



<http://www.ijssit.com>

## THE INFLUENCE OF DEPRESSIVE DISORDER ON ACADEMIC ACHIEVEMENT IN MIXED PUBLIC SECONDARY SCHOOLS IN KISII COUNTY, KENYA

<sup>1\*</sup> **Phelister Moindi Mokaya**  
[phelistermokaya@yahoo.com](mailto:phelistermokaya@yahoo.com)

<sup>2\*\*</sup> **Dr. Zipporah Kaaria**  
[kailukaaria@yahoo.com](mailto:kailukaaria@yahoo.com)

<sup>3\*\*\*</sup> **Rev. Gregory Kivanguli**  
[gregorykivanguli@yahoo.com](mailto:gregorykivanguli@yahoo.com)

<sup>1\* 2\*\* 3\*\*\*</sup> *Department of Theology, Counseling and Religious Studies, Kenya Methodist University*

### Abstract

*Globally, research indicates that the prevalence of adolescence depressive disorder is increasing, the onset of depressive disorder is occurring earlier in life, and that depressive disorder coexists with other mental health problems such as anxiety and disruptive behavior disorders. A study conducted by ministry of education (MEO) strategic plan on teachers and students' perception on factors contributing to poor academic achievement in secondary school students in Nyanza Province in Kenya, listed depression as one of the factors. The study indicated that Kisii is one of the districts with poor performance. This was confirmed by the Kenya Certificate of Secondary Examination performance for four years (2011-2014). This study's findings will be used as a tool by the teachers and counsellors to help the depressed individuals' gain an understanding and awareness of the unconscious forces and conflicts in order to adopt new behavior changes. The study's correlation tests confirmed that there was no significant relationship between the gender of the student and the onset of depressive disorder. The study recommends that school management to establish conducive and workable counselling rooms in schools where students can freely express their issues to the counsellors and development of a guidebook on depressive disorders to guide teachers and counsellors on identification and management of students with depressive disorders.*

Keywords: Depressive Disorder, Depressive Symptoms, Peer Relationships

### Background of the Study

Globally, depressive disorder is a big problem. According to World Health Organization [WHO,

2014) there were 154 million people who suffered from depressive disorder. According to the same report, by 2030, depressive disorder alone is likely to be the second highest cause of disease, second

only to HIV/AIDS. The WHO (2014) further stated “depressive disorder could be long-lasting or recurrent, substantially impairing an individual’s ability to function at work or school or cope with daily life.” At its most severe, depressive disorder could lead to suicide. When mild, people could be treated by use of psychotherapy but when depressive disorder is moderate or severe they might need a combination of medication and psychotherapy.

A research by the Africa Mental Health Foundation (2000) titled “Suicidality and Depression” among adult patients admitted in general medical facilities in Kenya, found that on average one out of 10 patients had suicidal symptoms, more so in younger than the older people. Untreated clinical depression could lead to chronic mental illness. The impairment of depressive disorder was significant and chronic, not only impacting economically through lost productivity, unemployment and the strain on educational system, but, more crucially, through the creation of heavy psychosocial distress and interruption of life goals, which had long term effect on academic performance Merikangas et al., (2010). This then, create room for in-depth exploration of ways in which our education systems can come up with ways of understanding the life of the adolescents at home and while in the learning institutions to overcome and minimize the suicidal tendencies through research and formulating policies that look into depressive disorder by handling each situation different since no two individuals are the same.

Depressive disorder despite causing dismal academic achievement, also had devastating emotional, psychological, social and economic implications and if left untreated, it was debilitating Merikangas et al., (2010). Despite the severity of psychosocial functioning, few studies had assessed the quality of life (QOL) in students with the disorder (Goldberg & Harrow, 2011). Spataro, J.,

Mullen, P., Burgess, P., Wells, D., & Moss, S. (2014) examination of the psychosocial issues that were of significance for students with the disorder highlight common themes as: disintegration of personality, stagnation of maturity, experienced life as chaotic and characterized by loss and deficits, inability to forecasted episodes, and lacked understanding of what was normal in school live. One of the chief differences between adult and adolescent depressive disorder was that depressive disorder in adolescents usually involved more social and interpersonal difficulties which directly led to self-esteem problems.

According to Government of Kenya [GoK] (2013), the prevalence of depressive disorder among youths attending general health facilities and those in secondary schools had been found to be high. It also indicated that untreated major depressive disorder (MDD) in youths was associated with later development of anxiety disorders, depressive disorders, and substance abuse disorders. Prolonged depression was a common ultimate cause of suicide and a common emotional experience among adolescents (Angus & Greenberg, 2011).

Findings by top psychiatrists from the Psychiatry Department at the University of Nairobi indicated that 44% of youth in public schools in Kenya suffered from depressive disorder, while 41% of those attending general health facilities were depressed GoK (2013). This was a large number especially in relation to a growing nation like Kenya, and was a reflection of what could be happening with other growing nations in the world. The effects of depressive disorders especially on academic achievement on the youth is unproductive coupled with other external factors. This is a worrying situation that calls for more attention and therefore conducting research is imperative to come up with ways of combating the mental health condition to ensure that students are not only

distracted from academic pursuits but also remain focused in schools.

### Statement of the Problem

A study conducted by ministry of education (MEO) strategic plan (2006-2011) on teachers and students' perception of factors contributing to poor academic performance in secondary school students in Nyanza Province listed depression as one of the factors. The study indicated that Kisii was one of the districts with poor performance. This was confirmed by the K.C.S.E. results for the last four years (2011-2014). Despite the severity of psychosocial functioning, few studies have investigated the academic achievement of students with the disorder in Kisii County. This necessitated the researcher to carry out the study in Kisii County to ascertain whether depression was one of the factors affecting academic achievement in the county. The study aimed at providing findings for policy makers to establish ways of improving the academic achievement in the county.

