

RELATIONSHIP BETWEEN SCHOOL RELATED ASPECTS AND DEPRESSION SYMPTOMS AMONG TEENAGE STUDENTS IN PUBLIC SECONDARY SCHOOLS IN EMBU COUNTY, KENYA

Authors

Caroline R. Njeru and Nelson O. Jagero

Authors Affiliation

Chuka University, P.O Box 109 -60400, Chuka

Corresponding Author's Email: carolinenjeru76@gmail.com

njagero@chuka.ac.ke, cnjeru@chuka.ac.ke

Mobile number: 0720302954

ABSTRACT

Teenage depression symptoms are on the increase globally, within and outside the school setting which calls for the need to understand the risk factors related to the symptoms in teenagers. This will enable school counsellors and other care givers to deal with the symptoms on their onset before the problem affects the school teenager's personal, social, family and academic life. The current study investigated the relationship between school related aspects and depression symptoms among teenage students in public secondary schools in Embu County, Kenya. The study adopted a correlational research design. 275 teenage secondary school students were sampled randomly while 87 class teachers were selected purposively. Data was collected using two sets of questionnaires administered to the sampled students and the selected class teachers. Validity of the research instruments was enhanced using expert opinions. Reliability was estimated using Cronbach's alpha coefficient and a reliability coefficient of 0.885 and 0.842 was realized for the students' and class teachers' instruments respectively. Data was analysed using inferential statistics with the aid of the Statistical Package for Social Sciences. The research hypothesis was tested using linear regression at $\alpha = 0.05$ level of significance. The study findings revealed that was a statistically significant relationship between school related aspects and depression symptoms ($r = 0.398$, $r^2 = 0.158$, Unstandardized B = 0.414, $t = 8.220$, $P = 0.000$). The study findings also revealed that 47.5% of teenage secondary school students were experiencing depression symptoms. It was therefore recommended that school administrators, counsellors and teachers be sensitized on the relationship between school related aspects and depression symptoms for possible prevention and detection of the said symptoms. Psychological intervention for those already experiencing depression symptoms was also deemed necessary to alleviate the symptoms and prevent aggravation of the same, and avoid incapacitation of the affected teenagers.

Key Words: Relationship, School, Aspects, Depression Symptoms, Teenage

Introduction

Depression may be defined as a state of the human mind which tends to result in a period of unhappiness, lowering of enjoyment of life, low morale and lack of interest in day to day activities. Depression symptoms are therefore the signs that a person (in this study, a teenager) is beginning to experience or is already experiencing depression. According to DSM-5 (APA, 2013), the forms of depression are Major Depressive Disorder (MDD), Dysthymia (moderate depression) and minor (mild) depression. The MDD is disabling as it prevents a person from functioning normally while in dysthymia, the symptoms last for two years or more, and are not always so severe as to disable a person. However, the symptoms may in some cases cause a person to be unable to carry out daily activities (Turner, 2014). The symptoms of minor (mild) depression last for two weeks or longer and do not interfere with a person's daily functioning (DSM-5 APA, 2013). However, if not identified and dealt with, the symptoms of minor (mild) depression can worsen and people with such symptoms are at the risk of developing dysthymia and MDD (Turner, 2014).

The symptoms of minor (mild) depression have been found to include feelings of unexplained sadness, feelings of hopelessness and worthlessness, unexplained mild stomach aches and headaches, lack of motivation, decline in academic achievement, difficulty concentrating and persistent unexplained boredom. Adolescence (teenage) being a time when children transit from childhood to adulthood, depression symptoms occur quite commonly during this transition. This is because the period starts at puberty when teenagers undergo a lot of experiences and changes as they are transformed biologically, sexually, socially, emotionally, behaviourally, psychologically, academically and economically in their lives. Since these transformations take place simultaneously, they are likely to increase the adolescents' (teenagers') susceptibility to experiencing depression symptoms.

Unfortunately, depression symptoms during teenage years are not always easy to identify as they often appear as normal adolescent behaviour. This is because of the changes the adolescents experience in the process of growing up, during which they struggle with the issues of gender and development of secondary sexual characteristics. The teenagers often times appear moody and portray erratic and unpredictable behaviour and therefore, teenage depression symptoms may be mistaken for the typical teenage behaviour. In spite of all this, research findings have indicated that symptoms of depression are usually at their peak from around the middle of adolescence to late adolescence. It is therefore necessary for the education and health sectors to work hard in hand to delay the onset of teenage depression symptoms, decrease their prevalence and reduce their severity where the symptoms have been identified.

From review of literature, research findings have shown that school related factors (aspects) have been associated with the occurrence of depression symptoms among teenagers. Such aspects include bullying in the school, academic pressures, learning disability, compromised sleep quality, poor peer relations likely to lead to peer rejection and peer pressure. Research also suggests that utilizing counselling and other forms of intervention relieves the symptoms of depression. This implies that for teenagers to receive the appropriate intervention by school counsellors and other care givers, it is important to understand the association between the various risk factors (aspects) and depression symptoms. This study therefore sought to determine the relationship between school related aspects and depression symptoms among teenage students in public secondary schools in Embu County, Kenya.

