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Review Paper

Paper Review on Inclusion, Physical Activity and Social Competence amongst Learners with Intellectual Disabilities in Kakamega Kenya.

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ABSTRACT

Research studies consistently demonstrate that children with intellectual disability (ID) are deficient in social competence in general (Brooks 2013; Klavina and Radionova 2016). This makes their able bodied peers shun them hence making them become isolated in school, community activities and play situations. Numerous social competence deficits also interfere with the social functioning of children with intellectual Disability (ID). Due to the limited effectiveness of social skill interventions for this population, it is necessary to explore additional opportunities for social skill acquisition through physical activity involvement. Research suggests that physical activity participation positively influence adolescent skill development (World Health Organizations-WHO 2011); however, little is known about the benefits of Physical Activity participation for children with ID. Their involvement in activities is related to higher ratings of social competence. The purpose of this paper review was to explore physical activity intervention on social skill development of children with intellectual disabilities. The objectives was to: (a) highlight challenges children with Intellectual disabilities face in an inclusive setting (b) elaborate on the role of physical activity intervention on social competence for learners with ID in an inclusive setting. (c) Recommend other intervention measures that significant others may need to incorporate in their service delivery to ensure these children reap health-related social competence benefits of participation in physical activity programs. This paper used desktop research in gathering up to date relevant data on physical activity intervention on social skill competence on children with intellectual disabilities. Descriptive statistics were used to present the information gathered.

KEYWORDS: Physical activity, Intellectual disability, Intervention, Inclusive setting, Participation.

INTRODUCTION

Intellectual disability (ID) is a sub-average Intellectual functioning existing concurrently with deficits in two or more of the applicable adaptive skill areas during the developmental period. This makes their able-bodied peers shun them, hence making them become isolated in school activities. Numerous skill deficits interfere with the social functioning of children with intellectual Disability (ID). Valcova (2015) observe that Physical activities (PA), school physical Education (P.E) and sports are considered an important part of daily lifestyle and has an important role in the improvement of children with intellectual disabilities adaptive skill areas such as: Communication, Self-care, Home-living, Social Skills, Community use, Self-direction, Health and Safety, Functional academics, Leisure and work. Studies Indicate that children with ID are less likely to be physically fit and less engaged in physical activities than their peers (Tudor-Locke, Washington & Hart, 2009). It is reported (in Healthy people 2020) that 56% of children with intellectual disabilities engage in no leisure activities compared to 36% of children without disabilities.

Persons with ID are citizens like others, it means therefore that they have the same rights to participate in types and levels of physical exercise. Specifically, the right to participate in exercise and sport is proclaimed in the United Nations Convention on the Rights of persons with Disabilities (UNCRPD, 2004). Article 30 includes culture and recreational possibilities for them (Valcova, 2011). Special Olympics International (SOI) is considered as the most opened up sports movement for all individuals with intellectual disabilities, hence physical activity intervention is implemented within this programmes for special Olympic athletes.

Problem Statement

Childhood is a critical stage when gross motor skills and fine motor skill is learned. These are prerequisite skills in learning sport skills, social behavior and functional independence in society. Children without intellectual disabilities learn these social skills instinctively in natural play situations with their peers and through active transport, hence more socialized in community activities as they grow up (United Nations Office for Sport Development and Peace-UNOSDP, 2012). However, children with Intellectual disabilities lack social skills because of limited opportunities and therefore more dependent on their caregivers, families and society for social,

psychological and physical support. They also experience delayed developmental milestones because of late socialization in physical and recreation activities (Special Olympics Kenya-SOK 2013). These children therefore participate less in community activities than their typically developing peers, hence lack social skills to maintain relationships.

METHODOLOGY AND MATERIALS

The researcher conducted literary search to gather up to date information from several sources on inclusion, sport and development of social competence. Both primary and secondary sources were used for data collection.