### Objectives of the Study

The study was guided by the following objectives;

- i. To establish the effects of the levels of depressive disorder on academic achievement in public mixed secondary schools in Kisii county
- ii. To determine whether age at the onset of depressive disorder affects academic achievement in public mixed secondary schools in Kisii County.
- iii. To investigate the effects of depressive disorder on the academic achievement of students with regard to their gender in public mixed schools in Kisii County.
- iv. To establish the involvement of counseling teachers and principals in addressing

depressive disorder in public mixed secondary schools in Kisii County.

### Hypotheses

The study was guided by the following hypotheses;

- i) H01:* There is a relationship between depressive disorder and academic achievement for students in public mixed secondary schools in Kisii County;
- ii) H02:* There is a relationship between age at onset of depressive disorder and academic achievement for students in public mixed secondary schools in Kisii County;
- iii) H03:* There is a difference in the effect of depressive disorder on students' academic achievement based on their gender in public mixed secondary schools in Kisii County.

### Research Methodology

The study used a cross-sectional descriptive research design. Questionnaires and interview schedules were used to collect data for the study. The target population comprised of 384 students and 59 School counseling teachers which formed the total sample size of 443. Regression was calculated separately for each variable to determine the significant relationships between independent variables and dependent variable. Content analysis was done on qualitative data, where behavior trends or similar responses were thematically coded, then subjected to quantitative data analysis.

### Results and Discussion

#### Effects of Depressive Disorder on Academic Achievement

To achieve the first objective, two tools were designed; a questionnaire to elicit information from the students on their depressive disorder using Becks Depression Inventory and SAMS on school achievement and motivation status, while the interview schedule elicited information on their

understanding of the term depression, any effects of depression they had experienced within the last one month. This explained how depression may have affected their academic achievement, and suggestions on what could be done to help depressed students to perform well academically.

### Levels of Depressive Disorder among Students

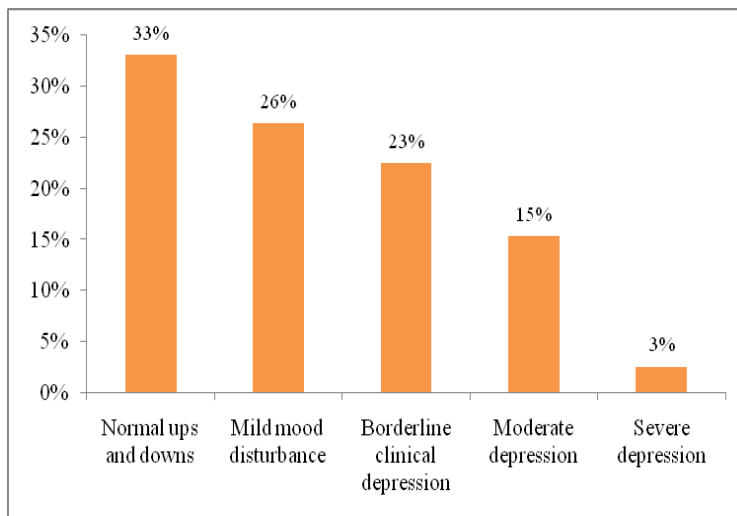


Figure 1 Levels of depressive disorder (Becks inventory 1998)

Findings in Figure 1 show that the students experienced depression in varied intensities. The majority (59%) of the students experienced “mild mood disturbance” and “normal up and downs”. These experiences are considered normal in regard to normal human functioning in any given environment and that the issues faced by this population cut across what human life is.

A significant proportion (23%) of the students’ experienced borderline clinical depression. This implied that the students need a lot of observation and monitoring to help them from falling into the moderate depression continuum. The findings further show that 18 percent of the students were experiencing moderate to severe depression. This implied that the students need more attention to bring them towards the normal ups and downs of life.

These findings implied that majority of the students lie in the continuum of borderline and moderate depression, a critical area that needs more attention to help the students move towards the direction of normal ups and downs by working on the issues and challenges they are facing. This finding is consistent with Humensky et al., (2010), who realized that some students experiencing depressive symptoms and grade problems might be caught in a borderline and moderate depressive disorder affecting academic achievement which continue to exacerbate from time to time.

When the students were interviewed to describe any depression tendency they experienced in the immediate past one month prior to the date of data collection their responses were as follows: **Participant 1: difficulty in sleeping, Participant 2: agitation, Participant 3: lost interest in regular activities, Participant 4: sad mood.**

These findings confirmed that every now and then, every average person experiences instances of depression and the only difference is the intensity of the depression which could range from mild to extreme. Although findings are preliminary, they suggest the need for school teachers and counselors to closely monitor and identify cases of depressive disorder and offer appropriate interventions and referral to the appropriate resources available in the community.

### Students’ Achievement and Motivation Status

The participants were required to fill out a second assessment tool, which was a self-assessment on achievement and motivation as adopted from the Schools Assessment on achievement and motivation by Skinner (2011). The tool had 30 statements and the students were to assess themselves by indicating the extent to which they agreed or disagreed with those statements.

Five response options were available to the students for each of the statements. These were “strongly agree”, “agree”, “undecided”, “disagree” and “strongly disagree”. For ease of analysis, the responses were coded as follows: Strongly disagree = 1; Disagree = 2; Undecided = 3; Agree = 4; and strongly agree = 5. The options were aligned to the achievement and motivation status as follows:

Strongly disagree = very low achievers

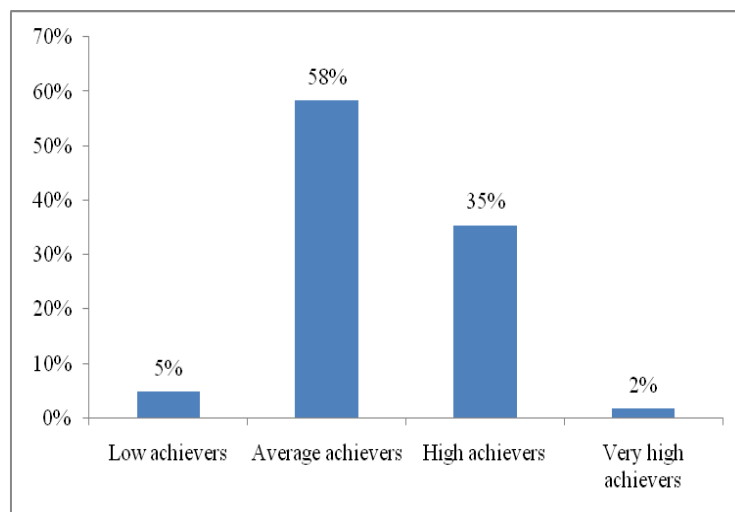
Disagree = low achievers

Undecided = average achievers

Agree = high achiever

Strongly agree = very high achiever

The scores were then collated and descriptive statistics used to present the data by the use of the percentage. The results were as summarized in Figure 2.



