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## **INFLUENCE OF SOCIALIZATION ON ACADEMIC PERFORMANCE OF LEARNERS WITH HEARING IMPAIRMENT AT INCLUSIVE PRIMARY SCHOOLS IN KENYA: A CASE IN THAWABU PRIMARY OF NAIROBI CITY COUNTY**

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## **INFLUENCE OF SOCIALIZATION ON ACADEMIC PERFORMANCE OF LEARNERS WITH HEARING IMPAIRMENT AT INCLUSIVE PRIMARY SCHOOLS IN KENYA: A CASE IN THAWABU PRIMARY OF NAIROBI CITY COUNTY**

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### **Abstract**

**Purpose:** This research aimed at determining the influence of socialization on performance of learners with hearing impairment at Thawabu Inclusive Public Primary School in Nairobi, Kenya. The objectives were to; establish modes of communication that promote socialization in an inclusive environment; establish strategies for boosting socialization to enhance academic performance; and establish challenges facing teachers in enhancing socialization to improve academic performance of learners with hearing impairment.

**Methodology:** The research design was a case study design. Structured questionnaires and interviews were used to collect data. Purposive sampling was employed to select the school and learners with hearing impairment while hearing learners were randomly selected.

**Findings:** The study found that: modes of communication among learners with hearing impairment, hearing learners and teachers create social and educational change for improvement of academic standards in the school and narrows the gap between those with hearing impairment and their hearing counterparts. Strategies like family support program (assisting children and families in language learning), family-infant-toddler program, and competent and consistent administration system promote learning. Socialization influences incidental learning of learners with hearing impairment to put them at par with their hearing peers on matters related to both academic performance and social advancement. Socialization makes learners with hearing impairment comfortable, self-esteemed, and self-actualized, hence improving educational performance.

**Unique contribution to theory, practice and policy:** The study may help to promote attitudinal, psychological and educational change in all stakeholders for inclusive education to be a success and meaningful to learners with hearing impairment. The study recommends that the government should add specially qualified teachers of learners with hearing impairment in Thawabu among other inclusive public schools in Kenya to help promote socialization and to increase inclusivity of learners with hearing impairment.

**Keywords:** *Socialization, Academic Performance, Inclusive Primary Schools*

## 1.0 INTRODUCTION

Every child has a legal right to basic and equal educational opportunity irrespective of their difficulties and disabilities. This calls for schools to modulate ways of successfully educating all children with diversity in a common setting. There is an emerging consensus that children with special needs be included in the educational arrangement set for the “normal” children. This has led to the idea of inclusive schooling, which involves the act of modifying the regular school environment, classrooms, teaching style and methods befitting all learners in an inclusive setting (Brenda & Brian, 2006). To promote inclusion of people with disabilities, an array of social policies and programs working coherently to respond and support the person with disability across their lifespan especially at school level is required (Brenda & Brian, 2006).

A joint publication between the National Disability Authority (NDA) and the Equality Authority (EA) provides an important opportunity to examine in detail the influence of social inclusion in Ireland and to examine how that impact changes over time (National Disability Authority, 2005). Specifically, the study allows us to better understand the experience of disability over time in the areas of education and social participation in regards to academic performance of learners with HI. By examining this dynamic we can better plan policy and program interventions to promote education and how and when to intervene to prevent exclusion of learners with disability (National Disability Authority, 2005).

Hearing impairment (HI) is a general term which is used to describe disordered hearing. Deafness and hard of hearing are the widely known two categories of hearing impairment. Deaf individuals are those whose sense of hearing is non-functional for processing linguistic information through audition with or without amplification (Gargiulo, 2012). The author describes learners who are hard of hearing as those individuals in whom the sense of hearing although defective, is functional either with or without a hearing aid (Gargiulo, 2012). For learners who are hard of hearing, the use of hearing aids is necessary or desirable to enhance residual hearing. A Minimum Hearing Loss (MHL) is a condition where there is difficulty in hearing spoken language at a distance or in the presence of background noise (Kuder, 2003). A study carried out by Omondi, Ogot, Otieno and Macharia (2007) showed that between 2.3 and 5.6% of school-going children in Kenya are hearing impaired.

Inclusive education of learners with hearing impairment refers to the educational process that wishes to extend to the maximum the opportunity of deaf and hard of hearing learners to attend regular classroom in regular schools within their locality. It involves the provision of necessary special education services under the responsibility and management of the classroom teacher (Gargiulo, 2012). It would therefore call for special attention by special education teachers to manage such educational settings. United Nations Convention on the rights of people with disabilities (2008) reports that Australia has joined other nations in a global effort to enhance equal and active participation of persons with special needs. Convention also states that persons with disability should be guaranteed the right to inclusive education at all levels, regardless of age, gender, color etc. and on the basis of equal opportunity. Inclusive education is therefore a process that involves the transformation of schools and other centers of learning to cater for all children with or without disabilities.

