

Psychological Dispositions of Anxiety among Learners with Visual Impairment: A Study of High School for the Blind, Thika

Mrs. Anne Wanjiru Mbugua

Department of Psychology
Mount Kenya University
P.O. Box 342-01000, Thika, Kenya

Dr. Florence K'Okul

Chair, Department of Psychology
Mount Kenya University
P.O. Box 342-01000, Thika, Kenya.

Abstract

The study sought to investigate the psychological dispositions of anxiety among learners with visual impairment. The study proceeded from the idea that available literature on visual impairment reveal that students with such a disability experience test anxiety at higher rates than their peers. Using High School for the Blind Thika as its case study, this study examined the nature and manifestations of anxiety among students with visual impairment, identified and analysed differences in psychological dispositions and examine the measures that need to be put in place to accommodate visually impaired learners and to lower the anxieties. The target population for this study was students at Thika High School for the Blind. The researcher employed stratified random sampling technique in selecting the participants from the four stratum. Brailled and Large Print Questionnaires and interviews were used as methods of data collection. Data from the field was cleaned, coded and entered in readiness for analysis using SPSS version 17. Findings from the study showed that visually impaired students experience anxiety at different levels and this affects their psychological stability, makes them unable to concentrate on their studies and in some cases, feel neglected and unappreciated. These findings are useful to the education stakeholders, Ministry of Education, Parents, Non-governmental organizations and other stakeholders involved in the education of learners with visual impairment in Kenya and beyond.

1.1 Introduction

Education is of utmost importance not only to an individual but also to the country for it enables individuals make positive contributions to their well being as well as to that of the society. Through education, members of the society are able to better understand how to deal with social and societal phenomena. This is important to the social development of the individuals and society as a whole. However, for equal social development to be experienced, all stakeholders must be involved regardless of their physical conditions. One such a condition is visual impairment, which forms the thrust of this paper. Visual impairment is a condition that spans and affects all nations – developed, developing and under developed. Resnikoff et al. (2004) there are approximately 161 million individuals in the world who are visually impaired. Out of the 161 million, 37 million are blind. Visual impairments can be classified into partial visual impairment and full visual impairment. Various scholars such as Heiman & Precel (2003), Lufi, Okasha, & Cohen (2004) and Peleg (2009) have examined the prevalence, causes and measures that should be adopted to effectively manage visual impairment. This paper, however, interrogates the psychological dispositions that students with visual impairment face in the learning process.

Various researches have been conducted on the challenges that students with visual impairment face in their learning environments. Lieberman and Houston-Wilson (2002) investigate barriers that students with visual impairment face when learning. Findings of the two scholars revealed that lack of competent teachers, adequate programming and timing, and specialized equipment are some of the challenges facing learning institutions with visual impairment learners all over the world. Moswela and Mukhopadhyay (2011) revealed that students with disabilities face various challenges in the learning process.

The study cites lack of necessary resources to facilitate learning, lack of policies, lack of support systems and mechanisms, and lack of necessary skills and knowledge as some of the challenges facing visually impaired learners. There are various measures that learning institutions have put in place to make the learning environment conducive for learners with visual impairment. For instance, Douglas (2001) argues that the British government has adopted the use of information and communications technology (ICT) to facilitate and enhance the learning process of students with visual impairment. By so doing, students with visual impairment are more able to participate in their learning. Wolffe et al (2002) argue that teachers who teach students with visual impairment have to have special skills and an expanded curriculum. In addition, they are trained on how to better communicate with the students with visual impairment.

Empirical evidence has shown that students with visual impairment face various anxieties in the course of their learning process. During tests – for instance – students with visual impairment experience higher levels of anxiety when compared to their sighted counterparts. Students take many tests throughout their school years. The results are used to make important decisions about their educational programs, including determining levels of curriculum mastery, report card grades, grade level promotions, honors, and graduation (Carter et al., 2005). Educators also use testing data to monitor students' learning progress and to assess the effectiveness of their instruction and identify ways to improve it (Salend, 2009). In Kenya, Kiarie (2004) argues that the following are some of challenges that Kenyan students who have visual impairment face: lack of resources to facilitate the learning process, the lack of a comprehensive syllabus and curriculum, and the lack of competent personnel.