*Figure 2 Students achievement and motivation inventory*

Findings in figure 2 show that the majority of the students 58% were average achievers with a sizeable proportion of 35% being high achievers. A small proportion of the students fell on the extremes where 2% were very high achievers while another 5% were low achievers. It's worth noting that none of the

students was in the category of low achievers. Based on these findings, half of the students were expected to attain average performance results in their school work while about a third would attain a high performance result. A small proportion of the students would attain below average results suggesting that they could have been struggling with some issues in their schooling.

When the interviewed students were asked to explain how depressive disorder could have affected them in terms of academic achievement, their responses were;

**Participant 1: *Difficulty concentrating in school work,***

**Participant 2: *Feelings of disappointment with myself***

**Participant 3: *I expect to be punished at school anytime.***

**Participant 4: *Self pity***

According to (Pitmarsh, 2013) depressive disorder in adolescents affected the cognitive and social functioning and might cause impairment in academic achievement even after recovery which in turn might cause long last adversely effects on transition to working life. This is also supported by the theoretical model where depressive disorder could be originating from stressors which include parenting styles, abuse, neglect, relationships, socio-economic factors, family conflicts and life events like death of the loved ones that causes a lot of dysfunctionality as indicated in the diagram. The indicators of depressive disorder as discussed in the literature review are stipulated in the model to show the relationship and the interactions of one event to the other and the dysfunction it causes in the lives of the students .The end results being poor performance low self esteem and acute mood that

can lead to suicidal tendencies (Pillermer et al., 2010).

Depression in adolescents involved developmental process associated with difficulties in concentration and motivation. This then, led to poor academic achievement, impaired social functioning, poor self-esteem and a higher risk of suicide (Angus & Greenberg, 2011). Even after recovery from depression, young people might still be at greater risk of experiencing psychosocial difficulties such as a reduced capacity for intimacy, loss of social support and increased use of alcohol and drugs.

How individuals view themselves ultimately determines who they are, their abilities and what they could be. Having either low self-esteem or high self-esteem could be detrimental to an individual's mental health (Carey, 2009). A person's self-esteem played a much larger role in their overall happiness and quality of life. Poor self-esteem whether it is too high or too low could result in aggression, violence, self-deprecating behavior, anxiety, and other mental disorders. Not fitting in with the masses could result in bullying and other types of emotional abuse. Bullying could result in depressive disorder, feelings of anger and loneliness which eventually leads to poor academic achievement and lack of inner motivation towards fulfillment of personal goals and ambitions.

### **Influence of Depressive Disorder on Students Achievement and Motivation**

To establish the effects of the levels of depressive disorder on students' achievement, hypothesis testing techniques were employed. The hypothesis was set as:

H<sub>01</sub>: There is no significant relationship between levels of depressive disorder and academic achievement

Correlation coefficients were used to test the extent to which these two variables influenced each other at a 95% confidence level. The Pearson's and the Spearman's correlation coefficients were considered.

A cross tabulation was therefore done between the Students' depression inventory scores and their respective achievement scores. The Pearson's and the Spearman's correlation coefficients were consequently generated at 0.05 level of significance. The hypothesis would be rejected if p-value <0.05. The results were as shown in Table 1

**Table 1 Correlation between students' depression inventory and their achievement**

Correlation	Value	P-value
Interval by Interval Pearson's R	-.017	.769 <sup>c</sup>
Ordinal by Ordinal Spearman Correlation	-.027	.640 <sup>c</sup>

Findings in Table 1 show that there was a weak negative correlation between the students' depression inventory and their motivation and achievement. However, this correlation was insignificant (the p-value <0.05 for both Pearson's and Spearman's correlation tests). The null hypothesis was therefore not rejected leading to the conclusion that there is no significant relationship between depressive disorder and students' motivation and achievement. The student's achievements were not dependent or influenced by their depressive situations. Although previous studies by Walker, S. (2011) have linked depressive symptomatology to subsequent poor academic achievement. There is also some evidence by Gunthler, HoltKamp and Jolles (2014) who suggest that academic problems result in the development of depression caused by negative reinforcement from parents, peers, and teachers.

Findings of the current study support an association between self-reported academic functioning and self-reported depressive symptoms of secondary

students as indicated in the literature research (Crowe et al., 2011). These findings are of particular importance given that the onset of clinically diagnosed mood disorders often occurs in early adulthood (DSM-V- American Psychiatric Association, 2010), possibly when students are attending school. Consistent with the conclusions of Humensky et al., (2010), results indicated that students presenting moderate levels of depressive symptoms might be at risk for lower performance within academic environments. The research findings from this study show that 18 percent of the students were experiencing moderate to severe depression. This implied that the students needed more attention to bring them towards the normal ups and downs of life.

According to Beck's (1998) cognitive theory of depression, in achievement-oriented environments, depressed individuals are prone to react to low grades with a sense of failure due to tendencies to display negative perception of themselves, the world, and the future. Students, who have a pessimistic view of themselves because of depressive disorder, are more threatened by difficult academic tasks, thus negatively affecting their academic potential (Barbara & Stuart, 2011), this supports the findings of the study where the analysis of SAM indicates the reaction of the students to their achievements.

However, depression is associated with other conditions seen in children and youth. For example, approximately 50% of children with depression also have problems with anxiety. Depression also co-occurs with attention deficit hyperactivity disorder, conduct disorder, oppositional defiant disorder, and substance abuse problems in 17% to 79% of cases (Barbara & Stuart, 2011). This is supported by the qualitative responses where the respondents when asked to explain how depression could have affected them in terms of academic performance, they came

up with varying responses like, difficulties concentrating in school work, feelings of disappointment with themselves, and expecting to be punished at school anytime.