Social interaction influences inclusivity of people, learners and communities to coexist, share and develop understanding of one another. In a school environment, it promotes learners with

disabilities especially learners with HI to enrol in public schools around their homes for a better academic performance. This will put them at par with their hearing peers for competitive educational standards and job market. Hearing impairment usually affects children in several ways, such as delayed development of receptive and expressive language skills, delay in general language acquisition, lack of self-esteem and self-actualization (*(<http://www.hearinglossweb.com/olderb.htm> retrieved on December 17, 2017)*). Frequent intermingling of learners with HI and their hearing peers may narrow the gap of isolation, language acquisition and improvement of receptive and expressive language to better their self-esteem and self-actualization.

A study in the United States of America by McVilly (2004), reported that learners with hearing impairment often lack friends and experience a lot of loneliness as a result of communication barrier. Good academic results have generally been observed in learners with hearing impairment who are mainstreamed, but they also show higher degrees of isolation and psychological problems due to limited communication (Gravenstede, 2009). This implies that even in the developed countries, learners with hearing impairment are still bound to face some challenges. Shakesphere (2006), cited in Farrell (2009) affirms that even in the most accessible world, there will always be residual disadvantage attached to many impairments.

Various reports and studies confirm that the current education system has not managed to adequately respond to the needs of the vulnerable groups, specifically those with disabilities. There are equity gaps in access in terms of physical and curriculum access as well as in educational outcomes due to pervasive challenges in creating attractive learning and teaching conditions. Embakasi Sub-County in which Thawabu Primary School is located has learners from varied social and economic status. Most schools may suffer enrolment crisis as a result of parents of hearing learners withdrawing their children from these public schools because of inclusion of learners with disabilities. Some of them may not be comfortable seeing learners with disabilities learning together with their children in public schools.

The claim of poor standards of education, low pace of content coverage, the thought of disabilities being congenital and many other allegations crop up. Despite all these, it is advantageous for learners with HI to learn together with their peers with hearing to interact and learn from one another. It enables them to improve on their hearing ability, spoken language, vocabulary, self-esteem and self-actualization (Wamocho, 2003). Learners with HI usually feel withdrawn due to communication barrier. Such withdrawal leads to isolation and limits socialization which is key in boosting self-esteem, confidence and actualization to promote academic performance of learners with HI in an inclusive setting. Socialization of learners with HI in public schools should be encouraged in order to make learners with disabilities comfortable, relevant and at par with their peers in these schools. Socialization, self-esteem and self-actualization are some of the benefits that are brought about through inclusive education (Wamocho, 2003). Boosters of socialization are paramount in doing away with special schools which promote segregation, isolation and disintegration of those with disabilities. It therefore influenced the researcher to carry out a study on virtues of socialization on academic performance of learners with hearing impairment in Thawabu inclusive school to help them improve academic performance. The study therefore begged to answer the following questions regarding Thawabu Inclusive Public Primary School: 1) What are the modes of communication that promote socialization between learners with HI and hearing peers for enhancement of academic performance? 2) What strategies are used to

influence social interaction among learners with HI and their peers? 3) What are the challenges facing teachers in enhancing social interaction and academic performance of learners with HI?

## **2.0 THEORETICAL FRAMEWORK**

This study was based on Vygotsky's (1986) socio-cultural theory of development which focuses on language, social and cultural impact on a child's cognitive development. Vygotsky's (1986) theory points out that language, culture as well as social interaction affect each other and also influence cognitive development. This implies that all children including those with hearing impairment can be best educated in their natural surroundings, that is, their native community and a language must be developed to address them in order for learning to take place. Learners with hearing impairment should therefore be allowed to learn in the public schools within their communities because this is their most familiar environment where they could be best understood.

Schools do not exist in a vacuum. They exist in different societies with different cultures. Since different cultures stress different things and they produce individuals who differ in their way of thinking, educating learners with hearing impairment away from their cultural society will interfere with their social integration later on in life, especially after school. The socio-cultural theory focuses on the child as a product of social situation, and is between the teacher and the learner, before the child internalizes the concept. This theory recognizes that the social world mediates children's cognitive development. It highlights active participation as one of the components of the theory in facilitating dialogue hence ideas are exchanged, leading to advanced cognitive development. Such dialogue helps in moulding the child. This implies that learning is not a direct result of activity. Other people should interact with the learner and use various mediatory tools to facilitate the learning process for cognitive development to occur. In further support to social interaction as a crucial element in learning, Vygotsky (1986) argues that in a supportive, interactive environment the learner is in a much better position to advance his/her knowledge and performance to a higher level than he/she could have not done independently.

Teachers in an inclusive set up can device various tools to assist learners to complete various classroom tasks in order to enhance learning as well as cognitive development. Basically, the secret of effective learning depends on the nature of the social interaction between two or more people with different levels of skills and knowledge. The role of the one with the most knowledge, usually a teacher, is to develop ways of helping the other to learn. Vygotsky (1986) also states that cognitive development cannot be separated from its social context. This kind of context is where the learner can interact with others and use the new tools to learn. This idea implies that the learning environment must be authentic. An environment with people who use tools like language, symbols, and concepts, among others to a deaf learner is referred to as the Least Restrictive Environment (LRE).