However insightful the reviewed studies are, they have primarily focused on the various challenges that students with visual impairment face in their attempts to acquire education and have remained largely silent on psychological dispositions of anxiety among visually impairment students. It is the contention of this paper that anxiety plays a pivotal role in the overall academic performance of learners, especially those with visual impairment. Therefore, while using High School for the Blind Thika as its case study, examine the psychological dispositions of anxiety among students with visual impairment. In this, the study sought to investigate the nature and manifestations of psychological dispositions of anxiety among students with visual impairment. We sought to identify and categorise the nature of these dispositions and examine measures that the schools have taken to facilitate and make the learning atmosphere conducive for students with visual impairment.

1.2 Methodology

1.2.1 Research Design

Descriptive research design was used in determining the psychological dispositions of anxiety that learners with visual impairment face. The descriptive design facilitated the collection of information directly from individuals using questionnaires and interviews based on the sample selected (Orodho, 2004). It also assisted the researcher in formulating principles of knowledge regarding visual impaired learners and to give deep insights into the learners' attitudes, opinions and problems as well as to conveniently collect data from a large number of participants through various methods, in this case, observation, interviews and questionnaires were used. The researcher employed stratified random sampling in selecting students and teachers from the target population at High School for the Blind Thika. Stratified random sampling allowed the classification of the target population into four homogenous groups and then selecting participants from these groups randomly during the research (Mugenda & Mugenda, 2003; Orodho, 2004). Thus, the student population was divided into the following strata: (1) form one; (2) form two; (3) form three; (4) form four from where the researcher selected the participants randomly.

1.2.2 Scope and Delimitation of the Study

The study was conducted at High School for the Blind Thika. The teachers and students in this institution constituted the target population. Selected teachers for the study were interviewed specifically on the psychological dispositions of anxiety facing learners with visual impairment face and how they mitigate them in their teaching. Selected students for the study were used to identify the nature of anxieties that students with visual impairment face.

1.2.3 Data Collection Procedures

Primary data for the study was collected using questionnaires and structured interviews. The researcher prepared Braille and Large Print questionnaires for student respondents since they are visually impaired.

Selected teachers and the two school principals were interviewed on various characteristics and dispositions that learners with visual impairment exhibit during their day to day interactions with the learners. The researcher also used observation to deduce the respondents' behavior to various test situations and the facilities and equipment put in place by the institution in making the learning environment conducive. The teachers and the two principals provided the researcher with an in-depth insight on anxieties and challenges that students with visual impairment face in their learning processes.

1.2.3 Data Analysis

Kombo and Tromp (2006) define data analysis as “the examining of the coded data critically and making inferences” (56). Data was first inspected thoroughly for its completeness, to identify mistakes such as inappropriately answered questions and wrongly spelt words. Secondly, the data was sorted into various categories such as gender, level of education etc. Thirdly, the data was coded, processed, analyzed and tabulated in form of graphs, tables and pie charts by Statistical Package for Social Sciences (SPSS) version 17. For easier analysis and with the help of thematic analysis, data was categorized into themes and subthemes. Statistical measures such as frequencies, percentages, correlation coefficients, and chi-tests were used in the analysis and presentation of data findings.

1.3 Analysis and Discussion of the Findings

1.3.1 Demographic Information of Respondents

In any research, the background information of the respondents is considered very crucial not only for subsequent discussions of the findings but also for the authenticity and generalization of the results (Bernard and Ryan, 2010). This section, therefore, presents respondents' background information considered crucial for discussions in this study such as age, class level and duration of impairment. The respondents from the field gave their demographic details which describe them for the purpose of statistical verification as recommended by Kothari (2008). Kothari observed that for any research study to have credibility, the characteristics of the respondents must be presented. In particular, the analysis of the demographic information of the respondents was aimed at identifying and analyzing differences in psychological dispositions of learners with visual impairment in terms of gender, class and category of visual loss. The findings are analysed as follows:

