# DEPRESSION AND LIFE SATISFACTION AMONG UNDERGRADUATES: A COMPARATIVE STUDY

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Abstract: This study investigated depression as a correlate of life satisfaction among students of Enugu State University of Science and Technology (ESUT) using a simple random sampling technique. A total of 70 participants comprising 34 male and 36 female students from the Department of Psychology with ages between 16-20 years, with a mean age of 17.92 and a standard deviation of 1.26 years were selected for the study. Self-Rating Depression scale (SRDS Zung (1965). While Life Satisfaction Index-Short Form (LIS-SF) was developed by Barrett and Murk (2009) A correlation research design was adopted for data collection, while the Pearson Moment Correlation Coefficient was applied to analyze the data. The findings showed that those who are depressed are not satisfied with life. The participants showed an increase in depression and a decrease in life satisfaction. Therefore, the present study shows that with the high level of depression the students will not be satisfied with life. The results have also implications for clinical practices especially as it relates to counselling.

**Keywords:** Depression, Education, Life Satisfaction, University Students.

## Introduction

Psychological wealth includes life satisfaction, the feeling that life is full of meaning, a sense of engagement in interesting activities, the pursuit of important goals, the experience of positive emotional feelings, and a sense of spirituality that connects people to things larger than themselves (Diener, & Diener, 1995). Life satisfaction affects subjective well-being and is a judgmental process; it is a cognitive evaluation of the quality of life that individuals form, based on their standards (Shin & Johnson, 1978). Life satisfaction is conceptualized as a cognitive judgmental process in which individuals assess their quality of life based on the unique criteria possessed by individuals (Diener, Emmons, Larsen, & Griffin, 1985), however, this cognitive assessment is separate from individual interpretations of affective events (emotional) (Suldo, Savage, & Mercer, 2014). It appears that all human activities are geared toward making life more meaningful and the desire for happiness has been viewed as a basic and universal human drive (Ho, Cheung, & Cheung, 2008). Recently, social scientists and other researchers in related fields have focused attention on satisfaction with life across different categories

of people, including the young and the old (Ho, Cheung, & Cheung, 2008, Joshanloo & Afshari, 2011; Seitz, Hagmann, Besier, Dieluweit, Debatin, Grabow, Kaatsch, Henrich, & Goldbeck, 2011; Wong, Oie, Ang, Lee, Ng, & Leng, 2007). Life satisfaction has been identified as one of the three components of subjective well-being (Diener, 1984). It is defined as one's overall assessment derivable from the comparison between one's aspiration and one's achievement (George & Bearnon, 1980).

Life satisfaction connotes the outcome of self-assessment, depending on one's expectations. It is determined by one's perception of how things are and how they should be.

Generally, most of the studies on life satisfaction have been done in cultures outside Africa. For example, studies on life satisfaction involved samples from many countries including the United States (e.g. Schimmack, Oishi, Furr, & Funder, 2004), Europe (e.g. Halvorsen & Heyerdahl, 2006), China (e.g. Ho, Cheung, & Cheung, 2008), Australia (e.g. Hong & Giannakopoulos, 1994) and Iran (Joshanloo & Afshari, 2011). Although Nigerians have been described as one of the happiest people on earth, still there are limited studies on the correlates of happiness and life satisfaction of Nigerians (Agbo, Nzeadibe, & Ajero, 2012).

In an attempt to understand life satisfaction, several models have been advanced. For instance, the top-down approach model advocate for dispositional such as personality characteristic in understanding life satisfaction (Ho, Cheung & Cheung, 2008). In line with this, researchers have reported that genetic components account for about 80% variations in well-being (Lykken & Tellegen, 1996; Tellegen, et al, 1988). These findings indicated that the differences in peoples" life satisfaction are due in part to their biological differences. If this argument is dragged to the extreme, it appears there is little we could do to change people's feeling of satisfaction as it is predominantly genetic. Thus, some individuals have a predisposition to be satisfied or unsatisfied with life.

