



## Psychological Disorder among Adolescent Students and its Intervention Strategies in Kenya- A Decade Review

Wangila Caroline \* and Oseko Agnes  
School of Education, Department of Psychology, University of Eldoret,  
P.O. Box 1125 Eldoret, Kenya

\*Corresponding author's email address: [carolinewangila@gmail.com](mailto:carolinewangila@gmail.com)

### Abstract

*Globally, psychological disorder is a major challenge and in Kenya 1 out of 4 persons who seek healthcare in Kenya have a mental health condition. With all these damning statistics, the country is still struggling with providing affordable mental health care and treatment. Due to a growing interest in psychological disorder of adolescents in recent years and especially due to Covid-19 crisis, a review seems timely, to demonstrate the on psychological disorder among adolescent students in Kenya but also to identify proposed interventions measures that should be put in place to curb psychological issues among adolescent students in Kenya. This research looked through the databases of Google Scholar, Scopus, Web of Science, and ScienceDirect in search of articles that had been reviewed by experts and reported on the prevalence of psychological disorders among adolescents in Kenya. The scope of the search was narrowed to include just English-language articles that were published in the last ten years (2012-2022). Results of the study indicated that the most prevalent psychological is depression and anxiety. Based on the findings of this study, additional research is required in Kenyan schools to understand the psychosocial risk factors for teenage depression in order to design therapeutic strategies. The Ministry of Education should establish effective interventions and strategies to combat psychological issues among adolescent students. Also, the ministry should implement proposed intervention strategies.*

**Keywords:** Mental Health, Students, Adolescent, School, Psychological Disorder

### INTRODUCTION

Globally, adolescent mental health issues are on the rise, affecting between 10 and 20 percent of adolescents (Zhou *et al.*, 2020; Kieling *et al.*, 2011; Gore *et al.*, 2011; Marquez & Saxena, 2016; Wiederhold, 2022; Charara *et al.*, 2017). The largest part of the population in sub-Saharan Africa is made up of adolescents, who account for 23 % of the region's total population and range in age from 10 to 19 years old (Adejumo *et al.*, 2015; Idele *et al.*, 2014; Jörens-Presentati *et al.*, 2021). Adolescence is the era between childhood and adulthood, lasting from the ages of 10 to 19 years (Curtin *et al.*, 2018; Sawyer *et al.*, 2018; Taghizadeh *et al.*, 2016). This is a time of foolish behaviour and impulsiveness. Their carefree and careless behaviour might lead to a variety of problems (Gómez *et al.*, 2014; Lockwood *et al.*, 2017; Maneiro *et al.*, 2017).

Adolescents' psychological disorder issues vary from minor to serious emotional and behavioural issues that meet psychiatric diagnosis criteria (Merikangas *et al.*,

2010; Merikangas *et al.*, 2022). They include depression, anxiety, adjustment, conduct, eating disorders, etc (Copeland *et al.*, 2015; Bacopoulou *et al.*, 2018; Strain *et al.*, 2008). These disorders are sources of stress for adolescents as well as their families, school, community, and larger society in the short and long term (Rahman *et al.*, 2021). Adolescent with psychological disorder confront stigma, isolation, discrimination, lack of health treatment and educational facilities, and human rights violations (Drew *et al.*, 2011; Rahman *et al.*, 2021; Dardas, & Simmons, 2015). Genetic factors also contribute to adolescent mental illness (Allegrini *et al.*, 2020; Uher & Zwickler, 2017; Zwickler *et al.*, 2020). psychological disorder is more common among those with affected family (Van Der Sanden *et al.*, 2015; Saunders, 2003). Divorce, split from joint to nuclear family, parental neglect, and substance misuse put teenager at risk for psychosocial and mental health problems (Chaulagain *et al.*, 2019; Priest *et al.*, 2014). In their study on the incidence of psychosocial disorders among teenagers, Muzammil, Kishore, and Semwal (2009) found that psychosocial problems are widespread among adolescents who through many biological and emotional developmental changes.