### **3.0 METHODOLOGY**

#### **3.1. Research design**

The case study research design was adopted in conducting this study. This type of design allowed the researcher to gather information from the respondents in their natural environment.

#### **3.2. Study variables**

##### **3.2.1. Independent variable**

The independent variables were modes of communication, strategies for boosting socialization and challenges facing teachers of learners with hearing impairment.

##### **3.2.2. Dependent variables**

The dependent variable was improved academic performance.

#### **3.3. Location of the study**

The study was conducted in Thawabu inclusive public primary school in Embakasi, Nairobi City County, Kenya. Embakasi has 20 public primary schools but only one has learners with H.I (D.E.O. Embakasi office, 2016). The Sub-County was selected because it has one school with special units and practice inclusion of learners with HI in the mainstream classes.

#### **3.4. Target population**

The study targeted all learners with hearing impairment in Thawabu public primary school in Embakasi, Nairobi City County. The population of the school included; head/teacher, deputy head-teacher, seventeen teachers, nineteen learners with hearing impairment and one thousand and fifty hearing learners. The total enrolment of learners in Thawabu Primary Schools is one thousand and sixty-nine (1069). These figures were gotten from Sub-County records (DEO Embakasi, 2016).

#### **3.5. Sampling technique and sample size**

##### **3.5.1. Sampling technique**

The study adopted purposive sampling technique for individual learners with hearing impairment because they were the target for the study. In this form of sampling, the investigator relied on her/his expertise or judgment to select respondents that were representative or typical of the population (Orodho, 2009). Purposive sampling was also used to select the school under study. Simple random sampling technique was used to select hearing learners from class 4-8 (two from each class). The sampling technique was also used to select teachers who participated in the study. According to Orodho (2009), simple random sampling is a process of selection from a population that provides sample of a given size an equal probability of being selected.

##### **3.5.2. Sample size**

The study sample size comprised one (1) school (Thawabu inclusive Public Primary School one headteacher, one (1) deputy headteacher and nine (9) teachers, ten (10) learners with hearing impairment and ten (10) hearing learners, totalling to thirty-one (31) respondents (Table 3.1). This number represents more than 20% of the teachers and learners in the

selected school in Embakasi, which was adequate to contribute a sample in a study of this nature (Gay, 1992).

**Table 1: Target population**

<b>Respondents</b>	<b>Total</b>	<b>Sample</b>
Head-teacher	1	1
Deputy H/T	1	1
Teachers	17	9
Hearing learners	1050	10
Learners with HI	19	10
<b>Total</b>	<b>1088</b>	<b>31</b>

### **3.6. Research instruments**

#### **3.6.1. Questionnaires**

Questionnaires were administered to teachers, learners with hearing impairment and their hearing peers. A five-point Likert scale questionnaires were used to collect data from both teachers and learners in general. Questionnaires were used because they could collect a large amount of information in a reasonably quick pace of time (Orodho, 2009). Questionnaires ensured confidentiality and information needed was easily narrated (Kombo & Tromp, 2009). A five-point Likert scale questionnaire were teacher made which were used to gather information from the respondents and were free from biasness.

#### **3.6.2. Interview schedule**

Interview schedule were used to gather detailed information from the head teacher. The interview schedule was chosen and carried out in the head teacher's office because it created an opportunity to develop relationships with the respondent so that the researcher could get the full range and in-depth information from the respondent. The open-ended questions were used to interrogate and un-earth information that questionnaires could not deliver. The interview was to complement data collected from questionnaires.

#### **3.6.3. Observation schedule**

Observation schedule were used by the researcher to get more information on the availability of learning resources used both in classroom and outside classroom to enhance socialization and academic performance of learners with hearing impairment. It was also used to establish the mode of communication used by learners with hearing impairment as well as the methods that was used to teach them. The observation schedule was preferred as it verified the truth of the statement made by the respondents in the context of questionnaires and interview schedule. The data obtained from the observation schedule was analyzed quantitatively as it justifies the information obtained under this method to what is currently happening on the ground (Cohen, Mahion & Marrison, 2000)

### **3.7. Pilot study**

Pilot study was conducted in Wangu Primary School in Njiru, Nairobi City County. Njiru sub-county neighbours Thawabu and the participants had similar nature of disabilities. The school was selected because it provided an environment and population similar to the population for this study. The population of the pilot study consisted of one (1) school

head/teacher, two (2) teachers, five (5) hearing learners and (5) five learners with hearing impairment. These participants were not included in the actual study.

### 3.8. Validity

Content validity was adopted for the study after piloting was carried out. Unclear directions, cluster questions, and wrong phrasing of questions were opened and cross-checked. Two lecturers in the department of special needs education competent in the area were requested to assess the relevance of the content used in the instruments. Their recommendations were incorporated in the questionnaires and the interview schedules. Ambiguities detected were corrected according to their advice.

