Psychological Dispositions of Depression and Academic Performance of Learners with Visual Impairment in Selected Special Primary Schools in Kenya

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Abstract:- **The aim of this study was to establish the influence of depression levels on academic performance of learners with visual impairment. A descriptive survey study design was used to carry out the study in special public primary schools for learners with visual impairment in Kenya, namely: St. Francis Primary school- Kapenguria, St. Oda primary, Thika primary and Kibos primary school. The study group consisted of 4 head teachers, 5 class teachers, 2 teachers in charge of guidance and counseling and 98 learners with visual impairment were selected for the study. Data was collected through questionnaires for class teachers and students with visual impairment, and interview schedules for the head teachers and teachers of guidance and counseling. The collected data was cleaned, coded and analyzed using descriptive statistics such as frequencies and percentages with the aid of SPSS version 21.0. Quantitative data was presented using tables, bar-graphs and pie-charts. Mean and standard deviation were also used to describe the distribution of depression dispositions of learners with visual impairment. Qualitative data were categorized into patterns, presented using texts and discussed. Findings revealed that both male and female learners with total blindness and that had high level of depression were more affected by academic performance than those with low vision. The study concluded that learners with impaired vision were less able to perform activities of daily living, less mobile, more isolated, suffer higher rates of depression and had a reduced overall quality of life when compared to their sighted counterparts. The study recommended that the Government should ensure that special schools for learners with visual impairments have professional counselors who will assist the learners with VI in dealing with their emotional and behavioural disorders. The findings of the study may be useful to the school administrators, doctors, teachers and other paraprofessionals in special needs education in executing measures that would moderate the possible negative effects of depression.**

Keywords: **Depression, Academic performance, Learners with Visual Impairment**

I. INTRODUCTION

Depression is a common mental condition that exhibits depressed mood, loss of interest, low self-worth, poor concentration, disturbed sleep, low appetite and feelings of guilt, observed in anybody regardless of age, gender, or socio-economic background (American Psychiatric Association, 2013). Based on the context of this study, learners with visual impairment may sometimes go through many changes and experiences such as emotional, academics as well as discovering their identity with psycho-social and their visual conditions. Nevertheless, emotions play a major role in the teaching and learning as they create an impact on learner's motivation, regulation and academic progress (Ahmed, Firas, Tang, Azmed & Ahmad, 2013). In this regard, individuals who are blind or had low-vision faced the constant challenge of psychologically and socially adjusting to their disability. Researchers investigated the role of emotions and behaviour in children with special needs and the findings show that different emotions had negative, positive or neutral effect on learner's attitudes, behavior and ability to comprehend meaning (Kimel &Volet 2010; Pekrun, 2011).

