

# **Effectiveness of Cognitive Behaviour Therapy on Academic Procrastination Behaviour of Secondary School Students in Ika-South Local Government Area, Delta State**

**Ekwelundu, Chinyere A. (Ph. D)**  
**Community Secondary School Mbaukwu, Anambra State**  
[chiianthoekwelundu@gmail.com](mailto:chiianthoekwelundu@gmail.com)

**Okeke, Ndidi U. (Ph. D)**  
**Community High School Adazi, Anambra State.**  
[Ndidiokeke88@yahoo.com](mailto:Ndidiokeke88@yahoo.com)

**Onyeukpere, Lucky O. (Ph.D)**  
[luckyonyeukpere@gmail.com](mailto:luckyonyeukpere@gmail.com)

## **Abstract**

Academic procrastination is a cognitive as well as a behavioural problem among students during which students continues to delay a task that can have serious effects on them whose lives are characterized by frequent postponements or by perfectionists who want to do their best. Studies have shown that academic procrastination cannot be corrected by medical procedures rather by the use of some psychological techniques such as cognitive behaviour therapy. The study therefore investigated the effectiveness of cognitive behaviour therapy on academic procrastination behaviour of secondary school students in Ika-South Local Government Area of Delta State. Three research questions and three null hypotheses guided the study. The study adopted pre-test, post-test control group (quasi- experimental research design). The population of study consisted of 920 secondary school students. Purposive sampling procedure was used to select two schools out of 20 existing co-educational ones in Ika- South Local Government Area. The participants identified with academic procrastination were 80 JSS111students preparing for their external examination. Instrument for data collection was adopted from Sunitha and Musthafa's Academic Procrastination Scale (APS) Nigerian used. The internal consistency reliability coefficient for Nigeria sample is 0.74. The experimental group were subjected to the treatment. Data were analyzed using Mean for research questions while the null hypotheses were tested at .05 Per cent level of significance using ANCOVA. The findings revealed that there was a significant effectiveness of the cognitive behaviour therapy on the treatment of academic procrastination more than conventional counselling. It was recommended among others that the Delta State Ministry of Education should provide on-the job training through seminars, symposia and workshops to school guidance counsellors and other allied professionals on the use of cognitive behaviour therapy in reducing academic procrastination behaviour and other behavioural problems among secondary school students.

**Keywords:** Academic Procrastination, Cognitive Behaviour Therapy, Secondary School Students

## **Introduction**

The school is an educational institution that is planned to prepare and develop the students through the acquisition of knowledge, values, attitudes and skills in order to become a social being; more civilized in

behaviour, refined in self-expression and having mutual respect for others' opinions. Most students in the secondary school are involved with so many activities rather than their studies. They skip reading their notes after lessons; they keep postponing their time of studies. The essence of postponement and delaying academic activities is called procrastination. It is a serious problem that occurs among students of all educational level.

Hence, procrastination has been defined in various ways by different researchers. According to Laeus (2015) procrastination behaviour is the avoidance of doing a task that needs to be accomplished. Laeus further added that it is the process of doing more pleasurable things in place of less pleasurable ones, or carrying out less urgent tasks instead of more urgent ones, thus putting off impending tasks to a later time. This is to say that it is a voluntary, inappropriately postponement of the intended tasks, despite the fact that this means a negative effect on the student life.

Saplavska and Jerkunkova (2018) saw academic procrastination as a delay in the fulfilment of educational assignments and is associated with undeveloped learning skills, lack of organization, forgetfulness, and behavioural rigidity. This is to say that academic procrastination occurs when a student is passive in completing academically related works such as studying for an exam or completing his or her take home assignment on time. It has been observed that, no matter how efficient or committed student is, there is the possibility that he or she must have been found wasting or managing his or her time on irrelevant things instead of spending that time on school- related works. Academic procrastination includes consistently postponing studying for exams, submitting assignments late, and failing to register for classes in time, and such behaviours ground the authenticity of academic procrastination as a concept (Tuckman in Toker & Avaci, 2015). Therefore, academic procrastination operationally is a condition whereby students fail, delay, or avoid completion of their academic tasks despite being aware of the negative effects.