### 3.9. Reliability

Reliability was established through test re-test method. This involved administering the same questionnaires at an interval of two weeks to the same group of respondents, and then comparing the two scores. According to Creswell (2003), qualitative data can be made reliable and valid by triangulating different data sources of information by examining evidence from the sources and using it to build justification for themes. The scores of both tests were correlated and reliability established using the Spearman Rank Order Correlation coefficient (Rho) formula.

$$\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)} \quad (1)$$

where:  $\rho$  (Rho) is Spearman correlation index;

$d$  is the difference in ranks for a pair of scores;

$n$  is the number of scores within each distribution.

A reliability measure of 0.75 will be established. According to Mugenda and Mugenda (2003), a correlation coefficient greater or equal to 0.75 shows a high reliability of the instruments.

### 3.10. Data collection procedure

The researcher was personally involved in carrying out interviews with the head teacher in his office. Face-to-face guiding and prompting questions from interview schedule were used. Filling and collection of questionnaires was conducted in a natural classroom setting, where the researcher observed participants filling and handing over the questionnaires to ascertain the behaviour, participation and response of the respondents. Observation schedule was also employed to ascertain the actual facts on the ground. The researcher assured the respondents that the exercise was to take less than thirty minutes of their time but those who required more time were given.

### 3.11. Data analysis

Data was analyzed using descriptive statistical method. Responses from interview schedule were analyzed qualitatively using thematic approach. Quantitative data was analyzed using Statistical Package for Social Sciences program (SPSS). Descriptive statistics such as frequencies and percentages were used to present the data. The researcher established the completion of all the questionnaires. Data from the questionnaires were coded for analysis



purposes. This was useful in explaining variable distributions, summarizing and organizing data to make meaning and observe trends.

## 4.0 RESULTS AND DISCUSSION

### 4.1. Teachers' demographics

In the study, gender, age, academic qualifications, professional qualifications, and advanced professional qualifications of teachers were considered important in determining social integration of learners with hearing impairment, hearing peers and their teachers.

**Table 2: Demographics of teachers**

Variables	Frequency (n=11)	%
Gender		
<i>Male</i>	7	63.6
<i>Female</i>	4	36.4
Age (years)		
31-35	2	18.2
36-40	2	18.2
41-45	3	27.3
46 and above	4	36.4
Academic qualifications		
<i>Form 4</i>	4	36.4
<i>Form 6</i>	4	36.4
<i>University</i>	3	27.3
Professional qualifications		
<i>P1</i>	2	18.2
<i>Diploma</i>	4	36.4
<i>University</i>	5	45.5
Advanced professional qualifications		
<i>Bachelor and master degrees</i>	3	27.3
<i>P1 to diploma</i>	7	63.3
<i>No advanced qualification</i>	1	9.1

Out of 11 teachers in the study, 7 (63.6%) were female while 4 (36.4%) were male. From the sampling, various proportions of the representation were recorded (Table 1). Gender disparity in favor of females was realized.

It was revealed that 4 (36.4%) were of age 46 years and above, 3 (27.3%) were of age between 41 – 45 years old, 2 (18.2%) were between 36 – 40 years old while the remaining 2 (18.2%) were of age between 31 – 35 years old. The fact that 36% of teacher respondents were of age 46 and above could be a pointer to the fact that there is a wealth of experience in teaching to promote inclusive education in Thawabu public school. For inclusion to be experienced between boys and girls with hearing impairment and their hearing peers, mutual respect, understanding and use of common language among the learners and teachers must be encouraged.

The highest academic qualification of teachers of Thawabu Inclusive Public Primary School was university graduates (36.4%), followed by form four (36.4%) while the rest 27.3% were

form six school leavers. A reasonable number of teachers in Thawabu School (45.5%) had Bachelor of Education degrees, (36.4%) were Diploma teachers who had been there for quite some time in their capacity as teachers while (18.2 %) were P1 teachers for learners with hearing impairment and their peers with hearing in Thawabu inclusive Public School. Through advancement in educational studies, the current university graduate status had been achieved. The finding is supported by Ndege (2010) who reported that teacher's level of professional training determines and influences the academic out-put for academic performance of learners. Good professional qualification outlines in-depth mastery of the subject matter hence quality delivery of subject content. Learners will always relate well with teachers who adequately deliver to boost and improve academic performance.

Out of 10 teachers, (63.3%) had advanced their qualification from P1 to diploma, bachelor and master degrees, (27.3%) failed to respond completely while (9.1%) did not advance their professional qualifications. Majority of respondents who advanced their professional qualifications are some of the teachers with degrees and diplomas in Thawabu inclusive public school. Although the numbers of learners with hearing impairment in the school are still low, there is hope that the number will improve should all stakeholders double their effort to advance inclusion. Attention to inclusive education of children with hearing impairment and other nature of disabilities should be given priority in that school. The finding supports that of Ayiela (2012) who found that the gap which existed between children with disabilities in decades caused disparity hence rendered them helpless and useless was diminishing. Inclusion therefore is not only helpful in the improvement social well-being of learners with disabilities but also from being assisted by others to be self-reliant, self-actualized, self-confident and self-esteemed (Wamocho, 2003).