1.3.1.1 Gender of the Respondents

The gender of the respondents was considered an important variable of analysis because the study held the view that levels of anxiety are felt and managed differently across gender. To this end, findings on the gender of respondents are presented in figure 1.1 below:

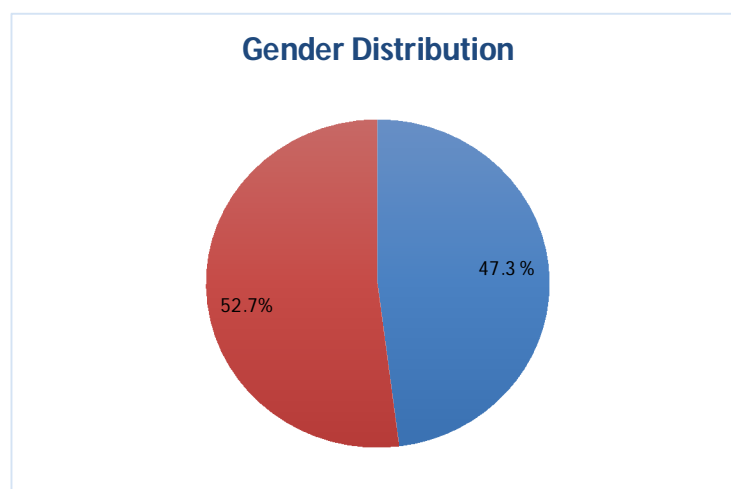


Figure 1.1: Gender of Respondents

Results in figure 1.1 above show that respondents were almost equally balanced in terms of gender with 52.3% female and 47.3% male respondents.

1.3.1.2 Age of the Respondents

The age of the respondents was viewed as a crucial component in this study as it revealed the categories of people participating in this research process. Hence, findings on the age of respondents are presented in table 1.1 below:

Table 1.1: Age of respondents

Age group	Percentage (%)	Cumulative Percent
Below 15 years	9.3	9.3
16-20 years	69.8	79.1
21-25 years	14.0	93.0
Over 25 years	7.0	100.0
Total	100.0	

Results from table 1.1 indicate that majority of the respondents (69.8%) were aged between 16 and 20 years, 14% were aged between 21 and 25 years, the youngest aged below 15 years comprised 9.3% while the eldest aged over 25 years comprised 7% of the total respondents.

1.3.1.3 Nature of Visual Impairment

The study considered the nature of visual impairment as an important variable because it's the supposition of the study that the nature of visual has a direct link to how anxiety is manifested among learners with visual impairment. The findings on nature of visual impairment are presented in figure 1.2 below:

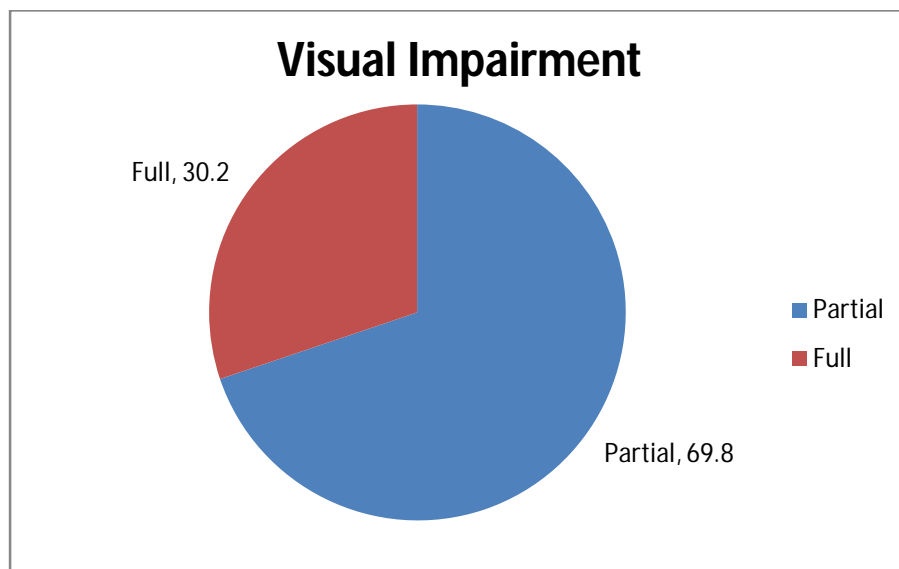


Figure 4.2: Nature of impairment of respondents

Findings in figure 1.2 show that 30.2% of the respondents have full impairment while 69.8% have partial impairment. This is very crucial in explaining differences in anxiety levels among the respondents.

