



UNIVERSITI PUTRA MALAYSIA

***RELATIONSHIP BETWEEN PARENTAL ATTACHMENT, PEER
ATTACHMENT, PROBLEM FOCUSED STRATEGY AND STRESS
AMONG SCHOOL-GOING ADOLESCENTS IN AKWA IBOM STATE,
NIGERIA***

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FEM 2022 5



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By

EDIDIONG MAURICE ABIA

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfilment of the Requirements for the Degree of Master of Science**

May 2021

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

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EDIDIONG MAURICE ABIA

May 2021

Chairman : Muslihah binti Hasbullah @ Abdullah, PhD
Faculty : Human Ecology

Despite a plethora of research that investigated parental attachment, peer attachment, problem-focused strategy and stress, there exists a variety of uninvestigated socio-cultural contexts. More so, empirical investigation has been very scanty with regards to the relationships among stress, parental and peer attachments, and problem focused strategy among school-going adolescents in Nigeria. The study was a cross-sectional survey which drew participants, using a purposive sampling technique, from the three senatorial zones of Akwa Ibom state in South-south Nigeria. Data were collected using standardized, reliable and valid measures of the study variables. Of the 372 school-going adolescents who participated in the study, 221 (59.4%) were females while 151 (40.6%) were males. Participants ages ranged from 10 to 18 years with a mean of 14.0 (SD = 3.97). Results showed that parental attachment ($r = -.107, p < .05$), peer attachment ($r = -.190; p < .01$) and problem-focused strategy ($r = -.173; p < .01$) were significantly associated with stress. Results also indicated that parental attachment, peer attachment, and problem-focused strategy significantly predicted stress. This means that the lower the parental attachment, peer attachment and problem-focused strategy, the more like the experience of stress. In terms of joint prediction, parental attachment, peer attachment, and problem focused strategy significantly predicted stress ($R = .50; R^2 = 0.25; p = .01$). Peer attachment was found to be the strongest predictor of stress. Practically, the study offered parents/guardians, home managers and educational institutions useful suggestions on reducing and mitigating the effects of stress. The findings of the study and the conclusions portend beneficial implications to governments and policy makers. Stress reduction through healthy parental and peer attachment and adoption of problem-focused strategy can be enhanced by organizing school-based psycho-educational with focus on parental and peer attachment as well as problem-focused strategy.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

HUBUNGAN ANTARA PERAPATAN IBU BAPA, PERAPATAN RAKAN SEBAYA, STRATEGI BERFOKUS MASALAH DAN TEKANAN DALAM KALANGAN REMAJA YANG SEDANG BERSEKOLAH DI NEGERI AKWA IBOM, NIGERIA

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Walaupun banyak penyelidikan tentang perapatan ibu bapa, perapatan rakan sebaya, strategi berfokus masalah dan tekanan, terdapat pelbagai konteks sosiobudaya yang belum dikaji. Kajian empirikal mengenai hubungan antara tekanan, perapatan ibu bapa dan rakan sebaya, dan strategi berfokus masalah dalam kalangan remaja yang bersekolah di Nigeria adalah sangat kurang. Ini adalah kajian keratan rentas yang mengumpulkan peserta melalui teknik persampelan bertujuan, dari tiga zon senator di negeri Akwa Ibom, Selatan Nigeria. Data dikumpulkan menggunakan langkah-langkah standard, pengukuran dan kebolehpercayaan yang sah. Daripada 372 remaja yang mengambil bahagian dalam kajian ini, 221 (59.4%) adalah perempuan manakala 151 (40.6%) adalah lelaki. Peserta berumur antara 10 hingga 18 tahun dengan purata 14.0 (SD = 3.97). Keputusan menunjukkan perapatan ibu bapa ($r = -.107, p < .05$), perapatan rakan sebaya ($r = -.190; p < .01$) dan strategi berfokus masalah ($r = -.173; p < .01$) mempunyai kaitan dengan tekanan. Keputusan juga menunjukkan bahawa perapatan ibu bapa, perapatan rakan sebaya, dan strategi yang berfokuskan masalah dengan ketara meramalkan tekanan. Ini bermakna bahawa semakin rendah perapatan ibu bapa, perapatan rakan dan strategi yang berfokuskan masalah, mereka lebih mengalami tekanan. Dari segi ramalan bersama, perapatan ibu bapa, perapatan rakan, dan strategi berfokus masalah meramalkan tekanan ($F(3, 368) = 6.653; R^2 = 0.051; p = .001$). Secara praktikal, kajian ini menawarkan ibu bapa / penjaga, pengurus rumah dan institusi pendidikan dengan cadangan berguna untuk mengurangkan kesan tekanan. Dapatan kajian dan kesimpulannya memberi implikasi yang baik kepada kerajaan dan pembuat dasar. Pengurangan tekanan melalui perapatan ibu bapa dan rakan sebaya yang sihat dan penggunaan strategi yang berfokuskan masalah boleh dipertingkatkan dengan menganjurkan program psiko-pendidikan berasaskan sekolah, memfokuskan pada keterikatan ibu bapa dan keterikatan rakan sebaya serta strategi berfokuskan masalah.

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This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Stress has become an inevitable part of the ever-dynamic and increasingly complex world. While most people consider stress to be a threatening and negative experience, the fact of its ubiquity cannot be disputed. Everyone experiences stress in one form or the other, irrespective of age, sex, or socioeconomic status. Indeed, stress, which was hitherto considered to carry an existential threat, has now been accepted as a normal part of daily life. However, when the stress level increases without being properly mitigated, it may lead to a host of physical, emotional, psychological and social consequences. These negative consequences include depletion of physical and psychological energy, lowered immune system, psychological disorders such as major depression, anxiety, substance use disorder, and impulse control disorder (Kumar et al., 2019; Sigfusdottir, 2017, Kessler et al., 2005;).

Adolescence is a period when individuals strive to become independent from their parents. The period of adolescence has been tagged “a period of *stress and storm*” (Hurlock, 1981), as the adolescent undergoes a myriads of physical and psychological vicissitudes during this period (Abolarin, 2010). The adolescence period is a transitional period of physical and psychological development, which is associated with the teenage years and characterized by conflicts and stress (Obiunu, 2015). During this stage, adolescents go through a phase of physical development and change in hormones (Thapar et al., 2012). While going through this evolution period, adolescents are mostly engulfed by psychosocial problems such as difficulties associated with peer attachment, stress, and parental attachment. They also create an urge for self-will and develop an enhancement of social salience and association with peers (Lomanowska et al., 2011). Due to adolescents’ level of curiosity in their quest for independence and social importance, some of them end up contradicting the whims of their parents, peers and social groups by either involving in substance abuse, conduct disorders or educational difficulties (Burke & Arslan, 2020; Sigfusdottir et al., 2017).

Since school-going adolescents spend most of their waking hours within the school environment or engaged in school-related activities, the potentials for stress are perhaps considerably higher because, in addition to the stressors in home environment, they have to grapple with school environment stressors such as academic difficulties, tests and examinations, possible bullying, and lack of adequate support from teachers and other students. Studies have shown high prevalence of psychosocial problems in adolescents (Jorm et al., 2010; Gilbert 2006). It is also reported that about 10% to 25% of adolescents experience psychosocial problems or mental distress during adolescence (Ahmad et al., 2007; Gilbert, 2006).

Parent-adolescent relationship has been viewed as a critical and crucial factor in the experience and outcome of stress among adolescents (Garbe et al., 2020; Rabbani et al., 2014; Operario et al., 2006). Studies have consistently shown that adolescents who have safe attachments with their parents are more adjustable and experience low stress compared to those without such attachments (Hampel & Petermann, 2006; Howard & Medway, 2004). In addition, Folkman and Lazarus (1984) emphasized on perception of the ability to cope with threat, implying that presence of resources such as parental and peer support through healthy attachment will yield a positive outcomes. This makes parents and peers some of the most influential and powerful agents in the life of adolescents.

Despite the crucial role of attachment relationships during adolescent, fast growth and significant changes are experienced within this period (Millings et al., 2012). As a result, coping strategy is another factor that may play a crucial role on stress. Problem-focused strategies are successful in dealing with stressors such as discrimination (Allen & Kern, 2019), HIV infections (Brann et al., 2019) and diabetes (Alharbi et al., 2019). Problem-focused strategies are effective in mitigating the effects of psychological distress (Mitchell et al., 1983), and problem-focused strategies have been shown to have a positive relationship with the measures of adjustment to stress (Terry et al., 1995). According to Moskowitz et al. (2009) and Mitchell et al (1983) line of theorizing, problem-focused strategy should be associated with reduced stress level since it is considered a healthy way of coping with adversity. Other findings (e.g. Alharbi, 2019; Andersen et al., 2017) have also demonstrated the potentials of problem-focused strategy as a predictor of stress. Problem-focused strategy is the ability to cope with stress by adopting objective, practical and proactive approach rather than a passive, docile or submissive approach (Folkman & Lazarus, 1984; McLeod, 2015).