Schools play a significant role in adolescent development since adolescents spend so much time there, in school activities, and on homework (Larson, 2000; Hu & Mu, 2020; Dotterer *et al.*, 2007). School is an establishment that contributes to an adolescent's education and socialization (Wang & Sheikh-Khalil, 2014). In school, students are subjected to various aspects that cause psychological problems (Omoteso, 2010; Yikealo *et al.*, 2018; Shoshani & Slone, 2013). The major ones are academic pressure with the responsibility of success, unknown future and difficulties with system integration, learning disabilities, difficulties understanding academic concepts, financial problems, health problems, exam stress, and blatant discrimination or violent and criminal acts in educational institutions (Arusha & Biswas, 2020; Dyrbye *et al.*, 2006; Tadesse *et al.*, 2021; Savarese *et al.*, 2020; Said *et al.*, 2013). According to Dunn (2016), schools play an important part in determining the mental health of adolescents because they interact with more than 95% of the nation's young people for nearly 6 hours per day for at least 11 years of their lives. This means that schools have a significant impact on the students' ability to maintain positive mental health. According to a study conducted in India by Deb *et al.* (2015), 63.5 percent of the higher secondary students in Kolkata experience academic stress. Parental pressure for better academic performance was found to be mostly responsible for academic stress as reported by 66.0 percent of the students. Chinawa *et al.* (2018) found that among secondary school-aged adolescents in the South East of Nigeria, 34.1% had anxiety disorders, 16.7% had physiological symptoms, 35.5% had attention problems, and 59.9% presented with anxiety. In their study on the incidence of psychological disorders among adolescents, Muzammil, Kishore, and Semwal (2009) found that psychosocial problems are widespread among adolescents who through many biological and emotional developmental changes. Nalugya *et al.* (2016) studied depression symptoms among school-going adolescents in central Uganda. The results were alarming: 21% of the participants showed substantial depressive symptoms, 11% met the criteria for major depression, and 3.1% had present suicide ideation. Single-sex schools, drinking, and family loss were linked to depression.

The issue of increased psychological disorder due to pandemics has been reported in the past (Lau *et al.*, 2010; Xiang *et al.*, 2014). The circumstances surrounding the COVID-19 pandemic have increased the stress and anxiety in people, including high school students. report a much higher fraction of youth with psychological issues during the COVID-19 pandemic when compared to prior pandemics (Ellis *et al.*,

2020; Weisbrot & Ryst, 2020; McGaughey *et al.* 2021; Daniel, 2020; Guessoum *et al.*, 2020). A study conducted in China reported that 53.8% of respondents suffered moderate to severe psychological crises, with students constituting a bigger proportion than members of larger populations (Wang *et al.*, 2020). During the lockdown, Tadesse *et al.* (2021) found that 77.2%, 71.8%, and 48.5% of students in Ethiopia experienced depression, anxiety, and stress-related psychological issues, respectively. While assessing mental health issues among postgraduate residents in Kenya during the COVID-19 pandemic, Ali *et al.* (2022) found that 66 participants (66%) suffer from depression, anxiety, sleeplessness, distress, and burnout. Giannopoulou *et al.* (2021) found a 15.3% increase in depression, 17% increase in severe depression, 25.7% increase in anxiety, and 16.7% increase in severe anxiety after only one month of lockdowns in longitudinal research including 442 last year high school students in Greece.

The psychological problems of adolescents have a significant impact on their schooling, particularly their academic performance, which may have significant long-term effects (Bas, 2021; Busch *et al.*, 2017; McLeod *et al.*, 2012; Rothon *et al.*, 2011). Luketero & Wambui (2020) studied the factors influencing students' academic performance in Kenyan Certificate of Secondary Education in Kirinyaga Central Sub-County. Some factors affecting students' performance are peers influencing each other on drug and substance abuse, premarital indecency, dressing indecently, laziness, and other activities, most of which could tell us that the students may have psychological health issues. It is estimated that between 14 and 30 percent of high school students who enrol in university programmes in Kenya have mental health issues that interfere with their academic performance (Gurung, 2015)