Studies conducted in the United States of America (USA) on the role of negative emotions on cognition showed that negative emotions negatively affected the academic achievement of all learners, including learners with visual impairment (Dobson, 2012). In developed countries such as Britain, USA, Germany and France support for teachers was given in that they were provided with opportunities to learn the skills of negotiation, consultation, conflict and classroom management that would help increase their confidence as they handled learners with emotional and behavioural disorder in schools for the learners with hearing impairment (Ratcliff, Jones, Costner, Savage-Davis & Hunt 2010). Psychological challenges related to depression have significant implications for the lives, academic performance and general behaviour of learners, especially those with visual impairment. According to 3, learners who reported experiencing at least one period of depression-like symptoms were significantly more likely to face academic challenges that those without symptoms, in terms of lower grade. Moreover, poor classroom performance is proportional to the daily frequency of students' depression symptoms (Hagge & Westergren, 2006).
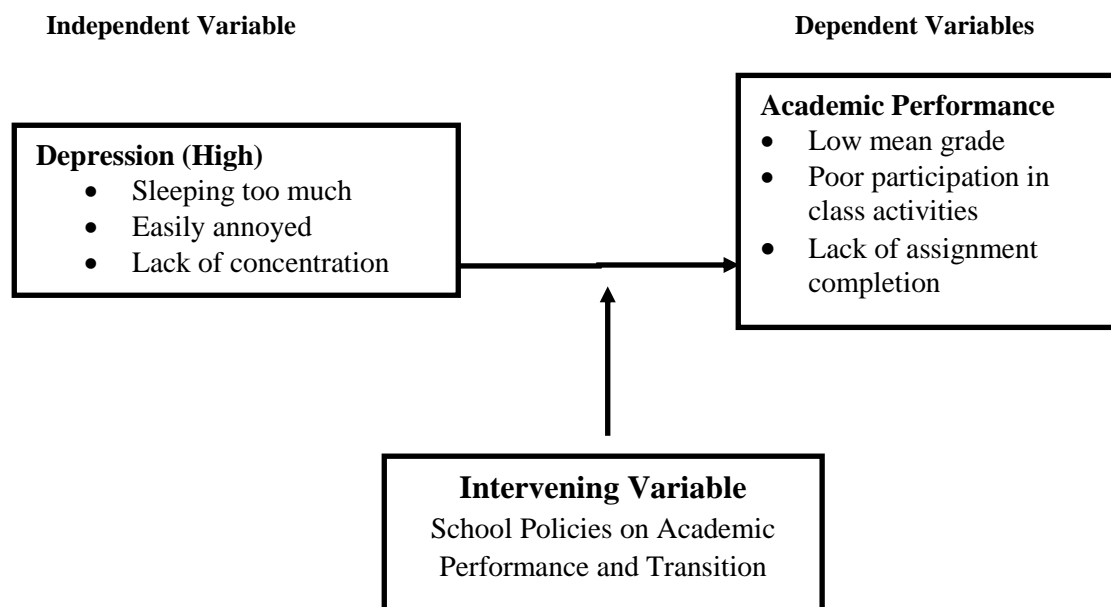
In Kenya, Kiarie (2004) conducted a study on education of students with visual impairments in Kenya and observed that vision problems could also be detected by teachers in general educational classrooms using behavioural characteristics that indicated visual function problems. However, both international and locally-based studies failed to specifically focus on depression which is also significant in determining the academic achievement among learners with VI. They had primarily focused on the various challenges that students with visual impairment faced in their attempts to acquire education and had remained largely silent on emotional and behavioural disorders among visually impairment students. This paper presents data from a study of the learners with visual impairment in special schools in Kenya. The descriptive study sought to address three major areas of the subject: the depression status across gender and the intensity of visual impairment, predispositions of depression among learners with visual impairment and the effect of depression on academic performance.

1.1 Purpose of the Study

The purpose of this study was to establish the influence of depression on academic performance of learners with visual impairment in selected special primary schools in Kenya.

1.2 Conceptual Framework

Independent Variable

Dependent Variables

Depression (High)
- Sleeping too much
- Easily annoyed
- Lack of concentration

Academic Performance
- Low mean grade
- Poor participation in class activities
- Lack of assignment completion

Intervening Variable
School Policies on Academic Performance and Transition

II. LITERATURE REVIEW

2.1 Influence of Depression on Academic Achievement of Learners with VI

Depression has been linked to social cognition deficits which are associated with poor social competence, interpersonal skills and communication (Boara & Berk, 2016). In fact, depressive disorders are the most prevalent types of mood disorder which are charaterized by persistent and severe low mood or loss of enjoyment and interest, associated with functional impairment and suffering. As exhausted and demonstrated by the American Psychiatric Association (2013, p.155), the presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes that intensively affects the individual's ability to function are the common features of all the depressive disorders. Basing on gender, Bradley (2001) opines that girls are much more likely to be diagnosed with depression than are boys, particularly both with special needs. Depression had a high occurrence and connection with both memory retention and academic achievement and its symptoms were: endless sadness, afflict or distress, discouragement, low self-esteem and interest in daily activities.