Problem-focused strategy focused on the changing or modifying the fundamental cause of the stress. This can be an effective method of coping when it is practical, and the stressor is changeable or modifiable. The overarching goal for this type of strategy is to reduce or remove the cause of the stressor. This type of strategy focuses on individuals' taking control of the relationship between them and the stressor (Lazarus, 1991). In addition, problem-focused may include employing information seeking, or developing strategies to avoid the source of the stress. There are 2 types of problem-focused strategy, which is effective and ineffective. It's effective for example, when an individual plans to host Thanksgiving dinner for 27 people, but finds the thought of preparing such a feast extraordinarily stressful, while it is ineffective when for example, if one ponders over the way his/her friends deal with stressors such as exams; especially when people adopt moving around to tell friends that they are worried without preparing for the exam. Problem-focused coping has the potential to resolve her stress by evaluating options, seeking information, and taking control of the situation, all of which are problem-focused methods of coping, the individual decided to have the event catered. The effectiveness of problem-focused depends on whether the stressor can be managed by changing it (Laureate Education, Inc., 2012). Carver (2011) found problem-focused strategy had a biological effect on stress, lowering the cortisol levels and promoting recovery from the stress.

Globally, one out of every ten adolescents suffers significant distress, and three out of every five visits to the doctor are for stress related problems (Kumar and Bhukar, 2013). The United States of America statistics on stress between 2006 and 2013 as pointed by Hardy (2013) revealed that four out of ten college students reported that they feel stressed often; one out of five said they feel stressed most of the time; one out of four students experienced daily stress and one in ten had thoughts of suicide (Kio, Omeonu & Egbede, 2015). Also, 72% of adolescents in schools in India are unaware of how to deal with stress and its ill effects (Kumar & Bhukar, 2013). Adolescents in South Africa could potentially be under a lot of stress to perform well academically as well as absorbing stress from family members and family situations (Bizcommunity, 2009). More so, South African black adolescents are faced with many stressors and challenges, which are placing demands on their emotional and mental resources (Van-Rooyen et al., 2014). The situation is not different in Nigeria as with other developing countries (Kio et al., 2015). For instance, the kidnapping of over 250 high school female students at Chibok Girls High School in Borno state, Nigeria (Aliyu et al., 2015; Onapajo and Usman, 2015), and seasonal hostilities of Niger Delta militants makes the Niger Delta region a “zone of violence” (Keane, 1996), which constitutes stress among residents including adolescents and therefore should be unraveled to sustain a healthy adolescent population in Nigeria.

1.2 Overview of Nigeria and her Adolescents’ Development

Nigeria comprises of 36 states, and the federal capital territory (FCT) as depicted in Figure 2.1. The capital is Abuja, located in its north central and Lagos is the biggest city and commercial nerve base. The country’s population has increased from 37 million in 1950 to over 190 million in 2017 (UN estimate, 2018). Nigerians have a high fertility rate, which accounts for the population explosion witnessed in the past 60years. The country is made up of three major ethnic groups, which are Hausa-Fulani, Igbo and Yoruba. Nigerian culture is as multi-ethnic as the people in Nigeria. Nigerians cherish their traditional languages, music, dance and literature (Countries and their Culture, NA).

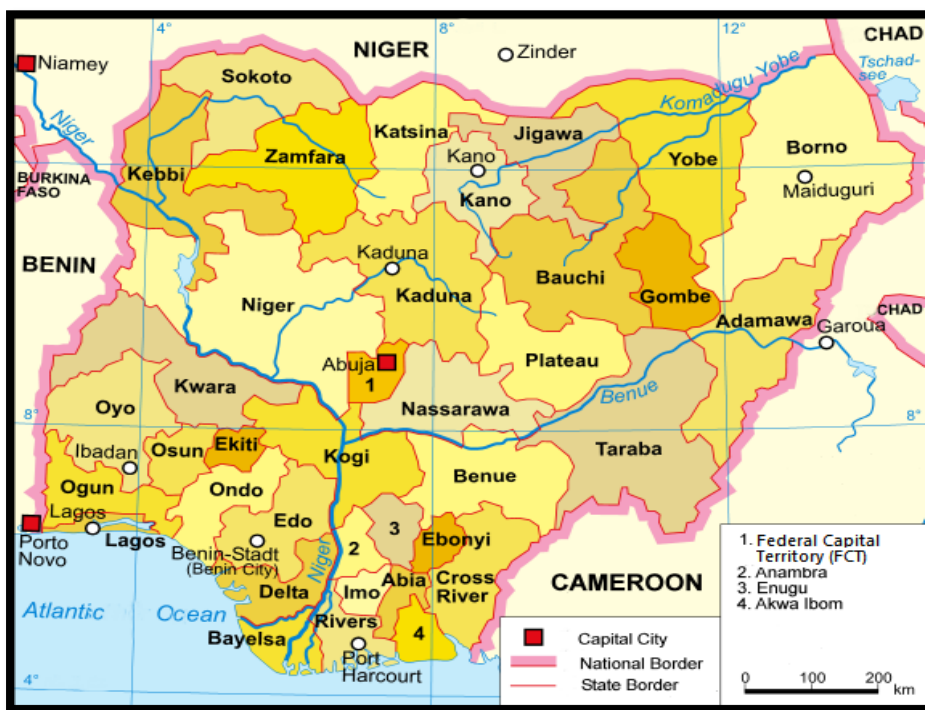


Figure 1.1 : Map of Nigeria

(Source: <https://www.google.com/#q=Nigerian+map>)

However, there are other ethnic groups in Nigeria, including Ibibio, Annang, Oro, Benins, Itsekiris, Ijaws, Nupe, Tapa, etc. Nigerian culture gives a lot of value to various types of arts, which primarily include ivory carving, grass weaving, woodcarving, leather and calabash. Pottery, painting, metal works and clothe weaving. Nigeria has more than 250 languages, but the lingua franca (national language) is English language. It is notable that not more than 50% of the population is fluent in English (The Nigerian Culture and Traditions, NA). Every tribe has its own language, which is mostly preferred as the standard mode of communication among them. The culture includes various types of clothing, way of greeting and food as there are different groups of people living in the country. The common aspect of their dressing style is their conservativeness (The Nigerian Culture and Traditions, NA).

Moreover, Nigerian culture gives a lot of importance in treating the guests with utmost care and warmth. The hospitality of people represents this tradition. That is why people are not supposed to say thank you, when they are offered food. Nigeria is also a sports loving country. Among all the games, Nigerians enjoy soccer the most. Tennis, cricket, swimming and wrestling are popular among the affluent classes. The culture has been in place for over 2000 years and the diversity of the nation upholds it strongly. Nigeria is richly blessed in human and natural resources such as; crude oil, limestone, coal, cocoa, cassava, oil palm, timber and many others (Baro, 2016).

As a culturally-diverse and developing nation, Nigeria is grappling with a number of challenges – economic, political, psychological, and socio-cultural. Since a society is an integrated whole, Nigerian adolescents are not immune from the myriads of problems confronting the country. (Adolescents constitute about one-fifth of Nigerian population (Lawal, 2017). This significant portion of Nigerian population is facing cultural and religious challenges, which form part of their social problems. As stated by Elder, Caspi and Burton (2013), stress is experienced in a course of normal life events and conventional developmental processes. With Nigeria having her more than proportional dose of negative events almost on a daily basis, it is stating the obvious that adolescents in Nigeria are exposed to frequent and extensive stressors.

In fact, it is plausible to opine that adolescents bear the brunt of these problems. Coupled with of being partakers in various challenges confronting Nigeria as a country, adolescents are also faced with overwhelming physical, developmental and psychological changes that typify adolescence (Bello et al., 2017).

Nigerian adolescents want greater privacy and parents' reactions are very supportive of their children's pubertal transition, but mothers' communication approaches may sometimes be inappropriate in terms of using fear/scare tactics Bello et al. (2017), especially on female adolescents. Adolescents' reactions to their own pubertal development vary considerably in different socio-cultural settings and may have implications for their psychological well-being and sexual and reproductive health behaviors (Marvan et al., 2007; Burrows & Johnson, 2005; Scott et al., 1989).

The influence of technology and the media, especially the social media, has also played an important role in shaping the experience of adolescence. Compared to the past, body image, vocational / career choice, and other important domains of an adolescent's life are now shaped, to a very large extent, by the media (Bello et al., 2017). Inevitably, unregulated use of the media (especially social media) comes at a huge cost, as it exposes the adolescent to sexually explicit and other toxic contents that can potentially induce stress and compromise the psychological health of adolescents (Bello et al., 2017).