The Kenyan government, through the Ministry of Health, has recognised the psychological issues faced by adolescent students. However, minimal intervention measures have been put in place to curb the problem. In a 2016 study conducted in Kenya, the incidence of mental disorders among school-aged children was determined to be 37.7%, with somatic disorders being the most prevalent. This suggests that the majority of physical complaints addressed in adolescents are actually somatic manifestations of mental illnesses (Ndetei *et al.*, 2016). Different studies demonstrate that school-aged adolescents are under a lot of pressure and are battling with psychological concerns. Most research investigations have found mental health difficulties among school-aged adolescents and sought solutions. Due to a growing interest in mental health of adolescents in recent years and especially due to Covid-19 crisis, a review seems timely, to demonstrate the on psychological disorder among adolescent students in Kenya but also to identify proposed innervations measures that should be put in place to curb psychological issues among adolescent students in Kenya. To date, no review research has examined the psychological disorder among adolescent students in Kenya, and the present research aims to fill this gap in the scope. This review was conducted to give an updated overview of primary studies on the prevalence of psychological disorder among Adolescent Students in Kenya.

## METHODOLOGY

This research looked through the databases of Google Scholar, Scopus, Web of Science, and ScienceDirect in search of articles that had been reviewed by experts and reported on the prevalence of psychological disorders among adolescents in Kenya. Combinations of teenage student and depression, major depressive disorder,

depressive episode, burnout, mental health, social withdrawal, distress, anxiety, or psychological weariness were utilised as subject heading phrases for psychological concerns. The scope of the search was narrowed to include just English-language articles that were published in the last ten years (2012-2022). After reading the article titles and online abstracts, we retrieved the papers for a more in-depth analysis to decide whether or not they would be suitable for inclusion in our research. It was determined by looking through the reference lists of these publications which contained pertinent supplementary papers.

## RESULTS AND DISCUSSION

### Reported Cases of Psychological Disorder Among Students in Kenya

Ndetei et al. (2016) researched mental problems among upper primary school children in Kenya and found a prevalence of 37.7%. Somatic symptoms were most common (29.6%), followed by emotional and behavioural disorders while 18.2% of children had concomitant mental disorders. Male sex, living in a peri-urban vs. rural location, being held back in school, having divorced or separated parents, and having a working mother raised the risk of having most mental problems investigated, but age decreased the likelihood. The most clearly proven prior stressor is an uncaring or abusive parent, according to Powers and Welsh (1999). Family dysfunctions are a factor in children developing psychiatric problems, according to Ndetei et al. (2008). Kiamba *et al.* (2021) while assessing teachers' academic expectations and psychological distress among adolescents in private secondary schools in Nairobi County, Kenya. Reported that adolescents experienced psychological distress. A descriptive survey by Othieno et al., (2014) Othieno et al (2014) reported overall prevalence of mild depressive symptoms was 35.7% (33.5% males and 39.0% females) while severe depression was 5.6% (5.3% males and 5.1% females). In a sample of Kenyan high school students (n = 658; mean age: 15.8) from Nairobi, the prevalence of mild anxiety was 35.7%, moderate anxiety was 25.5%, and severe anxiety was 12.3% using the Generalized Anxiety Disorder Screener-7 (GAD-7) (Osborn *et al.*, 2020). According to a previous study done by Ndetei *et al.* (2008) reported that 4% of adolescents ages 12 to 17 and 9% of adolescents ages 18 to 24 suffer from Major Depressive Disorder (MDD). Examining secondary pupils, Ndetei et al. (2008) found that among 250 students from public secondary schools in Kenya, 43.7% had clinical diagnostic scores for depression, with symptoms ranging from mild to severe. According to Mwayo *et al.* (2020), teachers acknowledged being aware that children suffered from mental health issues. Students were identified as having learning challenges, externalising problems, internalising problems, odd behaviour, and substance abuse problems. Teachers cited a lack of skills and time as obstacles in addressing mental health issues among students. Mokaya *et al.* (2017), whilst evaluating the influence of depressive disorder on academic achievement in mixed public secondary schools in Kisii County, Kenya, reported that 23% of the students experienced borderline clinical depression. This indicated that the pupils require extensive surveillance and supervision to prevent them from falling into the continuum of mild depression. The findings also indicate that 18% of students suffered from moderate to severe depression. Ndetei *et al.* (2022) assessed socio-demographic, economic, and mental health difficulties as risk factors for suicide thoughts among Kenyan students aged 15+. Suicidal thoughts (22.6%), significant depression (20%), affectivity, psychosis, and stress (10.4%, 8.7%, and 26.0%) were reported. Suicidal ideation was significantly predicted by female gender, serious depression, stress, affectivity, and high school. Gitonga *et al.* (2017) in Kamukunji and Olympic Mixed Sub-County Schools in Nairobi County reported that the overall prevalence of CD was 31.4%,

