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Full Length Research Paper

Influence of psychological needs on participation of children aged 4-6 years with physical disabilities in early childhood education classes in Starehe Division, Nairobi County, Kenya

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Psychological needs, emphasizes self determination, relatedness and autonomy as vital components of survival among children with disability. Inappropriate fulfillment of needs de-motivate children lowering participation during classes creating symptoms of ill being such as withdrawal, deprivation and optimism. To address this imbalance, early childhood education (ECE) classes require structuring to enhance participation of children with physical disability (CWPD). The study assessed influence of psychological needs on participation of CWPD in ECE classes in Starehe division. The study adopted descriptive research design and targeted 5 head teachers, 35 teachers, 20 parents and children with physical disabilities aged 4 – 6 and in preschool. Purposive sampling and simple random sampling was used to select respondents for the study. Questionnaires, observation guide and structured interview were used to solicit data. Findings revealed that teachers were not conversant with types of psychological needs promoting participation of CWPD in ECE classes. Teachers who supported needs of CWPD tended to yield better results and created inclusive learning environment. Non satisfaction of psychological needs yielded lower learner participation, lowered self esteem and promoted negative attitude towards teaching learning process in ECE classes. The study recommends policy for early identification, assessment and intervention on the needs of effective participation of CWPD in ECE classes.

Key words: Participation, physical disability, psychological needs, inclusive learning environment, early childhood education.

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INTRODUCTION

Promoting the physical, social, and psychological development of young children is perhaps the most important task for early childhood development programs in countries around the world (Young, 2002). This is more so in developing countries, where developmental risk due to the direct and indirect effects of poverty, is high. Yet, the plight of the disabled child has been of little focus in the policy frameworks in countries such as Kenya. Recently, however, comprehensive programs have been implemented in integrating healthcare, nutrition and education (American academy of pediatrics, 2011). These programs have demonstrated positive impacts on childhood as well as fostering favorable outcomes for later development (Wegman, 1999). Similarly, recognition of the need for early childhood development interventions for children with disabilities or developmental delays has emerged in recent years (Young, 2002). This has been partly due to improvement in infant and child survival, and changing attitudes and knowledge about disability.

According to World Health Organizations (1990), physically disabled children are defined as those whose non-sensory physical limitation or health problems interfere with the school attendance or learning to such an extent that special services, training equipment, materials or facilities are required. Keate et al. (2002) indicates that physically disabled children are faced with

those disabilities, which relate primarily to disorders of the skeleton, joints and muscles including club foots, poliomyelitis, amputation (a missing limb) and fractures or burns that cause contractures.

Arnold and Chapman (1992) argues that, physically disabled child's development like physical, emotional, mental and social is slower, to a greater or lesser extent, than that of a normal child, even though the disabled child is of normal intelligence, his concept as a separate entity is more difficult to achieve from the beginning. Universally, there is an increased awareness of the early years as a crucial period for promoting physical, mental, and psychological growth of children and preparing them for lives as productive adults (Zinkin and McConachie, 1995), Provision of psychological needs of self-determination, intrinsically motivates children with physical disability (CWPD) to develop skills of self-awareness, decision making, problem solving and constructive criticism. These skills are likely to motivate CWPD to participate fully in the community, early childhood education (ECE) and in all aspects of life.

The government of Kenya through sessional paper on education and training (2004) captures the government policy intentions for mitigating the circumstances of children with special needs. The paper suggests that for this sub-sector, the MOE policy is to focus on 4-6 year-old children with a view to providing a holistic and integrated program that meets the child's cognitive, social, moral, spiritual, emotional, physical and psychological needs of relatedness that will enable CWPD to be intrinsically motivated, enthusiastic, have peace and strengthen. Consequently, skills of autonomy are important to the success and participation of CWPD. According to Wenden (1998), an autonomous learner willingly takes risks, shows tolerance and responsibility, and has insights in his learning. Participation is seen as the result of his own self-initiated interaction with the inclusive learning environment.

Heah et al. (2007) emphasizes that children's participation in activities in which they form friendships, develop skills and competences, express creativity, achieve mental and physical health, determine meaning and purpose in life. The participation of CWPD is influenced by provision of psychological needs of (self-determination, relatedness and autonomy). In cases where the psychological needs are not provided, there is likelihood of less learner participation. Commitment to provision of sufficient needs to CWPD creates a warm ECE learning environment. To realize optimal learner participation, special attention should be paid to learners psychological needs that accommodate all the physical needs. Providing support for children's self-determination in ECE environment is one way of enhancing participation of CWPD. Wehmeyer et al. (2013) argues that children who are self-determined experience skills such as self awareness, decision making, problem solving and constructive criticism. They are more likely to live independently in the community than those who are less determined. This position is supported by Hoffman and Field (1995) who argues that, development of self-determination and instructional interventions such as increasing self-awareness, improving decision making, goal setting and goal attainment skills enhances communication and relationship skills which in turn transcend to higher learner participation.