Although a significant, negative relationship between self-reported SAMS and self-reported depressive symptoms was found, it should be noted that the direction of the relationship between depressive symptoms and academic achievement is not clear. Lower grade point averages could, understandably, contribute to depressive symptoms. In fact, SAMS was situated as the dependent variable only because the categories defined by the BDI-II provided discrete classification groups and the creation of categories for SAM would have been arbitrary. The reciprocal nature of this relationship deserves attention. Students experiencing depressive symptoms and grade problems might be caught in a cycle in which depressive symptoms and academic failures continue to exacerbate from time to time Humensky et al., (2010).

Consideration should also be given to the notion that many students view their grades as a reflection of some stable aspect of themselves. The explanation suggesting that lower mean might have contributed to depressed mood is supported by Abramson, Seligman, and Teasdale's (2009) reformulated learned helplessness model of depression from the literature review. According to this model, individuals who attribute negative experiences to personal generalized and stable aspects of oneself are at elevated risk for exhibiting depressive symptoms following low grades. If so, receiving poor grades can threaten a student's positive self-concept, placing them at risk for the development of depressive symptoms (Crocker, Sommers & Luthanen, 2012).

Another important factor as supported in the literature is a student's belief in his or her own abilities (Jansen, Veenstra, Ormel, Verhulst, Reijneveld (2011). This model suggests that students who possess higher self-efficacy perceive themselves more capable of performing complex academic tasks. Such beliefs affect how students motivate themselves (Bandura, 1997) and influence the likelihood of using effective learning strategies (Pintrich & De Groot, 2010). Depressive symptoms might negatively affect students' beliefs in their performance capabilities by lowering their expectations of academic success and reducing their motivation to learn Humensky et al., (2010).

Surprisingly, results from this analysis did not indicate that students reporting severe levels of depressive symptoms had lower mean than those with mild or moderate levels of depressive symptoms. The absence of significant differences in mean between severe depression and other less severe categories deserves consideration. Perhaps students reporting severe depressive symptoms might also be excelling in academics. Such students might be prone to perfectionist tendencies (e.g. unrealistic goals, unobtainable standards) that contribute to depression, but raise or elevate grades (Barbara, F. & Stuart, A. 2011). These students, perhaps somewhat hyper-focused on academic tasks, might be "missing out" on many aspects (e.g. social activities) of school adjustment. In fact, perfectionist attitudes have been associated with school student adjustment difficulties and emotional distress, including depression and anxiety.

### **Depressive Disorder in Mixed Secondary Schools by Age at onset**

The second objective was to determine depressive disorder in mixed secondary schools by age at onset. To achieve this, findings on the students' depression status and their respective ages were considered. A cross tabulation was then conducted between the

two variables and the results were as shown in Table 2.

Table 2 Students' depression inventory by age at onset

Age of student	Normal ups and downs	Mild mood disturbance	Borderline	Moderate	Severe depression	Total						
12	2	1%	0	0%	1	0%	0	0%	0	0%	3	1%
13	9	3%	1	0%	1	0%	5	2%	0	0%	16	5%
14	3	1%	9	3%	6	2%	9	3%	0	0%	27	9%
15	18	6%	9	3%	13	4%	9	3%	2	1%	51	16%
16	23	7%	15	5%	15	5%	9	3%	2	1%	64	21%
17	24	8%	29	9%	19	6%	8	3%	2	1%	82	26%
18	13	4%	9	3%	8	3%	7	2%	1	0%	38	12%
19	10	3%	9	3%	6	2%	1	0%	1	0%	27	9%
20	0	0%	1	0%	2	1%	0	0%	0	0%	3	1%
<b>Total</b>	<b>102</b>	<b>33%</b>	<b>82</b>	<b>26%</b>	<b>71</b>	<b>23%</b>	<b>48</b>	<b>15%</b>	<b>8</b>	<b>3%</b>	<b>311</b>	<b>100%</b>

According to Table 2, the onset of depressive disorder amongst the secondary schools students is as early as 12 years where cases of borderline clinical depression were reported by one student. As the age progresses to 14 years onward cases of borderline depression increase coupled with the onset of moderate and severe depression. These forms of depression intensify, as the students get older up to 19 years when they decrease. This observation tends to suggest that the onset of the depression disorder could be synonymous with the onset of the adolescence stage, and that the end of the disorder slows down as one exits the adolescence stage into young adulthood.

This research finding agrees with a large retrospective study by (Merikangas, et al., (2010) that depressive disorder in adolescents has a fairly early age of onset, with the first episode usually occurring between the ages of 15 and 19 years. The findings on the students with the disorder reported



that there was an average of 8 years' delay from a student's first recollected mood episode to receiving a diagnosis of depressive disorder. The study further concurs with (Pitmarsh, 2013) who says that depressive disorder in adolescents affects the cognitive and social functioning and might cause impairment in academic achievement even after recovery. The most serious outcome of depressive disorder is suicide.

### **Relationship between depressive disorder and age at onset**

To establish the effects of age on depressive disorder, the hypothesis was set as follows;

H<sub>02</sub>: There is no relationship between the age of the student and the onset of depressive disorder

To test the hypothesis, Pearson's and Spearman's correlation coefficients were generated at 95% confidence level. The level of significance was therefore set as 0.05 implying that the hypothesis would be rejected if p-value <0.05. The results were as shown in Table 3.

**Table 3 Correlation Tests: Students' Depression Inventory and Age at onset**

Test	Value	P-value
Interval by Interval Pearson's R	-.113	.048
Ordinal by Ordinal Spearman Correlation	-.104	.049

Findings in Table 3 show that there was a negative correlation between the students' depression inventory and their age which was statistically significant (the p-value <0.05 for both Pearson's and Spearman's correlation tests). The null hypothesis was therefore rejected leading to the conclusion that there existed a correlation between the age of the student and the onset of depressive disorder. Depressive disorder has a fairly early age of onset, with the first episode usually occurring between the ages of 13 and 19 years.