1.3.1.4 Duration of Visual Impairment

The duration of impairment was considered an important variable in this study because it plays part in understanding the levels of anxiety which learners with Visual impairment experience. The findings on the duration of visual impairment are presented in table 1.2 below:

Table 1.2: Duration of Visual Impairment

Impairment period	Percentage (%)	Cumulative Percentage (%)
0-4 years	18.6	18.6
5-9 years	32.6	51.2
Over 10 years	48.8	100.0
Total	100.0	

The results in table 1.2 indicate that 48.8% of the respondents have had visual impairment for over 10 years, 32.6% had 5-9 years of visual impairment while a minority 18.6% had visual impairment of less than 4 years. These findings will have a bearing on the anxiety levels that the respondents experience with likelihood that respondents with a longer duration of visual impairment experience lower levels of anxiety while those with the least duration of visual impairment are likely to experience higher levels of anxiety.

1.3.2 Psychological Dispositions of Anxiety among Learners with Visual Impairment

The study's main independent variable focused on psychological dispositions of anxiety among respondents with visual impairment. Items liable for testing as sub-variables were uncertainty or panic, anger, self-confidence and determination. All these sub-variables were tested using Likert-scale type question items. This variable was directly responding to the study's focus which was predicated on investigating the nature and manifestations of psychological dispositions of anxiety among learners with visual impairment. The findings are discussed as:

1.3.2.1 Panic

Panic is one of the psychological dispositions of anxiety and was tested using the Likert scale to determine its impact on learners with visual impairment. The Findings for this sub-variable are presented in table 1.3 below:

Table 1.3: Panic reactions of respondents

Panic item	N	Mean	Std. Deviation
I worry so much about the effects of things I can do and those I don't do.	43	2.95	1.511
I act foolishly or without knowing.	43	2.19	1.435
I worry so much about my future	43	3.07	1.334
I can hardly say anything	43	2.07	1.163
I'm always nervous of anyone around me.	43	2.63	1.328
I am often unable to control myself.	43	2.21	1.166

Findings from table 1.3 above show that during moments of panic, the respondents were found to be mainly worrying about the future with the item returning a means of 3.07 and standard deviation of 1.334. This was closely followed by worries about the things the respondents could do and those they could not do with a mean score of 2.95 on the Likert scale.

1.3.2.2 Anger

Anger is another disposition of anxiety which borders psychological and emotional and was tested using the Likert scale to determine its impact on learners with visual impairment. Various items where anger is manifested were tested and the findings for this sub-variable are presented in table 1.4 below:

Table 1.4: Anger Reactions of Respondents

Anger reactions	Descriptive Statistics	N	Mean	Std. Deviation
I'm often to blame when things go wrong.		43	3.21	1.319
I try to control my temper		43	3.33	1.340
I become very disorganized.		43	2.26	1.364
I feel disadvantaged when my friends help me.		43	2.74	1.416
Feelings of anxiety affect my academic performance.		43	3.12	1.331

Findings from table 1.4 show that the respondents mainly controlled their anger with the item having a mean score of 3.3 on the Likert scale. This was followed by self-blame which scored a mean of 3.21 while the least agreed item during reactions to anger was to become disorganized, which had a mean of 2.26.