The following sources were used to gather up to date data

- Masinde Muliro University Library
- Kenya Institute of Special Education (KISE) Library
- Kenyatta University Library
- Kenya Institute of Curriculum Development (KICD)
- British Council Library, Kisumu
- Internet
- National Council of Persons with Disability resource centre
- Kenya National Archives Library
- Google scholar links

Challenges Children with intellectual Disabilities face in an Inclusive Setting

Children with mild to moderate intellectual disabilities (ID) often lack appropriate social skills to fully participate in the social world of their peers (Leeann *et al.*, 2012). These learners have slow rate of acquiring and developing skills such as speaking and walking, have an exercise purposeless movements in class or in the play field (Klavina and Block, 2009). They also have deficits in motor coordination, have decreased muscle tone (Ndurumo, 1993). They are referred to as slow, dummies by their peers. This leads them to be withdrawn, hypoactive and most of the time needed to be motivated to participate in a given activity (Bukhala, 2012). The current special Olympic programme in Kakamega, County Kenya, is doing a great deal in making the learners feel worthwhile (Special Olympics Kenya-SOK 2013). Learners with ID have negative feelings about themselves. It is suggested that other disciplines of development should emulate sports and games

disciplines in order to boost the self- concept of these learners (Ngugi & Mwaura, 2007).

During play, Maura & Wanyera (2007) note that learners with ID may show noticeable under activity or over activity, with uneven gross and fine motor skills. Similarly Schmidt, (2008) adds that these learners are very anxious and are characterized by swinging moods, temper tantrums, difficulty in sustaining conversations due to poor speech and self-talk which may be symptoms of anxiety and worry causing difficulties with social contacts.

The development of physical ability occurs from childhood to maturity. For children with ID the development of motor ability is either delayed or abnormal (Rehabilitation International 1991). A report by UNICEF (2013) indicate a discrepancy as great as 4 years between motor skills level and chronological age for children with disabilities. They lag behind in motor skill development, have delayed language acquisition, have low vitalities, awkward restricted movements and lowered fitness level, this puts them at risk of living sedentary lifestyles (Sherril & Huztler2010).

According to Bedell, Law, Liljenquist and Khetani (2013) children with ID between ages 5 and 7 participate less in community activity than their typically developing peers, hence lack social skills of maintaining relationships.

To promote social development, these children are frequently mainstreamed in the school setting, this involves spending recreational periods and occasional academic classes with children who do not have disabilities. Allowing children with cognitive delays opportunities to interact with their typically developing peers and hence creating a forum for developing social skills. Although inclusion may be beneficial, but the social experiences offered within the inclusive environment, may not fully facilitate the social development of children with ID.

According to research documentation by Wiener & Tardif (2004), when children with ID were placed in an inclusive classroom, they tended to have fewer reciprocal relationships than those without ID. These children may need additional support to better prepare for the social demands of a mainstreamed classroom. Without proper supports, children with ID are potentially at risk for negative peer experiences like bullying and rejection. Therefore, despite being in the physical proximity of their typically developing class mates, children with ID continue to be socially excluded, hence lack social competence at individual level

When efforts are not made to ensure that physical activities are inclusive, it remains another area where discriminatory attitudes and practices towards children with intellectual disabilities are perpetuated. Even when decisions are made to make sport more accessible and inclusive without basic steps to foster understanding, knowledge and communication on how to adapt sports appropriately, intolerance can be exacerbated and divisiveness can ensue (Parmes & Hashemi, 2007). However, appropriate communication, knowledge and skill learning through sport participation can be a powerful tool for transforming community attitudes and empowering individuals through acquisition of new physical and social skills, self-confidence and positive relationships (Fukuchi, 2007, Favazza ,Siperstein, Masila & wairimu.2016).