#### **4.2 Modes of communication promoting socialization between learners with hearing impairment and hearing peers**

Objective one of this study sought to examine modes of communication for promoting socialization for academic performance of learners with hearing impairment in an inclusive setting. In doing that, the researcher focused on key thematic areas. They included; total communication between learners with hearing impairment and their hearing peers in the study school, use of Kenya sign language by all learners and teachers, systematic and consistent use of vocalic (paralanguage that includes; volume, rate, pitch and timbre) among others.

**Table 3: Modes of communication promoting socialization between learners in an inclusive environment of Thawabu Inclusive Public Primary School**

Mode of communication	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
<b>Total communication</b>					
<i>Teachers' responses (n=11)</i>	2(18.2)	6(54.5)	2(18.2)	1(9.1)	0(0)
<i>Learners with hearing impairment responses (n=10)</i>	6(60)	2(20)	2(20)	0(0)	0(0)
<i>Hearing learners' responses (n=10)</i>	5(50%)	2(20)	0(0)	2(20)	1(10)
<b>Sign language</b>					
<i>Teachers' responses (n=11)</i>	6(54.4)	5(45.5)	0(0)	0(0)	0(0)
<i>Learners with hearing impairment responses (n=10)</i>	8(80)	2(20)	0(0)	0(0)	0(0)
<i>Hearing learners' responses (n=10)</i>	5(50)	3(30)	1(10)	1(10)	0(0)
<b>Systematic and Consistent Use of Vocalic</b>					
<i>Teachers' responses (n=11)</i>	5(45.5)	3(27.3)	1(9.1)	0(0)	2(18.2)
<i>Hearing learners' responses (n=10)</i>	2(20)	3(30)	1(10)	2(20)	2(20)
<b>Kinesthetic</b>					
<i>Teachers' responses (n=11)</i>	2(18.2)	3(27.3)	1(9.1)	3(27.3)	2(18.2)
<i>Learners with hearing impairment responses (n=10)</i>	4(40)	2(20)	2(20)	1(10)	1(10)
<i>Hearing learners' responses (n=10)</i>	3(30)	3(30)	2(20)	2(20)	0(0)
<b>Oral-aural Approach</b>					
<i>Teachers' responses (n=11)</i>	6(54.4)	3(27.3)	2(18.2)	0(0)	0(0)
<i>Learners with hearing impairment responses (n=10)</i>	4(40)	3(30)	3(30)	0(0)	0(0)
<i>Hearing learners' responses (n=10)</i>	5(50)	3(30)	2(20)	0(0)	0(0)

Note: Figures in parenthesis are percentages (%)

The findings in Table 4.2 shows that a high proportion (54.5%) of respondents were in agreement that total communication can enhance cordial relationship between learners with hearing impairment and their hearing peers to promote academic performance. Two teachers (18.2%) agreed and another (18.2%) were undecided. Only 1(9.1%) disagreed with that question. Responses of learners with hearing impairment were; Majority (60%) strongly agreed, (20%) agreed while (20%) were undecided. Responses on the same question from learners with hearing were; (50%) strongly agreed, (20%) agreed, (20%) disagreed and (10%) strongly disagreed.

Among the teachers, 72.7% it worth noting that quite a good percentage of respondents were not decided and others did not agree. This shows that some members of the school community still believe that inclusion of learners with hearing impairment in mainstream cannot work. They still cling on to stigmatization and isolation of those with hearing impairment due to communication barrier as a curse hence should be separated. Communication breakdown can be limited through total communication to usher in

socialization for improved academic performance to all learners. The finding is supported by Farrell (2009) who emphasized on the social model by pointing out that disability is removable by social change, which can minimize the effect of any impairment. It is equally supported by Gargiulo (2012) who reported that communication involves use of a suitable language to convey and decode ideas, knowledge, opinion or feelings to enable an individual contextualize fully the subject content for deeper and high-level understanding. Total communication narrows the disability gap to enable learners with hearing impairment socialize both with their hearing peers and their teachers, which enhances mutual understanding for the good of academic improvement of all.

When teachers were asked about their views on use and teaching of sign language as an examinable subject in promotion of socialization their responses were; 6 (54.5%) strongly agreed while 5 (45.5%) agreed. All the teacher respondents were in agreement that use and learning of sign language as any other subject can boost socialization of learners with hearing impairment to enhance their academic performance.