with males having a higher prevalence than females ( $p=0.009$ ), CD increasing with respondents' age ( $p=0.008$ ), and religion having a significant impact on CD prevalence as either a precipitating or a protective factor ( $p=0.041$ ). Okongo, (2021) in Migori county determined that a significant number of students exhibit psychological stress, which is characterised by feelings of fear, anxiety, unease, and dread. Maroma *et al.* (2019) found that the majority of respondents, 76.5 percent, reported minor depressive symptoms while 2.3% experienced severe depression. Depression was prevalent among responders at a rate of 23.6% (scoring 14).

### **Proposed Intervention Strategies**

This study also summarized proposed intervention for psychological disorder among Adolescent Student in Kenya strategies as follows;

1. There is need for in-service training for the identification and referral and that school psychologists be employed to deal with student psychological disorder.
2. The school management should build counselling rooms where students can freely communicate their difficulties to counsellors and publish a guidebook on psychological disorder to help teachers and counsellors identify and manage depressed students.
3. Employment of fully counsellors who do the counselling to both the parents, teachers and students and not combined with teaching.
4. Screening measures in schools should be put in place that can detect single and multiple disorders in order to improve the mental health and well-being of the next generation.

## **CONCLUSION AND RECOMMENDATIONS**

According to research conducted among students in schools, depression and anxiety are prevalent. However, little research has focused on the psychological disorder among adolescent students in Kenya. Psychological disorder among adolescent Students can lead students to drop out of schools, preventing them from reaching their full potential. In the absence of early detection, these problems may impede the psychological, social, and educational development of children. Based on the findings of this study, additional research is required in Kenyan schools to understand the psychosocial risk factors for teenage depression in order to design therapeutic strategies. The Ministry of Education should establish effective interventions and strategies to combat psychological issues among students. Also, the ministry should implement proposed intervention strategies.

### **Conflict of Interest**

The authors declare no conflict of interest.

## **REFERENCES**

- Adejumo, O. A., Malee, K. M., Ryscavage, P., Hunter, S. J., & Taiwo, B. O. (2015). Contemporary issues on the epidemiology and antiretroviral adherence of HIV-infected adolescents in sub-Saharan Africa: a narrative review. *Journal of the International AIDS Society*, 18(1), 20049.
- Ali, S. K., Shah, J., Du, K., Leekha, N., & Talib, Z. (2022). Mental health disorders among post graduate residents in Kenya during the COVID-19 pandemic. *Plos one*, 17(4), e0266570.
- Allegrini, A. G., Cheesman, R., Rimfeld, K., Selzam, S., Pingault, J. B., Eley, T. C., & Plomin, R. (2020). The p factor: genetic analyses support a general dimension of psychopathology in childhood and adolescence. *Journal of child psychology and psychiatry*, 61(1), 30-39.
- Arusha, A. R., & Biswas, R. K. (2020). Prevalence of stress, anxiety and depression due to examination in Bangladeshi youths: a pilot study. *Children and youth services review*, 116, 105254.