To date research on social abilities for children with ID documents their social skill deficits. These children tend to exhibit low levels of involvement with other children during play, even under facilitative play conditions such as having regular playmates at home (Guralnick *et al.* 2009). Lower levels of cognitive ability have been associated with lower levels of social development and peer adjustment. Children with ID have potential deficits in social cognitive functioning. These children often struggle with accurately interpreting another child's intention, especially when the situation incorporates multiple intensions (Leffert, Siperstein & widaman 2010).

Despite full inclusion in a general education classroom with accepting teachers, children with ID are still less liked by their peers. This situation suggest that apart from stigma, factors such as children's skill deficits are contributing to their low peer status. Due to a variety of social skill deficits in children with ID, it is necessary to focus on the social inclusion of these children and strive to create settings and situations in which these children can experience increased social interactions within inclusive settings.

Other challenges learners with ID face in inclusive settings are: negative attitude from teachers and pupils due to stereotypic cultural beliefs about causes of disability, difficulty in locating them since most often they are kept at home, curriculum barriers, poor communication strategies, poor teaching methods, inadequate educational resources and insufficient human resource personnel and securing playing time for them (Mwaura and Wandera, 2007). All these

challenges need to be addressed if Physical Activity (PA) is to be an effective tool of inclusion.

Role of Physical Activity Intervention on social competence of learners with ID in an inclusive setting.

Specific problematic social behavior of children with ID creates a need to identify factors that influence the development of social skills. Participation and Social activities may be needed interventions which is the focus of this paper review. Socialization into sports and recreation programs may help children with ID to form positive social relationships and become socially accepted (Siperstein, Glick & Parker, 2009). It has been suggested by Ghosh and Data (2012) that participation in sports activities has resulted in a positive influence on the functional wellbeing of children with Intellectual disabilities. According to King *et al.* (2003) participation is the involvement of a child within everyday activities of childhood. Social (outside class activities) or co-curricular activities are situations in which a child with ID are engaged with others without disability within the inclusive settings. These activities can be categorized as either structured or unstructured. Structured activities involve a set of rules or standards of behaviour e.g. sports, games, art activities, student organizations. Unstructured activities are those which involve individualized engagement without set rules e.g. playing with toys, visiting friends or watching Television, or playing computer games (Brooks, 2013).

Children with ID may experience limited social interactions within classroom settings. Therefore, these children may benefit from participating in outside class activities to better prepare them for life in inclusive settings. In a research study by Bedell (2013), it was reported that children with ID between ages 5 and 17 years were less likely to participate in structured sports and also highlighted the importance of exploring a child's quality of play in developing social skills. Other studies suggest that recreation programmes help children with ID to form social relationships and become socially accepted by their peers and enhance their participation in the social fabrics of society. For example, Siperstein, Glick and Parker (2009) examined social inclusion in a four week recreational sport programme that involved children with ID and those without ID aged 8 to 13 years. The students participated in structured games that de-emphasized competition and focused on group membership. In addition; the programme

stressed on equal treatment of all children during all activities. This programme resulted in positive gains not only in athletic skills but also in social relationships. Based on peer nominations, children with ID received the same number of new friend nominations as children without ID. Findings from other research studies agree with these findings and further suggests that continued participation in sport activities have always resulted in a positive influence on the functional well-being of children with ID and equally improved their self-efficacy (Brooks, 2013; Gosh and Datta, 2012).

Recent physical activity intervention studies present the auxiliary benefits of PA such as decrease in anxiety, depression, and increase in self-perception of quality life, self-efficacy as well as social competence (Carro & Gobbi, 2012; Harade *et al.*, 2011; Hutzler & Korsensky, 2010; Lante, Walkley, Gamble & Vassos, 2011; Ozer *et al.*, 2012; Vogt *et al.*, 2012). Studies that assessed mood states, such as anxiety and depression have had positive results with physical activity reducing anxiety and improvement of concentration, motivation to be active by a clinically significant amount. Other studies, have found evidence for increased positive mood directly after exercise (Vogt 2012), increased social competence and self-efficacy (Hutzler & Kokensky, 2010; Marks 2010).