Yousefu, Mansor, Juhari, Redzuan and Talib (2010) investigated the existence of a correlation relationship between age, depression and academic attainment among adolescents in Malaysia, amidst 400 students (200 boys and 200 girls) between ages 15-19. The results revealed that 27.5% of the boys and 31.5% of the girls were depressed and that depression and academic achievement were significantly correlated, $r = -0.22$, $p \leq 0.000$. The study proposed that along with academic achievement, mental health be established in school settings using platforms such as educational guidance and counseling, giving instructions of life skill programs and psychotherapy (Yousefu et al., 2010).

Hallemani, Kale and Gholap (2012) conducted a research to evaluate the level of stress and coping strategies appropriate for adolescents with visual impairment in India. The overall level of stress experienced by adolescents with visual impairment revealed that 42(52.5%) of respondents had moderate level of stress, 36(45%) of respondents had mild

level of stress and 2(2.5%) of the respondents had severe level of stress. The analysis revealed that there was a statistical significant association between the stress levels of adolescents with visual impairment and their school performance. From the findings of Hallemani et al. (2012) it was evident that depression negatively affected memory, academic achievement and consequent school transition of learners.

In Nigeria, Busari (2012) investigated whether there was a relationship between academic performance, depression syndrome and age respectively in learners of ages ranging fourteen to twenty learners with VI. In the study, 1200 learners with visually impairment were involved in the study six hundred boys and six hundred girls. The results showed that 26.5% of the boys and 30.7% of the girls were depressed and that depression syndrome and academic performance were correlated, r = -0.24, p≤0.000. Depression in teenagers had turned out to be very critical considering its pervasiveness, future occurrence and malfunctioning in the distressed learner (Khasakhala, Huurre, Kamulainen & Aro, 2012).

In Kenya, depressive symptoms and signs were not as high as had been realized in other countries across the world. Studies carried out revealed that, among learners in primary schools seven to eight had depressive disorders which were approximately 2% of which four to eight percent were teenagers (Wanjiru & K'kokul, 2013). The findings therefore stated that practical importance of the treatment of depressive signs and symptoms was found to be 26.4%. Henceforth, there was little research on how depression affects memory, academic performance and transition of learners with visual impairment, especially in Kenya. Thus, the proposed study sought to fill the gap.

III. METHODOLOGY

3.1 Research Design and Target Population

Descriptive survey design was used for the purpose of this study. The study targeted a population of 1005 respondents comprising of 4 head teachers, 17 class teachers, 4 teachers in charge of guidance and counseling and 980 learners with Visual Impairment drawn from special schools including; Thika primary school, Kibos primary school, St Francis-Kapenguria primary school and St Oda primary school.

3.2 Sampling Technique and Sample Size

The study employed the use of stratified sampling technique to select the sample. The strata consisted of key informants that included the head teacher of the special schools, as well as class teachers, teachers in charge of guidance and counseling. The four selected special schools formed the strata of the study and 5 class teachers, 2 teachers in charge of guidance and counseling were purposively sampled. 98 learners with visual impairment were selected using stratified random sampling leading to a total sample of 109 respondents.

3.3 Research Instruments

Questionnaires and interview schedules were used to collect data. The questionnaire had two sections A (which was used to capture demographic information of the respondents like age, gender, professional qualifications and years of teaching experience) and B (which had both closed and open-ended items addressing the objectives of the study i.e. level of withdrawal, levels of depression, anxiety and shame among learners with visual impairment and how these affected their academic performance. The items were weighted on a 5-point Likert scale of Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. The interview schedule for head teachers and teachers for guidance and counseling were used to collect their opinion on the subject matter. The interview schedule was preferred since they were able to collect in-depth information on the research questions.

3.4 Pilot Study

Piloting of the research instruments was done in Likoni Primary School for Learners with Visual impairment in order to establish their reliability. This school was excluded in the final sample during the actual data collection. Questionnaires were distributed to a sample of 10 selected learners with VI consisting of 5 boys and 5 girls. Interviews were also conducted on the guidance and counseling teacher and the head teacher. The respondents were selected because they had similar characteristics with those of the final study.