The finding agrees with a longitudinal study conducted by (Crowe et al., 2011) which tried to determine how well depressive symptoms in adolescence predicted adult mental health. Different scales were used for different age level of the target group (N=2563). The tests were given when they were at age 14, and 19. The follow-up test using Beck Depression Inventory at the age of 19 years, showed that 508 (19.8%) met the DSM-V criteria for having ever had depression, while 638 (24.9%) met the DSM-IV criteria for a lifetime diagnosis of anxiety, and 896 (35%) met the DSM-V criteria for any lifetime mental illness diagnosis.

Therefore, depression has a fairly early onset and it's carried onto adult life. Information on age of onset of depressive disorder allows us to distinguish between lifetime prevalence of the population who had a disorder at some time in their life up to their age at interview and projected lifetime risk. Second, an understanding of age of onset is important for targeting research on prevention of mental disorders, early intervention with prodromal or incipient mental disorders and primary prevention of secondary disorders (Kendall PC, Kessler RC 2008).

In the absence of age of onset information, we would have had no way to know the appropriate age range to target preventive interventions. A related issue is that early age of onset is often found to be associated with greater disorder severity], persistence], and lack of treatment response WHO (2012). Based on these associations, age of onset information can be useful in making projections of aggregate illness course associated with primary and secondary disorders.

### **Depressive disorder with regards to gender of learners**

The third objective was to investigate the effects of depressive disorder with regards to gender of learners in public mixed schools in Kisii County. To

achieve this, a cross tabulation between the Students' depression inventory and their respective gender was generated and the results were as shown in Table 4.

**Table 4 Distribution of students' depression inventory by gender**

Students' depression inventory category	Male		Female	
	n	%	n	%
Normal ups and downs	54	17%	49	16%
Mild mood disturbance	30	10%	51	16%
Borderline clinical depression	34	11%	37	12%
Moderate depression	23	7%	25	8%
Severe depression	5	2%	3	1%
<b>Total</b>	<b>146</b>	<b>47%</b>	<b>165</b>	<b>53%</b>

Findings in Table 4 show that there were a near equal number of males and female students who responded to the Students' depression inventory. The males were 47% while the females were 53%. Under each of the students' depression inventory category identified, the proportion of the males and females was near equal except for the mild mood disturbance category where there were significantly more females (16%) than males (10%). This is consistent with findings by Rao and Poland (2010) who found that between the ages of 15-18, the prevalence of depression in girls would increase to twice the prevalence of boys (20.69 to 9.58) but will taper off during 18-21 years of age for both genders (15.05 and 6.58).

According to Nolen-Hoekema and Hilt (2009) many factors may account for this gender difference, including biological influences such as genetics, hormones, adrenal functioning, and neurotransmitter systems, as well as psychosocial variables. The psychosocial factors may range from frequent victimization and trauma in childhood, gender role factors (e.g., competing social roles, role

restrictions), interpersonal orientation such as increased vulnerability to the emotional pain of others, being more prone to rumination, differential attributional styles, and greater reactivity to stress in terms of biological responses, self-concept, and coping styles.

### **Relationship between depressive disorder and gender**

To establish the relationship between gender and depressive disorder hypothesis testing techniques were employed. The hypothesis was set as follows:

HO<sub>2</sub>: There is no significant relationship between the gender of the student and the onset of depressive disorder

To test the hypothesis, Pearson's and Spearman's correlation coefficients were generated at 95% confidence level and as such, the level of significance was therefore set as 0.05 implying that the hypothesis would be rejected if p-value < 0.05. The results were as shown in Table 5

**Table 5 Correlation between Students' depression inventory and gender**

		Value	P-value
Interval by Interval	Pearson's R	.010	.984
Ordinal by Ordinal	Spearman Correlation	.015	.788

Findings in Table 5 show that p-value > 0.05 for both Pearson's and the Spearman's correlation tests. The null hypothesis is therefore not rejected leading to the conclusion that there is no relationship between the gender of the student and the onset of depressive disorder. This led to the conclusion that both male and female student were likely to experience depressive disorder in equal measure.

The finding is inconsistent with Derdikman-Eiron and colleagues (2010) who found that the associations between depressive problems and lower academic achievement were larger among boys than

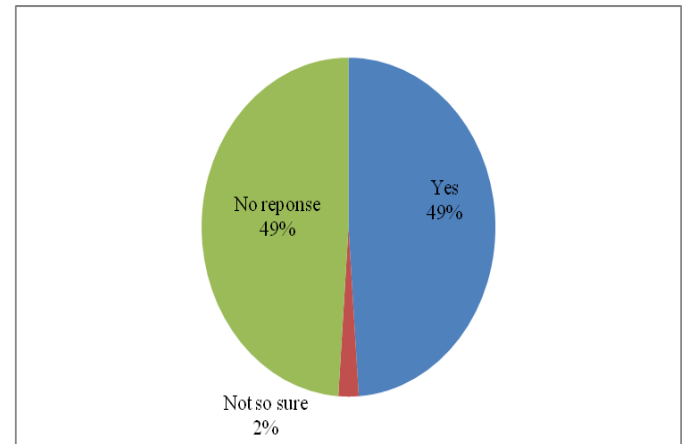
among girls. Further multiple studies by Moilanen, Shaw & Maxwell (2010) found that depression-associated functional impairment was higher in girls than in boys and that baseline grades predicted later depression in girls but not in boys, and that girls showed significantly lower social well-being in class than boys. In addition, Nagar et al., (2011) showed that general impairment (i.e., academic and social achievement) was higher in girls than in boys. Although gender had a direct effect on depression severity according to the previous studies, it is not true to this study which suggests that both genders get affected equally by depressive disorder. This difference may be attributed to environmental support were the girl child has received total support from the government by providing equal opportunities in accessing free education, provision of the sanitary towels and moral support through gender equality in leadership positions in our schools. Thus, increased environmental support serves to buffer the association between gender and depression such that when environmental support is a statistical covariate, gender no longer is significantly associated with depression in this sample. This finding is entirely consistent with behavioral models of depression and supports conceptual foundations of behavioral activation treatment interventions designed to increase exposure to environmental support and response-contingent positive reinforcement Sturmey, P (2009).