- Bacopoulou, F., Foskolos, E., Stefanaki, C., Tsitsami, E., & Vousoura, E. (2018). Disordered eating attitudes and emotional/behavioral adjustment in Greek adolescents. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 23(5), 621-628.
- Bas, G. (2021). Relation between Student Mental Health and Academic Achievement Revisited: A Meta-Analysis. In *Health and Academic Achievement-New Findings*. IntechOpen.
- Busch, V., Laninga-Wijnen, L., Schrijvers, A. J. P., & De Leeuw, J. R. J. (2017). Associations of health behaviors, school performance and psychosocial problems in adolescents in The Netherlands. *Health promotion international*, 32(2), 280-291.
- Charara, R., Forouzanfar, M., Naghavi, M., Moradi-Lakeh, M., Afshin, A., Vos, T., ... & Mokdad, A. H. (2017). The burden of mental disorders in the eastern Mediterranean region, 1990-2013. *PloS one*, 12(1), e0169575.
- Chaulagain, A., Kunwar, A., Watts, S., Guerrero, A. P., & Skokauskas, N. (2019). Child and adolescent mental health problems in Nepal: a scoping review. *International journal of mental health systems*, 13(1), 1-8.
- Copeland, W. E., Bulik, C. M., Zucker, N., Wolke, D., Lereya, S. T., & Costello, E. J. (2015). Does childhood bullying predict eating disorder symptoms? A prospective, longitudinal analysis. *International journal of eating disorders*, 48(8), 1141-1149.
- coronavirus disease (COVID-19) epidemic among the general population in China. *International journal of environmental research and public health*, 17(5), 1729.
- Curtin, S. C., Heron, M., Miniño, A. M., & Warner, M. (2018). Recent increases in injury mortality among children and adolescents aged 10-19 years in the United States: 1999-2016. *National vital statistics reports: from the centers for disease control and prevention, national center for health statistics, national vital statistics system*, 67(4), 1-16.
- Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49(1), 91-96.
- Dardas, L. A., & Simmons, L. A. (2015). The stigma of mental illness in Arab families: a concept analysis. *Journal of psychiatric and mental health nursing*, 22(9), 668-679.
- Dotterer, A. M., McHale, S. M., & Crouter, A. C. (2007). Implications of out-of-school activities for school engagement in African American adolescents. *Journal of Youth and Adolescence*, 36(4), 391-401.
- Drew, N., Funk, M., Tang, S., Lamichhane, J., Chávez, E., Katontoka, S., ... & Saraceno, B. (2011). Human rights violations of people with mental and psychosocial disabilities: an unresolved global crisis. *The Lancet*, 378(9803), 1664-1675.
- Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. *Academic medicine*, 81(4), 354-373.
- Ellis, W. E., Dumas, T. M., & Forbes, L. M. (2020). Physically isolated but socially connected: Psychological adjustment and stress among adolescents during the initial COVID-19 crisis. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 52(3), 177.
- Gitonga, M., Muriungi, S., Ongaro, K., & Omondi, M. (2017). Prevalence of Conduct Disorder among Adolescents in Secondary Schools: A Case of Kamukunji and Olympic Mixed Sub-County Secondary Schools in Nairobi County, Kenya.
- Gómez, M. J., Luciano, C., Páez-Blarrina, M., Ruiz, F. J., Valdivia-Salas, S., & Gil-Luciano, B. (2014). Brief ACT protocol in at-risk adolescents with conduct disorder and impulsivity. *International Journal of Psychology and Psychological Therapy*, 14(3), 307-332.
- Gore, F. M., Bloem, P. J., Patton, G. C., Ferguson, J., Joseph, V., Coffey, C., ... & Mathers, C. D. (2011). Global burden of disease in young people aged 10–24 years: a systematic analysis. *The Lancet*, 377(9783), 2093-2102.
- Guessoum, S. B., Lachal, J., Radjack, R., Carretier, E., Minassian, S., Benoit, L., & Moro, M. R. (2020). Adolescent psychiatric disorders during the COVID-19 pandemic and lockdown. *Psychiatry research*, 291, 113264.
- Hu, S., & Mu, Z. (2020). Some time is better spent than other time: Chinese adolescents' time use and developmental outcomes. *Child Indicators Research*, 13(5), 1739-1765.
- Idele, P., Gillespie, A., Porth, T., Suzuki, C., Mahy, M., Kasedde, S., & Luo, C. (2014). Epidemiology of HIV and AIDS among adolescents: current status, inequities, and data gaps. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 66, S144-S153.
- Jörns-Presentati, A., Napp, A. K., Dessauvagie, A. S., Stein, D. J., Jonker, D., Breet, E., ... & Groen, G. (2021). The prevalence of mental health problems in sub-Saharan adolescents: A systematic review. *PloS one*, 16(5), e0251689.
- Kiamba A. K., Muriithi J. K., Githuthu K. (2021). Teachers' academic expectations and psychological distress among adolescents in private secondary schools in Nairobi County, Kenya. *International Journal of Research and Innovation in Social Science (IJRISS)*. 5(8)
- Kieling, C., Baker-Henningham, H., Belfer, M., Conti, G., Ertem, I., Omigbodun, O., ... & Rahman, A. (2011). Child and adolescent mental health worldwide: evidence for action. *The Lancet*, 378(9801), 1515-1525.
- Larson, R. W. (2000). Toward a psychology of positive youth development. *American psychologist*, 55(1), 170.