In support of this view, Jarman (1996) adds that self-determination instructional program influences learners to participate more actively in educational decision making by helping them become familiar with identifying information they would like to share in ECE settings. Examples of such activities include teaching children how to set goals that are important to them, taking steps to achieve these goals and coaching them for problem solving.

Analysis by Ryan and Deci (2002) reveals that humans are inherently proactive with their potential and mastering their inner forces such as internal drives interest and desires. They have inherent tendency towards growth, development and integrated functions. Though optimal development and actions are inherent, they do not happen automatically. To actualize their potential Ryan (1995) affirms that CWPD need nurturing from the ECE learning environment. If this happens, there are positive consequences, for instance well being and growth. But if not, there are negative consequences such as withdrawal, inactivity and sustained slow learner achievement which impede participation.

Further studies by Ryan and Deci (2007) revealed that an inclusive environment in which peers are supportive and there is emphasis on cooperation, effort and personal improvements influences motivation, enjoyment and psychological needs. When CWPD feel their needs have been fulfilled, they are more likely to improve in their participation in the ECE learning environment. To achieve this, teachers in ECE centers should build confidence in the learners and create an environment of hopefulness and instill positive attributes including better health, greater perseverance, flexibility and high confidence in CWPD. However, failure to provide relatedness can be unhealthy and instigate negative consequences on the CWPD's life. They only see the negative aspects of their physical disability, miss out on learning opportunities and fail to take action that would otherwise improve on their effective participation in the learning process (Bauer and Sapona, 1991).

Other studies by Chua and Koestner (2008) shows that when teachers find ways to promote children's relatedness during learning activities, they can successfully do so by promoting the value of task. This is by identifying the lesson's hidden value, and help CWPD understand why the lesson is genuinely worth in their effort. This in turn leads to an increased frequency of learner participation in the learning process. Based on this realization, Pettetier et al. (1997) suggests that

successful intervention should emphasize relatedness skills of peace, strength, enthusiasm and intrinsic motivation. This is through encouraging CWPD's initiative, respecting them as individuals, listening to their perspectives, creating opportunities for choice and self-regulating, helping out when they are into barriers and providing positive and constructive feedback. This will encourage CWPD's participation in the learning process.

Children, who feel a satisfactory relationship with one or more teachers, tend to do better in school than those who do not. Studies by Deci and Ryan (2002) have shown that feeling a sense of relatedness is so important that others support learner's relatedness. To realize this, teachers need to create an interactive program in which CWPD set short and long term learning objectives and take responsibility for their own learning. Such positive attributes are conducive for learner's high participation in the learning process. Relatedness leads to the most optimal school engagement and adjustment (Kasser and Ryan, 1996). The CWPD who experience such need satisfaction feel a sense of vitality, interest and flexibility, but those who do not are uninterested and disaffected as they show signs of greater adjustment problem. To mitigate such impediment, teachers need to be supportive by acknowledging learner's perspective, encouraging them to take initiative and assisting them to become problem solvers and allowing them to make choices when possible. When this is done, CWPD are likely to be motivated to participate in an inclusive ECE learning environment.

The CWPD experience autonomy when they feel supported to explore, take initiative, develop and implement solutions to their problems. They also experience relatedness when they perceive others listening and responding to them. Hall and Coles (1999) affirms that when these needs are met, individuals become more intrinsically motivated and actively engaged in their learning processes.

A study by Vansteenkiste et al. (2006a) on autonomy revealed that autonomous learners produced deeper engagements in learning activities, better conceptual learning and higher persistence at learning activities such as having insights in their learning, willingness to take risks, tolerance and responsibility. To achieve this, teachers in ECE centers should assist CWPD by appraising their performance in relation to individual standards, rewarding them for success and pay attention to their specific tasks. If this is successful, then CWPD capability will be shaped and maintained resulting to high participation in learning.

Teacher's supportive behaviors such as being responsive to learner's comments and questions, making time for learner's independent work, acknowledging signs of improvements are linked to learner's autonomous motivation, a requisite for high learner participation. More still, Candy (1999) confirms that a friendly atmosphere characterized by positive regard, honesty, open feedback, respect for ideas and opinions of others approval and collaboration lead to intrinsic motivation. This is likely to stimulate CWPD to show responsibility, initiative and take constructive criticism, which are ingredients for positive learner's participation in an ECE learning environment.