It was unanimously agreed by majority of respondents that learning and use of sign language improves socialization of both the teaching fraternity and the learners (hearing learners and those with hearing impairment) for cordial relationship which in the end enhances academic performance. Those other responses with divergent opinion could be as a result of failure to see learners with hearing impairment as complete individuals with full right of association and to learn in public schools. The finding is supported by Farrell (2009) who cited an example of barrier removal condition to people with hearing impairment in one of the historical studies by Martha's Vineyard, Massachusetts. This was an Island of the Eastern Coast of the United States of America where sign language was commonly used by hearing residents (Farrell, 2009). This brought enabling environment for deaf residents and learners to be more comfortable and felt included in the society.

All respondents were asked their views on whether systematic and consistent use of vocalic (paralanguage that includes; volume, rate, pitch and timbre) can improve socialization among learners with hearing impairment, teachers and hearing peers in the inclusive public school of Thawabu. Among the teacher respondents, (27.3%) strongly agreed, (45.5%) agreed, (9.1%) was undecided while (18.2%) strongly disagreed. Overwhelming 72.8 % responses showed that they were pro systematic and consistent use of vocalic in the inclusive school to promote socialization. All ten learners with hearing impairment strongly agreed that systematic and consistent use of vocalic improves socialization among learners and teachers in the school. This is a strong indication of longingness of learners with hearing impairment to freely associate, intermingle, communicate and share their feelings, ideas, emotions and operate at same levels with their hearing peers and teachers of Thawabu inclusive public school.

To establish whether kinesthetic (body language including facial) as a component of communication could improve socialization amongst teachers, learners with hearing impairment and their hearing peers to boost learning in an inclusive school of Thawabu teachers were asked a question. Their responses showed that 18.2% strongly agreed, 27.3% agreed, 9.1% were undecided, 27.3% disagreed and 18.2% strongly disagreed.

According to the finding of the study on kinesthetic as a component of communication responses, 45.5% teachers, 60% learners with hearing and 50% of their peers without hearing were in agreement. Responses indicated that although more than a half of hearing learner

respondents were in agreement, more than a half of teachers disagreed with this mode of communication. Therefore, majority of teacher respondents were dissatisfied with this mode of communication could be because it does not offer much to deliver when teaching. Revelation of the study is supported by Baker (2006) in a finding that the quality of socialization between teachers and learners has significant advantages on academic achievement of learners in an educational system. Education of learners with hearing impairment in Kenya has constantly trailed their hearing counterparts in academic performance as a result of communication barrier.

The overall result shows that majority of the respondents which include learners with hearing impairment; hearing learners and teachers accepted that oral-aural approach is the ideal mode of communication to spur both socialization and academic growth of learners with hearing impairment in public schools. This shows that hearing promotes language and speech which is a catalyst to socialization. The finding is supported by Libarente (2012) in a study where it was found that good relationship between teachers and learners is the most powerful element within the learning environment, forms the basis for social contact and promotes learning. Peel (2004) found that oral-aural approach to the education helps learners with hearing impairment to be able to communicate with the hearing counterparts and develop listening skills through speech and language therapy that focuses on residual hearing using assistive devices.

#### 4.3 Strategies for boosting socialization in an inclusive school

Objective two was to establish strategies for boosting socialization of learners with hearing impairment and their peers with hearing in an inclusive school setting. The objective was tackled under the following sub-headings; family support program (assisting families and children in language learning), family-infant-toddler program (organized activities to foster language and socio-emotional development), administration, research and development. Last sub-topic is a component focus on materials and resource for development strategies for boosting socialization. The results are summarized in Table 4.3.

**Table 4: Strategies for boosting socialization in an inclusive school**

<b>Boosting Socialization</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Undecided</b>	<b>Disagree</b>	<b>Strongly disagree</b>
<b>Family Support Program</b>					
<i>Teachers' responses (n=11)</i>	5(45.5)	3(27.3)	1(9.1)	1(9.1)	1(9.1)
<i>Hearing learners' responses (n=10)</i>	4(40)	3(30)	2(20)	0(0)	0(0)
<i>Learners with hearing impairment responses (n=10)</i>	3(30)	3(30)	2(20)	2(20)	0(0)
<b>Family-Infant-Toddler</b>					
<i>Teachers' responses (n=11)</i>	3(27.3)	4(36.4)	1(9.1)	1(9.1)	2(18.2)
<b>Competent and Consistent Administrative System, Research and Development</b>					
<i>Teachers' responses (n=11)</i>	4(36.4)	3(27.3)	2(18.2)	1(9.1)	1(9.1)
<b>Equipping the School with Materials and Resources for Development</b>					
<i>Teachers' responses (n=11)</i>	5(45.5)	3(27.3)	2(18.2)	1(9.1)	0(0)

Note: Figures in parenthesis are percentages (%)

Teachers responses show (45.5%) strongly agreed, (27.3%) agreed, (9.1%) undecided, (9.1%) disagreed and (9.1%) strongly disagreed (Table 4.3). Assisting children and families in language learning was found to be a very important aspect in socialization to aid learners with hearing impairment. The role of attitudinal, behavioural, emotional, language and speech is key to academic up-bringing of learners in general but more so to learners with hearing impairment. The response of hearing learners on family support program strategy show that (40%) strongly agreed, (30%) agreed while (30%) were undecided. Responses of those with hearing impairment on the same strategy show that (30%) strongly agreed, (30%) agreed, (20%) were undecided while another (20%) disagreed. The study revealed that both learners with hearing impairment (60%) and their counterparts with hearing (70%) were in agreement that assisting children and family in language learning has a role in inducing quality learning through language and speech to propel quality academic achievement of learners with hearing impairment in Thawabu inclusive school.