Global practices on inclusion of persons with disabilities using Sport

The need to incorporate special focus on inclusion and developing opportunities for persons with ID in National sport for development strategies is now more apparent than before. Several countries have initiated efforts toward achieving inclusion through sport based interventions using sport for development policies. The governments of Argentina, Benin, Brazil, Ghana Mexico, Mozambique, South Africa, Spain, Tanzania and Zambia all include Disability as a priority in their sport for development policies and programmes (Sport for development and Peace International Working Group-SDPIWG, 2007).

Brazil's national sport policy is based on two key principles: reversing injustice and exclusion and reducing social vulnerability. The government obligation is to ensure every citizen has access to sport and recreation as enshrined in the national constitution.

In Tanzania a national policy on Disability was put forward in 2004, to ensure that persons with Disabilities have opportunities to participate in sport and recreation, with a requirement that sport

organizations facilitate this participation (ISDPIWG Secretariat, 2008).

In Kenya, the 2010 Kenyan constitutional amendments enforce 1/3 of employment to pwd and National Council of Persons with Disabilities (NCPWD 2006) ensure the right to participants and waiver of entry fee in parks and recreational facilities. Kenya Paralympic sport federation run sport for persons with disabilities from grassroots level to international level. School system in Kenya organizes sport competitions across various disability groups, however these competitions are few, held once a year in April over a period of two days. These competitions are exclusive for disability groups. There is need for Kenya to have a more inclusive sport structures. Kenya still lags behind and there is need to adopt best practices from other parts of the world to meet this inclusiveness criterion.

Other intervention measures significant, others may incorporate in service delivery to enhance social development of children with ID in inclusive settings.

(a) Life skill training

Children with Mild and moderate intellectual disabilities should be taught skills that will enable them be socially competent, personally adequate and academically competent. Such skills can be taught through step by step analysis (Mwaura and Ngugi 2007). In early childhood programme, emphasis should be on readiness skills which are activities in sensory motor development, family and community awareness. Since the emphasis is on social competence, the mild intellectual disabilities should also be taught pre-vocational skills stressing on career awareness, independence, and appropriate social behavior

(b) Training in activities of daily Living

Mwaura and Wanyera (2007) observe that children with severe/trainable intellectual disability should be supported to develop habits of daily living such as self-care, cleanliness, health and eating behavior. Furthermore they should be taught communication skills, ability to follow directions and social skills. Their educational programmes should not be geared towards academic orientation but emphasis should be on skills that will enable them function in asocial environment.

The academic programmes should be geared at helping them get along in the community. These skills should be functional skills taught as task analysis or thematic approach (Otiato & Kithure,

2007). Economic skills are also necessary since they ensure that these learners are functional members of the society and act as sources of income. These include yard work, housework and garden work at home. Creative Arts project, sewing, cooking, leather and wood work at School and sheltered workshops in the neighborhood (KISE module 47 revised). Sport therefore provide a platform for bringing large numbers of children with disabilities together either in a school or community setting to make these programmes implementation possible and achievable.

(c) Home and hospital visitation

For those with severe intellectual disabilities there is need for home or hospital visitation programmes since they are bed ridden and are unable to move on their own. However they can be trained to develop minimal communication skills. Learners in this category should be taught self-help skills in motor activities such as grasping objects and walking. Schmidt (2008) always urges parents and Teachers handling them to promote self-esteem and confidence. They should provide opportunities for learners to be responsible and be given a chance to participate in learning activities. However, they should be communicated with minimal number of rules and routines. These learners need to be involved in establishing these rules for them to remember them better.

(d) Parental involvement in physical activities with their children

Amount of time parents dedicate to participate with their children enables their children acquire motor skill (Kersh, Master, Bambeger & Draham, 2007). Children whose parents are involved in their activities consistently have higher test scores, better attendance and higher self-esteem (Newman, 2005). Parents should take initiative to train their children.