Further studies by Grolnick and Ryan (1989) showed that parents who understood their children's feelings while supporting and encouraging them had children who reported more autonomous motivation and high perceived competence than children of parents judged to be more controlling. Therefore positive attributes from parents creates conducive environment for CWPD to participate in ECE learning environment.

Connolly and Kelly (2002) notes that it is essential to seek children's views on the issues and situations that affects them. Listening to young children and understanding how they are thinking about others who are different from them can help practitioners to develop strategies which challenge prejudices. Based on this realization, the study also involved the CWPD to get their perspectives and their view points. More still, Nutbrown (1996) argues that the involvement of children as research participants rather than research subjects is important in order that their voices are heard and their view points are taken into account in the development of policy. To this end, the study involved CWPD in the hope of soliciting their views on the provision of psychological needs.

Statement of the problem

Children with disabilities in early childhood centers desire to experience all aspect of life such as social activities, sports and recreation. In spite of the fact that the rights of disabled children have been captured in the new constitution (Republic of Kenya, 2010), the implementation of which is far from being realized in preschools in Kenya. On the same vein, early childhood development programs are often directed toward reducing direct and indirect effects of poverty.

However, such programs do not often constitute a sufficient approach to the complexity of needs of young children with disabilities, much less those with physical disability. The child with physical disability is usually treated with sympathy but no tangible mechanisms are put in place to mitigate the difficulties the child may face. Furthermore, CWPD are vulnerable to neglect, abuse, injury and exploitation. Some cultures view CWPD as unworthy of care, protection or inclusion in the larger community. Stigma and social exclusion and lack of support and proper mechanism for intervention impedes their participation in an inclusive ECE environment. With proper intervention such as provision of psychological needs of self-determination, relatedness and autonomy, there is likelihood that CWPD will be motivated to participate in learning and realize their full potential in life.

Currently there is little literature that has been written and studies carried out on psychological needs of CWPD in preschools, hence the need for this study.

Purpose and objectives

This study was conducted to identify psychological needs of CWPD in pre-schools in Starehe division in Nairobi County. The study was intended to provide useful information that could facilitate improvement in providing psychological needs in CWPD in ECE centers. The outcome of this study is particularly important for the Ministry of Education (MOE) policy makers, and National Center for Early Childhood Education (NACECE) in understanding the importance of psychological needs. The findings will also hearten the MOE to invest more in issues concerning CWPD.

Theoretical framework

The study was founded on the theoretical framework of Maslow (1981, 1970). He portrays human needs in a hierarchy with the largest most fundamental levels of needs at the bottom. If there is deficiency in providing human needs, then the individual will feel anxious and tense. Maslow suggests that the most basic level of needs must be met for individuals to satisfy their desires.

The theory looks at the entire physical, emotional, social and intellectual qualities of an individual and how they impact on learning. For instance, for learners' cognitive needs to be met, they must first fulfill their basic psychological needs. These needs are physically safe and accepted within the learning environment for learners to progress and reach their full potential.

Every person is capable and has the desire to move up the hierarchy towards a level of self actualization. Unfortunately, progress is often disrupted by failure to meet lower level needs. By implication, provision of psychological needs to CWPD is likely to produce desirable behavior that will motivate the learners to effectively participate in the learning process.

After providing the psychological needs, it is expected that the behavior of CWPD must change. To achieve this, learners must be shown that they are valued and respected in the classroom and that the teacher must create a supportive learning environment. The CWPD with a low self-esteem, whose psychological needs are not fulfilled will not participate in learning at an optimum rate until these needs are satisfactorily strengthened.

Conceptual framework

In this study, the conceptual framework was used to explain the influence of psychological needs of (self-determination, relatedness and autonomy) on the participation of CWPD. The participation of CWPD is influenced by provision of psychological needs. In cases where the psychological needs are not provided, there is likelihood of less learner participation. Commitment to provision of sufficient psychological needs creates a stimulating and warm learning environment. To realize optimal learner participation, special attention should be paid to learner's psychological needs that accommodate all the physical disability in ECE learning environment. Lack of appropriate mix between psychological needs and physical disability in ECE learning centers creates a lapse in sustained participation of CWPD hence less learner participation. By capturing learner's psychological needs, there are chances of entrenching high learner participation in an inclusive learning environment. Figure 1 shows psychological needs and how they influence learner participation.