Academic procrastination serves as major ill-chosen habit of many students in secondary schools in Delta State especially in Ika-South Local Government Area, because student's procrastination shows itself as a delay in academic tasks such as writing take home assignments, working on projects, studying for exams, and doing other necessary academic work. More so, students consistently postponing what they are expected to do at right time such as: spending much time on internet playing games rather than reading their books which in turns affect their reading habit. Even more, students' chooses to delay completing a vital academic task and moved on with a more pleasurable and less important task like socializing with friends.

Consequently, different factors as observed by the researchers have been identified to be associated with academic procrastination among secondary school students in Delta State namely: self esteem and self efficacy fear of success or failure, lack of time management, and goals and objectives of being in school. Others factors reported that causes academic procrastination include: inability to concentrate, having low levels of conscientiousness on one's work, laziness and lack of discipline when learning, fear and

anxiety related to failure, and negative beliefs about one's capabilities and that unrealistic expectations and perfectionism.

Being academic procrastinator results in lack of proper planning and time management could result in procrastination, late or non-submission of assignments and not being qualified for examination admission (McGhie, 2012).

Alkhutaba and Al habees (2015) observed that academic procrastination has been associated with perfectionism, a tendency to negatively evaluate outcomes and one's own performance, intense fear and avoidance of evaluation of one's abilities by others, heightened social self-consciousness and anxiety, recurrent low mood, and work holism. In support of this Chow (2011) revealed that academic procrastination happens to students who have a negative self-evaluation as a form of mind dysfunctional. This is why Flett, Stainton, Hewitt, Sherry, and Lay (2012) submitted that academic procrastination correlated with negative automatic thoughts. Considering the finding of above study, dysfunctional thinking also makes students become a person who easily give up before the task.

The problem of academic procrastination affects many students in Ika-South secondary schools. Although, many students do not know that their inability to read is problem of postponing their time to studies, but they were engaged more on pleasurable things in which they cannot benefits from it. Delay studying for internal or external examinations can produce lower grades or may be even cause one to totally fail a class.

Whatever reason that could be associated with academic procrastination behaviour, it is a serious, negative problem if left unchecked. If this negative behaviour among students especially at the secondary school level is overlooked, it will thwart the goals of secondary education as specified by Federal Republic of Nigeria (2004). In section 3, No.32 (e) of this policy states that secondary education shall inspire students with a desire for self improvement and achievement of excellence. Most of the time, students who are involved in academic procrastination had negative consequences that limit their efficiency and students' academic performance and excellence. The consequences could be either internal or external. External consequences include: decreased learning, lost opportunities, increased health risks, and strained relationships. Also external consequences are as ranging from small penalties to major setbacks in school, at home, and so on.

Internal consequences have a serious influence on a student's behaviour also. Internal consequences of procrastinator behaviour may include irritation, regret, despair, and self-blame. This is in consonance with Akbay and Gizir (2010) who reported that academic procrastinators face the following consequences namely: failing exams, extending periods of study, and terminating or drop out. Also negative psychological and physiological outcomes, namely guilt and stress, poorly prepared for tests and examinations, increased test anxiety and lower grades that may lead to poor academic performance. A growing body of evidence supports the view that procrastination in educational environments may not

just influence students' academic performance, but also students' health, and their future professional performance (Quant & Sánchez, 2012).

However, having observed that academic procrastination does not require the attention of medical experts rather psychological experts such as therapists or counsellors based on the underlined possible factors and consequences that contribute to academic procrastination behaviour among students mentioned above. Nevertheless, this provides information helpful to researchers in developing strategy that help to reduce academic procrastination in order to help secondary school students live better, more productive, and less or no conflicted lives. The strategy is cognitive behaviour therapy.

A Cognitive Behaviour Therapy (CBT) is a psychotherapy based on changing everyday thoughts and behaviours, with the aim of positively influencing emotions. It was propounded by Beck in 1960s. It is a wide ranged which attempts to modify, change, correct or eliminate maladaptive thoughts and behaviours. According to Adeusi (2013), cognitive behaviour therapy as a set of techniques applied on an individual to help one become more aware of one's thoughts and ways of modifying them, when they are distorted or are not useful. Cherry (2013) saw it as a therapeutic treatment that helps client understand the thoughts and feelings that influence behaviour.