3.5 Data Collection Procedure

The study focused on the use of primary data which was collected by administering interview and questionnaire to the sample population. Upon receiving permits from relevant authorities, data were collected. Participants were subjected to sign the consent form before participating in the study. Teachers were given a questionnaire each and were left to respond at own convenience and return them upon completion by a given date. The completed questionnaires were later collected and safely kept for analysis. Consequently, questionnaires which were prepared in Braille were administered by the researcher to the sampled visually impaired learners with the help of teachers through a drop-and-pick-later technique. The researcher interpreted each item in the questionnaire and presented them in Braille before the respondents were allowed to fill. Interviews were conducted on the guidance and counseling teachers which involved probing the interviewees by asking open questions to obtain in-depth information. The exercise took approximately 45 minutes.

3.6 Data Processing and Analysis

Data collected from the field were cleaned, coded and recorded. Quantitative data were coded and analyzed using Statistical Package for Social Sciences (SPSS version 21). Descriptive statistics were used to analyze these data to present percentages and frequency counts. The analyzed data were presented in figures and tables generated using SPSS.

For Inferential statistics, chi-square test was used to test for significance at 95% confidence level. Qualitative data were analyzed thematically by organizing them into similar themes based on research objectives and tallying similar responses. Qualitative data were presented using texts and direct quotes from the respondents.

IV. RESULTS

This section presents the data collected from the field and its analysis based on the achievement of the study objective. During the study, 5 teachers, 2 teacher-counselors, 2 head teachers and 80 learners with visual impairment took part in the study. Table 1 presents the results on the level of depression analyzed against gender and intensity of visual impairment among learners who took part in the study.

Table 1: Level of Depression with respect to Gender and Intensity of VI

Gender and intensity of VI		High		Moderate		Low		Nil	
Male	TB	3	60%	1	20%	1	20%	-	-
	LV	2	40%	1	20%	2	40%	-	-
Female	TB	3	60%	2	40%	-	-	-	-
	LV	-	-	2	40%	1	20%	2	40%

Key: **VI**=Visual Impairment, **TB**=Totally Blind, **LV**=Low Vision

Results from Table 1 showed that both male and female learners who were blind were equally depressed. This was indicated by 3(60%) of the teachers who reported that male learners who were totally blind had high level of depression. None of the teachers reported any probability of high withdrawal among female learners with VI. However, there was a difference in the level of depression among learners with low vision in both genders. These findings implied that there was no difference in the level between male and female learners with regard to the condition of being blind; however, the level remained high in both genders.

Learners were asked to rate indicators related to depression behaviour using 5-item Likert scale (Strongly Agree=5, Agree=4, Undecided=3, Disagree=2 and Strongly Agree=1). The results are presented in Table 2.

Table 2: Depression Reactions of Respondents

Statement	N	Mean	Std. Dev
Little interest or pleasure in doing things	80	2.82	0.88
Trouble falling or staying asleep, or sleeping too much.	80	2.94	0.85
Feeling bad about yourself- or that you are a failure or have let yourself or your family down	80	2.28	1.11
Trouble concentrating on things, such as reading the newspaper or watching television.	80	2.97	0.81
Thoughts that you would be better off dead or hurting yourself in some way	80	2.27	0.89
Not being able to stop or control worrying	80	2.68	1.09
Worrying too much about different things	80	3.67	1.16
Being so restless that it is hard to sit still	80	2.71	1.09
Becoming easily annoyed or irritable	80	3.55	1.08
Feeling afraid as if something awful might happen	80	2.56	1.13
Overall mean		**2.86**	

Findings from Table 2 showed that most learners with VI showed their depression behaviours by worrying too much about different things (mean=3.67) followed by 'Becoming easily annoyed or irritable' (mean=3.55). This implied that worry, anger, restlessness, poor concentration and oversleeping were significantly linked to depression among learners with VI. This was supported by Busari (2012) who also revealed that depression had a high occurrence and connection with both memory retention and academic achievement and its consequences were: endless sadness, afflict or distress, discouragement, low self-esteem and interest in daily activities.