1.3.1.3 Self Confidence

Self confidence as a sub-variable was considered among the psychological dispositions of anxiety and was tested Likert scale to determine its impact on learners with visual impairment. The Findings for this sub-variable are presented in the table 1.5 below:

Table 1.5: Reactions of self-confidence

Self-confidence reactions	N	Mean	Std. Deviation
I'm too sensitive to feelings for things going wrong.	43	3.58	1.401
I have visible signs of nervousness such as rapid breathing, upset stomach and increased heart rate.	43	2.74	1.274
Unsure when my friends read for me.	42	2.76	1.428
Take a lot of time reading the same thing over and over again	42	3.12	1.365
My perspiration rate increases tremendously as I seat for exams.	43	2.58	1.367

The above findings show that in times of self-confidence, majority of the respondents with a mean of 3.58 on the Likert-scale were too sensitive for the things going wrong. This reaction was followed closely by another reaction having a mean of 3.12 where respondents took a lot of time reading the same thing over and over again. The least reaction with a mean of 2.58 was increased perspirations by respondents as they sit for exams.

1.3.4.4 Determination

Determination was another the sub-variable considered in the psychological dispositions of anxiety and was tested using the Likert scale to determine its impact on learners with visual impairment. The Findings for this sub-variable are presented in the table 1.6 below:

Table 1.6: Determination reactions

Determination reactions	N	Mean
During examination periods, I'm worried as I read and write exams.	43	2.70
Tension and nervousness are feelings that I experience as I read and write examinations.	42	2.64

In relation to determination, the above findings show that the respondents indicated in table 1.6 that, both reactions had a low mean as worry scored 2.70 while tension and nervousness had a score of 2.64. This showed that the reactions of determinate on are not very prevalent among the respondents. To ascertain the level of relatedness of the various sub-variables analysed above, the means for each of the sub-variables were subjected to chi-square test and the findings are presented in table 1.7 below:

Table 1.7: chi-square test for psychological dispositions

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.631(a)	16	.046
Likelihood Ratio	30.055	16	.018
Linear-by-Linear Association	5.256	1	.022
N of Valid Cases	43		

The Chi-square test results in table 1.7 show that the asymptotic significance for psychological dispositions was 0.046. The figure is less than $p=0.05$ indicating a significance of each of the sub-variable to the variable. This implies that all the sub-variables tested above play a very important role in the determination of the dependent variable and in depicting psychological dispositions of learners with visual impairment. In other words, panic, anger, self confidence and determination are significant in understanding manifestations of anxiety among learners with visual impairment.

1.4 Psychological Stability

This study further sought to determine the relationship between dispositions of anxiety and psychological stability among learners with visual impairment. This was predicated on the fact that psychological stability was a dependent variable which entailed behavioural patterns when anxious, reactions to anxieties and actions to take when one is anxious. The findings are presented as herein.

1.4.1 Behaviour when Anxious

One of the key factors that this study sought to determine was how the visually impaired learners behave while anxious. Multiple responses were presented to the respondents and the findings are presented in table 1.8 below:

Table 1.8: Behaviour when Anxious

Psychological stability item	N	Mean	Std. Deviation
Talk	43	2.70	1.166
Being with people	42	3.17	1.080
Eating	42	3.12	1.131
Eating with other people	43	2.98	1.102
Doing exercises	42	2.90	1.144
Seeking counselling	42	3.05	1.058
Speaking or acting before an audience	42	3.05	1.058
Being criticized	42	2.98	1.070

The findings from table 1.8 above show that restraining from talking with a mean of 2.70 was the most common situation during anxious moments for learners with visual impairment. This was closely followed by restraining from doing exercises which had a mean of 2.90. However the items that were least affected by anxiety in this case scoring high means were being with people which had a mean of 3.17 followed by eating with a mean of 3.12.