### **Involvement of counseling teachers in addressing depressive disorder in schools**

The fourth objective was to ascertain the involvement of counseling teachers in addressing depressive disorder in mixed schools in Kisii County. To achieve this, the researcher used interview guide on the teachers in their respective schools. The interviews elicited information on the prevalence of depression, its effects on the

participation of the students in education, and on actions taken by the schools to address the problems. Their suggestions were also sought on the possible ways to mitigate depression amongst the students.

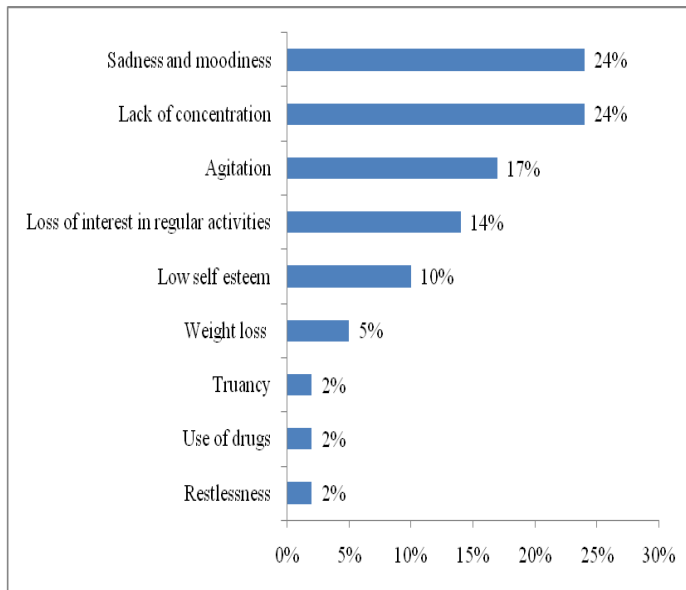
When the teachers were asked to state whether their students experienced depression, the results were as shown in Figure 3.



*Figure 3 Students' experience of depressive disorders*

Findings in Figure 3 show that of all the teachers, only half of the teachers were observant enough to note that students in their schools suffered from depression. This finding implied that half of the teachers in the schools either lacked basic psychological skills to assess their students or were too busy or were not bothered at all with the private lives of the students.

For the teachers who affirmed, the signs that signaled the symptoms of depression were as summarized in Figure 4.



*Figure 4 Signs exhibited by students with depressive disorders*

According to Figure 4 majority of the students experiencing depressive disorder expressed sadness, moodiness, lack of concentration and agitation. Other symptoms included lack of interest in co curricula activities, low self-esteem, truancy, drug abuse and restlessness.

Enquiries were also made on actions taken by the teachers when the students depict symptoms of being depressed. Their responses were as follows;

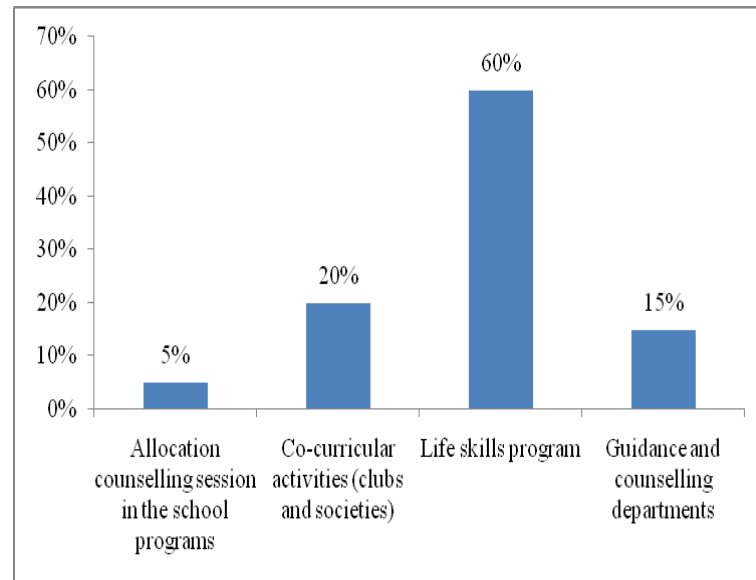
**Participant 1: Carry out counseling sessions**

**Participant 2: Refer to the counseling teacher**

**Participant 3: Refer to the principal**

**Participant 4: Refer to disciplinary committee**

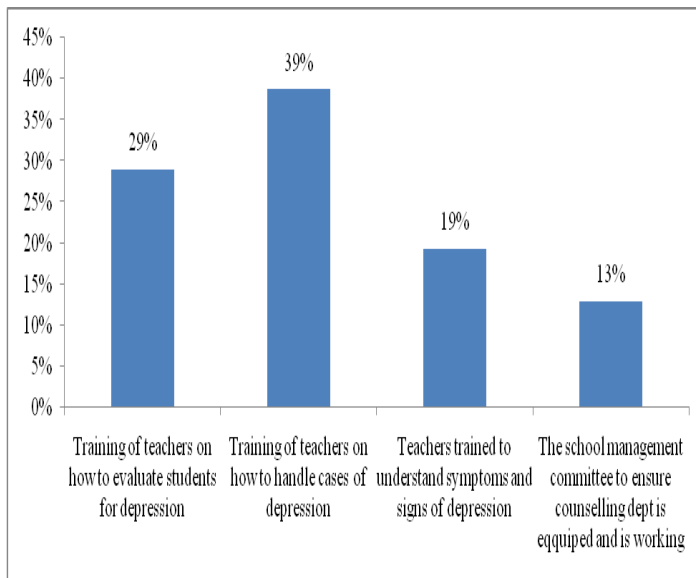
Further enquiries were made from the teachers on the current support being provided by ministry of education to assist students with emotional problems. The responses were as summarised in Figure 5.