It plays attention to cognitive and behavioural problems. The cognitive aspect helps students change their thinking patterns that keep them from overcoming their fears while the behaviour aspect helps the students on how the cognitive processes such as thoughts, images, beliefs and attitudes and so on impact on the way student's behave and deal with emotional problems. In this regard, a student with habit of procrastination will be assisted with this therapy to overcome fear of tackling his or her postponing academic tasks at hand. Beck believes that people's feelings are influenced by what they think or how they perceive life events. This refers to how students can change any negative patterns of thinking or behaviour that may be causing them academic problems. Therefore this can change the way they feel.

Cognitive-behaviour therapy (CBT) states that people procrastinate because of established thinking patterns, and within this framework. This therapy in secondary schools would mainly be concerned with helping students realize three things: how their thought patterns affect their behaviour; how they can take control of these thought patterns and how they can apply interventions to effect behaviour change.

However, the aim of CBT is to teach the students that even though they may not have control over every academic problem around them, they can learn and develop how to take control over the way they interpret their thoughts and other things around them. Also, helps students to better understand on how their thoughts, feelings and beliefs influence their actions as well as their behaviour. The goal of the CBT also is to challenge and hopefully change procrastinators' dysfunctional negative thinking, thus allow them to perceive the advantages of good preparations and reading ahead of time.

Since cognitive behaviour therapy plays a great role in shaping individuals, it is likely to play a role in students' academic procrastination irrespective of gender. A gender role according to Uwameiye and Iserameiye (2013), is all the characteristics, expected behaviours and roles of men and women which a particular society has determine and assigned to each sex. Gender operationally has to do with expected behaviour of individuals in a society are assigned to different sexes and these expected behaviours differ from one society to another, one ethnic group to another and family to family, thereby providing opportunity to comparisons in activities within the family and society in general. There had also been a number of researchers which found no significant difference between male and female participants with regard to procrastination Demeter and Davis, (2013); Khan, Arif, Noor and Muneer (2014); Berkleyen (2017) reported that males procrastinate more than their female counterparts while Sepehrian and Lotf (2011) revealed that there was no significant difference among boys and girls on the level of academic procrastination.

Although good numbers of researchers have investigated the effectiveness of cognitive behaviour therapy in reducing academic procrastination among students in public secondary schools in different geographical background, such as Asyeh and Moradi (2016) conducted a study aimed to assess the efficacy of cognitive-behavioural group therapy on reducing procrastination and increasing motivation in secondary school students in Saqqez city. Findings from Asyeh and Moradi revealed that cognitive-behavioural group therapy can be effective in reducing procrastination students. In support of this Agbakwuru and Chikwe (2018) investigated the effect of cognitive behaviour therapy (CBT) on procrastination reduction and improved mathematics achievement among low achieving students in Enugu State, Nigeria. The effect of cognitive behaviour therapy in handling academic procrastination behaviour is perceived to be effective as observed in literature.

This situation has become worrisome and concern teachers, counsellors, parents, students, as a lot of students in that area still having poorly academically. The researchers were not aware of any work done on cognitive behaviour therapy on academic procrastination behaviour among secondary school students in Ika- South Local Government Area of Delta State.

### **Statement of the Problem**

Academic procrastination behaviour among secondary school students is a serious issue confronting Delta State especially in Ika-South Local Government Area this mare the progress of a students' academically and else. Observation has shown that some secondary school students in Delta State especially in Ika-South Local Government Area suffer from academic procrastination and this problem exposes this category of students into various negative effects on their lives. These effects include: clamming, poor academic performance, decreased learning activities, lost opportunities, increased health risks, and strained relationships, irritation, regret, despair, self-blame and so on.