Statement of the Problem

Depression symptoms among teenagers are occurring and increasing at an alarming rate all over the world. This problem calls for prompt identification of the symptoms and intervention in order to deal with early warning signs and prevent aggravation of symptoms. Studies conducted mainly in developed countries have shown that there exists a connection between teenage depression symptoms and problems triggered by specific issues or events. However, data on the association between the risk factors (aspects) and depressive symptoms among teenagers in secondary schools is limited in low income countries like Kenya. In particular, such data is scanty in Embu County and there is need for further research on this. The present study therefore sought to establish the relationship between school related aspects and depression symptoms among teenage students in public secondary schools in Embu County, Kenya.

Objective of the Study

The objective of the study was to establish the relationship between school related aspects and depression symptoms among teenage students in public secondary schools.

Methodology

The study adopted a correlational research design. According to Dalinina (2017), correlation refers to a mutual relationship or association between quantities. Correlational research therefore refers to non-experimental research whereby the researcher decides to measure two or more variables which are not under the control of the researcher, and evaluates the statistical relationship (correlation) between the variables. The research design was therefore used to determine the relationship between school related aspects and depression symptoms among teenage students in public secondary schools.

The study utilized simple random sampling and purposive sampling techniques. Purposive sampling was used to select 15 secondary schools, form three and form two classes and 87 class teachers. Simple random sampling was then used to obtain 275 students giving a sample size of 362 respondents. The study made use of two sets of questionnaires used to collect data from students and class teachers. Orodho (2002) posits that questionnaires are suitable instruments in collecting data in a study involving a large number of respondents. Questionnaires were therefore utilized as they offered considerable advantage and stimulus to the respondents.

The data collected was cleaned by being checked for logical consistency and cases of insufficient responses. The cleaned data was coded to ease the analysis and later entered into the computer and analysed by use of the Statistical Package for Social Sciences (SPSS) version 22.0 for windows. Data was analysed using inferential statistics which was then used to test the hypothesis by use of correlation and simple linear regression. The study results were used to draw explanations, conclusions and recommendations.

Results of the Study

The study had sought to determine the relationship between school related aspects and depression symptoms among teenage students in public secondary schools. To achieve this, various school related aspects were highlighted and the opinion of the student and class teacher respondents sought on how the aspects influenced depression symptoms among teenage students in secondary schools. From the analysed results, the following null hypothesis was tested:

HO: There is no statistically significant relationship between school related aspects and depression symptoms among teenage students in public secondary schools in Embu County, Kenya.

In order to test the hypothesis, correlation and regression analysis were carried out at 95 % level of confidence ($\alpha = 0.05$).

Correlation of School Related Aspects and Depression Symptoms

The school related aspects were correlated with depression symptoms to establish whether there was a relationship between the two, and if any, the strength and direction of the relationship. Information in Table 1 shows the results on the correlation between school related aspects and depression symptoms.

Table 1

Correlations

		School Related Aspects
Teenage Depression Symptoms	Pearson Correlation	.398**
	Sig. (2-tailed)	.000
	n	362

**Correlation is significant at the 0.01 level (2-tailed)

Data analysis results in Table 1 reveal that the Pearson Product Moment Correlation Coefficient (r) is 0.398 showing a fairly positive correlation between school related aspects and depression symptoms. The P value is 0.000, an indication that the correlation is statistically significant at the 0.01 level of significance.

Regression of School Related Aspects and Depression Symptoms

The school related aspects were regressed against depression symptoms in order to test the aforementioned hypothesis. Information in Table 2 shows the model summary indicating the extent of the relationship between school related aspects and depression symptoms.

Table 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.398 ^a	.158	.156	.74517

a. Predictors: (Constant) School Related Aspects

As indicated in Table 2, the value of Pearson Moment Correlation Coefficient (r) is 0.398 and the value of the Coefficient of Determination (r^2) is 0.158. This therefore means that 15.8 % of the variation in teenage depression symptoms can be explained by school related aspects.

Table 3 presents the regression results on school related aspects and depression symptoms.

Table 3

Coefficient of Variables

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	t	Sig.
(Constant)		1.450	.199		7.288	.000
School Related Aspects		.414	.050	.398	8.220	.000

a. Dependent Variable: Teenage Depression Symptoms

From the data analysis results in Table 3, the predictive model for depression symptoms with respect to school related aspects can be stated as:

$$Y = 1.450 + 0.414X$$

Where:

Y = Depression Symptoms

X = School related aspects

1.450 is the constant (Unstandardized Beta)

0.414 is the regression coefficient which shows the expected increase in depression symptoms where there is a unit increase in school related aspects. This implies that for one unit change in school related aspects, depression symptoms increase by a factor of 0.414. This can also mean that 10 % increase in school related aspects increases depression symptoms by 4.14 %. From study results in Table 3, the value of t is 8.220 which is much greater than 2.00, while the value of P is 0.000 which is less than the set alpha value of 0.05.