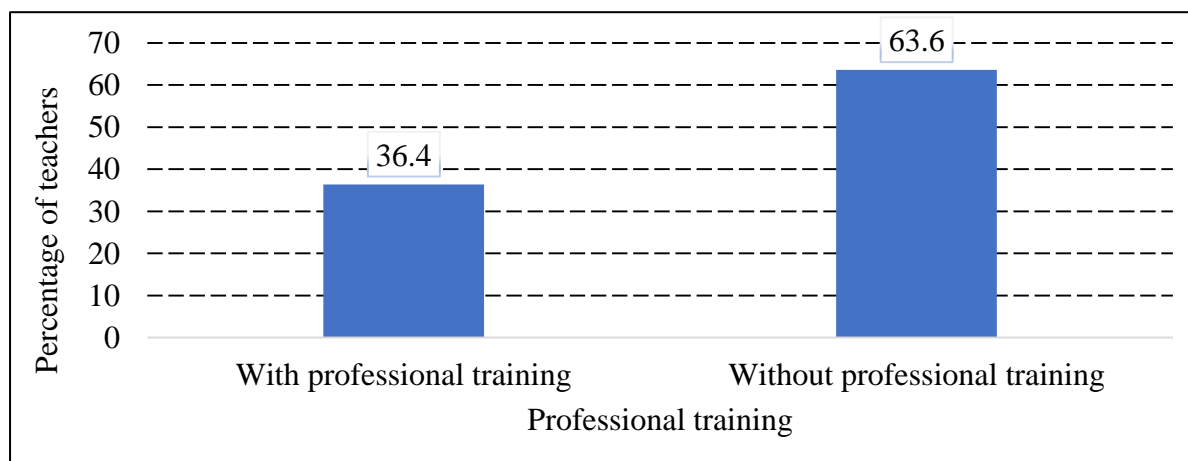
Majority of the respondents (36.4%) agreed with the statement that family-infant-toddler program (organized activities) can strengthen socialization through language practice to communize academic performance of learners with hearing impairment and their hearing peers. Twenty-seven-point three percent strongly agreed, (9.1%) were undecided, (9.1%) disagreed while (18.2%) strongly disagreed. It is evident that despite a fairly reasonable percentage (63.7%) who positively responded that family infant-toddler program could spur socialization into both learners with hearing impairment and their hearing counterparts, very little is done by parents and family members to sustain the program.

The variable sought to establish how competent and consistent administration system, research and development of learners'/teachers' progress, problems and difficulties enhances socialization for academic good of both learners with hearing impairment and their hearing peers. About 36.4% strongly agreed, 27.3% agreed, 18.2% were undecided, 9.1% disagreed and 9.1% strongly disagreed. Majority of the teacher respondents were in agreement that competent and consistent administration system, research and development is a component of socialization in Thawabu public inclusive school.

The researcher asked a question on whether equipping of materials and other resources required for learners with hearing impairment and their hearing peers could improve socialization to facilitate inclusion in Thawabu. The response to this question was; 45.50% strongly agreed, 27.3% agreed, 9.1% were undecided while 18.2% disagreed. Majority 72.8% of the teacher respondents attested to the fact that equipping materials and resources is ideal to promote socialization with ultimate aim of improved performance of learners in an inclusive school. Materials like hearing aids improve sound production in the classrooms to mention a few. The revelation of the study is supported Wanjiku (2014) who found that lack of funds for school management and development were contributors to drawback in the implementation of inclusive education system of learners with hearing impairment in public regular schools.

#### **4.4 Challenges facing teachers in enhancing socialization to improve academic performance of learners with hearing impairment**

The study also determined the challenges of enhancing socialization for improvement of academic performance of learners with hearing impairment in Thawabu inclusive school. This objective was analyzed under the following sub-topics; professional training of teachers,



resources used in teaching learners with hearing impairment, teaching experience, mode of communication, attitude towards learners with hearing impairment and methods of teaching (discussion, role taking etc.). The findings are summarized in Figure 4.1 and Table 4.

**Figure 1: Professional training of teachers of learners with hearing impairment**

From the findings of the study it can be seen that majority of teachers (63.6%) of learners with hearing impairment were not specially trained to teach learners with hearing impairment although they were handling them in an inclusive setting. This could be a pointer to why few learners with hearing impairment are registered in Thawabu inclusive school. Although the trained teachers of learners with hearing impairment were few, their attitude towards inclusion of those with hearing impairment seemed highly positive and that can be seen through the number of learners with hearing impairment in the school. No discrimination of those with disability could be realized in the school through inclusion of learners with hearing impairment in classes alongside those with hearing. It is proof of socialization that exists though at a low level, but can be improved to enable performance and number of learners with hearing impairment to increase in the school. The stronger the relationship, the greater the self-esteem, self-motivation and self-actualization hence improved academic performance. The finding is supported by Asif (2008) who found that regular class teachers need induction training to handle learners with hearing impairment in an inclusive setting.