1.4.2 Reaction to Anxieties

A further test was conducted to establish ways in which respondents react to anxious situations. The test also allowed multiple options and the findings are presented in table 1.9 below:

Table 1.9: Reactions to Anxious Situations

Anxiety reaction	N	Mean	Std. Deviation
I often feel responsible for things that go wrong	42	2.83	1.286
I am often to blame when things go wrong	43	2.91	1.231
I am too sensitive to feeling for things going wrong	43	2.70	1.355
I worry so much about the effects of things which I can do and those I don't do	42	3.12	1.194
I always think through the consequences of even the smallest action I take	43	2.63	1.328
In all daily activities, my inactivity is good	43	2.77	1.428

The above findings show that most of the respondents indicated that they always thinking through the consequences of even the smallest action taken with a mean of 2.63. Similarly, being too sensitive to feelings for things going wrong had a low mean of 2.70 indicating its likelihood to occur among the respondents. The least reactions were those with high means and they include worrying about things that can be done or not done with a mean of 3.12 and often being blamed when things go wrong with a mean of 2.91.

1.4.3 Actions to take when Anxious

The study sought to find out the likely actions that the respondents will take when anxious. The findings are presented in table 1.10 below:

Table 1.10: Actions likely to be taken in times of anxiety

Anxiety actions	N	Mean	Std. Deviation
Sit down	43	2.79	.888
Keep still	43	2.70	.939
Move very slowly	43	2.60	1.027
Look for an escape route	43	2.70	1.059
Try to keep control of your mind	43	2.65	.923
Try to control your temper	43	2.30	1.081
Change your behaviour	43	2.51	.960
Ask people around you for help	43	2.58	.879
Hold onto or lean to something	43	2.88	1.179
Hold onto or lean to someone	43	2.98	.913

Results in table 1.10 indicate that the most likely actions the respondents could take in case of anxiety are those with the most likely action whose mean is closest to 1. This action according to results in table 1.10 was trying to control anger with a mean of 2.30 followed by changing behaviour with a mean of 2.51. The least expected action in this case had high means tending towards 4 and this were leaning onto someone and leaning onto something with respective means of 2.98 and 2.88.

1.5 Contextual Factors influencing Psychological Stability

The final part of the analysis was concerned with the contextual factors influencing psychological stability of learners with visual impairment. These factors formed the intervening variable in establishing psychological dispositions of anxiety. The sub-variables included the learning environment, counseling services, examination preparation and supportive services. Using thematic content analysis, the issues raised during the interview were carefully examined and observations from the respondents were assessed to indicate the general view on the measures undertaken by the school in dealing with psychological dispositions of anxiety. The findings were analyzed in the sub-headings below.

1.5.1 The Learning Environment

The school as an enabler for learning was investigated. In terms of learning materials, majority of the respondents indicated that more materials like books and Braille diagrams had been bought but more needed to be done to increase their distribution to the students. Other respondents indicated that there should be more reading and study hours with assistance after the normal class hours. Further measures indicated by the majority of the respondents included gender mixing especially during preparation times after normal classes. The respondents felt that the school as a community should allow such mixing in order to enhance exchange of ideas among the gender divide, age mix and level of impairment among the school members. The other issue raised by the respondents was the idea of opening interactions with other schools with visual impairment learners to facilitate the sharing of learning experiences among visually impaired learners. The suggestion was that there could be a form of tuition during the holidays or on special weekends in which sharing of ideas from the other schools was necessary.

1.5.2 Counseling Services

Through content analysis, the study looked at statements that respondents put forth regarding counselling services that the institution has put up to mediate between the psychological dispositions and the psychological stability. The respondents suggested that the teachers and counsellors should be ready to listen to the complaints or problems they encountered. The participants' reception of their problem solving requests meant that they can ease their anxiety through counselling and if they get attention from their teachers. Similarly, it was suggested that even though counsellors and teachers are available, many a times, the respondents were misunderstood and hence proper responses not provided or timely solutions not given. This led to the conclusion that not all the counsellors and teachers are appropriately responding to the challenges facing visually impaired students. However, majority of the respondents indicated that they would still go for more counselling if more hours were provided as shown in Figure 1.2 below:

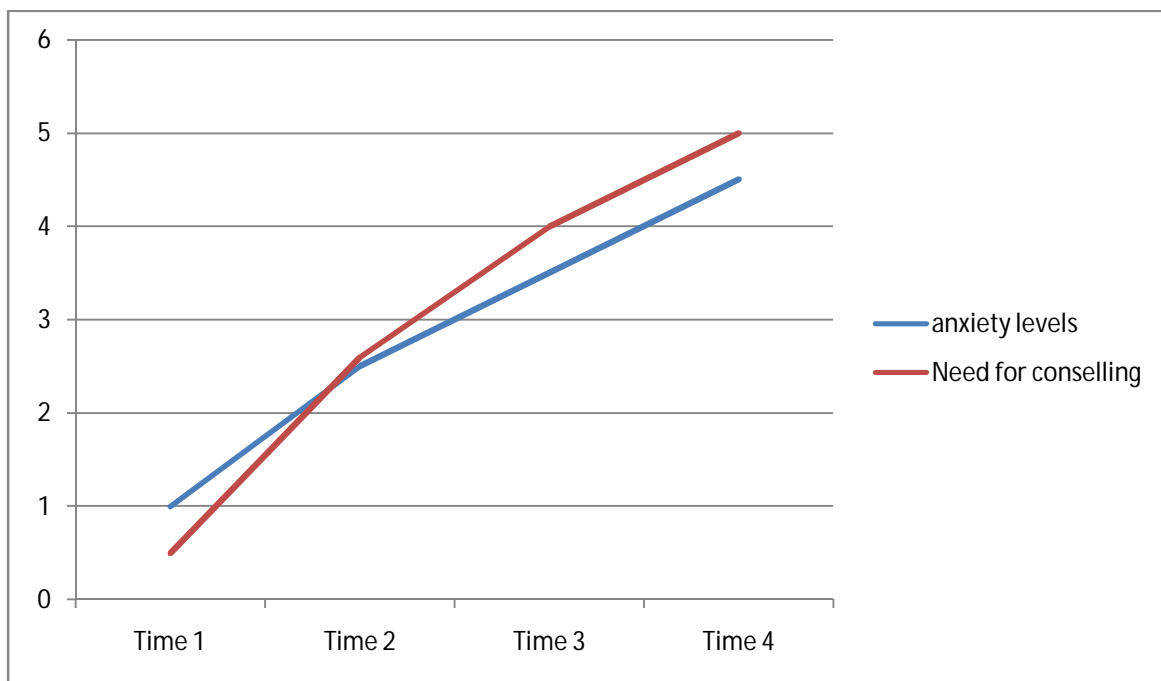


Figure 1.2: Anxiety, examinations and need for counselling

Figure 1.2 above clearly shows that where the level of anxiety increases as the time for exams nears with many respondents desiring to have a counsellor then. Additionally, the participants suggested that counselling should be limited in order to give the visually impaired students a chance to be self-reliant. This view was based on the observation that when respondents over relied on counselling, they tended to be more unstable and forgetful thus showing signs of lack of confidence. From some responses, it was deduced that, treatment of each person should be individualised and that one respondent would not expect another to be treated the same way by the counsellor or teacher. This means that various counsellors and teachers approached the respondents differently, implying a strong effect on both psychological dispositions of anxiety and psychological stability. The study therefore concluded that provision of counselling services had a direct impact on both the dispositions of anxiety and psychological stability.

1.6 Conclusions

From the foregoing, it is clear that both dependent and independent variables had an influence on the psychological dispositions of anxiety and stability of learners with visual impairment. Various psychological aspects such as anger, panic, fear, determination and self-confidence were established as manifestations of psychological dispositions of anxiety. The study established that counseling was a major factor in reducing psychological dispositions of anxiety and an enabler in determining how stable a visually impaired student was. In the same vein, it was found out that more individualized counseling was not taking place leading to students wishing to have more of the same. It also established that the drivers of stability were linked with the contextual factors and played a role in revealing psychological dispositions. The study also found out that psychological dispositions of anxiety cut across age and gender. On the one hand, anxiety reactions recorded as well as that factors trigger such reactions were mainly indiscriminate in terms of gender and age. On the other hand, the stability conditions were found to be related and affected by contextual factors in which control of anger and anxiety clearly dependent on these contextual factors. Finally, it was realized that the school as a learning environment needs to provide adequate support services for learners with visual impairment.

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