Although within the school setting, efforts of school administrators using non-psychological procedures through introduction of scholarship schemes and organisation of extra moral classes for these students in

order to improve their academic excellence yielded nothing because this will not help in reframe the dysfunctional thinking responsible for academic procrastination. Notwithstanding, academic procrastination behaviour remained a problem such that stakeholders in education are worried. The researchers observed that this ugly situation could be corrected using cognitive behaviour therapy. It was against this background that the study therefore examined the effectiveness of cognitive behaviour therapy on academic procrastination among secondary school students in Ika-South Local Government Area of Delta State, Nigeria.

### **Research Questions**

The following research questions were answered in this study:

1. What is the difference in pre-test and post-test academic procrastination behaviour mean scores of secondary school students exposed with cognitive behaviour therapy and those in control group?
2. What is the difference in the pre-test and post-test academic procrastination behaviour mean scores male and female students exposed with cognitive behaviour therapy?

### **Null Hypotheses**

The following null hypotheses were tested at .05 levels of significance

1. There is no significant difference in the pre-test and post-test academic procrastination behaviour mean scores of secondary school students exposed with cognitive behaviour therapy and those in control group.
2. There is no significant difference in the pre-test and post-test academic procrastination behaviour mean scores of male and female students exposed to cognitive behaviour therapy.

### **Method**

Quasi-experimental research design was employed in this study. Bearing in mind that Nworgu (2016) pointed out that quasi-experimental design could be used on students in a school setting where it is not possible to use pure experimental design which he considers as disruption of school activities. Many quasi-experimental methods are available but the one employed in the study is non-randomized pre-test, post-test control group design. Here, two groups of the subjects were involved one school was used as experimental group and the other as control group. All of them were pre-tested. The experimental group received treatment on cognitive behaviour therapy for modification of academic procrastination, while the control group taught academic procrastination through conventional method. Then, on two different settings, the two groups were post-tested at the end of the exercises to test their academic procrastination.

**Table 1: A non-randomized Pre-test Post-test Control Group Design**

Group	Type of Treatment	Pre-test	Treatment	Post-test
-------	-------------------	----------	-----------	-----------

1	CBT	T1	X1	T2
2	Conventional counselling	T3	-	T4

Representation of Two Group Quasi-Experimental Design  
Pre-Test (T1, T3); Treatment (X1); Post-Test (T2, T4)

The study was carried out in Ika-South Local Government Area. Ika-South is a centralized Local Government Area located at Agbor and they speak Ika language. The population of the study consisted of 820 junior secondary three (JSS3) students with academic procrastination in all the co-educational secondary schools in Ika-Local Government Area of Delta State. The population was gotten from the result of pre-test administered to all the JSS3 students using Academic Procrastination Scale (APS). The sample for the study comprised 50 JSS3 students who exhibited academic procrastination in the two co-educational public secondary schools. Purposive sampling technique was used to select two from 20 co-educational schools with the highest number of students identified with academic procrastination.

The instrument used in this study was the Academic procrastination Scale (APS) originally developed by Sunitha and Musthafa (2013) and validated for use with Nigerian sample by Okeiye, Okezie and Nlemadim (2017). The instrument was designed to measure academic procrastination of secondary school students, which was adapted for this study. The instrument consists of 28 items and each is scored on a 4 point scale ranging from Strongly Agree (4) to Strongly Disagree (1). Academic procrastination Scale (APS) used for this study has been used extensively in research with Nigerian samples, for instance, Okeiye, Okezie and Nlemadim (2017) and many more. The instrument has been validated in many studies for use in Nigeria (Okeiye et.al, 2017). The norm for interpreting the APS according to Okeiye et.al (2017) is 49 for male and females. The reliability of the present scale was established by split half method with reliability coefficient of 0.74. APS is adopted by current researchers having been used for secondary school students.

In the treatment procedure, APS was administered as pre-test and post-test to both the experimental and control group. The treatment was administered on the JSS3 students in school "A" using Cognitive Behaviour Therapy while school "B" the control group was done by the school counsellor (a research assistant) using conventional method. The counselling method for CBT was one session per week, each session lasting for 40 minutes, for eight weeks which was during the school guidance and counselling timetable agreed with the school principals. At the end of counselling periods, a post-test was administered to the two groups to ascertain the effectiveness of the treatment. The APS was reshuffled to guide against easy recall.