METHODOLOGY

Research methodology is an approach and a set of supporting methods and guidelines to be used as a framework for doing research design (Blessing and Chakrabarti, 2009). This study employed a descriptive research design to gather data. Descriptive studies portray an accurate profile of persons, events or situations (Chandran, 2004; Robson, 2002) and describe existing conditions and attitudes through observation and interpretation techniques. The design was appropriate for this study to accurately capture data from the various intervention measures adopted by the preschools and impact of those interventions on the participation of CWPD. The use of qualitative research methods in this study provided opportunity to examine and interpret patterns of instruction used by teachers.

Population is the aggregate of all that conforms to a given specification (Mugenda and Mugenda, 2003). Simple random sampling technique was used to identify five pre-schools. This method reduces bias in sample selection and provides the basis of making statistical inferences to the population from which the representative sample is drawn (Chandran, 2004). Purposive sampling and simple random sampling were then used for this study to obtain a target population of 5 head teachers, 35 teachers, 20 parents and 20 CWPD aged between 4-6 years. According to Kerlinger (2003), purposive sampling is characterized by the use of judgment and deliberate effort to obtain a representative sample while reducing error and increasing possibilities in analysis. Purposive sampling is useful in qualitative research design and especially in cases where data illustrates characteristics of particular subgroups of interest and also facilitates comparison, and investigator relies on expert judgment to select units that are representative or typical of the population (Patton, 1990).

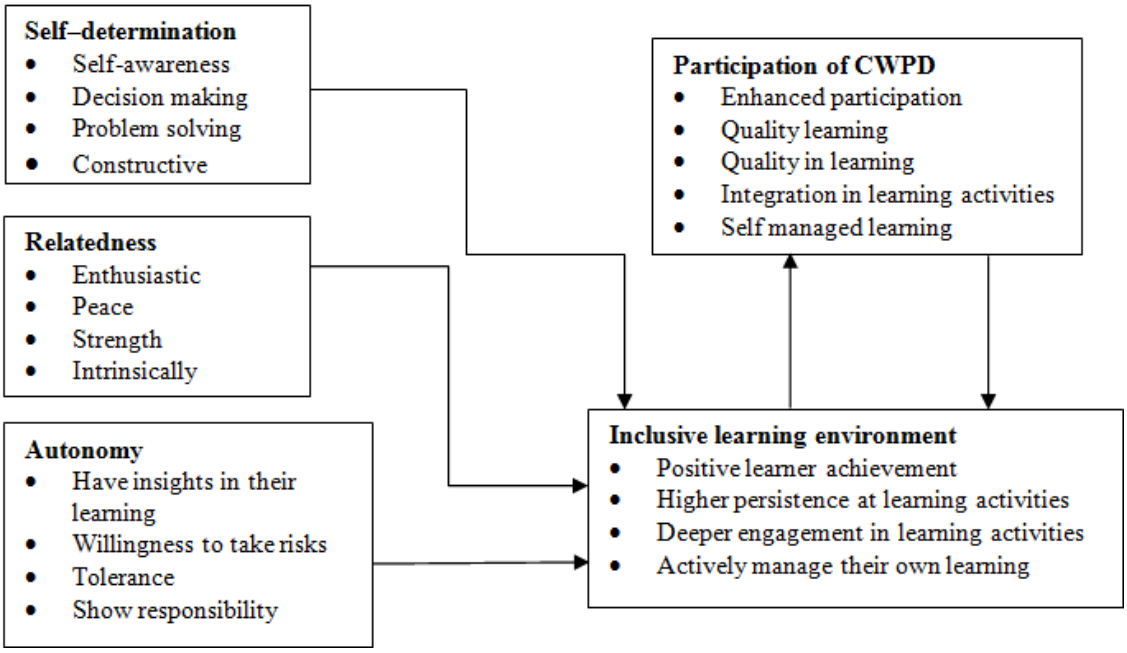

Figure 1. Conceptual framework.

Table 1. Sample.

Sample	Number
Head teachers	5
Teachers	35
Parents	20
Children living with physical disabilities	20

The sampling frame displayed shows how respondents were distributed in the sample of this study as shown in Table 1. According to Mugenda and Mugenda (2003), the most commonly used instruments of data collection are questionnaires, interview schedules, observation forms, standardized tests and content analysis. Instruments of data collection for this study were questionnaires, interview schedules and observations forms. The questionnaire was administered to teachers and it dealt with teachers' views on participation of CWPD. An interview schedule was used to obtain information from head teachers and parents on their views concerning psychological needs of CWPD. The interview schedule was used on CWPD to obtain views on their psychological needs.