Even though media and technology are educative, adolescent development in Nigeria has seen a new phase whereby every adolescent is getting attached to social media, android phones or computer system. This is undoubtedly a different scenario compared to the past era of communality - when adolescents were attached to parents, siblings and other members of the community. The swift physiological, social, and psychological changes experienced by adolescents as they move from childhood to adolescence can either place them on a trajectory of risk or become an opportunity to ensure that adolescents receive the assets needed to enhance their future health and well-being (Sommer, 2011). The future of every society lies in the hand of youths, and without psychologically healthy adolescents, there will not be a robust, healthy society. Given the potentials for stress among Nigerian school-going adolescents and the plethora of negative consequences of stress on the individual, family and the society, it is imperative

to throw more light on stress and its predictors among this vulnerable population with a view to recommending appropriate mitigation strategies.

1.3 Problem Statement

It has been demonstrated that many mental health disorders are first manifest during adolescence (Kessler et al., 2005). There is evidence that about one in every five of adolescents have a diagnosable mental health disorder (Kessler et al., 2005; Kumar et al., 2019), with nearly one in every three adolescents having a major depressive episode before they reach adulthood (Rushton et al., 2002). It has also been estimated that for 25% of people with mood disorders such as major depression, the onset is traceable to adolescence. Similarly, about 50%–75% cases of anxiety disorders and impulse control disorders have their roots in adolescence (Rushton et al., 2002). Existing mental health problems become more complex and intense with children's transition into adolescence (Patel et al., 2007). Untreated mental health problems among adolescents may lead to poor school performance, school dropout, strained family relationships, substance abuse, and engaging in risky sexual behaviors (Kapphahn et al., 2006). Usually, these problems arise when young people experience major stress in their lives, particularly those bordering on the social relationships and environment such as peer and parental relationships. It is now widely recognized that the social environment and social relationships can have powerful effects on health and behavioral outcomes. To underscore the importance of the social environment to the well-being of growing persons, several studies have attempted to elucidate the complexity of capturing the social influences at various levels (Al-Abhudi, 2019; Alhardi et al., 2019; Allen et al., 2017; 2018; 2019).

Apart from the home environment, school-going adolescents spend most of their time in their school or college environment. School environment, curriculum design, examinations and perceived social from classmates and the school system carry additional potentials for stress for school-going adolescents. Despite a plethora of studies that investigated stress among school-going adolescents (e.g. Arhin et al., 2019; Everly & Lating, 2019; Rabbani et al., 2014; Momtazi & Rawson, 2010; Terry et al., 1995), there exists a range of uninvestigated tasks in connection with these variables in different geographical locations and contexts. As observed by Rabbani et al. (2014), although quite a lot is known about the effects of stress, there are still major gaps, especially in relation to the association between stress, peer and parental attachment and the utilization of the various coping strategies in handling the inevitable stressors that individuals must grapple with as they go through life. This is especially the case in Akwa Ibom state, Nigeria, where empirical findings in this regard are very scanty. Specifically, there has been no investigation into the relationships between stress, parental and peer attachments, and problem focused strategy among adolescents in Akwa Ibom state, Nigeria. There is need for empirical investigation into this issue with a view to bridging the existing gaps in knowledge as well as to help shape intervention and policy direction in Akwa Ibom state in particular and Nigeria in general.

1.4 Research Questions

- (i) What are the levels of parental and peer attachments, problem-focused strategy and stress among school-going adolescents in Akwa Ibom state?
- (ii) Are there relationships between parental attachment, peer attachment, problem-focused strategy, and stress among school-going adolescents in Akwa Ibom state?
- (iii) Do parental attachment, peer attachment and problem-focused strategy significantly predict stress among school-going adolescents in Akwa Ibom state?

1.5 Research Objectives

The general objective of this study is to examine the independent and joint prediction of stress by parental attachment, peer attachment, and problem-focused strategy. The specific objectives are to:

- (i) To describe the personal characteristics of the respondents (gender, age, educational level, and religion) and all the key variables (parental attachment, peer attachment, problem focus strategy and stress) among school-going adolescents in Akwa Ibom state.
- (ii) To determine the relationship between parental attachment, peer attachment, problem-focused strategy, and stress among school-going adolescents in Akwa Ibom state.
- (iii) To determine the extent to which parental attachment, peer attachment and problem-focused strategy would predict stress among school-going adolescents in Akwa Ibom state.

1.6 Research Hypotheses

In line with the above-stated objectives, the following research hypotheses were stated and tested:

- H01: There is a significant relationship between parental attachment and stress among school-going adolescents in Akwa Ibom state.
- H02: There is a significant relationship between peer attachment and stress among school-going adolescents in Akwa Ibom state.
- H03: There is a significant relationship between problem-focused strategy and stress among school-going adolescents in Akwa Ibom state.
- H04: Parental attachment, peer attachment and problem-focused strategy will significantly predict stress among school-going adolescents in Akwa Ibom state.

1.7 Significance of the Study

Significance of a study is very crucial in order to reflect the study's benefits. Thus, the significance of this study will be emphasized in three different aspects; namely: theoretical, practical and policy wise. In terms of theory, the study is expected to contribute to the existing knowledge on stress and the predicting powers of parental and peer attachments, and also the intervening role of problem-focused strategy on these relationships. The study will add to the league of studies supporting Lazarus and Folkman (1984) transactional model of stress, and attachment theory of Bowlby (1982) and further offer greater insights towards stress, parental attachment, peer attachment and problem-focused strategy in Nigeria and African continent at large. As such, future researchers on this topic or related constructs in Africa especially Nigeria are believed to benefit from the findings of this study.

Practically, findings of the present study will serve as a reference point toward understanding the factors that influence stress among adolescents. It will offer parents/guardians, home managers and educational institutions a coherent idea of factors that influence stress among adolescents and ways of controlling/ameliorating stress based on the study's suggestions. More so, inferences of the study will offer adolescent establishments the caliber of adolescents whose stress could be affected by problem-focused strategy; hence, these establishments will proficiently manage or guide adolescents when they are stressed. In other words, adhering to the suggestions of this study will equip adolescent or adolescent establishments with the necessary knowledge on stress management.

In Nigeria, there is neither a statutory mental health policy nor specific adolescent mental health policy. Attempts by psychologists, psychiatrists and other mental health professionals to bring salient mental health issues, especially those having to do with children and adolescents, to the fore have remained largely unsuccessful due to lack of sufficient empirical evidence upon which a solid position could be advocated. Findings of this study will help in strengthening the scientific basis of the need for adolescent mental health policy in Nigeria. The study will be beneficial to government and non-governmental organizations by way of stimulating advocacy and policies aimed at reducing stress and enhancing well-being of adolescents. It is practically impossible to have a stress-free society but certain variables can reduce the potentials for elevated stress levels or mitigate the deleterious impacts of adolescent exposure to stress. Findings and recommendations of this study could stimulate national discourse and engender better public awareness through thematic seminars, conferences and symposia.

1.8 Definition of Terms

This section will conceptually and operationally define the major variables of the present study. It will also specify how the variables shall be measured and the scales. These variables include adolescents, parental attachment, peer attachment, problem-focused strategy and stress.

Adolescents

Conceptual: Early Adolescents refers to individuals at interim stage between puberty and adulthood of human development (Sigelman & Rider, 2014). Early adolescence can start as early as ages 10 to 18 (Stein, 1976).

Operational: Early Adolescents are individuals between the ages of 10 and 18 (UNICEF). In this study, school-going adolescents are individuals aged between 10 and 18 years that are attending secondary schools in Akwa Ibom state, Nigeria.

Parental Attachment

Conceptual: Parental attachment is a type of relational interactions that jointly form an ideological model to which future attachment relationships are compared (Waters et al., 2000).

Operational: Parental attachment is the perception of interaction between a child and his/her parents/guardians through varying levels of trust, communication, and alienation. It was measured with 28 items of the inventory of parents and peer attachments (IPPA) developed by Armsden and Greenberg (1987) on 5 points Likert type scale. Higher scores on the parent scales of IPPA depict greater attachment scrutiny with parents.

Peer Attachment

Conceptual: Peer attachment refers to the perception of a relational connection experienced between individuals of equal interpersonal standing (Schnyders, 2012).

Operational: Peer attachment is a social bond that links individuals of equal relational understandings which is expressed through varying levels of trust, communication, and alienation. It was measured with 25 items of the inventory of parents and peer attachments (IPPA) developed by Armsden and Greenberg (1987) on 5 points Likert type scale. Higher scores on peer scales of IPPA depict greater scrutiny with peers.