The data collected for the study was analyzed and in answering the research questions mean and standard deviation were used, while Analysis of Covariance (ANCOVA) was used to test the Hypothesis at .05 level of significance. When the post-test mean score of a group is below the norm of 49, the

treatment technique for that group is considered “effective”, while scores above the norm is “not effective”. For the null hypotheses, when the p-value is less than .05 level of significance the null hypotheses is rejected, but when the p-value is greater than the .05 level of significance the null hypothesis is not rejected.

## Results

**Research Question 1:** What is the difference in pre-test and post-test academic procrastination behaviour mean scores of secondary school students exposed with cognitive behaviour therapy and those in conventional group?

**Table 1: Pretest and Postest Procrastination Behaviour Mean Scores of Students Treated with CBT and those who Received Conventional Counselling (Norm= 49)**

Source of Variation	N	Pretest Mean	Posttest Mean	Lost Mean	Remark
CBT	32	63.29	40.40	22.89	Effective
Conventional Method	38	62.00	49.70	12.30	

Table 1 indicates that students treated with cognitive behaviour therapy had pre-test mean score of 63.29 and protest mean score of 40.40 with lost mean 22.89 in their academic procrastination behaviour, while those in the conventional group had pre-test mean score of 62.00 and post-test mean score of 49.70 with lost mean 12.30 which is below the norm of 49, cognitive behaviour therapy is effective in reducing academic procrastination behaviour among students.

**Research Question 2:** What is the difference in the pre-test and post-test academic procrastination behaviour mean scores male and female students exposed with cognitive behaviour therapy?

**Table 2: Pre-test and Post-test Academic Procrastination Behaviour Mean Scores of Male and Female Students Treated with Cognitive Behaviour Therapy (Norm=49)**

Source of Variance	N	Pretest	Posttest	Lost Mean	Remark
Male	18	72.00	37.60	34.40	Effective
Female	14	63.60	29.40	34.20	Effective

Table 2 shows that the male students exposed with cognitive behaviour therapy had pre-test mean score of 72.00 and post-test mean score of 37.60 with lost mean 34.40 in their academic procrastination behaviour, while the female students had pre-test mean score of 63.60 and post-test mean score of 29.40 with a lost mean of 34.20. Cognitive behaviour therapy is effective in reducing academic procrastination behaviour of both male and female secondary school students. However, the lost mean of 34.40 for male students is slightly above those of the female students.

## Testing of null hypotheses



**Null Hypothesis 1:** There is no significant difference in the pre-test and post-test academic procrastination behaviour mean scores of secondary school students exposed with cognitive behaviour therapy and those in control group.

**Table 3: ANCOVA on the Academic Procrastination Behaviour Mean Score of Students Exposed to Cognitive Behaviour Therapy and those who Receive Conventional Counselling**

Source of Variance	SS	df	MS	Cal.F	Crit. F	P ≥ .05
Corrected Model		1	0801.5308		2350.191	
Intercept	8.792	1	8.792			
Pre-test	2374.780	1	2374.780			
Treatment model	7914.508	1	7914.504	121.70	3.99	<b>S</b>
Error	4617.220	61	65.031			
Total	408820.000	70				
Corrected Total	15418.750	69				

Source of Variance	SS	df	MS	Cal. F	Crit. F	P ≥ .05
Corrected Model	133.146233.286					
Intercept	537.363	1	537.363			
Pretest	111.846	1	111.846			

**Discussion**  
 Findings on Table 1 revealed that cognitive behaviour therapy (CBT) was effective in reducing procrastination behaviour of secondary school students. Specifically, those students that underwent the cognitive behaviour therapy counselling technique recorded great improvement in the level of their academic procrastination behaviour. This finding is in agreement with Asyeh and Moradi (2016) whose study revealed that cognitive-behavioural group therapy is effective in reducing academic procrastination among students. The reason for reduction in students' academic procrastination in the experimental group over those in the conventional counselling group might be due to a way that their perceptions and understanding of the matter and the consequences become more meaningful to them. The result supports the work of Agbakwuru and Chikwe (2018) who found that there was significant effect of cognitive behaviour therapy (CBT) on procrastination reduction and improved mathematics achievement among low achieving students.