*Figure 5 Support currently provided by MoE*

The majority (60%) of the teachers acknowledged that the life skills programme implemented by the ministry of education to be rolled out in all the schools country wide had a great contribution in providing support to students with emotional problems. The other support that the teachers felt had a positive impact included co-curricular activities, counselling programs in schools where by some time is allocated for counselling on the timetable and the guidance and counselling departments in schools which are functional. The teachers however gave a disclaimer that very minimal counselling of students was taking place due to the increased teachers work load. As such the life skills programme was the main avenue accessed by the students as shown in the figure above.

When the teachers were asked to propose strategies for schools in dealing with depression among students, the results were as summarised in Figure 6.



*Figure 6 Proposed strategies for schools on dealing with depression among students*

The majority of the teachers (39%) were of the view that training of teachers on the management of depressed students was key for the teacher alongside curriculum delivery. This should include training on detecting symptoms of depression (19%) and on evaluating students for depression. The teachers further suggested that the school management committees should ensure that guidance and counselling departments were established, equipped and functional at all times.

In the interview, students were asked to suggest what could be done to help a student who is depressed so as to perform well academically and they came up with the following;

*“Employing counselors in school, they should be loved, listened to and given support, they should be taken to hospital for medication and parents to be friendlier to their children when they note behavior change”.*

This implies that counseling interventions are needed in schools to allow continues interaction and self-evaluation for both the students and teachers to achieve the expected end results of good

performance and character building to live within the community.

The teachers were further required to make suggestions to the government regarding the depressive disorders among students. The key suggestions were as follows:

- a) That the MoE develops and distributes a guidebook on Depressive disorders to guide teachers on managing the students with the conditions.
- b) That teachers be in serviced on identifying and managing depression among students
- c) That counselling rooms be established in schools so that students can freely express their issues to the counsellors
- d) That MoE ensures that schools are implementing life skills programme effectively as entrenched in the curriculum
- e) That MoE Encourages parents and teachers to report signs of depression among students to the counsellors so that early and appropriate interventions can be implemented.

That MoE establishes a peer counselling programme where peer counsellors could assist their fellow students to resolve some of the depressive situations.

### **Summary of the Findings**

#### **Effects of depressive disorder on students academic achievement and motivation**

The first objective was to establish the effects of levels of depressive disorder on students’ achievement in public mixed secondary schools in Kisii County. It was established that most of the students experienced “mild mood disturbance” and “normal up and downs”, experiences that were considered normal. A significant proportion of the students’ experienced “borderline clinical

depression” and “moderate depression”, situations that required monitoring to prevent them degenerating to severe depression. A small population of the students suffered from severe depression, a condition that required professional intervention. The majority of the students were average achievers with a sizeable proportion of being high achievers. There was a weak negative correlation between the students’ depression inventory and their achievement which was not significant. The students’ achievement and motivation was not influenced by their depressive situations.

### **The onset of depressive disorder in mixed secondary schools by age**

The second objective was to determine the onset of depressive disorder in mixed secondary schools by age. It was established that the onset of depression disorder was at 13 years where cases of borderline clinical depression were reported. At 14 years onwards, borderline depression coupled with moderate and severe depression sets in. These forms of depression intensify, as the students get to 19 years when they decrease. It was established that a significant positive relationship existed between the age of the student and the onset of depressive disorder. This implied that the older a student got the more likely they were to experience depressive disorder which in turn affected their academic achievement.

### **Depressive disorder with regards to gender of learners**

The third objective was to investigate the effects of depressive disorder with regards to gender of learners in public schools in Kisii County. Under each of the students’ depression inventory category identified, the proportion of the males and females was near equal except for the mild mood disturbance category where there were significantly more

females than males. The correlation tests however confirmed that there was no significant relationship between the gender of the student and depressive disorder. Both male and female students were likely to experience depressive disorder in equal measures especially when social support is accorded to the female students.

### **The role of counseling teachers in addressing depressive disorder in schools**

The fourth objective was to ascertain the involvement of counseling teachers in addressing depressive disorder in public mixed secondary schools in the County. It was established that only half of the teachers were aware of their students suffering from depressive disorders. Students undergoing depressive disorder exhibited sadness, moodiness, lack of concentration, agitation, lack of interest in co curricula activities, low self-esteem, truancy, drug abuse and restlessness. The teachers either carried out counseling sessions, referred the students to the principal, counseling teacher or the disciplinary committee. While the majority of the teachers were comfortable discussing the emotional health of a student with his or her parents, a significant proportion of the teachers were not willing to engage on this because it amounted to additional responsibilities beyond the teaching duties.

The teachers acknowledged that the life skills programme implemented by the ministry of education had a great contribution in providing support to students with emotional problems. Other support that had a positive impact on the students included co-curricular activities, counselling programs in schools and the guidance and counselling departments in schools. It was established however that very minimal counselling of students was taking place due to the increased teachers work load.

## Conclusions

Most of the adolescents in public mixed secondary schools in Kisii County experienced depressive disorder. A significant proportion of them experienced borderline disorders that required professional intervention. Most of the Secondary schools are not adequately equipped to address this potential problem in the education sector. Additionally, teachers lacked the skills to identify the symptoms and the skills to manage the depressive disorder effectively. With the teachers' workload ever increasing, the Ministry of education has the role of identifying other avenues through which supportive programmes could be rolled to the benefit of the youth. Both the students and teachers expressed the need of employing full time counsellors in schools who handled issues related with counselling not only of students but all humanity within a school set up.

## Recommendations

Based on the findings of the study, the following recommendations are made

### Recommendations to the stakeholders and practitioners;

- i. School management committees to establish conducive and workable counselling rooms in schools where students can freely express their issues to the counsellors.
- ii. Secondary school teachers be in serviced on identifying and managing depression among students.

## References

- American Psychiatric Association. (2012). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.). Washington, DC.
- Angus, N. & Greenberg, S. (2011). *The sociology of mental disorders* (3rd Edn). New York: Praeger.