Problem-focused strategy

Conceptual: Problem-focused strategy is a coping ability that centers on changing the environment or one's actions towards a more positive outcome (Fedorowic and Kral, 1995).

Operational: Problem-focused strategy refers to human behavioral capabilities that enable individuals to effect changes in stressful situations. Problem-focused strategy was measured with 17 items covering instrumental action, negotiation ability and exercising

cautiousness on a 5 point Likert scale which was developed by Aldwin and Raveneson (1987).

Stress

Conceptual: Stress is a common external or internal encounter by every human being which affects the normal psychological setting of the person and causes several health and behavioral issues (Saffari et al., 2011).

Operational: Stress refers to any relationship between a person and the surroundings that is appraised by the person as challenging or beyond his or her resources and threatening his or her well-being (Lazarus & Folkman, 1984). Stress was measured with 14 items adapted from Lovibond and Lovibond (1995) DASS stress scale (2nded) on a 5 point Likert scale. High scores indicate high adolescent stress e experience.

1.9 Chapter Summary

This chapter began by presenting a general background of the study. Based on contemporary adolescents' issues and research, the chapter situated stress and some possible predictors of stress within the adolescent health literature. A comprehensive overview of the adolescence development in Nigeria was presented with emphasis on the array of factors that now place school-going adolescents in Nigeria at elevated stress potentials. The chapter also highlighted what is known and the existing empirical lacunae thereby demonstrating the problematic underpinning of the study. This was followed by research questions, research objectives, and research hypotheses. Subsequently, the significance of the study and definition of terms (variables) used in the present study were all discussed.

REFERENCES

- Abege, T. (2014). Perceived parental bond, self-esteem and depression among adolescents in Makurdi, Benue state Nigeria. *Journal of Educational Policy and Entrepreneurial Research*, 1(2), 219-226.
- Aboal, D., Lanzilotta, B., Dominguez, M., & Vairo, M. (2015). The cost of crime and violence in five Latin American countries. *European Journal of Criminal Policy and Research*, 21(3), 689-711. Doi: 1007/s 10610-015-9295-5.
- Abolarin, E. E. (2010). *Essentials of developmental psychology*. Abuja: Petra Digital Press.
- Adekoya, J. A. & Abikoye, G. E. (2008). Psychological Distress in Mothers Raising Children with Disabilities and Chronic Conditions. *Nigerian Journal of Clinical Psychology*, 6 (2), 140-149.
- Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30, 47-88.
- Agnew, R. (2006). *Pressured into Crime: An Overview of General Strain Theory* (2nd edition). Oxford University Press, USA.
- Ahmad A, Khaliq N, Khan Z, Amir A (2007). Prevalence of psychosocial problems among school going male adolescents. *Indian Journal of Community Medicine*, 32 (3); pp. 219-221.
- Al-Abbudi, S. (2019). Prevalence of symptoms of depression, anxiety and stress among secondary school students in Baghdad. Iraq. *International Journal of Current Research*, 10 (3), 66257-66261.
- Alfaro, J., Guzmán, J., García, C., Sirlopú, D., Reyes, F., & Varela, J. (2016). Psychometric properties of the Spanish version of the Personal Well-Being Index-School Children (PWI-sc) in Chilean school children. *Child Indicators Research*, 9(3), 731-742. Doi: 10.1007/s12187-015-9342-2
- Alharbi, A., Alsuhaibani, K., Almarshad, A., & Alyahya, A. (2019). Depression and anxiety among high school student at Qassim region. *Journal of Family Medicine and Primary Care*, 8 (2), 504-510.
- Aliyu, A., Moorthy, R., & Idris, N. A. Bin. (2015). Towards Understanding the Boko Haram Phenomenon in Nigeria. *Asian Social Science*, 11(10), 307-317.
- Allen, K. A., Boyle, C., & Roffey, S. (2019). Creating a culture of belonging in a school context. *Educational and Child Psychology*, 36, 5-7.
- Allen, K. A., & Kern, P. (2019). *Boosting School Belonging in Adolescents: Interventions for Teachers and Mental Health Professionals*. Abingdon, UK: Routledge.

- Allen, K. A., Kern, M. L., Vella-Brodrick, D., Waters, L., & Hattie, J. (2018). What schools need to know about belonging: a meta-analysis. *Educational and Psychological Review*, 30, 1–34. doi: 10.1007/s10648-016-9389-8
- Allen, K. A., Vella-Brodrick, D., & Waters, L. (2017). School belonging and the role of social and emotional competencies in fostering an adolescent's sense of connectedness to their school, in *Social and Emotional Learning in Australia and the Asia-Pacific: Perspectives, Programs and Approaches*. 1st Edn. eds. E. Frydenberg, A. J. Martin and R. J. Collie (Melbourne, Australia: Springer), 83–99.
- Allen, T. D. (2001). Family-supportive work environments: The role of organizational perceptions. *Journal of Vocational Behavior*, 58, 414-435.
- Almojali, A. I., Almalki, S. A., Alothman, A. S., Masuadi, E. M., & Alaqeel, M. K. (2017). The prevalence and association of stress with sleep quality among medical students. *Journal of Epidemiology and Global Health*, 73, 169–174.
- Andersen, J. H., Lindholdt, L., Winding, T. N., Lund, T., & Labriola, M. (2017). Perceived stress among adolescents is socially determined. *European Journal of Public Health*, 27(3), 49 – 65..
- Arhin, D. K., Asante, K. O., Kugbey, N., & Oti-Boadi, M. (2019). The relationship between psychological distress and bullying victimisation among school-going adolescents in Ghana: a cross-sectional study. *BMC Research Notes*, 12(1), 264 – 271.
- Armsden, G. (1986). Attachment to parents and peers in late adolescence: Relationships to affective status, self-esteem, and coping with loss, threat and challenges. (Doctoral Dissertation, University of Washington, 1986). Dissertation Abstracts International, 47(4), October, 1986. Available on microfilm.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16, (5), 427-454.
- Armsden, G. C., McCauley, E., Greenberg, M.T.; Burke, P., & Mitchell, J. (1991). Parent and peer attachment in early adolescence depression. *Journal of Youth and Adolescence*, 18, 683-692.
- Aseltine, R. H., Gore, S., & Gordon, J. (2000). Life stress, anger and anxiety, and delinquency: an empirical test of general strain theory. *Journal of Health and Social Behaviour*, 41, 256–275.
- Bamidele M. Bello, Adesegun O. Fatusi, Oluwatomi E. Adepoju, Beatrice W. Maina, Caroline W. Kabiru, Marni Sommer & Kristin Mmari (2017). Adolescent and Parental Reactions to Puberty in Nigeria and Kenya: A Cross-Cultural and Intergenerational Comparison. *Journal of Adolescent Health*, 61, (4), S35-S41. <https://doi.org/10.1016/j.jadohealth.2017.03.014>.

- Baro, O. H. (2016). List of mineral resources, natural resources and their location in Nigeria. Retrieved from: <http://www.barvien.com/2016/03/24/list-of-mineral-resources-natural-resources-and-their-location-in-nigeria/>.
- Baron, R. M. & Kenny, D. A. (1986), Moderator-Mediator variables Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations, *Journal of Personality and Social Psychology*, 51(6), 1173-82.
- Basha, E. & Kaya, M. (2016). Depression, Anxiety and Stress Scale (DASS): The Study of Validity and Reliability. *Universal Journal of Educational Research*, 4(12), 2701-2705. DOI: 10.13189/ujer.2016.041202
- Bernier, A., Larose, S., Boivin, M., & Soucy, N. (2004). Attachment state of mind: Implications for adjustment to college. *Journal of Adolescent Research*, 19, (6), 783-806.
- Bizcommunity (2009). Teenagers in South Africa are coping with stress but many are taking strain. Available at: <https://www.bizcommunity.com/Article/196/336/37811.html>.
- Bono, G., Reil, K., & Hescoc, J. (2020). Stress and well-being in college students during the COVID-19 pandemic: can grit and gratitude help? *International Journal of Wellbeing* 10, 39–57. doi: 10.5502/ijw.v10i3.1331
- Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psychoanalysis*, 39, 350-371.
- Bowlby J. (1969). *Attachment. Attachment and loss: Vol. 1. Loss*. New York: Basic Books.
- Bowlby, J. (1982). Attachment and loss: Retrospect and Prospect. *American journal of Orthopsychiatry*, 52, (4), 664-678.
- Brann, E., Chaplin, J., Agelii, M., Sjoberg, A., Nikalsson, A., Albertsoon-Wikland, K., & Lissner, L. (2017). Declining well-being in young Swedes born in 1990 versus 1974. *Journal of Adolescent Health*, 60(3), 306-312. Doi: 10.1016/j.jadohealth.2016.10.009
- Bremner, G., & Slater, A. (2003). *Theories of infant development*. Cambridge, MA, & Oxford: Blackwell.
- Brown, J. S., Blackshaw, E., Stahl, D., et al., (2019). School-based early intervention for anxiety and depression in older adolescents: a feasibility randomised controlled trial of a self-referral stress management workshop programme ("DISCOVER"). *Journal of Adolescence*, 71, 150–161.
- Burke, J., & Arslan, G. (2020). Positive education and positive school psychology during COVID-19 pandemic. *Journal of Positive School Psychology*, 4, 137–139.