Another explanation is the bottom-up model which advocates that the objective life conditions and situation determine one's level of life satisfaction (Ho, Cheung & Cheung, 2008). Satisfactions here are derived from the major domains of life such as job, health, marriage, education, and income. The average satisfaction one derives from these domains sums up to determine our overall life satisfaction. This seems to support our generally held belief that satisfaction with domain factors like job, income, and health determine our overall life satisfaction. Some events or situations could make one satisfied with life.

Similarly, students spend the majority of their school time in classrooms. If the period spent with their teachers and other students comprises meaningful and enjoyable events, then it is probable that their attitudes toward the school, in general, will also be positive and satisfied. Students' perceptions of the quality of the classroom environment play a decisive role in their views on school life satisfaction, as proved by scientific studies (Mok & Flynn, 2002). The behavioural aspect involves the student attending school regularly and participating in activities. The students' sense of belonging and caring about school results requires emotional engagement (Finn, 1993).

Moreover, relationships with others in the classroom influence students' life satisfaction. Schools seek to encourage students to become self-aware and to learn to act independently, take personal responsibility, improve on their talents, and become creative and flexible as part of the education process. To gain these qualities, the school and classroom atmosphere must be suitable. According to a study, students study more effectively and feel safer in a democratic and humane atmosphere (Şahin & Özbay, 1999). The school atmosphere should have three basic elements, which are present in a psychological consultancy: Consistency (e.g., how the individual is

perceived by others), empathetic understanding (understanding the other person according to that person's perception, and reflecting this), and unconditional acceptance (attitudes based on loving care, free from judgment and not oriented toward personal satisfaction) (Motschnig-Pitrik & Mallich, 2004). According to a study by Elmore and Huebner (2010), there is a positive relationship between students' life satisfaction at school and the relationships they build with peers. Empathy, which is a determinant for effective communication, plays a significant role in the attitudes of students toward each other as it reduces undesirable behaviour. In the studies by Kandemir and Özbay (2009), bullying was found to decrease in situations where there is an empathetic atmosphere.

In the same vein, previous studies have indicated that life satisfaction influences their subjective well-being (Shin & Johnson, 1978) and their success in relationships with other people, their work, and their physical functions (Lewis, 2010). Moreover, it influences their relationships with other students (Leung & Zhang, 2000) and their attitudes toward their teachers and school (Gilman & Huebner, 2006; Mok & Flynn, 2002). No doubt, students' life satisfaction may affect their mental health, academic motivation, academic performance, peer relationships. Also, based on several previous studies as cited by Ackerman (2021), it can be seen that life satisfaction felt by individuals have a positive impact on individual behaviour and life.

Specifically, for students, life satisfaction can also, predict aspects of student life, not just academic aspects. In students, life satisfaction is influenced by many factors. In general, factors that affect life satisfaction in students are divided into two, namely internal factors and external factors. Internal factors are factors that come from within individual, expectations, involvement in activities, personality, orientation to happiness, academic fatigue, selfmonitoring, gratitude, determination of life goals, stress and resilience, self-esteem, and cognitive needs (Raats, 2015, Utami, 2009, Ramdani, 2015, Peterson, Park, & Seligman, 2005, Triana, Mashoedi, & Koentary, 2014, Robustelli & Whisman, 2016, Bronk, Hill, Lapsley, Talib, & Finch, 2009, Cazan & Truta, 2015, & Coutinho & Woolery, 2004).

Meanwhile, external factors are factors that originate outside the individual. External factors that influence life satisfaction include family support, income, quality of family cohesion, parental support, and peer relations, classmate support, school climate, and peer closeness (Ma & Huebner, 2008, Ramdani, 2015, Proto & Rustichini, 2015, Rabotec-Saric, Brajsa-Zganec, & Sakic, 2008, Minch, 2009, & Zullig, Huebner, & Patton, 2011).