Data analysis is the process of bringing order, structure and meaning to the mass of information collected. According to Jackson (2009), descriptive research design is commonly represented by use of frequency charts, bar graphs and pie charts to tabulate the information gathered appropriately. Data collection for this study was obtained through editing, coding and tabulation process.

Profile of respondents and implication for disability

Questionnaires were used to establish teacher's years of service in the profession and years of service in the same center and how they handled CWPD in ECE centers. Interview schedules were used to gather information from head teachers, parents and CWPD concerning their views on psychological needs of CWPD. Table 2 highlights years of service by teachers in current station.

RESULTS AND DISCUSSION

From Table 2, 14 (40%) of respondents had worked for ten years and 10 (28.6%) had worked for 5 to 9 years. Consequently, 4 (11.4%) had worked for ten years in the same ECE center likewise 18 (51.4%) teachers had worked for 5 to 9 years in the same ECE. With this wide teaching experience, respondents did their jobs accordingly and were well placed to have insights on the importance of psychological needs for CWPD. Further findings show that 6 (17.1%) of the teachers had worked

Table 2. Years of Service of the Respondents.

Number of years of service	Frequency	Percentage (%)	Number of years of service in current station	Frequency	Percentage (%)
1-2 years	5	14.3	1-2 years	3	8.6
2-5 years	6	17.1	2-5 years	10	28.6
5 - 9 years	10	28.6	5 - 9 years	18	51.4
> 10 years	14	40.0	> 10 years	4	11.4
Total	35	100	Total	35	100

Table 3. Distribution of CWPD in starehe division.

Disability	School	Age	Gender	Frequency	Percentage (%)
	Salama	4	Male	5	
Limb		5	Female	2	35
			Total	7	
	Salama	5	Male	1	
Hearing		4	Female	2	15
			Total	3	
	Mathare	6	Male	1	
Visual		4	Female	2	15
			Total	3	
	Daima	5	Male	3	
Attention deficit hyperactivity disorder		6	Female	2	25
			Total	5	
	Huruma	4	Male	1	
Dyspraxia		5	Female	Nil	5
			Total	1	
	Mathare	6	Male	1	
Dwarfism		5	Female	Nil	5
			Total	1	
			Totals	20	

for 2 to 5 years while 5 (14.3%) had worked for 1 to 2 years. However when asked about how they interact with CWPD, a teacher said:

> …..this “handicap” children are a disgrace, they have trouble getting through day to day activities. They make being a teacher even more difficult, these strains also cause strains between teachers. They throw temper tantrums at everybody and disrupt my lessons. They think that I should only concentrate on them alone.

Additionally, 3(8.6%) had worked in the same ECE center, suggesting that their understanding of physical disability and psychological needs of CWPD in ECE centers is likely to be limited. The study sought to investigate whether or not the respondents had physically disabled children in their classes. The findings in Table 3 show distribution of CWPD by school in Starehe division, Kenya. The findings in Table 3 depict that out of 20 respondents, 7(35%) of children aged 4-5 had Limb disability of which 5 were male while 2 were female all from one class.

Under such circumstances, provision of psychological needs to CWPD is manageable since they are all found in one ECE center. Further findings revealed that 3 (15%) children aged 4-5 had hearing disability while 3(15%) had visual disability respectively, implying that their

Table 4. Teachers understanding of psychological needs and participation of CWPD.

Needs	Views			
	Yes		No	
	Number	Percentage (%)	Number	Percentage (%)
Self-determination				
Do the CWPD have initiative in their learning?	15	42.85	20	57.14
Are the CWPD temperamental?	11	31.42	24	68.57
Do the CWPD cooperate in learning activities?	19	54.28	16	45.71
Are you confident in handling CWPD?	22	62.85	13	37.14
Do you support the CWPD by providing relevant learning materials?	29	82.85	6	17.14
Relatedness				
Do the CWPD interact well with their peers?	12	34.28	23	65.71
Do the CWPD interact well with their teachers?	18	51.42	17	48.57
Do the CWPD project sad moods?	13	37.18	22	62.85
Do the CWPD participate in the learning?	20	57.14	15	42.85
Do the CWPD project nervous behavior?	24	68.57	11	31.42
Autonomy				
Do you give the CWPD challenging tasks?	17	48.51	18	51.42
Are the CWPD self managed?	11	31.42	24	68.57
Do you create insights in their learning?	12	34.28	23	65.71
Do you teach them tolerance CWPD?	13	37.14	22	62.85
Do you build autonomy to CWPD?	23	65.71	12	34.28