- Burro, A. L., O'Dell, A. C., & Hill, P. L. (2010). Profiles of a developmental asset: Youth purpose as a context for hope and well-being. *Journal of Youth and Adolescence*, 39 (11), 1265-1273. doi:10.1007/s10964-009-9481-1.
- Burros, A. & Johnson, B. (2005). Girls' experience of menarche and menstruation. *Journal of Reproductive Infact Psychology*, 23, 235-249.
- Byrne, D. G., Davenport, S. C., & Mazonov, J. (2007). Profiles of adolescent stress: The development of the Adolescent Stress Questionnaire (ASQ). *Journal of Adolescence*, 30, 393-416. Doi:10.1016/j.adolescence.2006.04.004
- Callina, K. S., Johnson, S. K., Buckingham, M. H., & Lerner, R. M. (2014). Hope in context: Developmental profiles of trust, hopeful future expectations, and civic engagement across adolescence. *Journal of Youth and Adolescence*, 43(6), 869-883. doi:10.1007/s10964-014-0096-9
- Capurso, M., Dennis, J., Salmi, L., Parrino, C., & Mazzeschi, C. (2020). Empowering children through school re-entry activities after the COVID-19 pandemic. *Continuing Education*, 1, 64–82.
- Carver C. S. (2011). Coping. In R. J. Contrada & A. Baum (Eds.), *The handbook of stress science: Biology, psychology, and health*, pp. 221-229. New York, NY: Springer Publishing Company.
- Canett, L., Bachar, E., Galili-Weisstub, E., De-Nour, A., & Shalev, A. Y. (2017). The association between parental bonding and psychological health among adolescents in Israel. *Pro Quest Central*, 32 (4), 381 – 394.
- Capowich, G. E., Mazerolle, P., & Piquero, A. (2001). General strain theory, situational anger, and social networks—an assessment of conditioning influences. *Journal of Criminal Justice*, 29, 445–461.
- Chen, B., Sun, J., & Fing, Y. (2020). How have COVID-19 isolation policies affected young people's mental health? Evidence from Chinese college students. *Frontiers in Psychology*, 11, 1529. doi: 10.3389/fpsyg.2020.01529
- Crocetti, E. (2017). Identity formation in adolescence: the dynamic of forming and consolidating identity commitments. *Child Development Perspectives*, 11, 145–150. doi: 10.1111/cdep.12226.
- Casas, F., Figuer, C., Gonzalez, M., Malo, S., Alsinet, C., & Subarroca, S. (2007). The well-being of 12 to 16 years old adolescents and their parents from 1999 to 2003 Spanish samples. *Social Indicators Research*, 83(1), 87-115. Doi: 10.1007/ s11205-006-9059-1.
- Casas, F., Sarriera, J., Alfaro, J., Gonzalez, M., Bedin, L., Abs, D., & Figuer, C. (2015). Reconsidering life domains that contribute to subjective well-being among adolescents with data from three countries. *Journal of Happiness Studies*, 16(2), 491-513. Doi: 10.1007/s10902-014-9520-9

- Cullen F. T. (1994) Social support as an organizing concept for criminology: presidential address to the Academy of Criminal Justice Sciences. *Justice Quarterly*, 11, 527-559.
- Daily post (2018). 10 feared dead as Cross River, Akwa Ibom communities clash. Available at: <http://dailypost.ng/2018/05/10/10-feared-dead-cross-river-akwa-ibom-communities-clash/>.
- Das, J. K., Salam, R. A., Lassi, Z. S., et al., (2016). Interventions for adolescent mental health: an overview of systematic reviews. *Journal of Adolescent Health*, 59 (4), S49–S60.
- Daset, L., Fernández-Pintos, M. E., Costa-Ball, D., López-Soler, C., & Vanderplasschen, W. (2015). Desarrollo instrumental del Autoinforme de Adolescentes (ada). *Ciencias Psicológicas*, 9(1), 85-104. Doi: 10.22235/cp.v9i1.169
- DiFilippo, J. M., & Overholser, J. C. (2000). Suicidal ideation in adolescent psychiatric inpatients as associated with depression and attachment relationships. *Journal of Clinical Child Psychology*, 29, 155-166.
- Dixon, J. A., (2007). Predicting student perceptions of school connectedness: The contributions of parent attachment and peer attachment (PhD), University of Miami, Florida.
- Dvorsky, M., Breaux, R., & Becker, S. (2020). Finding ordinary magic in extraordinary times: child and adolescent resilience during the COVID-19 pandemic. *European Child Adolescence Psychiatry*, 1–3. doi: 10.1007/s00787-020-01583-8 [Epub ahead of print].
- Elder Jr, G. H., Caspi, A., & Burton, L. M. (2013). Adolescent transitions in developmental perspective: Sociological and Historical. Paper Presented at the Development During Transition to Adolescence. The Minnesota Symposia on Child Psychology.
- Ellis, W. E., Dumas, T. M., and Forbes, L. M. (2020). Physically isolated but socially connected: psychological adjustment and stress among adolescents during the initial COVID-19 crisis. *Canadian Journal of Behavioral Sciences*, 52, 177–187. doi:10.1037/cbs0000215
- Evans, G.W., & English, K. (2002) The environment of poverty: multiple stressor exposure, psychophysiological stress, and socioemotional adjustment. *Child Development*, 73, 1238–1248.
- Everly, G. S., & Lating, J. M. (2019). *The concept of stress. A clinical guide to the treatment of the human stress response*. New York: Springer.
- Featherman, D., Lerner, R., and Perimutter, M. (2019). *Life Span Development and Behaviour. Vol. 12*. Hove, UK: Psychology Press.

- Fedorwic, A. & Kral, M. (1995). Coping Strategies as Predictors of Distress in Survivors of Single and Multiple Sexual Victimization and Non-victimized Controls. *Journal of Applied Social Psychology*, 25 (16) 1464-1483.
- Fernández, M. E., Van Damme, L., Daset, L. & Vanderplasschen, W. (2020). Predictors of Domain-Specific Aspects of Subjective WellBeing among School Going Adolescents in Uruguay. *Avances en Psicología Latinoamericana*, 38 (1), 20 – 36. DOI: <https://doi.org/10.12804/revistas.urosario.edu.co/apl/a.6933>
- Fernández, M. E., Daset, L., Vanderplasschen, W., Costa-Ball, D., Van Damme, L., & Vindevogel, S. (2017). Risk and protective factors for alcohol use among school-going adolescents in Montevideo (Uruguay). *Drugs & Alcohol Today*, 17(1), 12-22. Doi: 10.1108/DAT01-2016-0002
- Folkman, S. (2013). Stress, coping, and hope. In B. I. Carr & J. Steel (Eds.), Ganste, D. C., & Victor, B. (1988). The Impact of Social Support on Mental and Physical Health. *British Journal of Medical Psychology*, 61 (1), 17-36.
- Freeston, M., Tiplady, A., Mawn, L., Bottesi, G., & Thwaites, S. (2020). Towards a model of uncertainty distress in the context of coronavirus (COVID-19). *Cogn. Behav. Therap.* 13:e31. doi: 10.1017/S1754470X2000029X
- Frydenberg, E. (2020). My journey in coping research and practice: the impetus and the relevance. *Educational Development and Psychology*, 37, 83–90. doi: 10.1017/edp.2020.9
- Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). COVID-19 and remote learning: experiences of parents with children during the pandemic. *American Journal of Quality Research*, 4, 45–65. doi: 10.29333/ajqr/8471
- García, D., Sagone, E., De Caroli, M., & Nima, A. (2017). Italian and Swedish adolescents: Differences and associations in subjective well-being and psychological well-being. *PeerJ* 5 e:26868. Doi: 10.7717/peerj.2868
- Gilbert A., (2006). Adolescent care. *Canadian Family Physician*, 52 (11), 1440-1441.
- González-Carrasco M., Casas, Malo, S., Vinas, F., & Dinisman, T. (2017). Changes with age in subjective wellbeing through adolescent years: Differences by gender. *Journal of Happiness studies*, 18(1), 63-88. Doi: 10.1007/s10902-016-9717-1
- Gorrese, A. & Ruggieri, R. (2012). Peer attachment: A meta-analytic review of gender and age differences and associations with parent attachment. *Journal of Youth and Adolescence*, 41, 650-672.
- Gustafsson, H., Skoog, T., Podlog, L., Lundqvist, C., & Wagnsson, S. (2013). Hope and athlete burnout: Stress and affect as mediators. *Psychology of Sport and Exercise*, 14 (5), pp. 640-649. doi:10.1016/j.psychsport.2013.03.008.