**Table 5: Teachers’ responses on challenges facing teachers in enhancing socialization to improve academic performance of learners with hearing impairment**

Challenges facing teachers in enhancing socialization	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Resources for Teaching Learners with HI	5(45.5)	3(27.3)	3(27.3)	0(0)	0(0)
Cooperation of Learners	3(27.3)	4(36.4)	4(36.4)	0(0)	0(0)

Note: Figures in parenthesis are percentages (%); N=11

A question was asked to that effect to establish what availability of resource materials to be used on learners could do to enhance socialization, inclusion and good academic performance. Three teachers 27.3% strongly agreed, 27.3% agreed while 45.5% were undecided. Majority of the teachers 54.6% were in agreement that the resources availed for use by learners with hearing impairment determines the degree of involvement in any discussion which results in the beginning of socialization and engagement in learning.

This study examined adaptation of cooperation of all members in the inclusive school. Learners with hearing impairment would embrace comfort and liking of the school environment if the mode of communication is common, to promote cooperation. When teacher respondents were asked their views in that regard, two (18.2%) strongly agreed, (36.4%) agreed and (36.4%) were undecided. The finding shows that 54.6% of the respondents were in agreement that cooperation among learners with and without hearing impairment can initiate socialization which would lead to informed decision and ideas for academic growth. Cooperation amongst learners would encourage group and class discussions, sharing of ideas and problems to bring forth socialization. This could mean that common understanding and mode of communication amongst learners with hearing impairment and hearing peers which makes them part ways would be bridged to enhance comfort and confidence. It promotes strong bond and interrelationship in the inclusive school hence self-esteem to pursue high educational achievement.

## **5.0 CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Conclusions**

Socialization influences incidental learning of learners with hearing impairment to put them at par with their peers on matters related to both academic performance and social advancement. It equally boosts their morale through use of varied modes of communication, group discussions, class discussion and approaches to other people around them in the study school. This is very important to learners with hearing impairment as it helps in improving self-esteem, self-actualization and confidence in them.

Teachers and family members of learners with hearing impairment would promote socialization through use of varied strategies such as (family support program, family-infant-toddler, materials & resources program and communication modes to spur academic growth of learners with hearing impairment in inclusive settings in public schools. Socialization establishes cooperation in the study school through enhanced communication modes amongst learners with hearing impairment, teachers and their parents.

Socialization of learners with hearing impairment, their hearing peers and teachers in Thawabu inclusive public school in Nairobi County improves academic performance of learners with hearing impairment. The role played by socialization in Thawabu inclusive public school is splendid and pivotal in enhancement of inclusive education and social advancement of learners with hearing impairment, leading to positive educational direction for the learners. A number of learners and teachers in the study school could improve their relationship with peers, teachers and other people through improved socialization for better academic performance.

Even though majority of teacher respondents were not specially trained for learners with hearing impairment, they showed positive attitude towards inclusion of learners with hearing



impairment in Thawabu Inclusive School. Teachers and learners need to adjust in upholding socialization with one another for good of education and social growth in the school. A number of the teachers were not professionally qualified in handling learners with hearing impairment, but were willing to advance their professional training to enhance inclusion of learners with hearing impairment in public schools.

## **5.2 Recommendations**

These implications are made based on the findings of the study;

The government, teachers, learners, the community, the school sponsors and NGOs should work together to promote strategies and communication modes to enhance education standards of learners with hearing impairment. All the stakeholders should fully be involved to make it possible for learners with hearing impairment fit well in an inclusive school. Teachers, learners and the community should accept, recognize and use common modes of communication both at school and homes of learners with hearing impairment. This will boost socialization between the learners with hearing impairment and the hearing lots which should translate into good academic performance.

The government to initiate strategies of financing and maintaining systematic campaign for smooth running of inclusive schools to ensure socialization of learners with hearing impairment for their academic performance. The headteachers should engage the non-governmental organizations, the faith-based organizations, individual well-wishers and the community in mobilizing resources especially for provision of modern assistive devices for communication of learners with hearing impairment.

The Teachers Service Commission should post more specially qualified teachers of learners with hearing impairment in Thawabu Inclusive Public School to help promote socialization in the school. This will eventually eradicate isolation of learners with hearing impairment to promote their academic performance. This will ensure that learners with hearing impairment gain confidence and self-esteem to narrow the gap between them and their hearing peers. Equally, more teachers should be trained to cope with the rising demands of the learners with hearing impairment and to usher in socialization for inclusion of learners with hearing impairment in public schools.

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