Discussion

The study findings therefore revealed that there exists a statistically significant relationship between school related aspects and depression symptoms at 5 % level of significance. Based on the study findings, the researcher rejected the null hypothesis that, there is no statistically significant relationship between school related aspects and depression symptoms. This is because the hypothesis was not supported by the study findings. The researcher therefore concluded that there exists a statistically significant relationship between school related aspects and depression symptoms among teenage students in secondary schools.

The findings of the present study tally with those of Tang *et al* (2020) in a study conducted in China. From the findings of this review and meta-analysis, school related factors (aspects) may have a significant relationship with depression symptoms. Additionally, in a study carried out in Sub-Saharan African countries by Nyundo *et al* (2019), the results revealed that bullying in the school had an association with depression symptoms on the part of the victims, while in another study conducted in the United States as cited by Newport Academy (2018), the findings showed that the perpetrators of bullying are highly prone to experiencing depressive symptoms during their school years. Moreover, El-Ezaby *et al* (2015) in a study carried out in Egypt among secondary school students found that teenage depression symptoms were highly associated with pressure from parents for the teenagers to perform well academically. In yet a different study conducted in Bangladesh by Anjum *et al* (2019), the results revealed that lack of enough sleep for teenagers is significantly associated with the development of depression symptoms among adolescents. Furthermore, in another review of studies, Fuligini and Hardway (2017) found that depression symptoms were highly prevalent among students who slept for less than the recommended hours over a period of time. The researchers also found that those teenagers who slept after midnight were 24 percent more likely to suffer from depressive symptoms.

Conclusion

From the study findings, there exists a statistically significant relationship between school related aspects and depression symptoms among teenage students in secondary schools. This is because the study results revealed the following: $r=0.398$, $r^2=0.158$, $UBC=0.414$, $t=8.220$ and $P=0.000$. There is therefore need for the school administrators, school counsellors and teachers to be sensitized on this.

Recommendations

Based on the findings of the study, the following recommendations were made:

- i. School administrators and teachers need to be sensitized on the relationship between school related aspects and depression symptoms to ensure that they do not put too much pressure on learners to perform academically.
- ii. School reporting time for day scholars should not be too early while learners in boarding schools should be allowed a comfortable waking up and sleeping time, in order to avoid compromising on teenagers' sleep quality which may lead to depressive symptoms.
- iii. School administrators and school counsellors should prioritize the mental well-being of learners (teenage students) by putting in place appropriate strategies for identification of mental health issues, including depression symptoms among learners. The right intervention should subsequently be provided to affected students in order to alleviate the problem before it progresses to unmanageable levels, leading to incapacitation of the teenage students.
- iv. There is also need for the government through the Ministry of Education, to put in place mechanisms in secondary schools to screen teenagers for identifiable susceptibility factors (aspects) and potentially associated depression symptoms. This will help in facilitating primary prevention, early detection of depression symptoms and the delivery of any necessary effective psychological interventions for the affected students.

REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders*. 5th Edition
- Anjum, A; Hossain, S; Sikder, T & Uddin, M. E. (2019). *Investigating the Prevalence of and Factors Associated with Depressive Symptoms among Urban and Semi-Urban school adolescents*. Retrieved on 29th May, 2020 from <https://www.academic.oup.com/inhealth/advance-article/doi/10.1093/inhealth>
- Dalinina, R. (2017). *Introduction to Correlation*. Retrieved on 11th August, 2017 from <https://www.datascience.com/blog/introduction-t-correlation-learn-datascience-tutorials>.
- El-Ezaby, H. H; Elalem, O. M. & El-Mowafy, R. I. (2015). *Factors Affecting Depression among Teenagers in Port Said City*. Retrieved on 29th May, 2020 from <https://pdfs.semanticscholar.org/d7568737f307fbc9572a76bdccZc6>
- Fulgini, A. & Hardway, C. (2017). *Depression, Anxiety and Fatigue*. Retrieved on 30th December, 2017 from <https://schoolstarttime.org/early-school-start-times/depression-anxiety-fatigue/>
- Newport Academy. (2018). *Adolescent Depression in Schools*. Retrieved on 15th June, 2020 from <https://www.newportacademy.com/resources/mental-health/adolescence>

- Nyundo, A; Manu, A; Regan, M; Ismail, A; Chukwu, A; Dessie, Y; Njau, T; Kaaya, S. F. & Fawzi, M. C. S. (2019). *Factors Associated with Depression Symptoms and Suicidal Ideation and Behaviours amongst Sub-Saharan African Adolescents Aged 10-19 Years; Cross-Section Study*. Retrieved on 29th May, 2020 from <https://online.library.uy.com/doi/full/101111/tmi/3336>
- Orodho, J. A. (2002). *Techniques of writing Research Proposals and Reports in Education and Social Sciences*. Nairobi: Masola Publishers.
- Tang, X; Tang, S; Ren, Z & Wong, D. F. K. (2020). *Psychosocial Risk Factors Associated with Depressive Symptoms among Adolescents in Secondary School in Mainland China: A Systematic Review and Meta-analysis*. Retrieved on 29th May, 2020 from <https://www.sciencedirect.com/science/article/abs/pii/S01650327193>
- Turner, E. A. (2014). *Adolescent Depression: Symptoms and Solutions*. Retrieved on 13th August, 2018 from <https://www.healthline.com>