. A., García, L. Y., & Cerda, A. J. (2021). The effect of physical activities and self-esteem on school performance: A probabilistic analysis. <https://doi.org/10.1080/2331186X.2021.1936370>
- Ede, M.O., Anyanwu, J.I., Onuigbo, L.N., Ifelunni, C. O., Alabi-Oparaocha, F. C., Okenyi, E. C., Agu, M. A., Ugwuanyi, L. T., Ugwuanyi, C., Eseadi, C., Awoke, N. N. Nweze, T., Victor-Aigbodion, V. (2020). Rational emotive family health therapy for reducing parenting stress in families of children with autism spectrum disorders: A group randomized control study. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 38, 243–271

- Ejike, L. (2018). Nigerian with Disabilities are tired of waiting for Apathetic Government. <https://brightthemag.com/health-nigeria-disability-rights-activism-96aa2cfef5f2?gi=3d4690740714>. Accessed 23/2/2022
- European Disability Forum (n.d). “Disability and Social Exclusion in the EU –time for change, tools for change” https://sid.usal.es/idocs/F8/FDO7040/disability_and_social_exclusion_report.pdf. Accessed 23/2/2022
- Galal, M. (2021). Benefits of sport and physical activity for the disabled. Available from: Available from: <https://www.youtube.com/watch?v=w2-LSUF7-TU> [last accessed 15/11/2021]
- Health and Human Right Resource Guide (2014). Disability and Human Right. <https://www.hhrguide.org/2014/03/21/disability-and-human-rights/#footnote-228-1>. Accessed 23/2/2022
- ILEP, (2011). Guidelines to Reduce Stigma: Counselling to Reduce Stigma, ILEP, London, UK.
- Iyioha. I. O. (07 December 2015). Exclusion as problem of children with disabilities. <https://guardian.ng/opinion/exclusion-as-problem-of-children-with-disabilities/>
- Kerner, C., Kirk, D., De Meester, A., and Haerens, L. (2019). Why is physical education more stimulating for pupils who are more satisfied with their own body? Health Educ. Journal. 78, 251–265. doi: 10.1177/0017896918798420| [Google Scholar](#)
- Kerner, C., Haerens, L., and Kirk, D. (2018). Body dissatisfaction, perceptions of competence, and lesson content in physical education. J. Sch. Health 88, 576–582. doi: 10.1111/josh.12644. [Google Scholar](#)
- Kolawole, F. M (2016). Measurement of disability through sample surveys: Nigeria Experiences. National Bureau of Statistics, Nigeria. <https://unstats.un.org/unsd/demographic-social/meetings/2016/kampala--disability-measurement-and-statistics/Sess>. Accessed 23/2/2022
- Koszela, K (2013). The Stigmatization of Disabilities in Africa and the Developmental Effects. Independent Study Project (ISP) Collection. 1639. https://digitalcollections.sit.edu/isp_collection/1639
- Lusli, M., Zweekhorst, M. B. M., Miranda-Galarza, B., Peters, R. M. H., Cummings, S., Seda, F. S. S. E., Bunders, J. F. G., & Irwanto (2015). Dealing with Stigma: Experiences of Persons Affected by Disabilities and Leprosy. BioMed Research International 2015. <https://doi.org/10.1155/2015/261329>
- Li, R., Sit, C. H.P., Yu, J. J., Duan, J. Z.J., Fan, T. C.M., McKenzie, T. L., & Wong, S. H. S. (2016). Correlates of physical activity in children and adolescents with physical disabilities: A systematic review. Preventive Medicine: An International Journal Devoted to Practice and Theory, 89, 184–193. <https://doi.org/10.1016/j.ypmed.2016.05.029>
- Maiano C, Hue O, April J. (2019). Effects of motor skill interventions on fundamental movement skills in children and adolescents with intellectual disabilities: a systematic review. J