## Recommendations for policy makers and researchers;

- iii. Reinforcement of life skills programme for its effectiveness in addressing depressive disorders among students.
- iv. Development of a guidebook on depressive disorders to guide teachers and counsellors on identification and management of students with depressive disorders.
- v. Employment of fully counsellors who do the counselling to both the parents, teachers and students and not combined with teaching.

## Suggestions for Further Research

Based on the findings of the study, the following suggestions for further research are made:

- i. Effect of depressive disorder on students' academic achievement of youth in tertiary institutions
- ii. Effect of depressive disorder on achievement of the employees at the work place.
- iii. Effects of depressive disorder on academic performance in other counties.

A longitudinal study on the effects of depressive disorder on academic achievement in selected counties using standardized exam.

- Barbara, F., & Stuart, A. (2011). Psychopathology and academic performance: The role of motivation and learning strategies. *Journal of Counselling Psychology*, 42, 456–465.
- Beck, A. (1998). *Cognitive therapy of the emotional disorders*. New York: New American Library.
- Beentjes, T., Goossens, P., & Poslawsky, I. (2012). Caregiver burden in bipolar hypomania and mania: a systematic review. *Perspect Psychiatry Care*, 48(4), 187–197. <http://doi.org/10.1111/j.1744-6163.2012.00328>.
- Bergie, A., & Richards, P. (2014). *Handbook of Psychotherapy and Religious Diversity*. American Psychological Association [APA].
- Carey, B. (2009). Hypomania's up side distinct but linked to depressive disorder. *Psychology*.
- Chen, X., & Li, B. (2009). *Depression mood in Chinese children: Development significance for social and school adjustment*.
- Crowe, M.; Ward, N.; Dunnachie, B. & Roberts, M. 2011. Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology*, 107, 128–140.
- Crowe, M.; Ward, N.; Dunnachie, B. & Roberts, M. 2011. Social cognitive bias and neurocognitive deficit in paranoid symptoms: evidence for an interaction effect and changes during treatment. *Schizophrenia Research*, 71(2-3), 463.
- Derdikman-Eiron R, Indredavik MS, Bratberg GH, Taraldsen G, Bakken IJ, Colton M. Gender (2011) differences in subjective well-being, self-esteem and psychosocial functioning in adolescents with symptoms of anxiety and depression: Findings from the Nord-Trøndelag health study. *Scand J Psychol*. 2011.
- Gunthler T, Holtkamp K. & Jolles, J.(2014), Verbal Memory and aspects of Attentional control in children and adolescents with anxiety disorders or depressive disorders 82:265-9.
- Hara Estroff Marano. (2011). The Dangers of Loneliness. *Psychology Today*, 65.
- Jansen D, Veenstra R, Ormel J, Verhulst F, Reijneveld S (2011). Early risk factors for being a bully, victim, or bully/victim in late elementary and early secondary education. The longitudinal TRAILS study RID G-6696-2011. *BMC Public Health*.; 11:440.
- Kendall, PC & Kessler RC (2008). The Impact of childhood psychology interventions on subsequent substance abuse. Policy implications, comments and recommendations *clinical psychology* 70:1303-1306
- Marsh, H. W., & Martin, A. J. (2011). Academic self-concept and academic achievement: Relations and causal ordering. *British Journal of Educational Psychology*, 81(1), 59-77. doi:10.1348/000709910X503501
- Merikangas, K. R. et al., (2010). Lifetime prevalence of mental disorders in U.S. adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry* 49(10):980-9.



- Moilanen KL, Shaw DS, Maxwell KL (2010). Developmental cascades: externalizing, internalizing, and academic competence from middle childhood to early adolescence. *Dev Psychopathol.* ; 22(3):635-653.
- Mugenda O M & Mugenda A.G. (2012). *Research Methods. Quantitative & Qualitative Approaches (ACTS)* Press Nairobi Kenya.
- Mulusa T. (2010). *Evaluation Research for Beginners' practical guide.* Longhorn Publishers, Nairobi Kenya
- Nagar S, Sherer JT, Chen H, Aparasu RR 2010;. Extent of functional impairment in children and adolescents with depression. *Curr Med Res Opin.* 26(9):2057-2064.
- National Institute of Mental Health. (2014). *Depression research at the national institute of mental health.*
- National Institute of Mental Health. (2012). Depression. Retrieved from <http://www.nimh.nih.gov/health/publications/depression/complete-index.shtml>
- Nolen-Hoeksema, S. (2008). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology, 100,* 569–582
- Nolen-Hoeksema, S and Hilt, L.M. (2009). “Gender differences in depression,” in *Handbook of Depression, 2ed,* I. H. Gotlib and C. L. Hammen, Eds., pp. 386–404, Guilford Press, New York, NY, USA.
- Organization for Economic Cooperation and Development. (2010). *Education at a Glance 2010: OECD Indicators.* [www.oecd.org/edu/eag](http://www.oecd.org/edu/eag).
- Pillermer, K., Sutor, J., Jill, P., & Seth, H. (2010). Mothers' Differentiation and Depressive Symptoms Among Adult Children. *Journal of Marriage and Family, 72(2),* 333–345.
- Pitmarsh, F 2013. On the Specification and Estimation of the Production Function for Cognitive Achievement. *Economic Journal, 113,* 3–33.
- Rao U, Hammen CL, Poland RE. Longitudinal Course of Adolescent Depression: Neuroendocrine and Psychosocial Predictors. *J Am Acad Child Adolesc Psychiatry.* 2010; 49(2):141-151.
- Spataro, J., Mullen, P., Burgess, P., Wells, D., & Moss, S. (2014). "Impact of child sexual abuse on mental health: prospective study in males and females. *Br. J Psychiatry, 184(5),* 416–421.
- Sturme, P. (2009) “Behavioral activation is an evidence-based treatment for depression,” *Behavior Modification,* vol. 33, no. 6, pp. 818–829, View at Publisher · View at Google Scholar · View at PubMed [38, 39, 41].
- Walker, S. (2011). Impact of school-based health center use on academic outcomes. *Journal of Adolescent Health 46(3):*251-257.
- World Health Organization [WHO]. (2013). *Health Report.*