- Lockwood, J., Daley, D., Townsend, E., & Sayal, K. (2017). Impulsivity and self-harm in adolescence: a systematic review. *European child & adolescent psychiatry*, 26(4), 387-402.
- Maneiro, L., Gómez-Fraguela, J. A., Cutrín, O., & Romero, E. (2017). Impulsivity traits as correlates of antisocial behaviour in adolescents. *Personality and individual differences*, 104, 417-422.
- Maroma, F. O., Karega, M., & Oteyo, J. S. (2019). Relationship between depression and pathological internet use among university students. *Cypriot Journal of Educational Sciences*, 14(2), 201-207.
- Marquez, P. V., & Saxena, S. (2016, July). Making mental health a global priority. In *Cerebrum: the Dana forum on brain science* (Vol. 2016). Dana Foundation.
- Mbwayo, A. W., Mathai, M., Khasakhala, L., Kuria, M. W., & Vander Stoep, A. (2020). Mental health in Kenyan schools: teachers' perspectives. *Global Social Welfare*, 7(2), 155-163.
- McGaughey, F., Watermeyer, R., Shankar, K., Suri, V. R., Knight, C., Crick, T., ... & Chung, R. (2021). 'This can't be the new norm': academics' perspectives on the COVID-19 crisis for the Australian university sector. *Higher education research & development*, 1-16.
- McLeod, J. D., Uemura, R., & Rohrman, S. (2012). Adolescent mental health, behavior problems, and academic achievement. *Journal of health and social behavior*, 53(4), 482-497.
- Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., ... & Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: results from the National Comorbidity Survey Replication-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(10), 980-989.
- Merikangas, K. R., Nakamura, E. F., & Kessler, R. C. (2022). Epidemiology of mental disorders in children and adolescents. *Dialogues in clinical neuroscience*
- Mokaya, P. M., Kaaria, Z., & Kivanguli, R. G. (2017). The Influence of Depressive Disorder on Academic Achievement in Mixed Public Secondary Schools in Kisii County, Kenya. *International Journal of Social Sciences and Information Technology*, 3(7), 2203-2222
- Nalugya-Sserunjogi, J., Rukundo, G. Z., Ovuga, E., Kiwuwa, S. M., Musisi, S., & Nakimuli-Mpungu, E. (2016). Prevalence and factors associated with depression symptoms among school-going adolescents in Central Uganda. *Child and adolescent psychiatry and mental health*, 10(1), 1-8.
- Ndetei, D. M., Mutiso, V. N., Weisz, J. R., Okoth, C. A., Musyimi, C., Muia, E. N., ... & Mamah, D. (2022). Socio-demographic, economic and mental health problems were risk factors for suicidal ideation among Kenyan students aged 15 plus. *Journal of affective disorders*, 302, 74-82.
- Okongo, C. O. (2021). *Influence of psychological issues on students' academic performance in public secondary schools in Migori county, Kenya* (Doctoral dissertation).
- Omoteso, B. A. (2010). Bullying Behaviour, Its Associated Factors and Psychological Effects Among Secondary Students In Nigeria. *Journal of International Social Research*, 3(10).
- Osborn, T. L., Venturo-Conerly, K. E., Wasil, A. R., Schleider, J. L., & Weisz, J. R. (2020). Depression and anxiety symptoms, social support, and demographic factors among Kenyan high school students. *Journal of Child and Family Studies*, 29(5), 1432-1443.
- Osborn, T. L., Venturo-Conerly, K. E., Wasil, A. R., Schleider, J. L., & Weisz, J. R. (2020). Depression and anxiety symptoms, social support, and demographic factors among Kenyan high school students. *Journal of Child and Family Studies*, 29(5), 1432-1443.
- Osman, S. R., Khalaf, S. A., Omar, M. S., & Ismail, T. A. (2019). Behavioral and emotional problems among adolescent students. *Journal of High Institute of Public Health*, 49(2), 82-89.
- Othieno, C. J., Okoth, R. O., Peltzer, K., Pengpid, S., & Malla, L. O. (2014). Depression among university students in Kenya: Prevalence and sociodemographic correlates. *Journal of affective disorders*, 165, 120-125.
- Priest, J. B., Salts, C., & Smith, T. (2014). Special topics in family therapy: Mental illness, physical illness, substance abuse, family violence, and divorce. In *An introduction to marriage and family therapy* (pp. 488-524). Routledge.
- Rahman, M., Ahmed, R., Moitra, M., Damschroder, L., Brownson, R., Chorpita, B., ... & Kumar, M. (2021). Mental distress and human rights violations during COVID-19: a rapid review of the evidence informing rights, mental health needs, and public policy around vulnerable populations. *Frontiers in psychiatry*, 11, 603875.
- Rothon, C., Arephin, M., Klineberg, E., Cattell, V., & Stansfeld, S. (2011). Structural and socio-psychological influences on adolescents' educational aspirations and subsequent academic achievement. *Social Psychology of Education*, 14(2), 209-231.
- Said, D., Kypr, K., & Bowman, J. (2013). Risk factors for mental disorder among university students in Australia: findings from a web-based cross-sectional survey. *Social psychiatry and psychiatric epidemiology*, 48(6), 935-944.
- Saunders, J. C. (2003). Families living with severe mental illness: A literature review. *Issues in mental health nursing*, 24(2), 175-198.
- Savarese, G., Curcio, L., D'Elia, D., Fasano, O., & Pecoraro, N. (2020, October). Online University counselling services and psychological problems among Italian students in lockdown due to Covid-19. In *Healthcare* (Vol. 8, No. 4, p. 440). MDPI.
- Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *The Lancet Child & Adolescent Health*, 2(3), 223-228.