Above all, we can see that people who have high levels of life satisfaction are more successful in their relationships with people, at work, at school and in terms of their physical functions while those who have low satisfaction are not (Lewis, 2010). Looking at a reverse of these factors, lack or the decline of any of the determinants of life satisfaction mentioned above can lead to depression. No doubt, many factors could predict a student's life satisfaction; depression is one of very important among all of them. Many studies concluded that depression affects life satisfaction, that individual who has better mental health is more satisfied in life (Abdulghani, Alkanhal, Mahmoud, Oonnamperuma & Alfaris, 2011). Life satisfaction is negatively associated with depression, anxiety and loneliness and positively associated with health (Abdulghani et al, 2011).

However, according to the Diagnostic and Statistical Manual of Mental Disorders – DSM-5 (2013), depression is an emotional state marked by low mood, great sadness and feelings of worthlessness, disappointment, guilt and shame. Additional symptoms include boredom, tiredness, lack of meaning in life, withdrawal from others and loss of sleep, appetite, sexual desire, interest and pleasure in usual activities. Other symptoms include

dissatisfaction with one's life, feeling of discouragement about the future, loss of energy, difficulty paying attention to work or thought, inability to grasp what is read and what other people say. Many depressed individuals (students) prefer to sit alone and remain silent. Others are agitated and cannot sit still. The paces, wing their hands, continually sigh and moan or complain. When depressed individuals/ or students are confronted with a proble m, no ideas for its solution occur to them. Every moment has a great heaviness and their heads fill and reverberate with selfrecriminations. Depressed people may neglect personal hygiene and appearance and make numerous complaints of somatic symptoms with no apparent physical basis. Utterly dejected and completely without hope and initiative, they may be apprehensive, anxious, and despondent much of the time (Davison et al., 2010).

The symptoms and signs of depression vary somewhat across the lifespan (APA, 2017). Depression often results in somatic complaints, such as headaches or stomach aches. In older adults, depression is often characterized by distractibility and complaints of memory loss. Ramli, Ramli, Albdullah and Sarkasi, (2011) observed that symptoms of depression exhibit some cross-cultural variation, probably resulting from differences in cultural standards of acceptable behaviour. For example, depression is substantially less prevalent in Africa particularly in Nigeria than in North America and Europe, due in part to cultural mores that make it less appropriate for Africa with particular reference to Nigerian people to display emotional symptoms.

Again, Moos (2008) noted that depression can affect an individual physically, psychologically and socially. Depression can either be temporal (transient) or permanent (chronic). It is temporary depression when the depressed individual rebounds to their usual mood after a short time, but if it continues for a long period without being treated, it becomes chronic. Davison et al., (2010) corroborate this idea by stating that "most depression, although recurrent, tends to dissipate with time. But an average untreated episode may stretch for months or longer. In cases where depression becomes chronic, the person does not completely "snap back" to an earlier level of functioning between bouts".

Kure (2019) quoting the World Health Organization (WHO) stated that over seven million (7,079,815) Nigerians suffer from depression. That accounts for 3.9% of Nigeria population. Similarly, Wang, Aguilar-Gaxiola and Wells (2007) referencing the WHO stated that over 264 million people of all ages suffer from depression globally. It is among the highest contributing factors leading to disability across the globe. Although depression can be effectively treated, about 76% to 85% of people in low and middle-income countries do not have treatment for their disorder. This is mostly caused by a lack of competent healthcare professionals and social depressiveness associated with mental health problems and disorders (Wang et al, 2007). Kure (2019) added that the scarcity of healthcare professionals – psychologists and therapists is acute in Nigeria and there are not many mental health outfits that are not psychiatric hospitals. Medical care regarding mental health is very expensive and most students are often afraid to open up about their mental health struggles not even to confide in a therapist because of the depressive stigma associated with mental illness. To avoid shame, most students withdraw into themselves and refuse to seek the much-needed help and support which could worsen the depressive symptoms as such denying them their satisfaction.