- Greenberg, M.T., Siegal, J., & Leitch, C. (1984). The nature and importance of attachment relationships to parents and peers during adolescence. *Journal of Youth and Adolescence*, 12(5), 373-386.
- Hampel, P., & Petermann, F. (2006) perceived stress, coping and adjustment in Adolescence. *Journal of Adolescence Health*, 38 (4), 409-415.
- Hardy M. (2013). Statistics on College Students Stress. Available at: <http://stress.lovetoknow.com>
- Horita, R., Nishio, A., & Yamamoto, M. (2021). The effect of remote learning on the mental health of first year university students in Japan. *Psychiatry Research*, 295:113561. doi: 10.1016/j.psychres.2020.113561
- Howe, D. (2011). Attachment across the life-course: A brief introduction. Basingstoke UK: Palgrave Macmillan.
- Hurlok, E. B. (1981). *Developmental psychology a life-span approach* (New Delhi: Tata McGraw-Hill Publishing Company Ltd.).
- Indumathy, J., & Ashwini, K. (2017). Parental bonding and psychological wellbeing among young adults. *International Journal of Indian Psychology*, 4(2), 78 – 94.
- Inga, D., Sigfusdottir, A. L., Kristjansson, T. T.& Allegrante, J. P.(2017). Stress and adolescent well-being: the need for an interdisciplinary framework. *Health Promotion International*, 32 (6), 1081-1090. <https://doi.org/10.1093/heapro/daw038>.
- Jach, H., Sun, J., Loton, D., Chin, T.-C., & Waters, L. (2018). Strengths and subjective well-being in adolescence: strength-based parenting and the moderating effect of mindset. *Journal of Happiness Studies*, 19, 567–586.
- James, L. R., and Brett, J. M. (1984). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology*, 69, pp. 307-321.
- Jorm, A. F., Kitchener, B. A., Sawyer, M. G., Scales, H & Cvetkovski, S. (2010). Mental health first aid training for high school teachers: a cluster randomized trial; *BMC Psychiatry*, 10-51.
- Kafle, A.& Thakali, M. (2013). Social relations in adolescence: role of Parent and peer relationships in adolescence psychosocial development. Bachelor thesis. Available at: https://www.theseus.fi/bitstream/handle/10024/59378/Kafle_Thakali.pdf?sequence=1.
- Kappphn, C. J., Morreale, M. C., Rickert, V. I., Walker, L. R. (2006). Society for Adolescent Medicine. Financing mental health services for adolescents: A position paper of the society for adolescent medicine. *Journal of Adolescent Health*, 39, 456–468.

- Keane, J. (1996). *Reflections on violence*. London, England: Verso.
- Kio, J. O., Omeonu, P. E., & Agbede, C. O (2015). Assessment of Stress Levels among Undergraduates in Nigeria: Implication for Mental Health Policy. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 4 (1) 18-23. Available at: <http://www.iosrjournals.org/iosr-jnhs/papers/vol4-issue1/Version-2/C04121823.pdf>.
- Kirsch, A. C. (2014). Examining the Moderating Role of Specific Coping Strategies on the Relationship between Body Image and Eating Disorders in College-Age Women. A Thesis Submitted to the Faculty of the Graduate School in Candidacy for the Degree of Master of Arts Program in Clinical Psychology, Chicago, Illinois
- Kotter, T., Wagner, J., Bruheim, L., & Voltmer, E. (2017). Perceived Medical School stress of undergraduate medical students predicts academic performance: An observational study. *BMC Medical Education*, 17(1), 256 – 265..
- Kulis, S., Marsiglia, F.F., & Hurdle D. (2003). Gender Identity, Ethnicity, Acculturation, and Drug Use: Exploring Differences among Adolescents in the Southwest. *Journal of Community Psychology*, 31 (2) 167-188.
- Kumar, S., & Bhukar, J. P (2013). Stress level and coping strategies of college students. *Journal of Physical Education and Sports Management*, 4(1), 5-11. DOI: 10.5897/JPESM12.001.
- Kumar, A., Yadav, G., Chauhan, N., & Bodat, S. (2019). Prevalence of depression, anxiety and stress among school going adolescents in Delhi: a cross sectional study. *International Journal of Community Medicine and Public Health*, 6 (12), 5021-5026.
- Kusi-Mensah, K., Donnir, G., Wemakor, S., Owusu-Antwi, R., & Omigbodun, O. (2019). Prevalence and patterns of mental disorders among primary school age children in Ghana: correlates with academic achievement. *Journal of Child & Adolescent Mental Health*. 31(3), 214–223.
- Laureate Education, Inc. (2012). *The Focus of Coping. (Handout)*. Baltimore: Author.
- Lawal, D. (2017). The Nation Newspaper. Nigerian population: Adolescents more vulnerable. Available at: <http://thenationonlineng.net/population-adolescents-more-vulnerable>.
- Lazarus, R. S., & Folkman S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company.
- Leadbeater, B. J., Kuperminc, G. P, Blatt S. J, Hertzog C. A (1999). Multivariate model of gender differences in adolescents' internalizing and externalizing problems. *Developmental Psychology*, 35 (5), 1268-82.

- Le, M. T., Tran, T. D., Holton, S., Nguyen, H. T., Wolfe, R., & Fisher, J. (2017). Reliability, convergent validity and factor structure of the DASS-21 in a sample of Vietnamese adolescents. *PLoS one*, 12(7): e0180557.
- Lee, K. W., Ching, S. M., Hoo, F.K., Ramachandran, V., Chong, S. C., Tusimin, M., et al. (2019). Prevalence and factors associated with depressive, anxiety and stress symptoms among women with gestational diabetes mellitus in tertiary care centres in Malaysia: a cross-sectional study. *BMC pregnancy and childbirth*, 19 (1), 1–11.
- LeMoult, J., Humphreys, K. L., Tracy, A., Hoffmeister, J. A., Ip, E., & Gotlib, I. H. (2020). Meta-analysis: exposure to early life stress and risk for depression in childhood and adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59 (202- 2018).
- Leonard, N. R., Gwadz, M. V., Ritchie, A., Linick, J. L., Cleland, C. M., Elliott, L., & Grethel, M. (2015). A multi-method exploratory study of stress, coping, and substance use among high school youth in private schools. *Frontiers in Psychology*, 6, ARTN 1028.
- Lewis, F. M., Woods, N.F., & Ellison, E. (1987). Family impact study, Unpublished report, University of Washington, R01-NUO1000, Division of Nursing, Public Health Service.
- Liang, L., Ren, H., Cao, R., Hu, Y., Qin, Z., Li, C., et al. (2020). The effect of COVID-19 on youth mental health. *Psychiatry Quarterly*, 91, 841–852. doi:10.1007/s11126-020-09744-3
- Loman M. M. & Gunnar, M. R (2010). Early experience and the development of stress reactivity and regulation in children. *Neuroscience and Bio-behavioral Reviews*, 34, 867-876. doi: 10.1016/j.neubiorev.2009.05.007.
- Lomaowska, A. M., Lovic, V., Rankine, M. J., Mooney, S. J., Robinson, T. E., & Kreamer, G. W. (2011). Inadequate early social experience increases the incentive salience of reward-related cues in adulthood. *Behavioural Brain Research*, 220 (1), 91-99.
- Loton, D., & Waters, L. (2018). The mediating effect of self-efficacy in the connections between strength-based parenting, happiness and psychological distress in teens. *Frontiers in Psychology*, 8:1707. doi: 10.3389/fpsyg.2017.01707
- Lovibond, P.F. & Lovibond, S.H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33, 335-343.
- Malak, M. Z., & Khalifeh, A. H. (2018). Anxiety and depression among school students in Jordan: prevalence, risk factors, and predictors. *Perspectives in Psychiatric Care*, 54 (2), 242–250.