- Intellect Disabil Res. 63:1163–79. doi: 10.1111/jir.12618. [PubMed Abstract](#) | [CrossRef Full Text](#) | [Google Scholar](#)
- National Center on Health, Physical Activity and Disability (2016). Discover Inclusive School Wellness. Birmingham, AL: National Center on Health, Physical Activity and Disability. [https://www.nchpad.org/fppics/NCHPAD_Discover%20Inclusive%20School%20Wellness\(1\).pdf](https://www.nchpad.org/fppics/NCHPAD_Discover%20Inclusive%20School%20Wellness(1).pdf) [pdf icon](#)[PDF – 4.4 MB] [external icon](#). Accessed December 18, 2019.
- Nwosu, K.C., Okoye, C.C., and Onah, U. H (2018). An Interpretive Descriptive Study of Factors Affecting Academic Achievement of Underachieving Student Teachers in Nigeria. *Journal of At-Risk Issues* 21(2): 20-29. National Dropout Prevention Center. 3325 Hwy 81 N, Anderson, SC 29621
- Oladejo, M. A., & Oladejo, S. A. (2011). Educating Students with Disabilities in Nigeria: Some Challenges and Policy Implications. *European Journal of Humanities and Social Sciences* 3(1). **Error! Hyperlink reference not valid.**
- Osero, P. O. (2015). Challenges Teachers Encounter In Implementing Inclusive Education In Public Primary Schools In Nyamira County, Kenya. *International Journal for Innovation Education and Research* 3-3. www.ijer.net
- Physical Activity Guidelines Advisory Committee. (2018) Physical Activity Guidelines Advisory Committee Scientific Report. U.S. Department of Health and Human Services; Washington, DC, USA: 2018. [(accessed on 2 January 2019)]. Available online: https://health.gov/paguidelines/second-edition/report/pdf/PAG_Advisory_Committee_Report.pdf. [[Google Scholar](#)] [[Ref list](#)]
- Pitchford, E. A., Leung, W., & Webster, E. K. (2021). Fundamental Motor Skill Delays in Preschool Children With Disabilities: 2012 National Youth Fitness Survey. *Front. Public Health* 9:758321. doi: 10.3389/fpubh.2021.758321.
- Salice, A., & Sánchez, A. M (2016). Pride, Shame, and Group Identification. <https://doi.org/10.3389/fpsyg.2016.00557>
- Shields, N., Synnot, A. (2016). Perceived barriers and facilitators to participation in physical activity for children with disability: a qualitative study. *BMC Pediatr* 16, 9. <https://doi.org/10.1186/s12887-016-0544-7>
- Shields, N., Synnot, A., & Barr, M. (2012). Perceived barriers and facilitators to physical activity for children with disability: a systematic review. *Br J Sports Med.*;46:989–97. [Google Scholar](#)
- Sit, C. H., McKenzie, T.L., Cerin, E., Chow, B. C., Huang, W. Y., & Yu, J. (2017). Physical Activity and Sedentary Time among Children with Disabilities at School. *Med Sci Sports Exerc.* 49(2):292-297. [[PubMed](#)] [[Ref list](#)]
- Sit, C., Li, R., McKenzie, T. I., Cerin, E., Wong, S., Sum, R., & Leung, E. (2019). Physical Activity of Children with Physical Disabilities: Associations with Environmental and Behavioral Variables at Home and School. *Int J Environ Res Public Health*; 16(8): 1394. Published online 2019 Apr 17. doi: [10.3390/ijerph16081394](https://doi.org/10.3390/ijerph16081394)

- Sit, C. H.P., McManus, A., McKenzie, T. L., & Lian, J. (2007). Physical activity levels of children in special schools. doi: 10.1016/j.jpmed.2007.02.003.
- Snook, A. (2019). Discrimination in Sports: 5 Types, 25 Solutions. <https://www.insight.com/resources/discrimination-in-sports-5-types-25-solutions/>.
- Sports Australia (2019). The Australian physical literacy framework. Canberra: Australian Sports Commission. Retrieved 21 April 2020 from https://www.sportaus.gov.au/data/assets/pdf_file/0019/710173/35455_Physical-Literacy-Framework_access.pdf.
- Terrizzi, J. A. Jr., & Shook, N. J. (2020). On the Origin of Shame: Does Shame Emerge from an Evolved Disease-Avoidance Architecture? <https://doi.org/10.3389/fnbeh.2020.00019>
- Uduu, O. (2020). Over 25 Million Nigerians Excluded Due To Disability. <https://www.dataphyte.com/latest-reports/governance/over-25-million-nigerians-excluded-due-to-disability/>. Accessed 23/2/2022
- UNESCO, (2021). Inclusion. <https://education-profiles.org/sub-saharan-africa/nigeria/~inclusion>. Accessed 23/2/2022
- United Nations General Assembly, (2006). Convention on the Rights of Persons with Disabilities, A/RES/61/106, Art. <http://www.ohchr.org/EN/HRBodies/CRPD/Pages/ConventionRightsPersonsWithDisabilities.aspx>. Accessed 23/2/2022
- UNICEF, (2021). Primary Education. <https://data.unicef.org/topic/education/primary-education/>
- University of South Florida (2022). What is Self-Confidence? <https://www.usf.edu/student-affairs/counseling-center/top-concerns/what-is-self-confidence.aspx>
- Whitney, S. D., Sullivan, S., & Herman, K. (2010). Low self-esteem as an early indicator of youth depressive symptoms. *Advances in School Mental Health Promotion*, 3(2), 5–16. <https://doi.org/10.1080/1754730X.2010.9715676>
- WHO (2020). Physical activity. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
- World Health Organization (2021). Disability and health. <https://www.who.int/news-room/fact-sheets/detail/disability-and-health>. Accessed 23/2/2022
- Yayasan Transformasi Lepre Indonesia (2008). Understanding the Condition of Leprosy Settlement in 13 Provinces in Indonesia.
- Yu, J. J., Burnett, A. F., & Sit, C. H.. (2017). Motor skill interventions in children with developmental coordination disorder: a systematic review and meta-analysis. *Arch Phys Med Rehabil.* (2018) 99:2076–99. doi: 10.1016/j.apmr.2017.12.009. [PubMed Abstract](#) | [CrossRef Full Text](#) | [Google Scholar](#).