To this end, it is suggested that the students should embrace and supports a tenet of the cognitive model which postulates that the withdrawal into themselves and refusal to seek the much-needed help and support was as a result of bias and distortions of one's perceptions of the world Mgbenkemdi & Aboh (2019). The Cognitive theory is hereby adopted as the theoretical framework based on the fact that the cognitive function governs all human

thoughts, actions and behaviours including the processes and reactions and the various contexts individuals interact within expression and experience of behaviour. According to Mgbenkemdi et al, (2019), this thought may well increase the risk for depression such as excessive selfblame for events beyond personal control as well as guilt. Such individuals/ or students may also experience problems in coping in the lecture hall, poor time management, lack of concentration in reading, distractions, cutting lectures such as adopting a pessimistic view of life, exaggerating the extent of current difficulties, isolation, and substance abuse. In line with the above, Ogbole, Aboh, & Mgbenkemdi, (2020), suggested the nature in which an individual's process trauma can make depression persistent most especially if the trauma processing leads to a series of the serious current threat. This may arise as a consequence of either excessively negative appraisal of the trauma or disturbances of memory characterized by poor elaboration and contextualization.

In appraising depression, it is assumed that individuals with persistent depression unlike individuals who recover naturally from trauma fail to see trauma as an event that does not have a negative implication on the future, (Ogbole, et al (2020). They are characterized by an idiosyncratic negative appraisal of the traumatic event that has a common effect of creating a series of serious recurrent threats. Here, individuals can overgeneralize from the event and as a result, perceive normal activities to be more dangerous than they are also exaggerating possibilities of future catastrophe. Such appraisals create situational fears and also avoidance most especially with the way such individuals/ or students felt during the traumatic event, which may have a long term threatening implication (Ogbole, et al (2020). Such situational fears and avoidance may lead to disturbance of memory characterized by poor elaboration. However, dysfunctional belief processes are held to be a vulnerability factor (a diathesis). When activated by appropriate environmental events (stress), these dysfunctional belief processes lead a person prone to depression to interpret experiences in negative and distorted ways. These negative interpretations, in turn, lead to negative views of oneself, one's world, and one's future. The researchers empirically assert that depression is a serious problem that requires psychological support for the majority of students.

The purpose of this study was to examine whether there would be a significant relationship between depression and life satisfaction among university undergraduates. It was hypothesized that there would be a significant relationship between depression and life satisfaction among university undergraduates.

## Method

#### **Participants**

A total of 70 participants comprising 34 males and 36 females were randomly selected from Department of Psychology 100 level and 200 level undergraduate students respectively, with their ages between

16-20 years, with a mean age of 17.92 and standard deviation of 1.26 years used for the study.

#### **Instruments**

TWO sets of instruments were used in this study, The Life Satisfaction Index-Short Form (Barrett & Murk, 2009), and Self-Rating Depression scale (SDS) (Zung (1965).

## The Life Satisfaction Index-Short Form (LIS-SF)

The Life Satisfaction Index-Short Form (LIS-SF) was developed by Barrett and Murk (2009) to measure the overall construct of life satisfaction. The original version of the Life Satisfaction Index (LSI) is a 35-item questionnaire that measures the construct of life satisfaction. The instrument development process using 654 adult

participants yielded a Cronbach alpha reliability of .95 (Barrett & Murk, 2009) and a high correlation with the Satisfaction with Life Scale (r = .70) (Diener, Emmons, Larsen & Griffin, 1985) Short version LSI-SF has 12-items and is scored on a six-point Likert type structure (1=strongly disagree, 6=strongly agree for items 2, 4, 5&6 while 1=strongly agree, 6= strongly disagree for items 1, 3, 7-12). Barrett and Murk (2009) reported Cronbach alpha reliability of .90 and a very high correlation with the original version. The LSI-SF had Cronbach's alpha reliability of .82; and a concurrent validity coefficient of .66 with the Life Satisfaction Index-Z (Neugarten, Havighurst & Tobin, 1961). While Erinoso (1996) provided the properties for Nigerian samples and was revalidated by Onyishi et al, (2013).