- Mansfield, C. D., & Diamond, L. M. (2017). Does stress-related growth really matter for adolescents' day-to-day adaptive functioning? *Journal of Early Adolescence*, 37, 677–695. doi: 10.1177/0272431615620665
- Marques de Miranda, D., da Silva Athanasio, B., Sena Oliveira, A. C., & Simoes-e-Silva, A. C. (2020). How is COVID-19 pandemic impacting mental health of children and adolescents? *International Journal of Disaster Risk Reduction*, 51, 101845. doi: 10.1016/j.ijdrr.2020.101845
- Marqus, C. P., Gasparotto, G. S., & Coelho, R. W. (2015). Fatores relacionados ao nível de estresse em adolescentes estudantes: Uma revisão sistemática (Stress level related factors in adolescents' students: A systematic review. *Salusvita*, 34 (1), 99-108. Available at: <http://www.usc.br/biblioteca/salusvita/salusvita>
- Marva, M. L., Vacio, A., Garcia-Yanez, G. & Espinosa-Hernandez, G. (2007). Attitudes toward menarche among Mexican preadolescents *Women Health*, 46, 7-23.
- Masten, A., & Motti-Stefanidi, F. (2020). Multisystem resilience for children and youth in disaster: reflections in the context of COVID-19. *Adversity and Resilience Science*, 1, 95–106. doi: 10.1007/s42844-020-00010-w
- Mayer, F. B., Santos, I. S., Silveira, P. S., et al., (2016). Factors associated to depression and anxiety in medical students: a multicenter study. *BMC Medical Education*, 16 (1), 282.
- Mazerolle, P., & Piquero, A. (1998). Linking exposure to strain with anger: an investigation of deviant adaptations. *Journal of Criminal Justice*, 26, 195–211.
- Midei, A. J., & Matthews, K. A. (2009). Social relationships and negative emotional traits are associated with central adiposity and arterial stiffness in healthy adolescents. *Health Psychology*, 28, 347.
- Millings, A., Buck, R., Montgomery, A., Spears, M., & Stallard, P. (2012). School connectedness, peer attachment and Self-esteem as predictors of adolescent depression. *Journal of adolescent*, 35 (4), 1061-1067.
- Moeini, B., Poorolajal, J., & Gharlipor G. Z (2012). Prevalence of cigarette smoking and associated risk factors among adolescents in Hamadan city, Western Iran in 2010. *Journal of Research in Health Sciences*, 12 (1), 31-37.
- Momtazi, S., & Rawson, R. (2010). Substance Abuse among Iranian high school students. *Current Opinion in psychiatry*, 23 (3), 221-226.
- Montserrat, C., Dinisman, T., Baltatescu, S., Grigoras, B., & Casas, F. (2015). The effect of critical changes and gender on adolescent's subjective well-being: Comparisons across 8 countries. *Child Indicators Research*, 8(1), 11-131. Doi: 10.1007/s12187-014-9288-9

- Nachmias, N., Gunnar, M., Mangelsdorf, S., Parriz, R. H., & Buss, K. (2008). Behavioral inhibition and stress reactivity: The moderating role of attachment security. *Child Development*, 67 (2), 508-522. doi: 10.1111/j.1467-8624.1996.tb01748.x.
- Natsuaki, M. N., Klimes-Dougan, B., Ge, X., Shirtcliff, E. A., Hastings, P. D., & Zahn-Waxler, C. (2009). Early pubertal maturation and internalizing problems in adolescence: sex differences in the role of cortisol reactivity to interpersonal stress. *Journal of Clinical and Child Adolescence Psychology*, 38(4), 513-24.
- Nielsen, L., Shaw, T., Meilstrup, C., Koushede, V., Bendtsen, P., Rasmussen, M., Lester, L., Due, P. & Cross, D. (2017). School transition and mental health among adolescents: A comparative study of school systems in Denmark and Australia. *International Journal of Educational Research*, 83, 65-74. <https://doi.org/10.1016/j.ijer.2017.01.011>.
- Nitkowski, D., Laakmann, M., Petersen, R., Peterman, U., & Peterman, F. (2017). Emotion training with students: An effectiveness study concerning relation between subjective wellbeing, emotional awareness and emotion expression. *Kindheit und Entwicklung*, 26(3), 175-183. Doi: 10.1026/0942-5403/a000229
- Nunnally, J. C. (1967). *Psychometric Theory*. New York: McGraw-Hill.
- Obiunu, J. J. (2015). Relationship between Parents and Peer Influences on Qualities of Adolescent Friendship. *Journal of Education and Practice*, 6 (8), 128-133.
- OECD (2015). Skills for social progress: The power of social and emotional skills Doi: 10.1787/9789264226159-en.
- Oldfield, J., Humphrey, N. & Hebron, J. (2016). The role of parental and peer attachment relationships and school connectedness in predicting adolescent mental health outcomes. *Child and Adolescent Mental Health*, 21 (1), 21-29. DOI: 10.1111/camh.12108.
- Onapajo, H., & Usman, A. A. (2015). Fuelling the Flames: Boko Haram and Deteriorating Christian–Muslim Relations in Nigeria. *Journal of Muslim Minority Affairs*, 35(1), 106-122.
- Ooi, Y. P., Ang, R. P., Fung, D. S. S., Wong, G., & Cai, Y. (2006). The Impact of Parent–Child Attachment on Aggression, Social Stress and Self-Esteem. *School Psychology International*, 27(5), 552-566. doi:10.1177/0143034306073402
- Operario, D., Tschann, J., Flores, E., & Bridges, M. (2006). Brief Report: Associations of parental warmth, peer support, and Gender with Adolescence Emotional Distress. *Journal of Adolescence*, 29 (2), 299-305. doi:10.1016/j.adolescence.2005.07.001.

- Owens, R., & Waters, L. (2020). What does positive psychology tell us about early intervention with children and adolescents? A review of the impact of positive psychological interventions with young people. *Journal of Positive Psychology*, 15, 588–597. doi: 10.1080/17439760.2020.1789706
- Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: A global public-health challenge. *Lancet*, 369 (1), 302–13.
- Pelaez, M., & Novak, G. (2020). Returning to school: separation problems and anxiety in the age of pandemics. *Behaviour Analysis and Practice*, 13, 521–526. doi:10.1007/s40617-020-00467-2
- Perry, Y., Werner-Seidler, A., CEAR, A., Mackinnon, A., King, C., Scott, J., Batterham, P. J. (2017). Preventing depression in final year secondary students: school-based randomized controlled trial. *Journal of Medical Internet Research*, 1911, e369.
- Pesonen, A. K. & Ramikkonen, K. (2011). Mental health of children evacuated during World War II. In Fitzgerald HE, Puura K, Tomlinson M, Paul C, editors. *International perspectives on children and mental health, Volume 1: Development and context*. Santa Barbara, CA: Praeger Publishers; pp. 197-216.
- Pinheiro, C., & Matos, P. M. (2012). Peer attachment, Coping, and Self-esteem in institutionalized adolescents: the mediating role of social skills. *European Journal of Psychology of Education*, 28 (1), 87-100.
- Pitman, R., & Scharfe, E. (2010). Testing the function of attachment hierarchies during emerging adulthood. *Personal Relationships*, 17, 201-216.
- Pogrebtsova, E., Craig, J., Chris, A., O'Shea, D., & González-Morales, M. G. (2017). Exploring daily affective changes in university students with a mindful positive reappraisal intervention: a daily diary randomized controlled trial. *Stress and Health* 34, 46–58. doi: 10.1002/smi.2759
- Rabbani, M., Kasmaiezhadfar, S. & Pourrajab, M. (2014). The Relationship between Parental Attachment and Stress: A Review of Literatures Related to Stress among Students. *The Online Journal of Counseling and Education*, (1), 42-50. Available at: <http://www.tojce.com.frontend/articles/pdf/v03i01/Rabbani%20et%20al.%2042-50.pdf>.
- Rashid, T., & McGrath, R. E. (2020). Strengths-based actions to enhance well-being in the time of COVID-19. *International Journal of Wellbeing*, 10, 113–132. doi: 10.5502/ijw.v10i4.1441
- Ramos-Díaz E, Rodríguez-Fernández, A., & Agirre, A (2017). El autoconcepto y el bienestar subjetivo en función del sexo y del nivel educativo en la adolescencia. *Psicología Educativa*, 23(2), 89-94. Doi: 10.1016/j.pse.2017.05.005