Likewise Rosenthal, Forrester, Nielsen, Risotto and Karlbryng (2014) in their results revealed the effectiveness of cognitive-behavioural group therapy was effective in reducing procrastination. The reason might be due to the contents of the intervention which included a period of the therapy on cognitive behaviour strategies and principles. As negative self-talk can lead to academic procrastination, participants were guided on how to reframe their thinking and avoid erroneous thoughts by exploring positive alternative thought, which Beck (1976) and Ellis (1960) identified as 'constant chatter' internal dialogue going on in our heads. This is in agreement with Nikbakht, Abdkhodaei, and Hasana Bady

(2013) which they believe that through multiple learning strategies more adaptive and more efficient behaviour can be created in negligent people and thereby helps to reduce procrastination.

The finding on Table 2 showed that there was no significant gender difference on the effect of cognitive behaviour therapy on secondary school students' academic procrastination behaviour. This means that the treatment using cognitive behaviour therapy has similar effects on both male and female secondary school students. This finding agrees with that of Ismail (2016), who found no significant difference in academic procrastination scores of males and females. Even though the researchers had expected a significant gender difference in favour of the male students, the reason being that males are assumed to possess higher cognitive abilities than females. The finding, however, contradicts the findings of researchers such as Steel and Ferrari (2013), Khan, Hafsa, Syeda, and Sidra (2014), and Berkleyen (2017), who reported that males procrastinate academically more than their female counterparts.

### **Conclusion**

Based on the findings of this study, it was concluded that cognitive behaviour therapy is effective in reducing academic procrastination behaviour of male and female students by changing their negative self-talk and dysfunctional thinking patterns to healthy self-talk.

### **Recommendations**

1. Since cognitive behaviour therapy has been shown to be effective in reducing academic procrastination behaviour, school guidance counsellors and psychologists should be encouraged to adopt the use of the technique in counselling and therapy among secondary school students to reduce academic procrastination behaviour.
2. The Delta State Ministry of Education should provide on-the-job training through seminars, symposia and workshops to school guidance counsellors and other allied professionals on the use of cognitive behaviour therapy in reducing academic procrastination behaviour and other behavioural problems among secondary school students.

## REFERENCES

- Adeusi, S.O. (2013). *Efficacy of cognitive restructuring and behavioural rehearsal on conduct disorder in adolescents in special correctional centres in Lagos state*. Retrieved from <http://C:/Users/John%20Palm/Desktop/phd%20final/coginitive%20thesis.pd>.
- Agbakwuru, C. & Ugwueze, S. (2018). Effect of cognitive-behaviour therapy on procrastination reduction and improved mathematics achievement among low achieving students. *The International Journal of Humanities & Social Studies*, 6(5), 15-22. ISSN 2321 – 9203
- Ajiyi, O.S. (2020). Self efficacy, gender and academic procrastination. Retrieved from <https://core.ac.uk/download/pdf/327163149.pdf>
- Akbay, S. E. & Gizir, C. A. (2010). Cinsiyete göre üniversite öğrencilerinde akademik erteleme davranışı: akademik güdülenme, akademik özyeterlik ve akademik yüklenme stillerinin rolü. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 6(1), 60–78.
- Alkhubata, M.Y. & Al habees, F.A. (2015). Academic procrastination among Non-Jordanian students at Al- Isra University and its relation with some variables. *Global Research Journal of Education*, 3(8), 384-387. ISSN: 2408-6894. Retrieved from <http://www.globalscienceresearchjournals.org/>
- Balkis, M., Duru, E., & Buluş, M. (2013). Analysis of the relation between academic procrastination, academic rational/ irrational beliefs, time preferences to study for exams and academic achievement: A structural model. *European Journal of Psychology of Education*, 28(3), 825–839.
- Beck, A.T. (1963). Thinking and depression: Idiosyncratic content and cognitive distortions. *Archives of General Psychiatry*, 9, 324-333. Retrieved on 30th April, 2018 from <https://aaronbeckcenter.org/beck>
- Berkleyen, N. (2017). Understanding the academic procrastination attitude of language learners in Turkish Universities. *Educational Research and Review*, 12(3), 108-115.
- Flett, G. L., Stainton, M., Hewitt, P. L., Sherry, S. B., & Lay, C. (2012). Procrastination automatic thoughts as a personality construct: An analysis of the procrastinatory cognitions inventory. *Journal of Rational-Emotive and Cognitive-Behaviour Therapy*, 30(4), 223–236.
- Irin, E.F. (2011). Academic procrastination among undergraduates attending school of physical education and sports: Role of general procrastination, academic motivation and academic self-efficacy. *Educational Research and Reviews*, 6 (5), 447-455.
- Ismail, D. (2016). Psychological well-being and its relationship with active and passive procrastination: A study of students of a business university in Karachi. *Academic Journal of Interdisciplinary Studies*, 5(3), 86-94.