# **Self-Rating Depression scale (SDS)** (Zung (1965).

The Self-Rating Depression Scale (SRDS) (Zung, 1965) was used to measure symptoms of depression among the participants. The SRDS is a 20-item inventory on four Likert rating scales designed to assess the cognitive, affective, psychomotor, somatic and social interpersonal dimensions of depression. Validated by Jari Jokelainen, Markku Timonen, Sirkka Keinänen-Kiukaanniemi,Pirjo Härkönen, Heidi Jurvelin & Kadri Suija (2019), Jegede (1979) provided the psychometric properties for Nigerian Samples. The normative means scores are 50–59, mild depression; 60–69, moderate depression and 70–80, severe depression. The SDS has a reliability of .93 and concurrent validity of .79. Scores higher than the norms indicate that the clients manifest clinical depression disorder, while scores lower than the norms indicate the absence of clinical depression. Obiora (1995) and Romera, Delgado-Cohen, Perez et al. (2008) also provided the psychometric properties for Nigerian Sample, with coefficients of congruence obtained 0.95 for the former.

## **Procedure**

The permission and cooperation of the Departmental research ethics committee and the participants were solicited and obtained. All the 11 Faculties in Enugu State University of Science and Technology (ESUT) formed clusters and from each one (1) faculty were randomly selected using balloting, since the Faculty have varied Departments and varied levels of students and years. The participants were selected using simple random sampling techniques where the class lists were used and then those with odd numbers were selected to participate.

These were the students who paid the school fees and were present in the class. The participants were 100 and 200 levels of undergraduate students of Enugu State University of Science and Technology studying psychology. The researchers created rapport with the participants and assure them that their responses will be treated with the utmost confidentiality. After completing copies of the questionnaire out of 100 copies that were administered, only 70 was properly filled and used for data analysis. 30 copies that were not properly responded due to cancellations were carefully removed and discarded

## **Design and Statistics**

The study adopted a correlation research design as data were collected to make inferences about the population of interest at one point in time. Pearson (r) analysis was conducted among the study predictors and dependent variables. Statistical Packages for the Social Sciences (SPSS) version 20 was used for the analysis

#### Result

**Table 1**: Summary table of means on the relationship between depression and life satisfaction among ESUT Psychology students.

	N	Mean	Std. Deviation
Depression	70	34.0143	3.72416
Life Satisfaction	70	33.1286	2.94353
Valid N (list wise)	70		

From table one above, it shows that the mean and the standard deviation of the samples used for the study. It shows that the mean for depression is 34.02 and that of life satisfaction is 33.13. The standard deviation shows that sample depression deviated at 3.72 and life satisfaction at 2.94. This table showed the sample mean of the sample population used for the study. This shows the average value of the samples which were taken from a larger population

**Table 2.** Demographic and characteristics of participants by frequency (Percentages).

		Frequency (%)	
Department	Psychology	70 (100%)	
	100 level	35 (50%)	
Level	200 level	35 (50%)	
	Male	34 (49%)	
Gender	Female	35 (51%)	
	<=20 Years	45 (64%)	
Age Groups	>20 Years	25 (36%)	

Table 2 above shows the frequency of the sample participants in different vital areas. It indicates that the students used for this study were only students selected from the department of psychology which emphasizes the need for a more elaborate representation of other departments and settings shortly researches. There were no signific ant

differences from the samples selected from both the 100 level and 200 level students of the department. Further, the gender representation was seen to be well represented with males at 34% while the females are at 35% respectively. The age groups indicated that there are more young students with 64% below the age of 20 and 36% below the age of 20.