- Redondo, L. M., Martin, A. L., Fernandez, J.S., & Lopez, J. M. (1986). An examination of the relationship between family environment and juvenile delinquency. Unpublished manuscript, University of Santiago, Chile.
- Riggs, S. A (2013). Adolescent behavior problems and inter-parental conflicts: The moderating role of parent-child attachment. (PhD Thesis), University of North Texas, United States of America.
- Rodríguez-Fernández, A., Ramos-Díaz, E., Fernández-Zabala, E., Goni, E., Esnaola, J., & Goni, A. (2016). Contextual and psychological variables in a descriptive model of subjective wellbeing and school engagement. *International Journal of Clinical and Health Psychology*, 16(2), 166174. Doi: 10.1016/j.ijchp.2016.01.003
- Rushton, J. L., Forcier, M., & Schectman, R. M. (2002). Epidemiology of depressive symptoms in the national longitudinal study of adolescent health. *Journal of American Academy of Child and Adolescent Psychiatry*, 41, 199–205.
- Saffari, M., Ghofranipour, F., Mahmoudi, M. & Montazeri, A. (2011). Stress, Coping Strategies and Related factors in a Sample of Iranian Adolescents. *Iranian Red Crescent Medical Journal*, 13 (9), 641-646.
- Sandal, R., Goel, N., Sharma, M., Bakshi, R., Singh, N., Kumar, D. (2017). Prevalence of depression, anxiety and stress among school going adolescent in Chandigarh. *Journal of Family Medicine and Primary Care*, 6(2), 405 - 427.
- Satici, S. (2016). Psychological vulnerability, resilience, and subjective wellbeing: The mediating role of hope. *Personality and Individual Differences*, 102, 68-73. Doi: 10.1016/j.paid.2016.06.057
- Schwarzer, R. & Schulz, U. (2013). Berlin Social Support Scales (BSSS). Measurement Instrument Database for the Social Science. Available at: http://www.midss.org/sites/default/files/berlin_social_support_scales_english_items_by_scale.pdf.
- Schnider, K. R., Elhai, J. D., & Gray, M. J. (2007). Coping style use predicts posttraumatic stress and complicated grief symptom severity among college students reporting a traumatic loss. *Journal of Counseling Psychology*, 54, 344-350.
- Schore A. N. (2012). *The science of the art of psychotherapy*. New York NY: Norton.
- Schore A. N. & McIntosh, J. (2011). Family law and the neuroscience of attachment, Part 1. *Family Court Review*, 49, 501-512.
- Schral, K., Perski, A., Grossi, G., & Simonsson-Sarnecki, M. (2011). Stress Symptoms among adolescents: the ole of subjective psychosocial conditions, lifestyle, and self-esteem. *Journal of Adolescence*, 34 (5), 987-996.

- Schwab-Stone, M., Chen, C., Greenberger, E., Silver, D., Lichtman, J. & Voyce, C. (1999). No safe haven II: the effects of violence exposure on urban youth. *Journal of American Academy of Child Adolescence Psychologists*, 38,359-367.
- Scott, C. S., Arthur, D., Owen, R. & Panizo, M. I. (1989). Black adolescents' emotional response to menarche. *Journal of National Medical Association*, 8, 285-290.
- Shaikh, B., Doke, P., & Gothankar, J.(2019). Depression, anxiety, stress, and stressors among rural adolescents studying in Pune and a rural block of Nanded district of Maharashtra, India. *Indian Journal of Public Health*, 62(4),311.
- Shoshani, A., & Slone, M. (2016). The resilience function of character strengths in the face of war and protracted conflict. *Front. Psychol.* 6:2006. doi: 10.3389/fpsyg.2015.02006
- Sigleman, C. & Rider, E. (2014). *Life-span Human Development*. United States of America: Cengage Learning.
- Sigfusdottir I. D., Gudjonsson G. H., Sigurdsson J. F. (2010). Bullying and delinquency. The mediating role of anger. *Personality and Individual Differences*, 48, 391–396.
- Sigfusdottir, I. D., Kristjansson, A. L., Thorlindsson, T., & Allegrante, J. P. (2017). Stress and adolescent well-being: the need for an interdisciplinary framework. *Health Promotion International*, 32, 1081–1090
- Singh, J., & Ullah, F. (2016). Personality factors as determinants of the stress experienced by the adolescents. *International Journal of Indian Psychology*, 31 (4), 47–58.
- Sinclair, J. (2016). *The effects of a school-based cognitive behavioral therapy curriculum on mental health and academic outcomes for adolescents with disabilities* [Doctoral dissertation]. Department of Special Education and Clinical Sciences, Graduate School of the University of Oregon. Available at: <https://scholarsbank.uoregon.edu/xmlui/handle/1794/20479> (Accessed April 24, 2021).
- Sommer, M. (2011). An overlooked priority: Puberty in sub-Saharan Africa. *American Journal of Public Health*, 101, 979-981.
- Southwick, S. M., Satodiya, R., & Pietrzak, R. H. (2016). Disaster mental health and positive psychology: an afterward to the special issue. *Journal of Clinical Psychology*, 72, 1364–1368. doi: 10.1002/jclp.22418
- Strohmeier, D., & Spiel, C. (2012). Peer relations among immigrant Adolescents: Methodological challenges and key findings migrations. *Interdisciplinary Perspectives*, pp. 57-65, Vienna Springer.

- Taherdoost, H. (2017). Determining sample size: How to calculate survey sample size. *International Journal of Economics and Management System*, 2, 237 – 239.
- Terry, D. J., Tonge, L. & Callan, V. J. (1995) Employee adjustment to stress: The role of coping resources, situational factors, and coping responses. *Anxiety, Stress and Coping*, 8 (1), 1-24, DOI: 10.1080/10615809508249360.
- Thapar, A., Collishew, S, Pine, D. S., & Thapar, A. K. (2012). Depression in adolescence. *Lancet*, 379, (9820), 1056-1067.
- Thomas, R. M. (2000). *Recent theories of human development*. Newbury Park, CA: Sage.
- UNICEF. Adolescents' overview: Investing in a safe, healthy and productive transition from childhood to adulthood is critical. Available at: <https://data.unicef.org/topic/adolescents/overview/>.
- Unnever, J. D., Colvin, M., & Cullen, F. T. (2004). Crime and coercion: a test of core theoretical propositions. *Journal of Research in Crime and Delinquency*, 41, 244–268.
- Van Rooyen, M., Naude, L., Nel, L., & Esterhuysen, K. (2014). The role of cognitive style in the stress and coping of black South African adolescents. *Journal of Mental Health*, 23(6), 340-346. Doi:10.3109/09638237.2014.97114.
- Wallace, D. D., Boynton, M. H., & Lytle, L. A. (2017). Multilevel analysis exploring the links between stress, depression, and sleep problems among two-year college students. *Journal of American College Health*, 653, 187–196.
- Waters, L. (2019). Searching for well-being in schools: a new framework to guide the science of positive education. *Journal of Educational Psychological Research*, 1, 1–8.
- Waters, L., Algoe, S. B., Dutton, J., Emmons, R., Fredrickson, B. L., Heaphy, E., et al. (2021). Positive psychology in a pandemic: buffering, bolstering, and building mental health. *Journal Positive Psychology*, 1–21. doi: 10.1080/17439760.2021.1871945
- Waters L, Allen K-A & Arslan G (2021) Stress-Related Growth in Adolescents Returning to School After COVID-19 School Closure. *Frontiers in Psychology*, 12, 643443. doi: 10.3389/fpsyg.2021.643443.
- Waters, L., Barsky, A., Ridd, A., & Allen, K. (2015). Contemplative education: a systematic, evidence-based review of the effect of meditation interventions in schools. *Educational Psychology Review*, 27, 103–134. doi: 10.1007/s10648-014-9258-2
- Waters, L., & Loton, D. (2019). SEARCH: a meta-framework and review of the field of positive education. *International Journal of Positive Psychology*, 4, 1–46. doi:10.1007/s41042-019-00017-4

- Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albershein, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development*, 71, 684-689.
- Weinfield N. S., Sroufe L. A., Egeland B., & Carlson E. A (1999). The nature of individual differences in infant-caregiver attachment. In: Cassidy J, Shaver PR, editors. *Handbook of attachment: Theory, research and clinical practice*. New York, NY: Guilford. pp. 68-88.
- Yusoff, M.S.B., Abdul Rahim, A.F., & Yaacob, M.J. (2010). Prevalence and Sources of Stress among Universiti Sains Malaysia Medical Students, *Malaysian Journal of Medical Sciences*, 17 (1), 30-37.
- Zimmer-Gembeck, M. J. & Locke, E. M (2007). The socialization of adolescent coping: Relationships at home and school. *Journal of Adolescence*, 30, 1-16.
- World Bank. (2019). *Population Stat 2017 – 2020*. Geneva: World Bank; 2020. Available at <https://populationstat.com/nigeria/uyo>.
- Zhou, S.-J., Zhang, L.-G., Wang, L.-L., Guo, Z.-C., Wang, J.-Q., Chen, J.-C., et al. (2020). Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. *Eur. Child Adolesc. Psychiatry* 29, 749–758. doi: 10.1007/s00787-020-01541-4.