Children with ID may attain motor skill at a slower rate than their counterparts without developmental milestone delays, hence they need to be supported by competent adults, mostly their parents, caregivers and other family members (Mactavish *et al.*, 2007; Maline, Bouchard & Baror, 2004). Parents are their child's first educators and can identify suitable sports and physical activities for their children (Jeynes, 2007).

Parents can be involved in volunteering, contractual duties, actual coaching and in fostering social experiences so they can follow up with their child's training programmes (Stewart, 2008). This involvement provide a chance for parents to interact

with their children and bond. Research studies continue to document that, Parents of children with intellectual disabilities feel isolated and stigmatized by the conditions of their children and so by getting them involved in community sport programmes, they are able to form support networks that provide them with acceptance, hope, and an opportunity to become advocates of their children's health and development (Wairimu *et al.*, 2017). It was also observed by Bomjin and Drummer (2008) that parental involvement is associated with a child's performance such as improved motor performance, positive behaviour change and substantial independence. Parental involvement may take the form of parenting, communication, volunteering, learning at home, decision making and collaboration with the community. Many a times parents are not certain on how to play a more active role in their children's sport activities thereby leaving the task to the children's teacher/coach. The most affected are parents of children with intellectual disabilities who may lack awareness of available programmes that can benefit their children (Bukhala, 2012). According to Kersh *et al.* (2010) factors that constrain parental active involvement in their children's physical activities are: parents' and society's attitude and inadequate resources.

(e) Identify and eradicate stigmatizing and discriminative activities, policies and practices within government itself.

Use persons with ID to help government identify problematic practices and adopt more inclusive approaches.

(f) Increase public awareness of the rights and capabilities of children with ID and importance of ensuring full inclusion.

Use of athletes with ID as public speakers and role models in schools catering for IDs can be a powerful means of creating positive changes in public perception about physical activities for persons with disabilities.

(g) Establish more fundamental social support for persons with disabilities, to ensure that they can fully participate in sport.

Examples of important needs that are not currently being met in many countries include:

- Adequate social insurance
- Access to medicines
- Rehabilitative services
- Trained and qualified caregivers
- Support for families of persons with disabilities 99% of whom are women.

Strategies need to be put in place to realize this within the Kakamega Community.

(h) Include Physical Education for children in any disability legislation:

Ensure all children with disability are included: i.e. Individualized Educational Programme (IED) programmes to include physical Education. This is not currently being well done in many countries, including Kenya.

(i) Create strong physical Education requirement for all children:

Weak or non-existent physical education requirement for children generally results in low levels or non-existent physical activity for those with disabilities. Need to strengthen the teaching of adapted physical activities for all children in all Schools

(j) Focus on both accommodation and Inclusion:

Efforts to include persons with disabilities (pwd) often stop at accommodation (Environmental modification and provision of technological and personal aids to accommodate pwd), rather than full inclusion. Accommodation enables, but it does not address stigma and discriminatory attitudes. Both inclusion and accommodation must be addressed. In sport, it means designing programs to enable individuals with disabilities to play and ensure that coaches and program leaders have the skills and exercise of leadership, to ensure that persons with disabilities are actually fully included in the games programmes at all levels.

(k) Help develop and participate in coordinated mechanisms for international policy, knowledge exchange on sport and Disability:

- Sharing information can strengthen and stream line policy development and delivery of sport for children with disabilities.
- To save scarce resources and avoid mistakes it is helpful to review experiences in other jurisdictions.
- Joint sponsorship of research analysis and dissemination of knowledge can reduce costs for individual governments.
- Inclusion of International sport organizations in this process can leverage their extensive expertise and help develop their capacity to provide valuable policy input in government.

(I)Ensure that coaches and P.E teachers are trained in Adaptive Sport and Inclusion of persons with Disabilities:

Professional preparation and knowledge increases the likelihood that a program will be effective and will provide challenging experience for participants with disability

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