**TABLE 3**: Summary table of Pearson Product Moment correlation co-efficient statistics on the relationship between depression and life satisfaction among University undergraduates Correlations

	Depression	Life Satisfaction
Pearson Correlation	1	.243
Depression Sig. (2-tailed)		043
N	70	70
Pearson Correlation	.243	1
Life Satisfaction Sig. (2-tailed)	043	
N	70	70

Correlation is significant at the 0.05 level (2-tailed).

From table 3 above, coefficient value is -.043 at P<.05 level of the significance, therefore the null hypothesis is rejected and an alternate hypothesis is accepted indicating a significant negative relationship between depression and life satisfaction among university undergraduates. In this study, there is a negative relationship that shows that an increase in depression leads to a decrease in the life satisfaction of a student. Therefore, this implies that since the students are not satisfied with their life they show more depression.

## **Discussion**

In this study, following the associative hypothesis, we predicted that there would be a significant relationship between depression and life satisfaction among university undergraduates. The outcome of the hypothesis tested was disconfirmed which implies that the tested hypothesis was rejected. This indicates that a significant negative relationship exists between depression and life satisfaction among university undergraduates. This means that the students are not satisfied in life or rather that they are not happy in life resulting in depression. Therefore, there is a negative relationship that shows that an increase in depression leads to a decrease in the life satisfaction of the student. The outcome of this finding was in tandem with Ogbole, Aboh, & Mgbenkemdi, (2020) & Mgbenkemdi, & Eze,(2020), Flores, et al, (2021),

Dogan & Celik, (2014) and Jari Jokelainen et al, 2019). This is to say that when the students are depressed their life satisfaction is reduced or affected. The result of this study is therefore meaningful and in line with the findings reported in other parts of the world. For example, some recent studies done above have reported that the rate of depression among students is higher than in the general population, and many studies have emphasized this level of prevalence compared to the general population (Dahlin, Joneborg, & Runeson, 2013, Dyrbye et al., 2005), Uwakwe, (2000); and Chen et al., 2013).

This demonstrates the applicability of the depression construct in Nigeria and the study provides an opportunity for further studies of depression in Nigeria. One important implication of this study is on the area of students' psychological depressive development. The results have also implications for clinical practices especially as it relates to counselling. Similarly, another major implication of this study is that the significant relationship between depression and life satisfaction among university undergraduates may have been influenced by the present hard economic situations in the nation, in addition to the school environments. This could likely generate

as much tension as possible, hence the remarkable negative influence as obtained in the study. The results may also serve to provide educators and psychotherapists with information that is useful in designing interventions to effectively deal with the problem of escalating psychological depressive evoking symptoms among university students.

Although this study contributes significantly to the gap in knowledge by stating that, there is a negative relationship that shows that an increase in depression leads to a decrease in the life satisfaction of a student in Nigeria, there are some factors that limit the generalization of the results. One limitation of this study is that it focused on just one university, Enugu State University of Science and Technology (ESUT). The replication of the current study in other institutions of higher learning perhaps using the 3rd and 4th years may be important in generalizing the results. Another limitation of the study is the number of the variables studied. Notwithstanding these reservations, the present study suggests the presence of robust reciprocal associations between depression and life satisfaction. Again, we evaluated depression using the SDS without the clinical interview. Additional clinical interviews with those scoring above a cut-off score of the SDS would be helpful to elaborate on factors associated with depression in future studies. Moreover, this study did not evaluate specific and major issues related to university students such as school life, academic performance, anxiety, and suicide. Thus, we kindly suggest and recommend further studies to build on our limitations to strengthen the knowledge gap. Regardless of these limitations, the present study could provide valuable information regarding the current status and associated factors of depression among university students.

#### Conclusion

The outcome of this study found that a remarkable significant relationship exists between depression and life satisfaction among university undergraduates as such when depression increased then life satisfaction decreased among the students which shows that depression has a role to play in the quality of life a student lives. The present findings also demonstrate that depression may also mean the same thing in Nigeria as perceived in other developed Western countries. Also, the study extended depression study to a neglected group of students' one may be assumed that their workloads or experiences are not enough as such would not suffer depression. Our findings may contribute to developing specialized mental health programs for the prevention, screening, and treatment of depression among university students. The study, therefore, opens opportunities for further research in other parts of Africa and across different institutional groups.