psychological needs varied depending on their nature of physical disability. These corroborates with the findings of Ryan and Deci (2007) that lack of appropriate mix between psychological needs and physical disability in ECE learning centers creates a lapse in sustained participation of CWPD. Attention Deficit Hyperactivity Disorder constituted 5 (25%) of CWPD suggesting that their participation is likely to be enhanced since they are found in ECE class. Additionally, dyspraxia and dwarfism accounted for 1 (5%) of children aged 4-6, implying that it is not a common form of physical disability in ECE classes in Starehe division. The study sought to investigate teachers' understanding of psychological needs and participation of CWPD.

Findings shown in Table 4 indicate teachers understanding of psychological needs of CWPD in ECE classes. The study sought to examine teacher's understanding of self-determination on participation of CWPD. Out of the 35 respondents, 15 (42.85%) indicated that learners had initiative in their learning, while 20 (57.14%) indicated that learners had no initiative, in their participation. This suggests that there was a likelihood of less learner participation. Additionally, 11 (31.42%) respondents indicated that CWPD projected high tempers while 24(68.57%) indicated that CWPD did not project high tempers. This suggests a likelihood of high learner participation tempers, implying a likelihood of less learner participation. Additionally, 19 (54.28%) indicated that there was cooperation in learning activities for example CWPD completed their assignments as scheduled. similarly 16(45.71%) indicated that CWPD did not cooperate in the learning process, indicating less learner participation. More still, 22 (62.85%) indicated they were confident in handling CWPD, while 13 (37.14%) were not. Further still, 29 (82.85%) supported the learners by providing relevant learning materials. However, 6 (17.14%) did not, indicating an impediment to learner participation. Based on this finding, it is evident that self-determination is a key component to learner participation in an inclusive ECE learning environment. This argument supports the contention of Ryan and Deci (2007) that self-determination is an inherent component for an inclusive learning environment. Similarly, Hoffman and Field (1995) argue that self-determination and instructional interventions are ingredients for sustained high learner participation.

The study sought to investigate teacher's understanding of relatedness on participation of CWPD. Out of the 35 respondents, 12 (34.28%) indicated that CWPD interacted well with their peers, however 23 (65.71%) indicated that CWPD did not interact well with their teachers. Furthermore, 18 (51.42%) indicated that CWPD projected sad moods additionally, 17 (48.57%) indicated that CWPD did not participate in the learning process, suggesting less learner participation. Furthermore, 13 (37.14%) indicated that CWPD projected nervous behavior a likelihood that learner participation was negatively affected while 62.85% indicated that

Table 5. Views of head teachers on participation in class and school activities by CWPD.

Views	Strongly Agree		Agree	
	Number	Percentage (%)	Number	Percentage (%)
The CWPD require positive interaction with peers	3	60	2	40
The CWPD require adequate caring	4	20	1	80
The CWPD require assurance	4	20	1	80
The CWPD need positive interaction with teachers	2	40	3	40
The CWPD need to create insight in their learning	3	60	2	60
The CWPD need to be taught tolerance	2	40	3	20
The CWPD need to be taught challenging tasks	4	20	1	80
The CWPD need to be autonomous	2	40	3	60
The CWPD need to be encouraged	4	20	1	80

CWPD did not project nervous behavior a likelihood that learner participation was high. This analysis suggests that positive interactions motivate learners to participate in the learning process. These findings corroborate the assertion by Kasser and Ryan (1996) that positive attributes are conducive for learner's high participation.

Furthermore, the study then sought to find out teacher's understanding of autonomy on participation of CWPD in ECE centers. Out of the 35 respondents, 17 (48.51%) opined that they gave learners challenging tasks for example tasks that allow them to experience improvement in their skills and those that vary in complexity while 18 (51.42%) did not. Furthermore, 11 (31.42%) indicated that CWPD are self managed, implying that the learners managed and regulated their own learning. Conversely, 24 (68.57%) indicated that CWPD were not self-managed, implying less learner participation. Additionally, 12 (34.28%) indicated that they created insights in learners through scaffolding, while 23 (65.71%) did not, indicating less learner participation. More still, 13 (37.14%) indicated that they taught CWPD tolerance and 22 (62.85%) did not. Additionally, 23 (65.71%) indicated that they built autonomy in CWPD, resulting to constructive criticism, while 12 (34.28%) did not. These findings suggest that CWPD experience autonomy when their needs are addressed. Similar findings were reported by Hall and Coles (1999), who noted that individuals whose needs are met become intrinsically motivated and they actively engage in learning activities. Further still, Ryan and Deci (2007) revealed that inconsistencies in creating unhealthy environment for CWPD results into negative consequences on the children's life such as withdrawal and shyness.