- Jorke, K. B., Thau, L. M., & Fries, S. (2011, July). Investigating domain-specificity of procrastination. *Presentation at the Presentation at the 7th Biennial Conference on Procrastination*, Amsterdam.
- Khan M. J., Arif, H., Noor, S. & Muneer,S. (2014). Academic procrastination among male and female university and college students.*FWU Journal of Social Sciences*, 8(2), 65-70.
- Klingsieck, K. B. (2013). Procrastination: When good things don't come to those who wait. *European Psychologist*, 18, 24-34.
- Laeus. (2015). "An analysis of teachers' general tendency to procrastinate, perception of professional efficiency/ self efficiency and AltrDewitte & Lens (2010). Psychology and economics; evidence from the field " *Journal of Economic Literature* 47; 315-37.
- McGhie, V. F. (2012). Factors impacting on first-year student's academic progress at a South African university. (Dissertation, Faculty of Education at Stellenbosch University).
- Nikbakht, E., Abdkhodaei, M. S.,& HasanaBady, H. (2013). The effectiveness of reality therapy on increasing academic motivation and academic procrastination decrease in students. *Research in Clinical Psychology and Counselling*, 3 (2).
- Nworgu, B.G. (2015). *Educational research: Basic issues and methods*. (3rd ed.), Nsukka: University Trust Publishers, Nsukka.
- Okoie, O. E., Okezie, N. E.,& Nlemadim, M. C. (2017). Impact of academic procrastination and study habit on expressed mathematics anxiety of junior secondary school students in Esan South-East Ddo state Nigeria. *British Journal of Psychology Research*, 5(1), 32-40.
- Quant, D. M.,& Sánchez, A. (2012). Procrastinación, procrastinación académica: Conceptoe implicaciones. *Revista Vanguardia Psicológica Clínica Teórica y Práctica*,3(1), 45-59
- Rozental, A., Forsström, D., Nilsson, S., Rizzo, A., & Carlbring, P. (2014). Group versus internet-based cognitive-behavioural therapy for procrastination: Study protocol for a randomized controlled trial. 1, 84-89.
- Saplavska, J.,& Jerkunkova, A. (2018). Academic procrastination and anxiety among students in Latvia.*Engineering for Rural Development*, 1192-1197. DOI: 10.22616/ERDev2018.17.N357
- Sepehrian, F., & Lotf, J.J. (2011). The effects of coping styles and gender on academic procrastination among university studies. *Journal of Basic Apply Science Research*, 1(12), 2987-2993
- Steel, P. & Ferrari, J. (2013). Sex, education and procrastination: An epidemiological study of procrastinators' characteristics from a global sample. *European Journal of Personality*, 27(1), 51-58.

- Steel, P. & Klingsieck, K. B. (2016). Academic procrastination: Psychological antecedents revisited. *Australian Psychologist*, 51(1), 36-46. doi:10.1111/ap.12173.
- Sunitha, T.P. & Musthafa, M. N. (2013). Relationship between academic procrastination and mathematics anxiety among secondary school students. *International Journal of Education and Psychological Research (IJEPR)*, 2(2), 101-105.
- Toker, B. & Avci, R. (2015). Effect of cognitive-behavioural-theory-based skill training on academic procrastination behaviours of university students. *Educational Sciences: Theory & Practice* 15(5), 1157-1168.