#### Reference

- Eze, J. D. (1993). School engagement & students at risk. US Department of Education, Office of Educational Research and Improvement.
- Okafor, M. W., Nwosu, C. T., Uche, I. R., & Obi, L. B. (2021). Major Depressive Episode Severity among Adults from Marginalized Racial and Ethnic Backgrounds in the US. JAMA Psychiatry. Published online September 08, 2021.
- Onyekachi, L. & Amadi, L. (1980). Quality of life in older persons. New York: Human Science Press.
- Nwankwo, R., & Umeh, E. S. (2006). Characteristics of adolescents who report very high life satisfaction. Journal of Youth and Adolescence, 35(3), 293-301.
- Iheanacho, I., & Anozie, S. (2006). Girls with anorexia nervosa as young adults: Personality, self-esteem, and life satisfaction. International Journal of Eating Disorders, 39: 285-293.

- Uzochukwu, M. Y., Eze, F. M., & Obi, S. F. (2008). Personality and life events as predictors of adolescents' life satisfaction: Do life events mediate the link between personality and life satisfaction? Social Indicators Research, 8: 475-471.
- Ibe, S. & Nnamdi, G. (1994). The relationship of satisfaction with life to personality characteristics. The Journal of Psychology, 128: 547-558.
- Nwafor, J., Ezeani, M., Okeke, K., Onwuegbuzie, P., & Ugochukwu, B. (2019). Validation of the Zung self-rating depression scale (SDS) in older adults, Scandinavian Journal of Primary Health Care. DOI:10.1080/02813432.2019.1639923.
- Okechukwu, R. O. (1979). Psychometric characteristics of Igbo version of Zung self-rating depression scale and self-rating anxiety scale. Afr J Med S, 8, pp. 133-37.
- Okonkwo, M., & Ezeh, S. (2011). Big-five personality traits and self-esteem as predictors of life satisfaction in Nigerian university students. Journal of Happiness Studies, 12: 105-113.
- Okeke, C., & Umeh, Y. (2009). Sınıf içinde algılanan empatik atmosfer ile benlik saygısı arasındaki etkileşimin zorbalıkla ilişkisi. Ilkogretim Online, 8(2), 322-333.
- Nwosu, J.-P., & Nwankwo, L.-W. (2000). Modelling life satisfaction of Nigerian adolescents. International Journal of Behavioral Development, 24(1), 99-104.
- Chukwu, A. D. (2010). Facilitating student engagement: The importance of life satisfaction (Doctoral dissertation, University of Nigeria, Nsukka). Available from ProQuest Dissertations and Theses database (UMI No. 3402795).
- Okorie, D. T., & Ndukwe, A. (1996). Happiness is a stochastic phenomenon. Psychological Science, 7: 186-189.
- Maduka, C. Q., & Ezeani, E. S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. Psychology in the Schools.
- Mgbenkemdi, E. H., & Aboh, U. J. (2019). Negative Sexual Experiences as predictors of Depression among Women. International Journal of Social Sciences and Conflict Management, 5(3), Sept. 2020. ISSN: 2536-7134 (Print); 2536-7142 (Online).
- Mgbenkemdi, E. H., & Eze, B. E. (2020). Perceived Factors Influencing Depression among ESUT Medical Students. International Journal of Social Sciences and National Development, 1(1), 62-76.
- Nwankwo, D. R. (2009). Interrelationships among personality, perceived classmate support, and life satisfaction in adolescents (Master's thesis).
- Mbah, M. M. C., & Nwachukwu, M. (2002). Determinants of students' quality of school life: A path model. Learning Environments Research, 5(3), 275-300.