The study sought to investigate the views of head teachers' on participation of CWPD in class and school activities. Table 5 captures the views of head teachers on participation of CWPD in ECE classes. Table 5 shows that out of the 5 respondents, 3 (60%) of head teachers strongly agreed that CWPD needed positive interactions with their peers, for example developing children's skills to work with others, playing cooperatively and being part of a team. However, 2 (40%) agreed on the importance of positive interactions. This finding suggests that positive interactions motivate CWPD to belong to the ECE school community hence high participation in the learning process. Additionally, 4 (20%) of the head teachers strongly agreed that CWPD required caring; this is through appreciating their personal experiences and their aspirations while 1 (80%) agreed on the need of caring for CWPD. Similar findings were reported by Wehmeyer (2013) who reported that learners who are self determined are more likely to live independently. Furthermore, 4 (20%) strongly agreed that CWPD required reassurance while 1 (80%) agreed. This indicates that the majority of head teachers understand the importance of self-determination for CWPD. This corroborates with the findings of Jarman (1996) who confirmed that self-determination influences learner participation in educational decision making.

More findings showed that 2 (40%) of the head teachers strongly agreed that CWPD needed positive interactions with their teachers, while 3 (60%) agreed. This finding implies that, a large number of head teachers did not understand the importance of teacher-learner interaction. Failure of proper teacher-learner interaction impedes learner participation. Further findings revealed that 3 (60%) of the head teachers strongly agreed that teachers need to create insight in the CWPD's learning while 2 (40%) agreed. This implies that majority of the head teachers did not understand the significance of relatedness. Further still, 2(40%) of the head teachers strongly agreed that CWPD needed to be taught tolerance, while 3 (60%) agreed. This finding indicates that most head teachers did not understand the significance of relatedness to CWPD. Findings by Pettetier et al. (1997) showed that successful intervention should emphasize relatedness skills.

Further findings showed that 4 (20%) of the head teachers strongly agreed that CWPD need to be taught challenging tasks that allow them to experience improvement in their skills and those that vary in

Table 6. Parents understanding of psychological needs and participation of CWPD.

Parents' views	Yes		No	
	Number	Percentage (%)	Number	Percentage (%)
Do you develop your child's strength and passion?	16	80	4	20
Do you work with your child on activities within his/her capabilities?	14	70	6	30
Do you discuss with your child about his/her disabilities	9	45	11	55
Do you celebrate with your child about his/her successes?	17	85	3	15
Do you give challenging tasks to your child?	11	55	9	45
Views of children living with physical disabilities				
Do you enjoy the school atmosphere?	15	75	5	25
Do you feel discriminated by your peers?	16	80	4	20
Do you like playing with your peers?	10	50	10	50
Do you like participating in class activities?	15	75	5	25
Do you like challenging tasks?	14	70	6	30

complexity. However, 1 (80%) agreed to the need of providing challenging tasks. These findings indicate that a large number of head teachers understood the need for autonomous learners. More still, 2 (40%) of the head teachers strongly agreed that CWPD needed to be autonomous through self regulating and reflecting on their capabilities while 3 (60%) agreed to the same. A study by Vansteenkiste et al. (2006b) on autonomy revealed that autonomous learners produced deeper engagements in learning activities. Similarly, 4 (20%) of the head teachers strongly agreed that CWPD needed to be encouraged not to focus on their disability while 1 (80%) agreed. When asked about their attitudes towards CWPD, one head teacher said:

> ……these children can develop skills and qualities that are absent in other children because of their disability, and the way their peers treat them, they can develop a better insight into their life and caring than many other children without disabilities. The problem is that: …….the CWPD still experiences a fairly high level of prejudice. Some believe that they cannot make it in life, and will also be subject to a substandard future life.