- Shoshani, A., & Slone, M. (2013). Middle school transition from the strengths perspective: young adolescents' character strengths, subjective well-being, and school adjustment. *Journal of happiness studies*, 14(4), 1163-1181.
- Strain, J. J., Klipstein, K., & Newcorn, J. H. (2008). Adjustment disorders. *Psychiatry*, 1702-1717.
- Tadesse, A. W., Mihret, S. T., Biset, G., & Kassa, A. M. (2021). Psychological problems and the associated factors related to the COVID-19 pandemic lockdown among college students in Amhara Region, Ethiopia: a cross-sectional study. *BMJ open*, 11(9), e045623.
- Taghizadeh Moghaddam, H., Bahreini, A., Ajilian Abbasi, M., Fazli, F., & Saeidi, M. (2016). Adolescence Health: the needs, problems and attention. *International Journal of Pediatrics*, 4(2), 1423-1438.
- Uher, R., & Zwickler, A. (2017). Etiology in psychiatry: embracing the reality of poly-gene-environmental causation of mental illness. *World Psychiatry*, 16(2), 121-129.
- Van Der Sanden, R. L., Bos, A. E., Stutterheim, S. E., Pryor, J. B., & Kok, G. (2015). Stigma by association among family members of people with a mental illness: A qualitative analysis. *Journal of Community & Applied Social Psychology*, 25(5), 400-417.
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019
- Wang, M. T., & Sheikh-Khalil, S. (2014). Does parental involvement matter for student achievement and mental health in high school? *Child development*, 85(2), 610-625.
- Weisbrot, D. M., & Ryst, E. (2020). Debate: Student mental health matters—the heightened need for school-based mental health in the era of COVID-19. *Child and adolescent mental health*, 25(4), 258-259.
- Wiederhold, B. K. (2022). The escalating crisis in adolescent mental health. *Cyberpsychology, Behavior, and Social Networking*, 25(2), 81-82.
- Yikealo, D., Yemane, B., & Karvinen, I. (2018). The level of academic and environmental stress among college students: a case in the college of education. *Open Journal of Social Sciences*, 6(11), 40.
- Zhou, S. J., Zhang, L. G., Wang, L. L., Guo, Z. C., Wang, J. Q., Chen, J. C., ... & Chen, J. X. (2020). Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. *European child & adolescent psychiatry*, 29(6), 749-758.
- Zwickler, A., MacKenzie, L. E., Drobinin, V., Bagher, A. M., Howes Vallis, E., Propper, L., ... & Uher, R. (2020). Neurodevelopmental and genetic determinants of exposure to adversity among youth at risk for mental illness. *Journal of Child Psychology and Psychiatry*, 61(5), 536-544.