To establish whether there was a relationship between depression and academic performance of learners with visual impairment, mean scores of learners' academic performance were calculated by adding the total marks for the previous three terms and dividing by the number of learners, in each level of depression. Data was organized as per the category of learners and analyzed using frequency and percentages. Mean scores of end term examination were obtained from the

teacher's opinions as measured using a score-scale of high (70 and above), above average (50-69), average (40-49) and below average (39 and below). The results were summarized in Table 3.

Table 3: Depression and Academic Performance of Learners with VI

Category of Learners	Level of depression	Frequency	Percentage	Mean score of end term examination
Male: TB	High	29	48.8	30.34
	Low	10	12.5	41.34
Male: LV	High	5	6.3	46.21
	Low	9	11.3	60.45
Female: TB	High	10	12.5	37.36
	Low	-	-	-
Female: LV	High	7	8.8	48.45
	Low	10	12.5	67.82
TOTAL		80	100	

As it can be seen in Table 3 both male and female learners who were blind with high level of depression were equally negatively affected in academic performance (means score for male=30.34; means score for female=37.36). This was inconsistent with the finding of Yousef, Mansor, Juhari, Redzuan and Talib (2010) which revealed that girls were more depressed than boys (27.5% of the boys and 31.5% of the girls) depression was significantly correlated to academic achievement. Similarly, Khasakhala, Huurre, Kamulainen and Aro (2012) found that the majority of those who suffered most from this syndrome were girls as compared to the boys. The findings of the current study implied that, keeping the type of visual impairment and the gender of learners constant, the higher the level of depression the lower the mean score of end term examination. Hence, depression had a negative effect on academic performance of learners with visual impairment. This was in agreement with Hallemani et al., (2012) who also revealed that there was a statistical significant association between the stress levels of adolescents with visual impairment and their school performance.

Teachers were also asked to show whether the depression among learners with VI in school affected their transition from one class to the next. In an explanation, teacher B from school 2 explained:

"When learners with visual impairment perpetrated with depression, their interests in learning is lowered and in this psychological condition one would like to do something else different from engagement in learning activities."

The above statement was buttressed by teacher C from school 3 when she responded:

"Depression is common with most of our children. But we are normally keen in studying their behaviours and once we identify this kind of disturbance, we either engage the child in play activities just to bring their happiness back or we engage the child in counseling."

During an interview with the respondents, guidance and counseling teachers were asked to briefly describe their observation about the levels of depression exhibited by learners with visual impairment in their school. In a statement by the first respondent, it was revealed that depression began from home.

"Family conflicts are arising between immediate family members with respect to expectation for the learners with LV. Pre-conceived ideas may influence how a relative misinterprets a person's level of visual competence or actions. For example, parents and grandparents of learners with LV may view them as sighted and become annoyed and angry when they do not always initiate interactions with them."

V. CONCLUSION

The study concludes that learners with impaired vision were less able to perform activities of daily living, less mobile, more isolated, suffer higher rates of depression and had a reduced overall quality of life when compared to their sighted counterparts. Children with visual impairments often had limited interactions with their environments, less reason to explore interesting objects, and as a result missed opportunities to learn.

VI. RECOMMENDATIONS FOR PRACTICE

Curriculum developers should incorporate social skills as part of the curriculum for learners with VI. This would help pupils with VI become more socially competent in the following areas: first, develop effective interaction skills, which included social initiations, turn taking, gaining entry into a group and using auditory cues to assist with the interpretation of body language. Second, the learners would be able to use a combination of senses to help support and interpret social encounters with peers, family members and asking for assistance when needed in social situations.

The government should ensure that special schools for learners with visual impairments have professional counselors who will assist the learners with VI in dealing with their emotional and behavioural disorders that arise from negative social experiences at school, family and the community.

The government should scout for donor support towards buying assistive items, which may be too expensive for some learners. The government has currently waved taxes on materials and equipment for persons with disabilities. However, the equipment is still expensive for some parents and stakeholders. Educators should also establish endowment funds to directly assist those victims who are needy.

Educators, community and even families should organize activities for learners with LV to interact with the sighted. The activities include among others, for example, games competitions, tree planting at school and community. This will boost their social skills and esteem, for example, how to take turns and also getting into an ongoing conversation.

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