The study sought to investigate parents' understanding of psychological needs and participation of CWPD as well as children themselves understanding their needs. Table 6 shows parents understanding of psychological needs and participation of children with physical disability. Table 6 shows that out of the 20 parents, 16 (80%) reported that they developed their children's strengths and passion through reinforcing and praising their efforts, while 4 (20%) did not. Additionally, 14 (70%) of the parents indicated that they worked with their children on activities within their capabilities for example activities they are able to perform without straining, while 6 (30%). This suggests that the majority of the parents understood the importance of self-determination. Understanding the needs of CWPD motivates them to participate in the learning process. Additionally, 9 (45%) of parents indicated that they did discussed their children's disability, conversely, 11 (55%) of the parents indicated that they did not. These findings indicate that the majority of the parents did not support the need for self-determination for their children even though studies by Grolnick and Ryan (1989) revealed that supportive parents create a conducive environment for learners. More still, 17 (85%) of the parents indicated that they celebrated their children's successes through positive encouragements; however, 3 (15%) did not. This implies that majority of the parents supported success of their children. Further findings revealed that 11 (55%) of the parents gave challenging tasks to their children while 9 (45%) did not; an indication that majority of the parents understood the need for autonomy. When asked to explain these phenomena one parent said:

> ……..my self-esteem, image, expectations and dreams are threatened by the presence of my child's disability. The pain and disappointment generated especially at the very first face when I had the beginning awareness of disability. There is an internal and natural resistance to the unwell change of status. I am distressed and people discriminate against me. My spouse, relatives and friends have abandoned me.

Further findings showed that out of the 20 respondents, 15 (75%) of CWPD indicated that they enjoyed school atmosphere due to the stimulating environment created by teachers. Conversely, 5 (25%) did not. Additionally, 16 (80%) of CWPD felt that they were discriminated by their

peers due to their disability, while 4 (20%) felt that they were not discriminated. These findings conquer with the findings of Deci and Ryan (2002) that feeling a sense of relatedness is so important that others support learner relatedness. Additionally, 10 (50%) of CWPD indicated that they liked playing with their peers while, 10 (50%) of CWPD did not like playing with their peers because they were not invited freely in the game. In one incident a learner said:

> ……. I am always discriminated by my friends. When I ask them to invite to play with them they refuse, being discriminated makes me feel bad. I hate them; it feels like I am treated like an outcast. They do so because I am different from them.

Further findings revealed that 15 (75%) of the CWPD indicated that they liked participating in class activities while 5 (25%) did not, indicating that the learning environment favoured the CWPD. Similarly, 14 (70%) indicated that they liked challenging tasks that make them feel appreciated while 6 (40%) did not, indicating that the majority of the learners were autonomous. This finding underscores the importance of a nurturing environment for sustained learner participation through varying nourishing activities such as cooperative play and teamwork. This argument supports the contention of Ryan (1995) that CWPD need a nurturing environment.

Conclusions

The study found that Limb disability constituting 38% was the most common form of physical disability among these children. However, other forms of disability were equally common. These included hearing disability and visual disability as well as Attention Deficit Hyperactive Disorder (ADHA), Dyspraxia and dwarfism. The study also found out that 14 (40%) of the teachers had over 10 years of teaching experience. Although experience is key to handling children with physical disabilities, it does not necessarily translate into effective provision of psychological needs.

The study identified the psychological needs as falling into three categories: self-determination, relatedness and autonomy. From the findings, 70 (70%) of the teachers provided relevant learning materials to CWPD. These findings are relevant to Ryan and Deci (2007) who noted that when psychological needs are fulfilled, learners experience improvements in their well being. They also become more resilient to their disability. The study also noted positive perception from head teachers, 70 (70%) noted that provision of psychological needs is important for effective learner participation. Additionally, the study found out that 16 (80%) of the parents understand the psychological needs of CWPD. The CWPD are aware of the fact that they are physically different than most others though they must interact and learn in an inclusive environment. There is need to enhance learner participation since CWPD require more time and attention from the teacher.

The study found out that children with CWPD were temperamental and viewed other children as looking down upon them because of their disability. Some of them displayed withdrawal tendencies or were just out rightly shy. When peers are cruel to CWPD or tease and cast insulting remarks at them or even exclude them from games and group type activities, these children can undoubtedly develop psychological needs for relatedness, self-determination and autonomy. The findings suggest that although psychological needs are a requisite for learner motivation. However, these needs do not automatically lead to change in behavior. This argument supports Maslow's hierarchy of needs that the most basic level of needs must be met before individuals can strongly desire secondary or higher levels of needs.

Recommendations

These recommendations derived from the study findings include some of the put forward by the respondents:

1. There should be programmes to educate parents, caregivers and the community on the concept of disability and on the special needs of CWPD.
2. The government, and the ministry of education should promote awareness on psychological needs of CWPD.
3. There is need to put in place measures to promote barrier free environment for CWPD.
4. There should be firm implementation for the rights of CWPD.
5. More research should be carried out on interventions for participation of CWPD.
6. There is need for enhancement of early identification and interventions of the needs of CWPD.

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